



California ISO

Market Performance and Planning Forum

Q4

October 26, 2026

Housekeeping



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The meeting is structured to stimulate dialogue and engage different perspectives.



Please engage in a respectful and professional manner.



Please keep comments brief and avoid repeating points already made so we can manage time and ensure everyone has an opportunity to participate.



You can access Closed Captioning and the Transparency Viewer using the controls located at the bottom of the Webex screen.

Instructions for Raising Your Hand to Ask a Question



If you are connected to audio through your computer or used the 'call me' option, select the raise hand icon located on the bottom of your screen.



If you are connected on the phone line only and not the Webex dial *3 to be added to the raise hand queue.



Please remember to state your name and affiliation before making your comment.



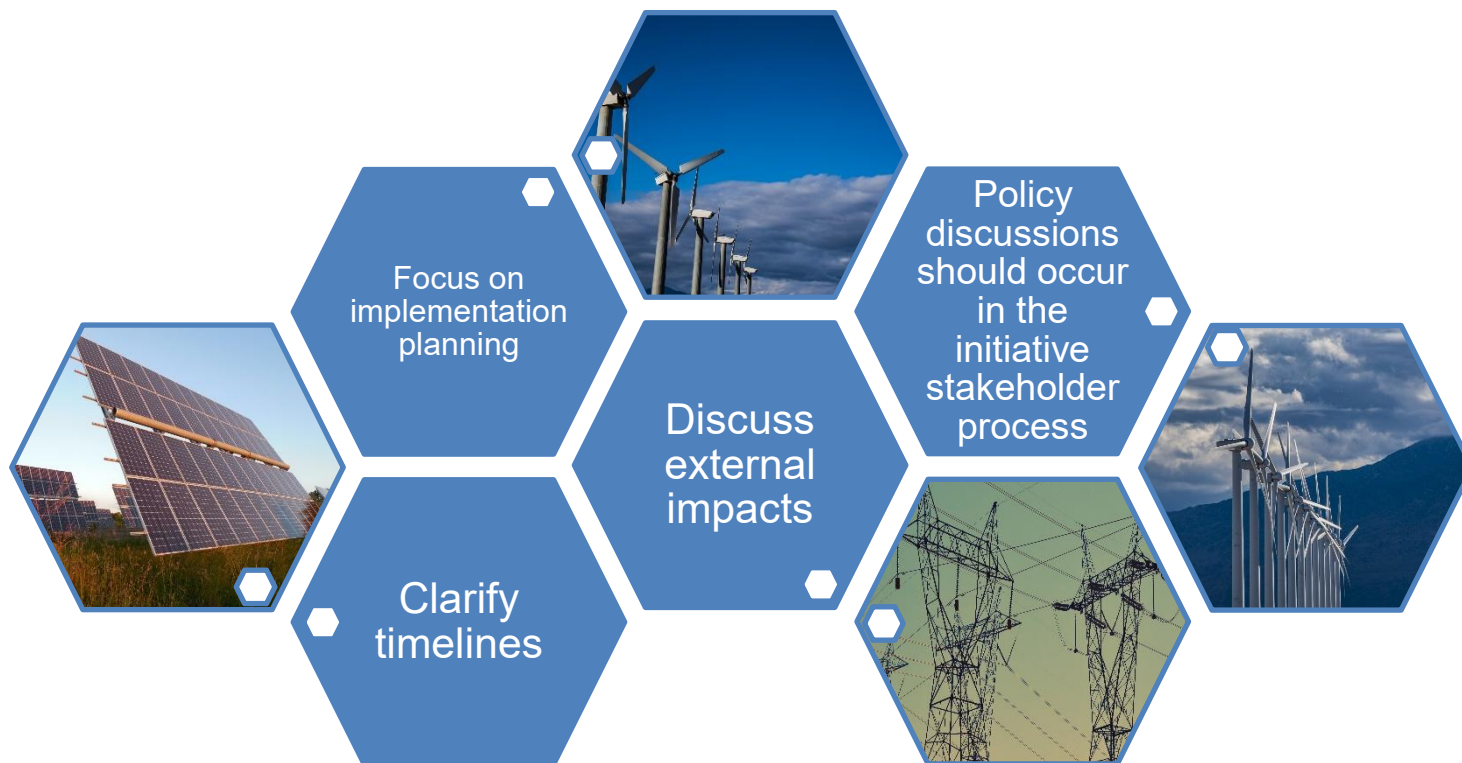
You may also send question via chat to all panelists.



If you need technical assistance during the meeting, please send a chat to the event producer at Intellor Events.

Objective: Enable dialogue on implementation planning and market performance issues

- Review key market performance topics
- Share updates to 2027-2029 release plans, resulting from stakeholders inputs





California ISO

Market Performance and Planning Forum

Agenda – Oct 26, 2026

9 p.m. – 12 p.m. Pacific Time (PST)

Time:	Topic:	Presenter:
9:00 – 9:05	Introduction, Agenda	Brenda Marquez, Stakeholder Affairs
9:05-9:30	Release Update	Trang Vo, Release Management
9:30 – 10:00	Market Design Update	Milos and Daniel, Market Policy Development
10:00-11:50	EDAM Market Performance Report, <i>Comments due 11/12/26</i>	Guillermo, Abhishek, Market Performance and Advanced Analytics
11:50-12:00	Next Steps and Energy Blog Matters	Brenda Marquez, Stakeholder Affairs



Release Update

Agenda for Release Update

Fall 2026 Release

- ✓ EDAM Onboarding PGE
- EDAM Enhancements 2026

Independent 2026 Release

- Contractual Share for Renewable Forecasting
- FERC 881 Track 2: CRR – November
- FERC 881 Track 3: AAR in Market Applications*
 - *effective date of Order No. 881 tariff under internal review*
- Transmission Exchange Agreement Renegotiation
- FERC 2023 Generator Interconnection Life Cycle
- ✓ DACA As A Service Implementation
- RC Forecast & Schedules Data Reporting Automation
- Storage Design & Modeling
 - ✓ *Automatic Acceptance of Outage Change Requests*
 - Power Minimum Rerates on Test Energy Cards*

Spring 2027 Release

- Resource Adequacy Modeling & Program Design - Resource Visibility
- Greenhouse Gas Coordination Accounting & Reporting
- Resource and Transmission Implementation – Release 1 WEIM*

Fall 2027 Release

- EDAM Onboarding BANC
- EDAM Onboarding LADWP
- EDAM Onboarding PNM
- EDAM Onboarding TID
- Resource and Transmission Implementation – Release 2 WIM*

Future Release

- Settlement Upgrade Project
- Enhanced Curtailment Calculator (ECC) Expansion for Western Interconnect SOL
- Congestion Revenue Rights Enhancements – Jul '26 Board approved
- EDAM Congestion Revenue Allocation
- Gas Resource Management – Dec '25 WEM GB approved
- Storage Design & Modeling
 - Non-Linearity Solution for Non-Generator Resources*
 - Improvements to Out-Of-Service Checkbox Functionality*
 - Partial Outages for Non-Generation Services*
- Price Formation Enhancements
- Resource and Transmission Implementation*
- FERC 917 – Electronic Quarterly Report*
- NERC Reliability Standard CIP-003-11*

POLICY UPDATE

Commitment cost bidding flexibility

- Revisiting with stakeholders the 2018 *commitment cost and default energy bid* changes that expanded the ability for resources to bid in their commitment costs, paired with a new test for market power associated with those offers.
 - Changes have not been implemented nor filed with FERC.
- The ISO is working with stakeholders in 2026 to:
 - Provide education of approved changes including potential commercial impacts – workshops were held in March and June and are expected to continue as we work to refine the implementation design.
 - Vet with stakeholders proposed implementation to validate consistency with approved policy.
- Proposed decisional classification: TBD if decision is necessary.

Demand and distributed energy market integration

- Design focus in 2026:
 - Recognize end-use customer exports within a demand response aggregation so long as the aggregated resource does not export.
 - Draft final proposal published in July; we are taking some time to address stakeholder feedback, outstanding policy and implementation issues, and to explore the implications of recent legislation such as SB913.
 - Growing large-load needs warrant reprioritizing and resequencing the remaining work.
 - Policy development on demand flexibility enhancements is paused and expected to resume in 2027.
 - Working group: Timing being assessed for the real-time demand and pumped-load bidding working group.
 - The ISO's near-term focus will shift to market visibility, forecasting, and integration of large loads.
- Proposed decisional classification: primary authority of the WEM Governing Body.

Resource adequacy design development

- Track 2: Second revised straw proposal published end of September, received comments mid-October.

Track 1: Modeling & Default Rules

- Loss of load expectation modeling.
- Updated default planning reserve margin and default counting rules.

Track 2: Outage and Substitution & Availability and Performance Incentives

- Updating outage and substitution processes.
- Reforming availability and performance incentives.

Track 3: Visibility and Backstop Reform

- Increase the ISO's visibility into available backstop capacity (3A).
- Increase transparency to stakeholders on backstop decision making.
- Update the current backstop product.
- Create longer-term solutions for the CAISO balancing authority area around curing deficiencies and assigning costs related to the EDAM resource sufficiency evaluation.

Decisional classification: ISO Board of Governors

Storage design and modeling

- Revised straw proposal on default energy bids posted September 2026.
 - Further develops the time-of-day approach, a methodology that can be readily used by WEIM-only resources and applies a time-of-day multiplier that supports state-of-charge management efforts and captures changing opportunity costs.
 - Refines the greater-of default energy bid methodology for hybrid resources and provides data on the hybrid fleet's composition.
 - A hybrid resource's default energy bid would be equal to the greater-of the default energy bid values applicable to each of the components that make up 30% or more of that hybrid resource.
- Proposed decisional classification for the items detailed above: primary authority of the WEM Governing Body.

Price formation enhancements (PFE)

- PFE has operated under a two-track framework
 - Track 1 advanced near-term changes on balancing authority area (BAA)-level market power mitigation and incremental scarcity pricing; a revised straw proposal was posted July 2.
 - Track 2 considered longer-term changes, including comprehensive scarcity pricing and BAA-level mitigation for the ISO BAA.
- Based on stakeholder feedback and further design work, the ISO is taking additional time to develop a more integrated PFE proposal
 - The next phase will consider interaction among BAA-level market power mitigation, treatment of the ISO BAA, and broader scarcity pricing enhancements.
 - Given these interactions, the ISO expects to bring the track 1 and track 2 concepts together in the next phase of policy development, rather than continue advancing them on separate paths.
- Next stakeholder milestone
 - Stakeholder meeting in November to preview and discuss the concepts under consideration.
 - Discussion paper targeted for December, informed by stakeholder input from that meeting.
- Proposed decisional classification: primary authority of the WEM Governing Body

Congestion revenue rights (CRR) enhancements

- The design development is focusing on key challenges:
 - Improving revenue adequacy and auction efficiency.
 - Updating how CRR products are defined to better align with evolving hedging needs.
 - Breaking existing on-peak period into more granular “time of use” periods.
 - Allowing storage locations as a sink to hedge storage charging.
- Initiative activity:
 - Phase 1 is pursuing informing CRR releases with enhanced loop flow modeling authority, which will improve revenue adequacy
 - Phase 1 was approved by the ISO Board of Governors in July 2026, allowing implementation in time for the 2027 annual CRR process
 - Phase 2 will continue discussions in Q3 2026 on auction efficiency, product definition, and additional measures for improving revenue adequacy
- Proposed decisional classification: ISO Board of Governors

Extended day-ahead market (EDAM) congestion revenue allocation

- Phase 2 of the initiative focuses on development of a long-term durable congestion revenue allocation design and potential near-term enhancements.
- This phase of the initiative began in December 2025.
- Working group has established broad consensus on design principles as reflected in stakeholder comments.
- Working group held a series of meeting dedicated to evaluation of discrete design concepts, including more recently two meetings to discuss a simultaneous feasibility framework across the EDAM footprint for congestion revenue allocation.
- Now targeting a straw proposal in Q1 2027, to allow more time for additional working group meetings through Q4 2027 to continue to develop and shape a viable design to inform a formal proposal.
- Proposed decisional classification: TBD

Intertie schedule modeling enhancements

- FERC approved tariff clarifications on April 8 regarding intertie schedule modeling on ISO balancing area interties supporting a transitional design for EDAM launch.
- The ISO launched stakeholder workshops in March to consider evolution of the design for modeling intertie schedules for the CAISO balancing area.
- Recurring workshops are discussing modeling of schedules at CAISO balancing area interties and phasing out of intertie bidding at CAISO EDAM internal interties.
- Next workshop will be scheduled in early November.
- Proposed decisional classification: TBD

2026 market policy catalog & roadmap

- **September 24:** Draft 2027-2029 market policy roadmap released for stakeholder review
- **September 24 - October 30:** Stakeholder comment period
- **October 1:** Stakeholder meeting
- **October 5:** Regional Issues Forum briefing
- **October 10:** Body of State Regulators briefing
- **Mid-November:** Final 2027-2029 market policy roadmap released
- **November 17:** Stakeholder meeting

Market design initiative process



[Learn more in the Stakeholder Process Guide.](#)

For an overarching view of where each initiative is in the development process, view the [Policy Initiatives Timeline](#) (updated weekly).

Initiatives

To learn more about an initiative and find important documents and meeting materials, search or select from the list below.

To view the 2026 process timeline and policy initiative catalog, visit the [2026 Market policy catalog and roadmap process](#).

For an overarching view of where each initiative is in the development process, view the [Policy Initiatives Timeline](#) (updated weekly).

Learn how to use the commenting tool:



[View presentation](#)



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 [Commenting tool](#)

 [Recent initiative documents](#)

 [Miscellaneous meetings](#)

Extended Day-Ahead Market Performance September Report

Market Performance and Advanced Analytics

Executive Summary

- Overall, day-ahead market continues to perform well through summer conditions
- However, results should be viewed as preliminary and subject to adjustments
 - Results from May through September reflect a transition to a new market design
 - Market participants adapting and learning about the EDAM/DAME features
 - Ongoing resolution of identified issues in market outcomes and settlements
 - Summer conditions for the month of September reflected in market trends
- This report provides an overview of market performance during September.
- This is the fifth of six-monthly performance reports

Executive Summary

- Summer conditions subsided in September, shifting patterns, while EDAM areas maintained sufficient supply to meet load obligations
- The ISO area reached its highest load of the year, peaking at 50,335 MW on September 9
- The ISO balancing area did not have any issues to reliably meet this peak load
- Monthly average prices declined from August levels, falling from \$53/MWh to \$45/MWh in CAISO, from \$46/MWh to \$31/MWh in PACE, and from \$43/MWh to \$36/MWh in PACW
- CAISO area increased import transfers as summer progressed, while PACE emerged as a net exporter

Executive Summary

- Total CAISO wholesale energy costs decreased to \$1 billion in September from \$1.3 billion in August, averaging \$51.4/MWh
- Imbalance reserve procurement significantly reduced manual operator adjustments, lowering its use from 65% to 11% of hours and reducing average peak adjustments from 3,000 MW in 2025 to 100 MW in 2026
- Upward imbalance reserve awards deployed in real time averaged 13 percent in CAISO, 59 percent in PACE, and 19.1 percent in PACW
- Congestion decreased to \$52.7 million in September, driven entirely by CAISO constraints and a return to northbound flows
- PAC received a net congestion revenue allocation of \$400K in September, reflecting payback associated with original congestion charges from providing prevailing flows

Executive Summary

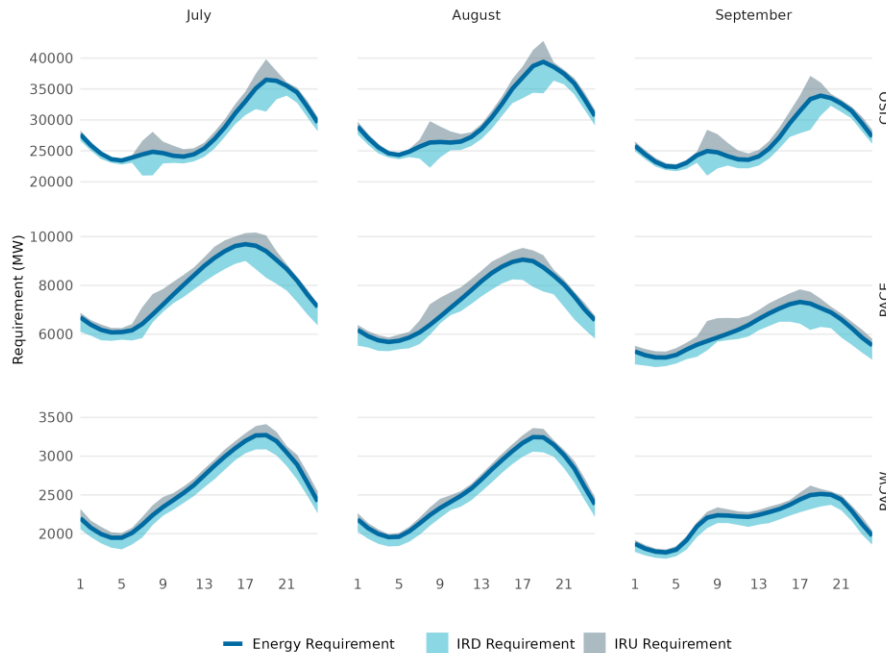
- CRR revenue adequacy has remained above 100% (surplus) since May, CRR auction efficiency in September reached 62%
- Since EDAM launch, monthly costs have averaged approximately \$3.9 million for imbalance reserves and \$8.2 million for reliability capacity
- Based on early EDAM performance assessments, the ISO implemented a storage management enhancement in the RUC process effective October 1, 2026
- Three market issues were identified since the last report including GHG Reference Point for Multi-Stage Generators.

Stakeholder comments on August report and analysis

- Pacific Gas & Electric Company submitted written comments
 - The ISO has provided responses in the September report
 - As part of the ISO's commitment to transparency and to incorporate suggestion from participants' feedback, the August report now includes additional metrics and analysis, including:
 - Frequency of IR and RC prices
 - Deeper analysis of Imbalance Reserve performance
 - Analysis of interplay between RUC adjustments and IR
- September report includes a section of summer conditions
- The ISO will continue to expand the scope of analysis for EDAM/DAME in future reports

Market Performance for September

All areas in EDAM had sufficient supply to meet their load obligations during high-load summer conditions



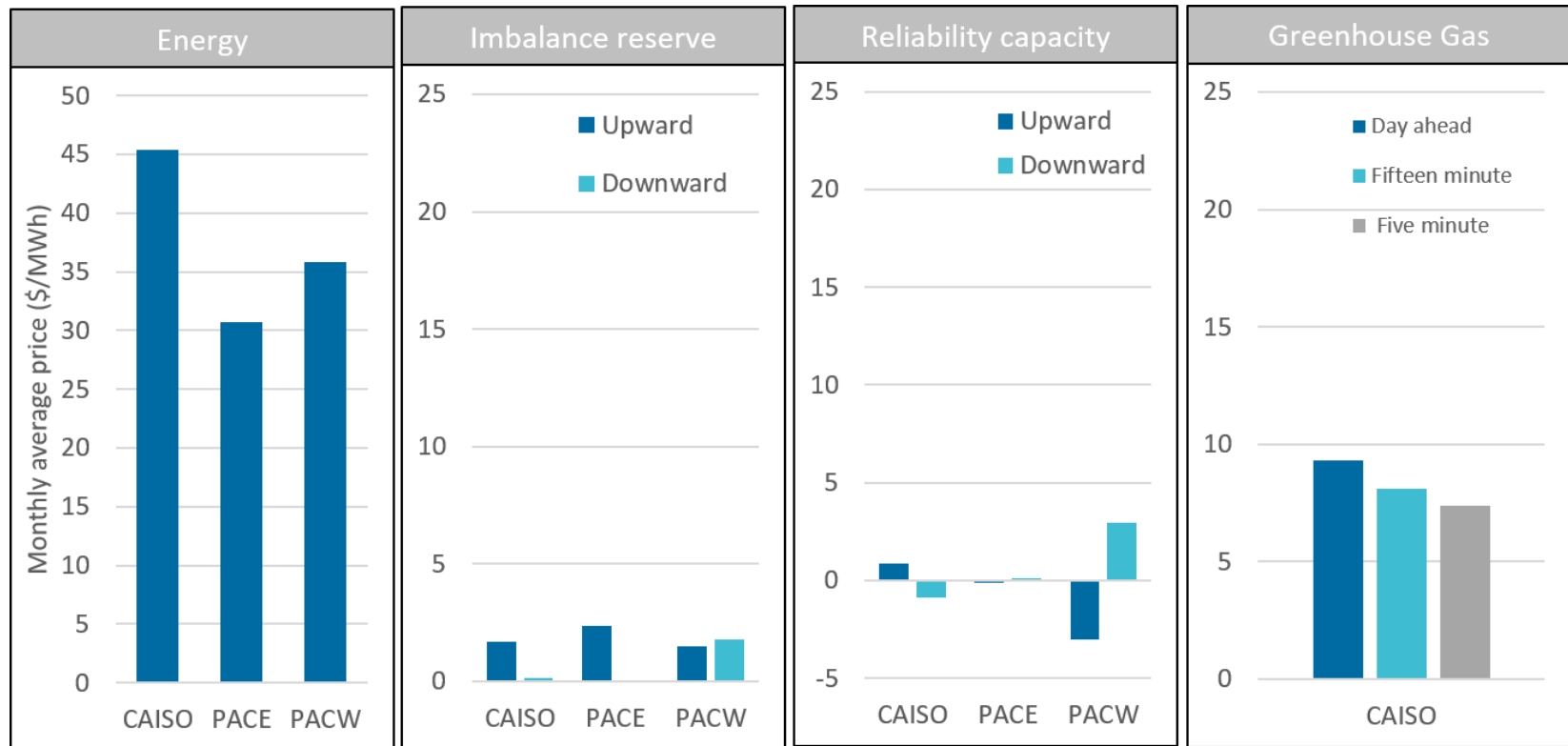
The extended day-ahead market includes a resource sufficiency evaluation

In September, all areas passed the test all hours

	IRU RSE Passing Rate (%)					IRD RSE Passing Rate (%)				
BAA	May	June	July	August	September	May	June	July	August	September
CAISO	100	100	100	100	100	100	100	100	100	100
PACE	100	100	100	100	100	100	100	100	100	100
PACW	98.92	100	100	100	100	99.87	100	100	100	100

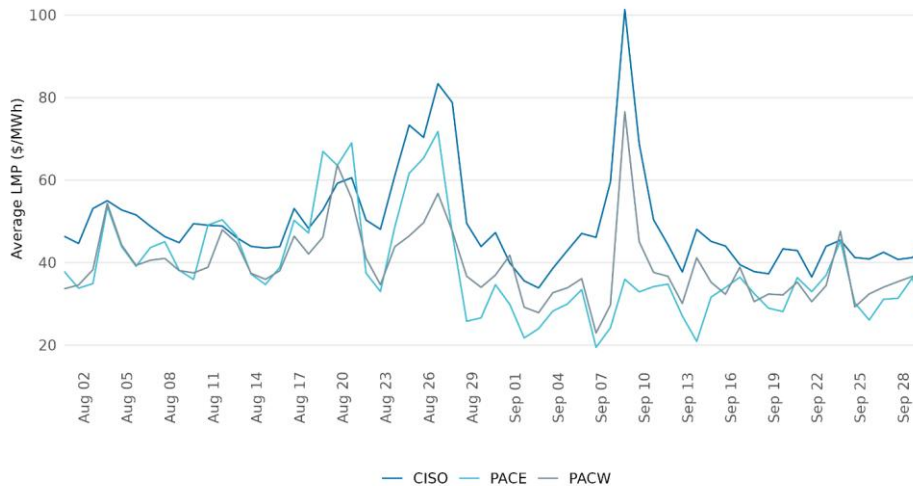
*The June 17 PACE RSE failure was deemed invalid due to the consideration of commitment costs in the RSE and is excluded from the June statistics.

Prices for all commodities are within expected economic ranges and seasonally consistent in September



The extended day-ahead market prices show explicitly the economic value of flexibility, reliability reserves and greenhouse gas

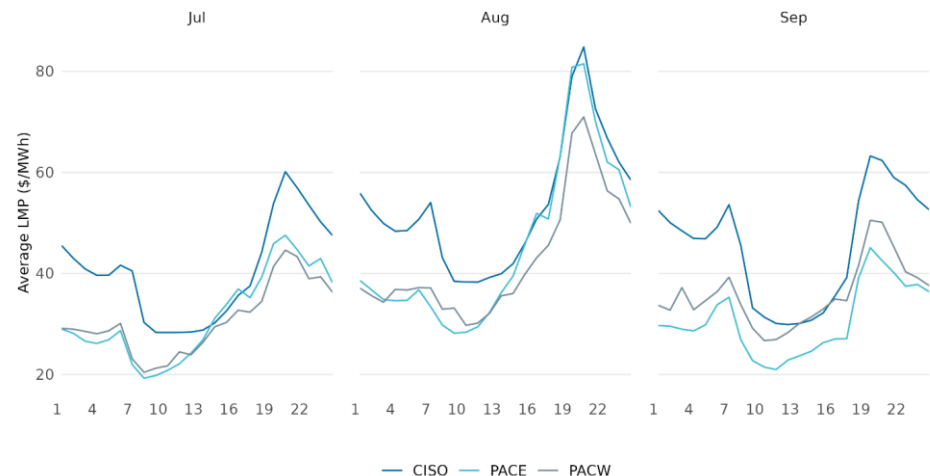
Day-ahead energy prices fell and were less volatile in September reflecting lower demand than in August



Prices spiked on September 9 for CAISO and PACW with daily averages of approximately \$101/MWh and \$77/MWh, respectively.

Prices were highest in the morning and evening peaks

CAISO prices were higher than PAC prices during peak hours, partly due to the GHG price contribution



All EDAM MECs decreased in September but GHG remained steady resulting in lower LMPs

The largest drop in MEC from August was 31% for PACE

GHG increased by 13% in IFM and RTD, and remained steady in FMM

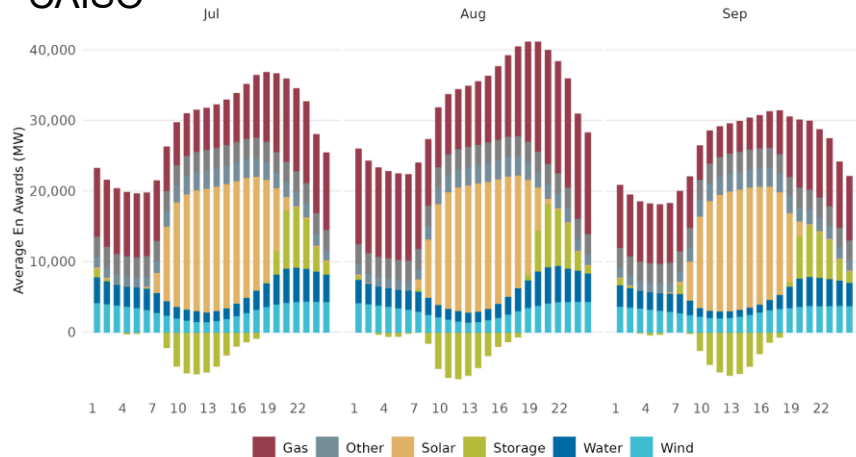
Congestion in CAISO reversed direction except for SDGE

Congestion decreased in PACW but was slightly higher in PACE



Hourly energy profile evolved and decreased as system faced high load conditions in September

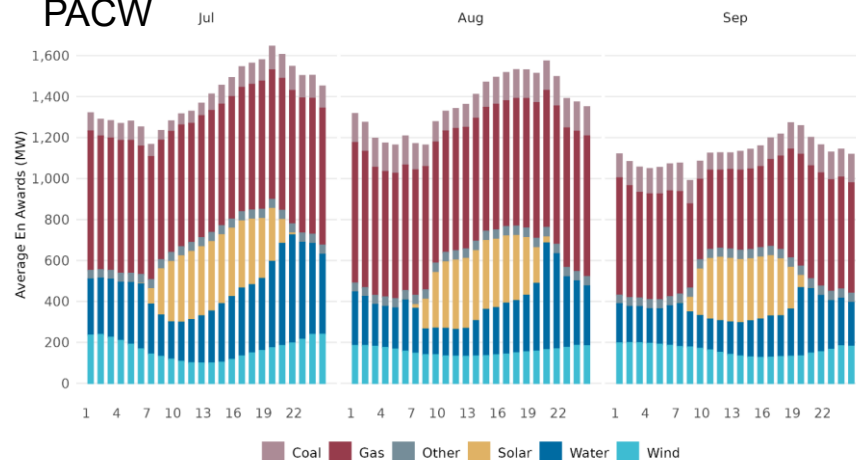
CAISO



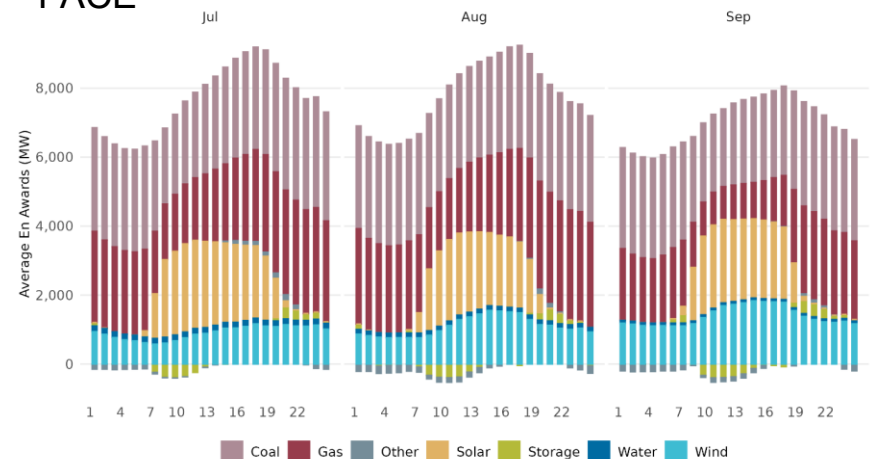
Total supply across EDAM decreased as September observed lower loads compared with August

Gas generation played an important role in meeting evening demand

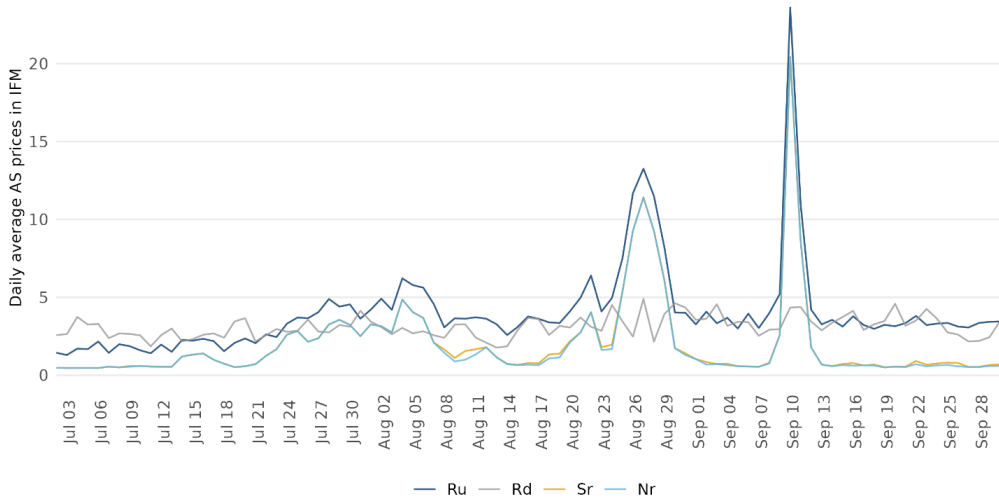
PACW



PACE

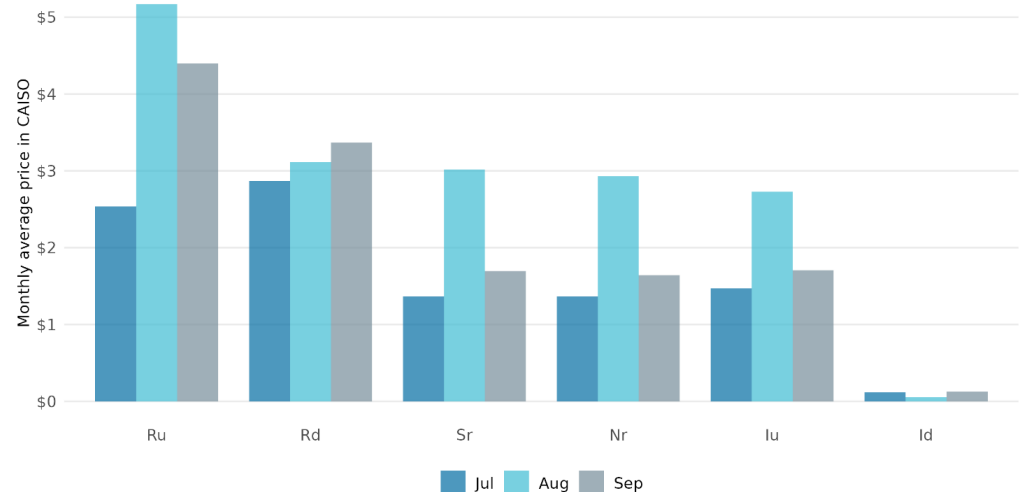


AS prices remained within typical ranges for all commodities



AS prices remained within typical ranges for all four commodities in September, with slightly elevated prices on September 9th, reflecting summer conditions.

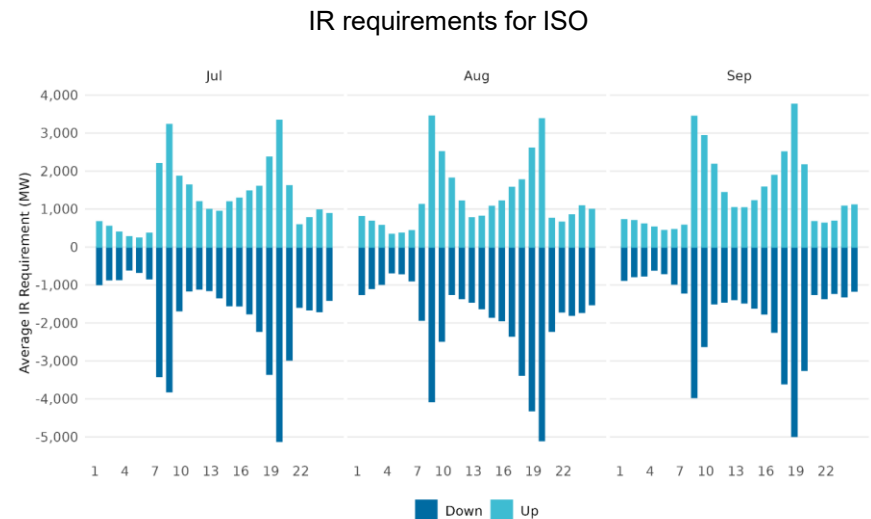
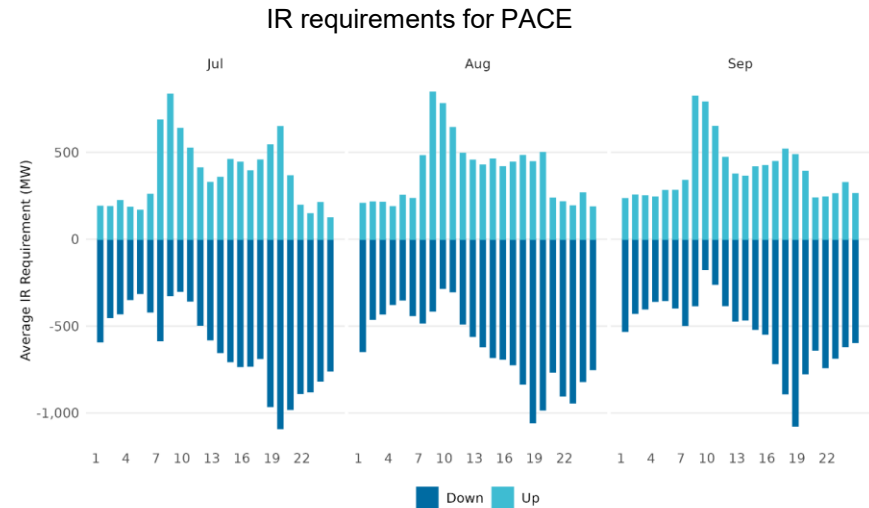
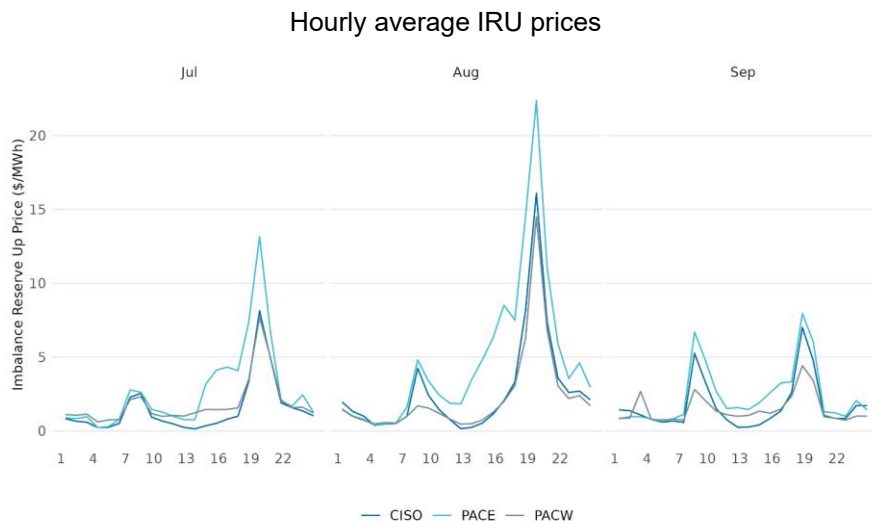
Average price of imbalance reserve up was at a similar level as average price of spin in September



Imbalance reserve prices fell in September but peaked on September 9 reaching \$12/MWh on average in CAISO

Requirement levels vary according to area size and fell in September

Prices continue to follow the pattern of higher requirements in the morning and evening peaks

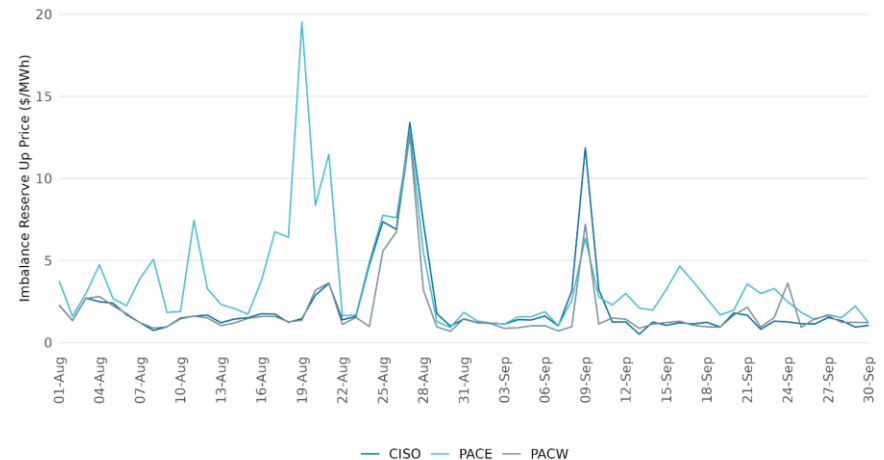


Imbalance reserve down prices increased for PACW and exceeded imbalance reserve up prices on average

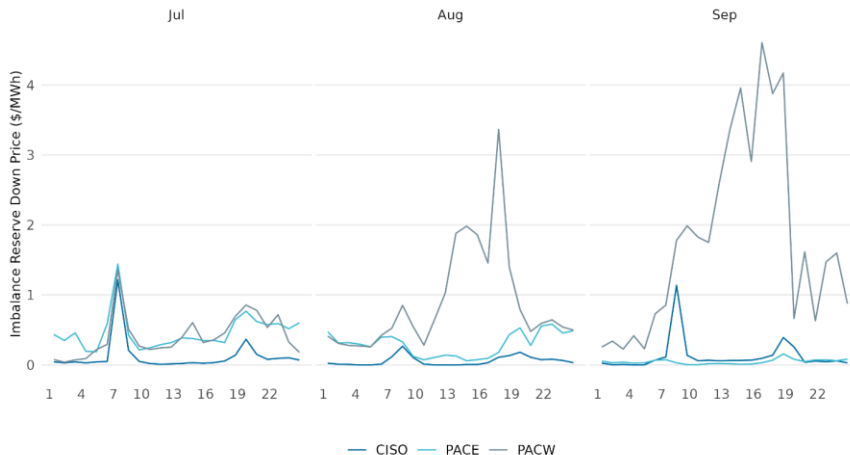
IRD prices in PACW spiked at the end of September, reaching \$13/MWh on September 30

IRD prices in PACW were highest from hours ending 13 to 18

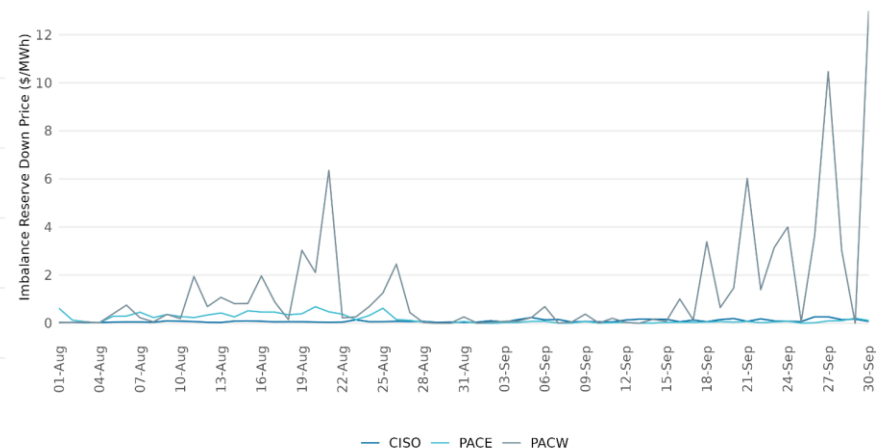
Daily average IRU



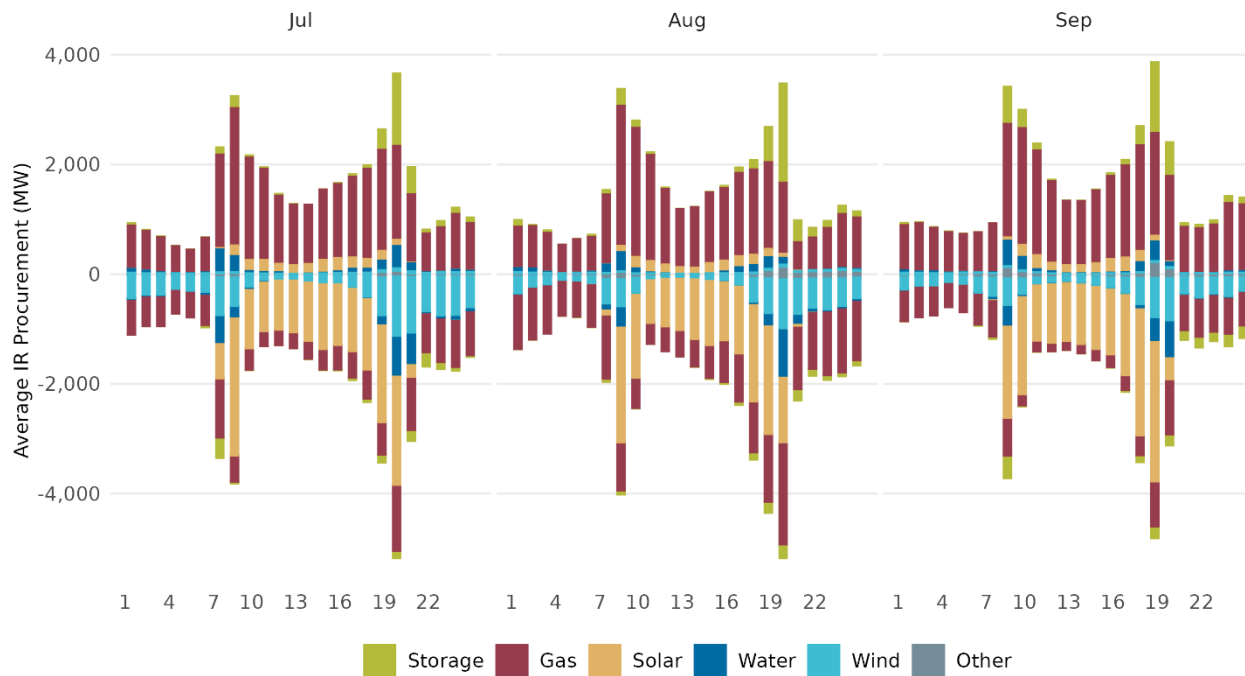
Hourly average IRD prices



Daily average IRD



Over 75 percent of imbalance reserve up was procured from gas resources in CAISO area



In the ISO area, gas followed by solar was the primary supply supporting imbalance reserves. Storage resource provide minimal capacity in peak hours

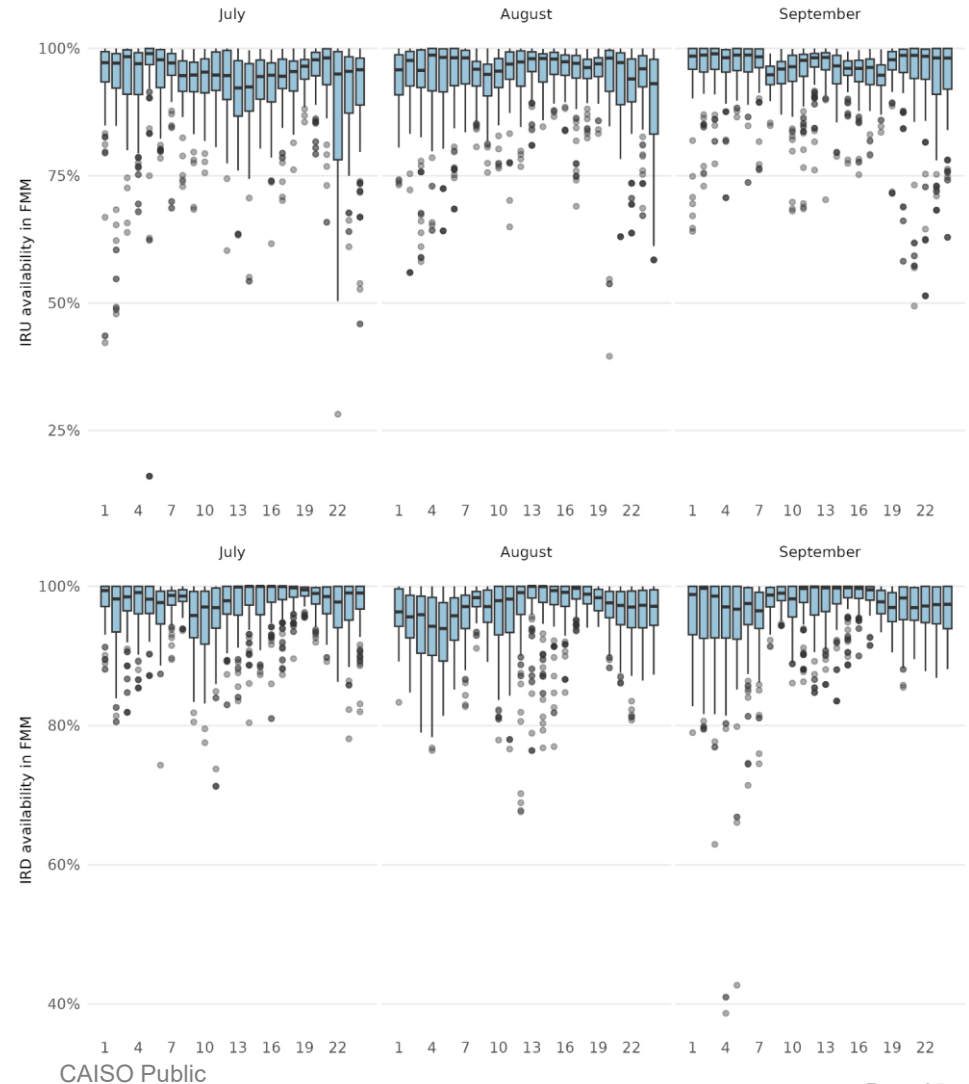
In the PACE area, coal complemented with transfers were the main sources of imbalance reserves, while PACW was mainly supported by transfers and hydro

Real-time IR capacity availability generally aligns with day-ahead IR procurement.

Availability is measured as the real time available capacity corresponding to IR awards in the EDAM footprint, expressed as a percentage of imbalance reserve procurement

In the upward direction, over 80% of IR capacity has been made available

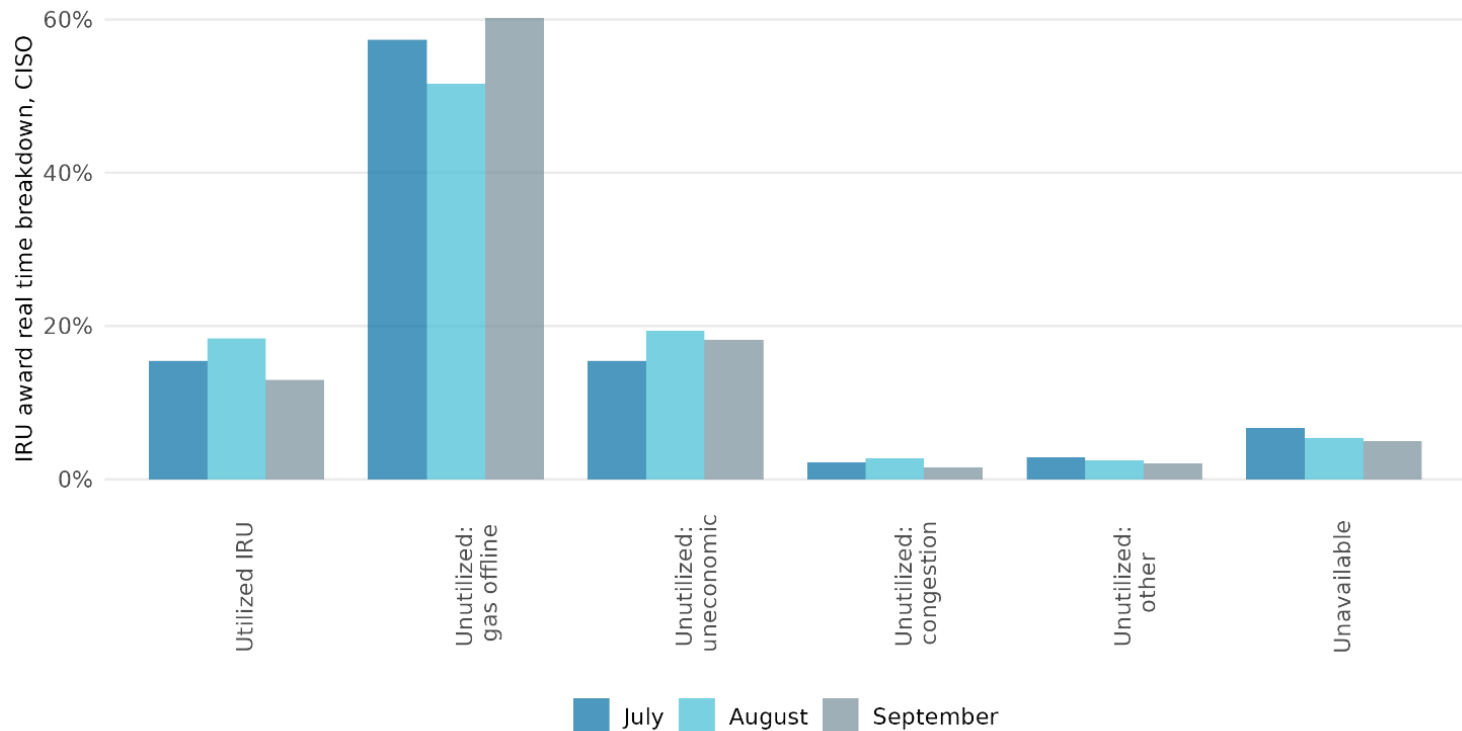
In the downward direction, the availability exceeds 95% majority of the time



Imbalance reserve real-time utilization

- Utilization depends on real time conditions
 - Realized uncertainty in real time
 - Availability
 - Deliverability
- Measure utilization
 - Regular Gen, Import, Export
 - Resource level FMM to IFM delta energy schedule
 - Compare to the corresponding day-ahead IR / RC awards
- Other system conditions that drive real time schedule
 - Outages, congestion
 - Access to additional supply through WEIM transfer, loss, load bias
 - Prices

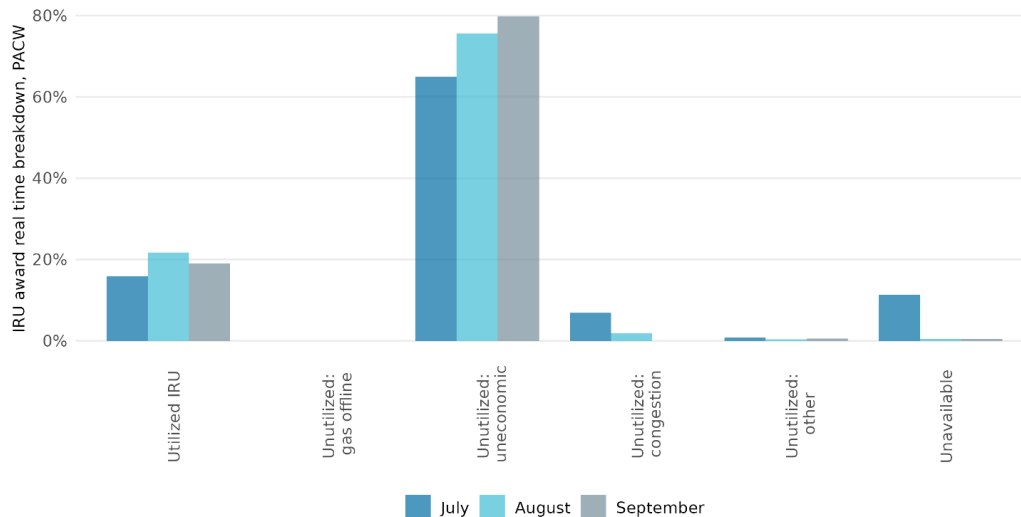
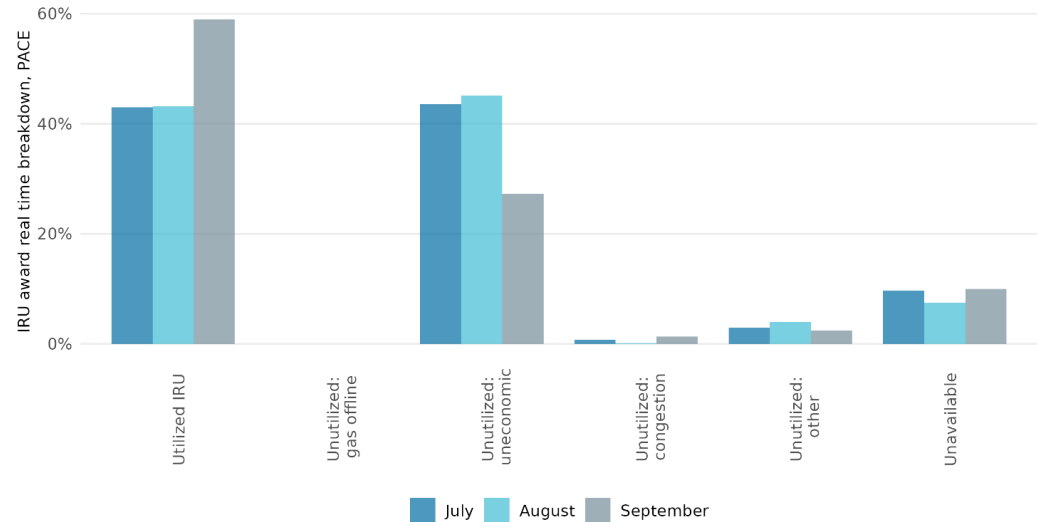
Economics was the primary driver of unutilized imbalance reserve up awards



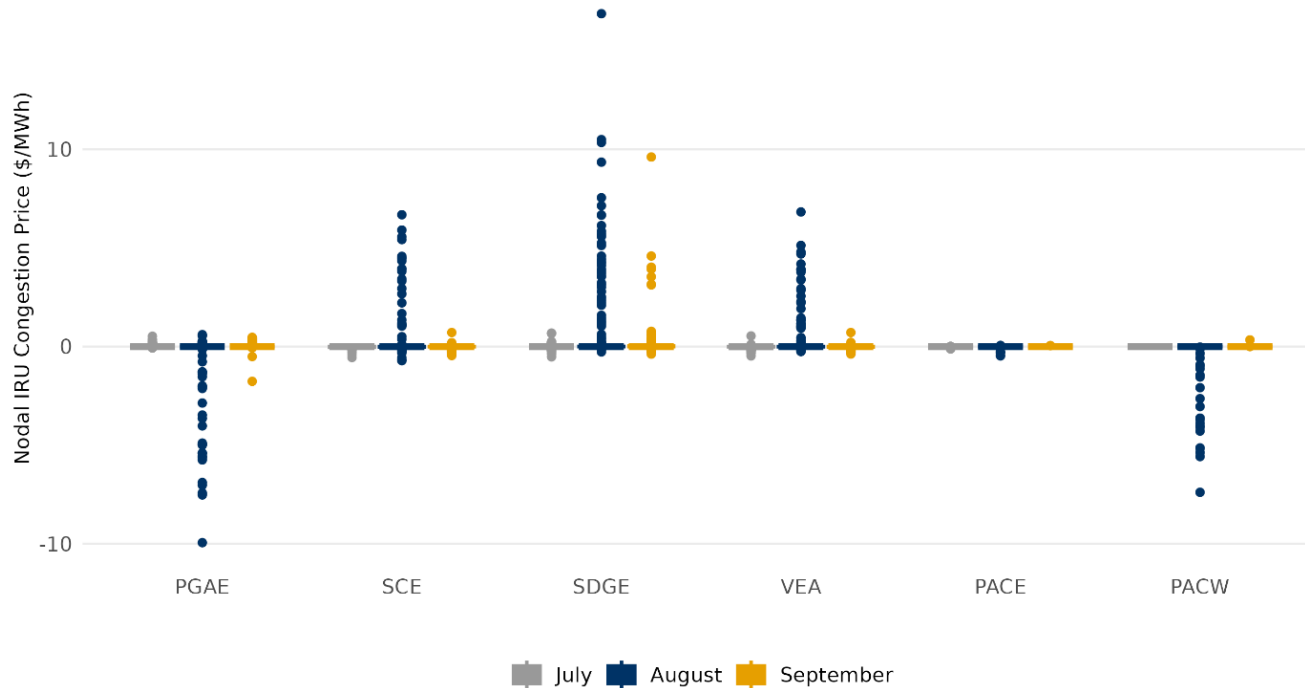
- For CAISO BAA, approximately 60% of September IRU awards were unutilized because gas units received IRU awards but remained offline in real time.

Economics was the primary driver of unutilized imbalance reserve up awards

For PACE and PACW, economics for online resources represented the largest share of unutilized capacity, at 27% and 80%, respectively.



Congestion components for IR prices show mild variation most of the time



Congestion component of IRU/IRD marginal prices is impacted only by IRU/IRD deployment scenarios

IRU/IRD pricing at the DLAP/ELAP level is not significantly impacted by congestion.
Contingencies are not enforced in IR deployment scenarios

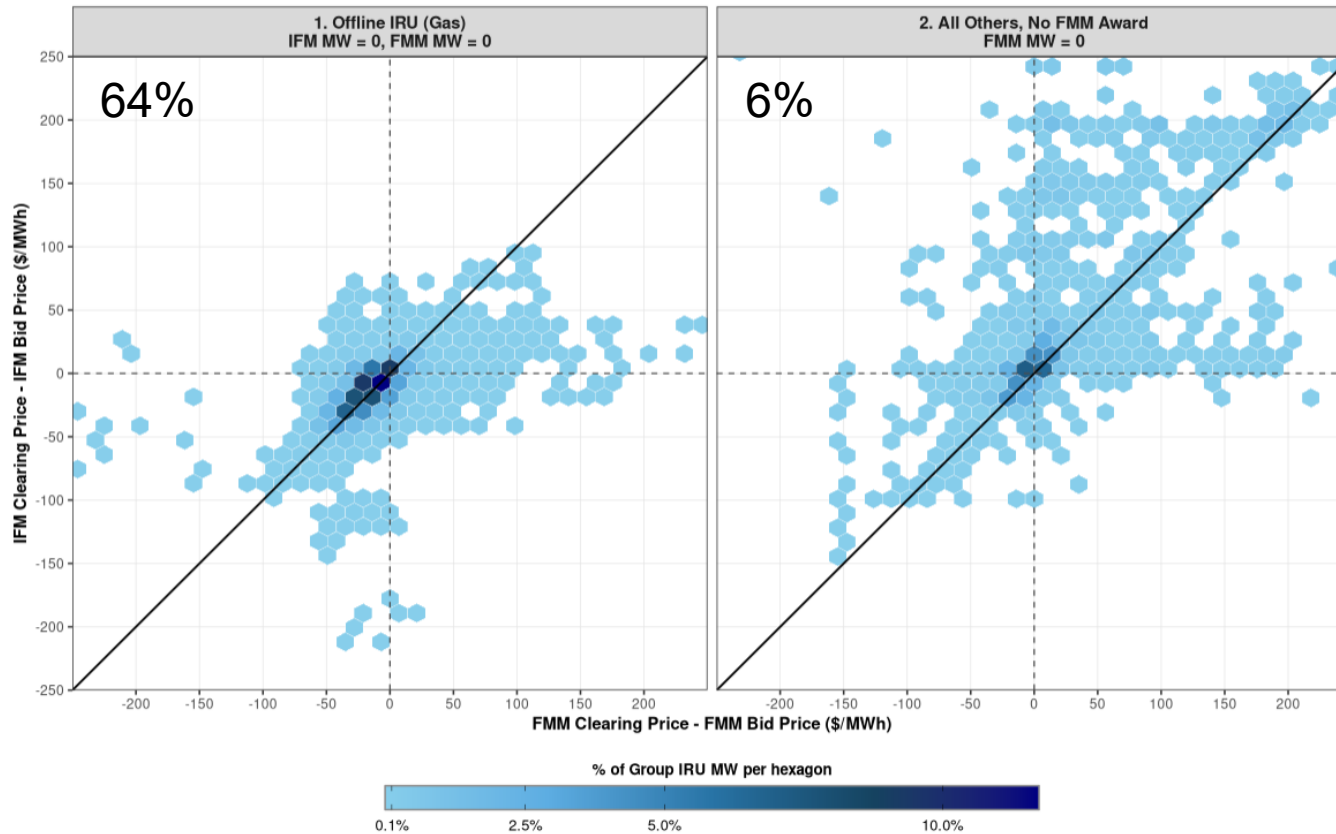
This could strand procured IR as contingencies are enforced in RT

Real-time congestion from contingency constraints for IR was not considered in the day-ahead market

September 2026 Average Congestion Costs by Constraint		Contingency	PACE			PACW			PGAE			SCE		
BAA	Constraint Name		Base	IRU	FMM	Base	IRU	FMM	Base	IRU	FMM	Base	IRU	FMM
CISO	30750_MOSSLD_230_30797_LASAGUIL_230_BR_1_1	Y				0.05			0.66		0.67	(0.48)		(0.66)
CISO	7760_DEV_RDB_ALIS	N	(0.22)		(0.32)			0.00	0.01		0.53	0.12		1.15
CISO	30765_LOSBANOS_230_30790_PANOCHÉ_230_BR_2_1	Y				0.61			0.29		0.07	(0.33)		(0.25)
CISO	38615_DS AMIGO_230_30790_PANOCHÉ_230_BR_1_1	Y				0.06		0.04	0.08		0.02	(0.19)		(0.62)
CISO	7820_TL 230S_OVERLOAD_NG	N	(0.16)		(0.27)	(0.08)			(0.09)		0.08	(0.04)		0.27
CISO	30060_MIDWAY_500_24156_VINCENT_500_BR_2_3	Y	(0.00)		(0.00)	(0.13)		(0.16)	(0.17)		(0.21)	0.12		0.15
CISO	30055_GATES1_500_30060_MIDWAY_500_BR_1_1	Y			(0.00)	0.01		0.27	0.01		0.31	(0.01)		(0.31)
CISO	30790_PANOCHÉ_230_30900_GATES_230_BR_1_1	Y				0.06		0.07	0.10		0.33	(0.07)		(0.29)
CISO	34418_KINGSBRG_115_34428_CONTADNA_115_BR_1_1	Y							0.12		0.30	(0.06)		(0.10)
CISO	35618_SN JSE A_115_35616_SNJOSEB_115_BR_1_1	Y							0.06		0.29	(0.06)		(0.15)
CISO	7430_CP6_NG	N							0.06	0.02	0.20	(0.05)	(0.01)	(0.21)
CISO	30790_PANOCHÉ_230_30900_GATES_230_BR_2_1	Y				0.13			0.19			(0.14)		
CISO	30056_GATES2_500_30060_MIDWAY_500_BR_2_1	Y						0.10			0.11			(0.11)
CISO	30733_VASONA_230_30735_METCALF_230_BR_1_1	Y									0.17			(0.05)
PACE	GLENCANY_SIGURD_230	N			(0.18)									0.03

Contingencies are not enforced for IR deployment scenarios, and this can result in additional congestion observed in FMM that prevent IR to be delivered

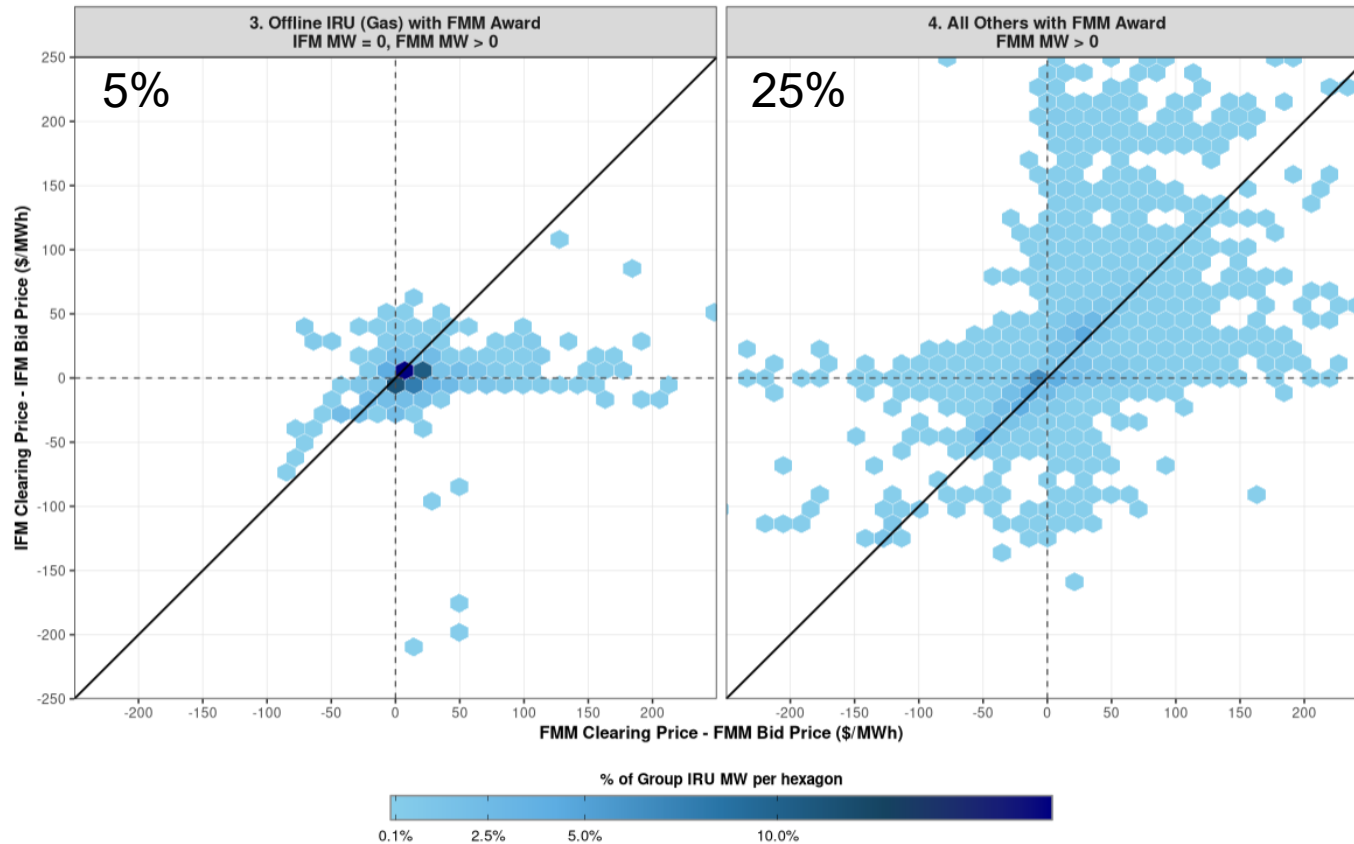
Congestion differences between EDAM and WEIM does not significantly impact IRU deliverability – CAISO BAA



- *Plot assumptions
- Bid prices use No load cost/ P_{min} as a proxy for offline resources
 - SOC, multi-interval optimization, outages, ramp-rate restrictions, startup and transition costs are not represented
 - \$250 limit on the price spread

- 64% of IRU procured from GAS is not utilized in real-time (too expensive to commit)
- 6% of other IRU awards are not dispatched in FMM due to other constraints

Congestion differences between EDAM and WEIM does not significantly impact IRU deliverability – CAISO BAA



*Plot assumptions

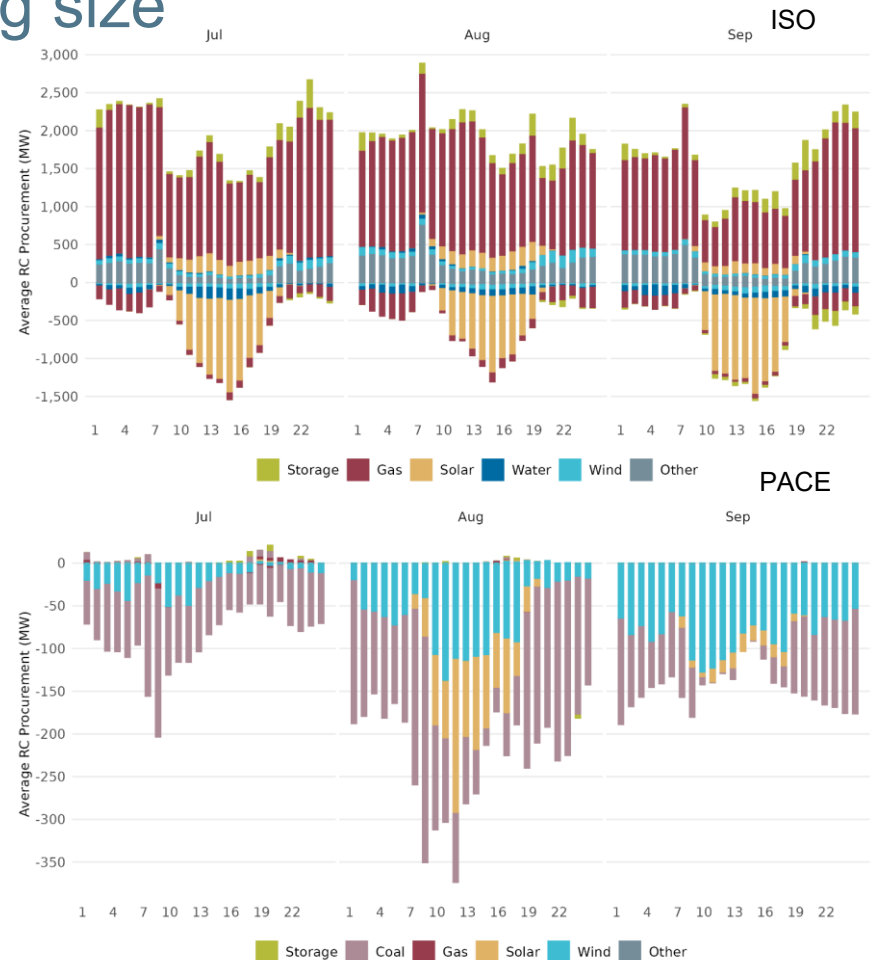
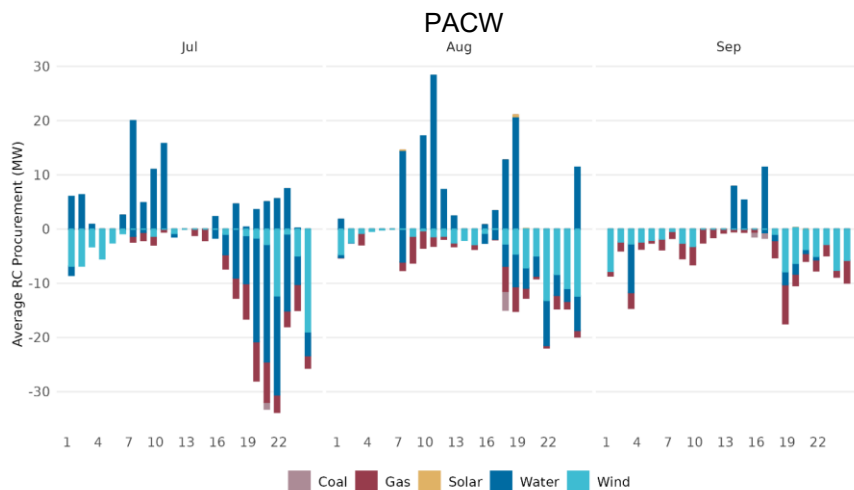
- Bid prices use No load cost/ P_{min} as a proxy for offline resources
- SOC, multi-interval optimization, outages, ramp-rate restrictions, startup and transition costs are not represented
- \$250 limit on the price spread

- Remaining 30% of IRU awards are deliverable in FMM with little impact from congestion preventing deliverability

The level of reliability capacity procured varies largely by area given their corresponding size

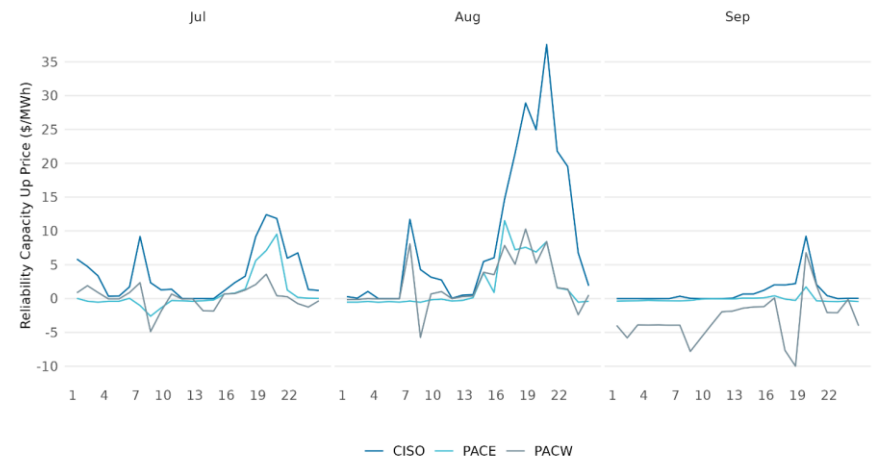
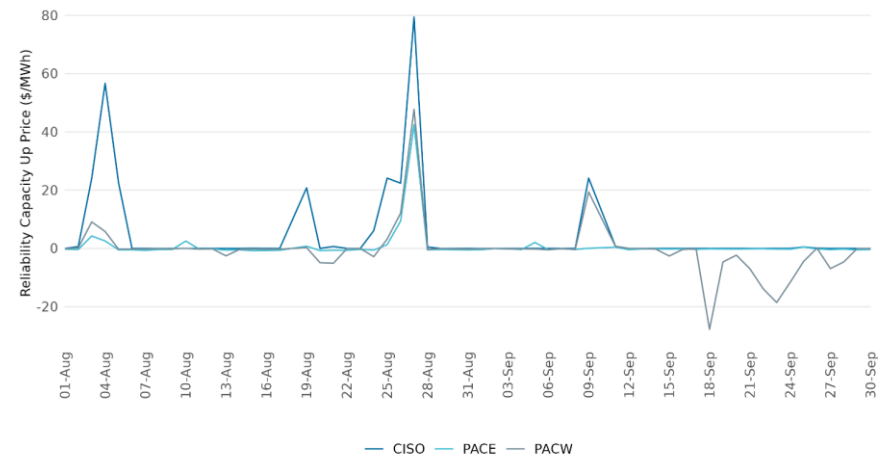
Reliability capacity is procured for the difference between the area's load forecast and physical supply cleared in the IFM

Underbidding of demand in IFM market leads to higher upward capacity procurement



Reliability capacity prices in PACW averaged $-\$2.98/\text{MWh}$ reflecting higher RCD needs

- RCU prices spiked on September 9 for CAISO and PACE averaging $\$24/\text{MWh}$ and $\$19/\text{MWh}$, respectively
- RCD prices in PACW spiked later in September averaging $\$28/\text{MWh}$ on September 18
- Hourly average RCU prices were highest during the evening peak
- Price separation reflects regional economic diversity, available supply mix and transfers



EDAM net export constraint enforced on all days for ISO area only

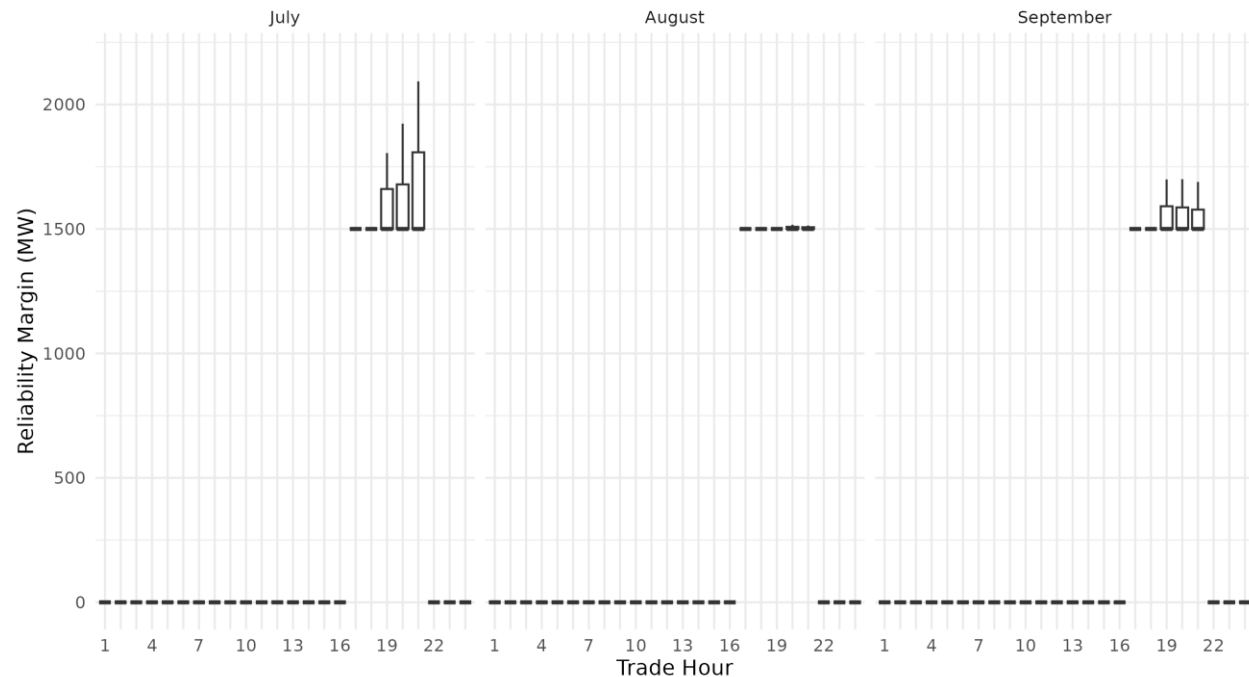
The net export constraint is an optional tool for BAAs to limit their net transfer exports to their excess RSE-eligible capacity

The constraint can be further tuned using a confidence factor for non-RSE eligible capacity and an additional reliability margin

The ISO reliability margin is set based on the most severe single contingency

The constraint has not been binding in the CAISO area in any hour since May.

ISO Reliability Margin, July-September 2026



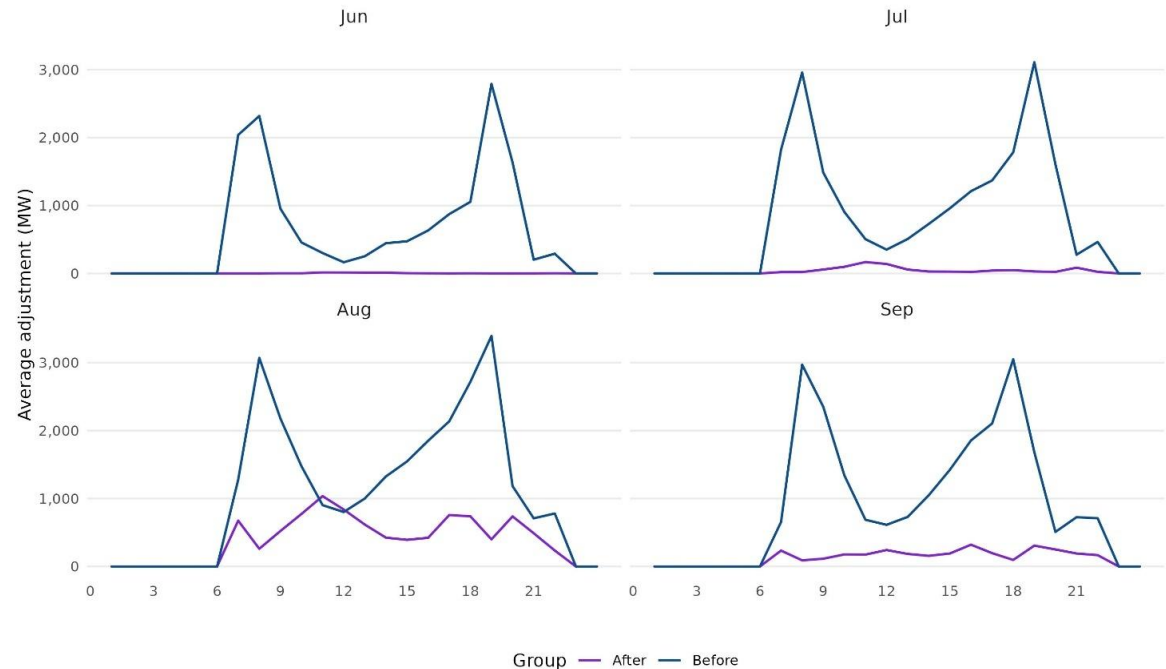
Procurement of imbalance reserves has lowered both the frequency and magnitude of ISO manual adjustments

Hourly average of manual adjustments

Reduction from 65 percent in 2025 to 11 percent in 2026

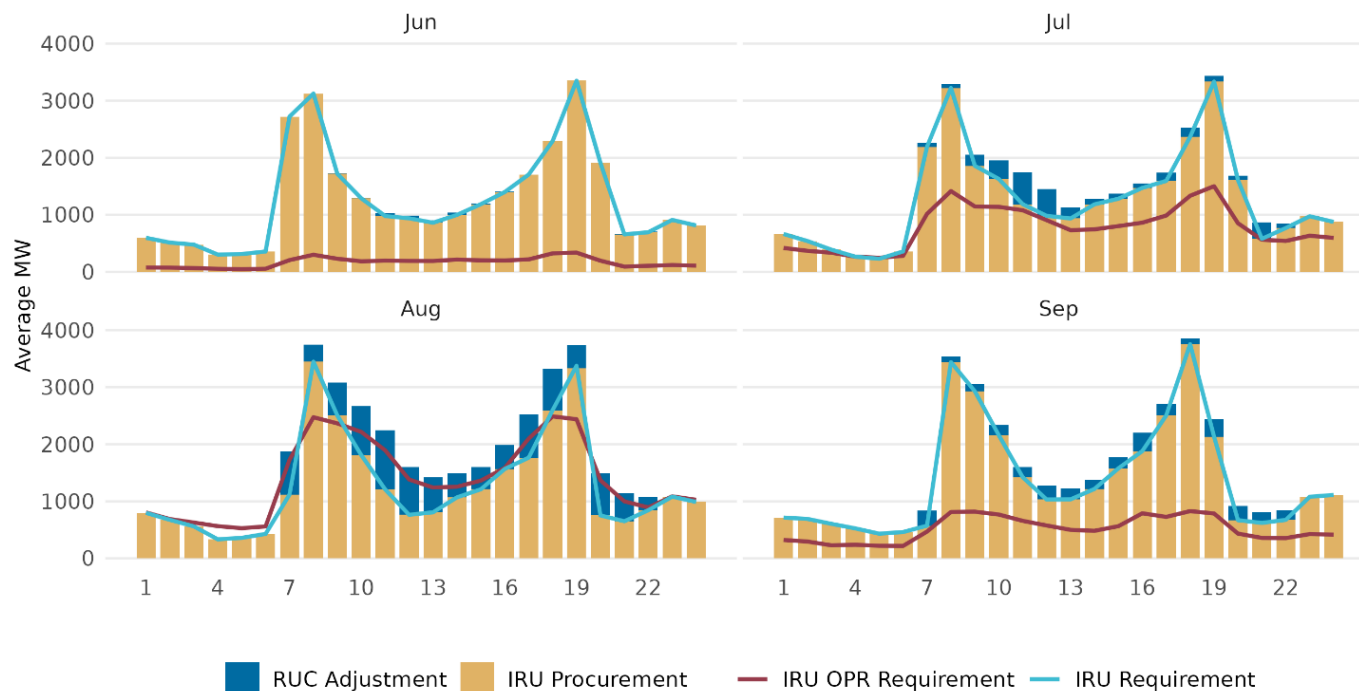
The day-ahead market procures most uncertainty needs through imbalance reserves

Manual adjustments are still likely when ISO area loads exceed 42,000MW



The CAISO has laid out the conditions under which it will use the RUC load adjustments in the EDAM BPM based on the load forecast, cleared imbalance reserves, and other operational concerns

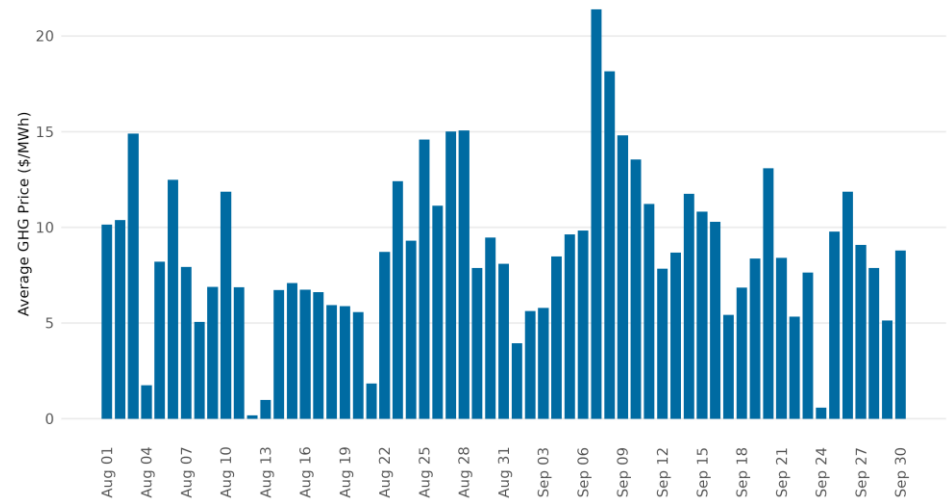
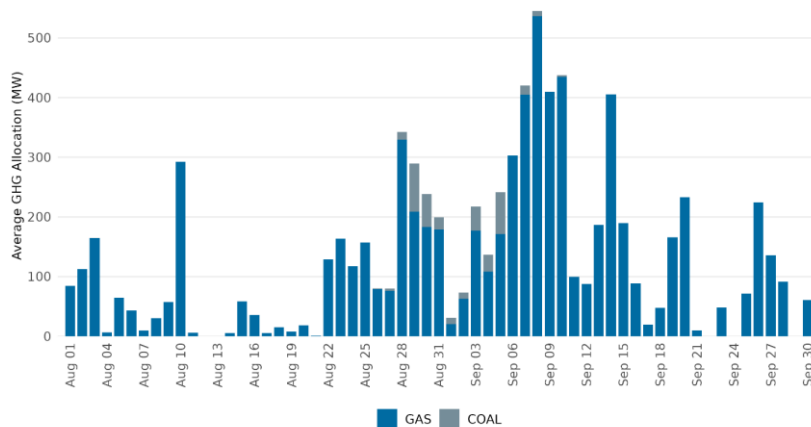
With the implementation of EDAM, RUC adjustments complement IRU procurement in high-load days



RUC adjustment, along with IRU procurement, meet the high IRU operation requirement during peak load days.

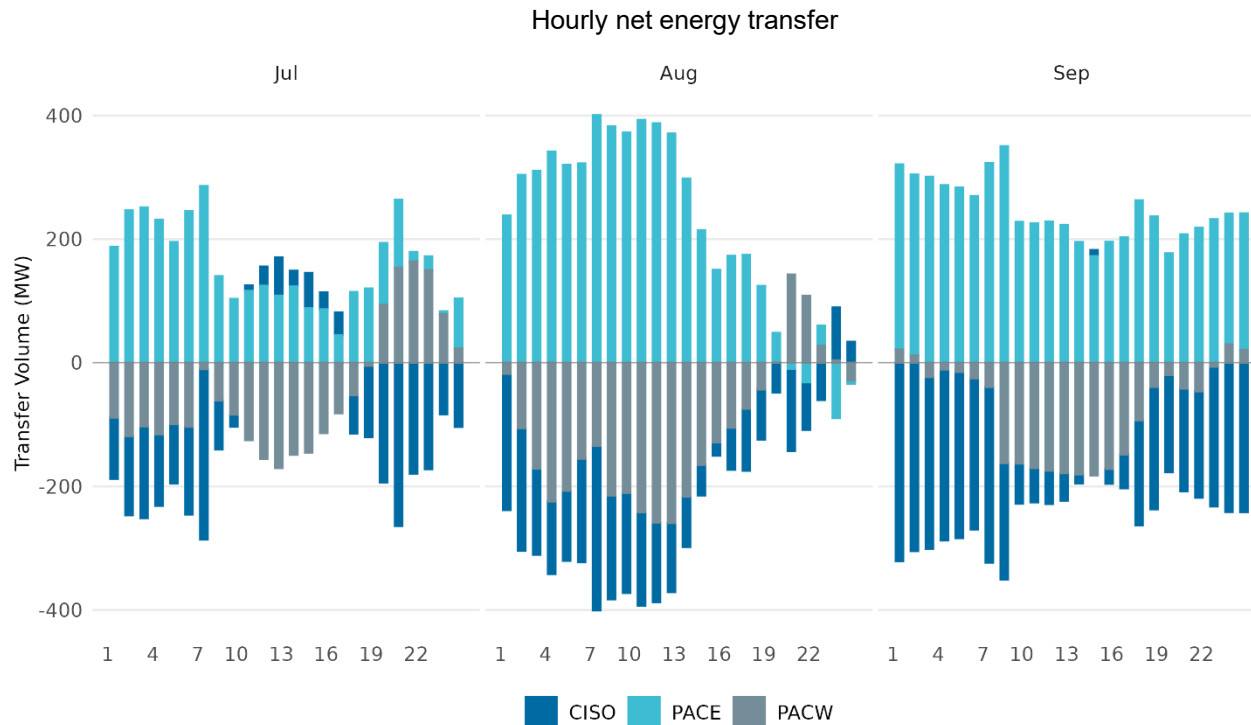
Daily average greenhouse gas allocation reached a maximum of 545 MW on September 8

- Average GHG price in September was \$9.33/MWh, higher than August's \$8.25/MWh



- Average GHG allocation in September was 166.10 MW, much higher than 90.81 MW observed in August
- A market issue in late August and early September caused \$0 GHG bids for some PACE resources, leading to coal GHG allocation.

Transfer capability available among areas is enabling the economics of the larger market footprint



The ISO remained net importer (-) throughout July to September

The PACE remained net exporter (+) and increased energy exports in August and September

The PACW remained high demand for imports across three months

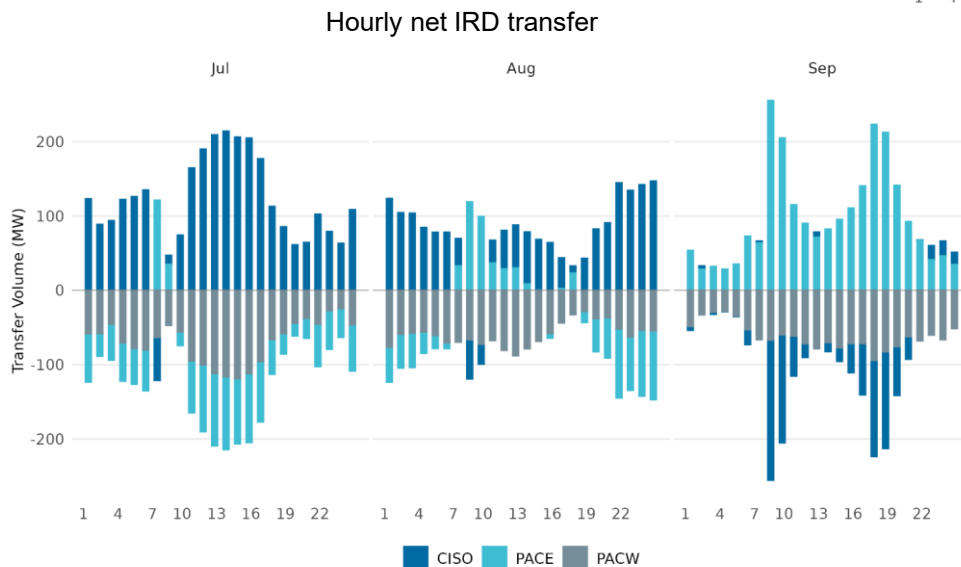
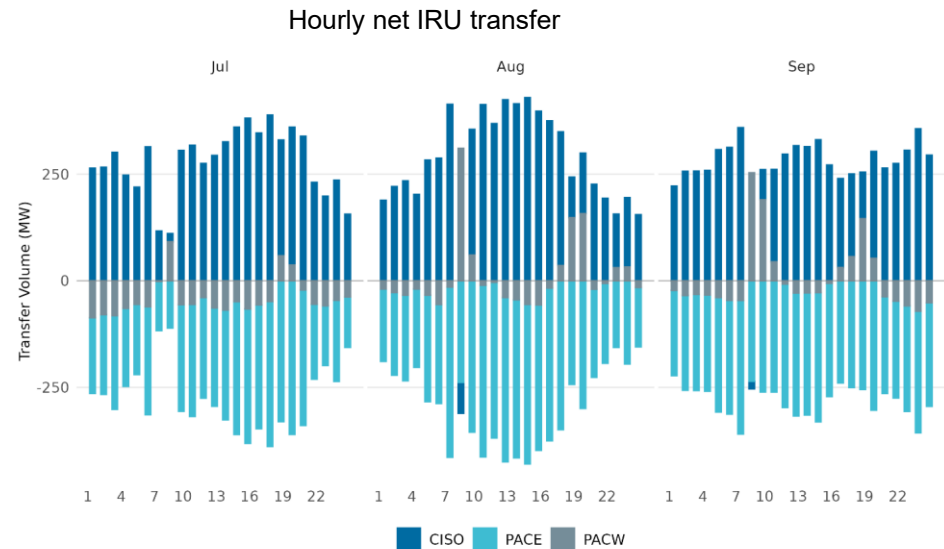
The EDAM is also finding economic transfers for imbalance reserves for both directions

September has same IRU transfer patterns

CAISO remained an IRU net exporter

PACE remained an IRU net importer

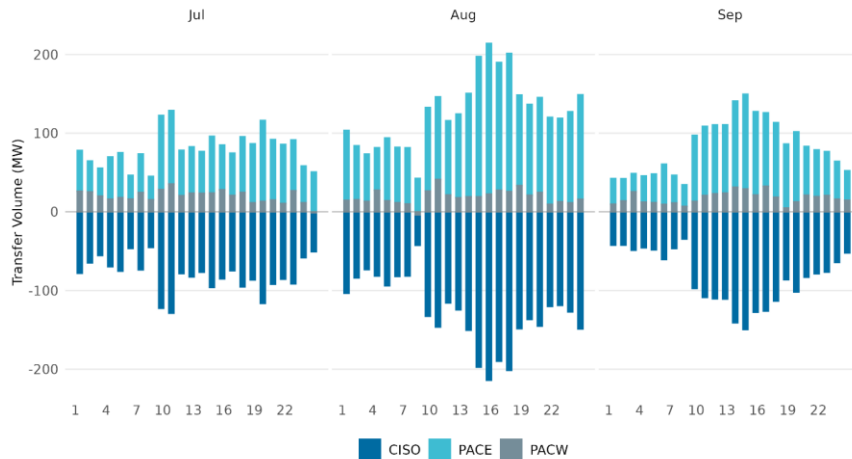
PACW imported IRU during most hours but exported on peak hours



The direction of IRD transfers reversed in September. CAISO switched to net IRD importer on peak hours. PACE switched to net exporter PACW remained net importer

The EDAM also realized economic transfers for reliability capacity

Hourly net RCU transfer



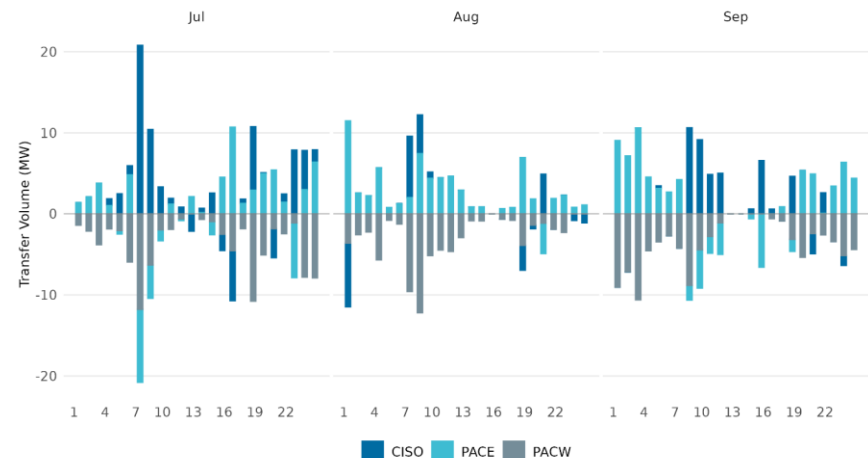
The ISO remained RCU net importer

PACE and PACW were net exporters

RCU transfer decreased by half in September compared to August

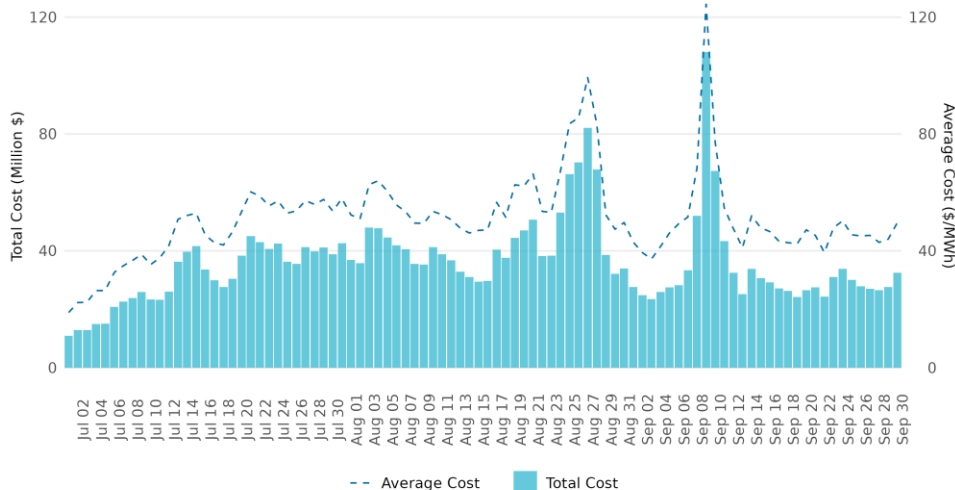
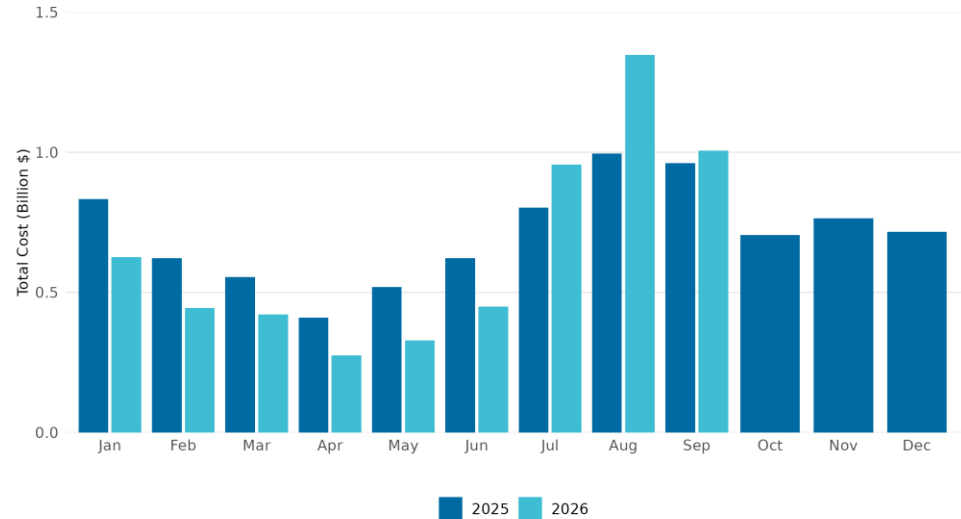
RCD net transfer showed relatively small volumes across the three BAAs
Several notable spikes in morning peak hours

Hourly net RCD transfer



ISO total market costs continue to follow seasonal and longer-term trends with no significant impact from EDAM

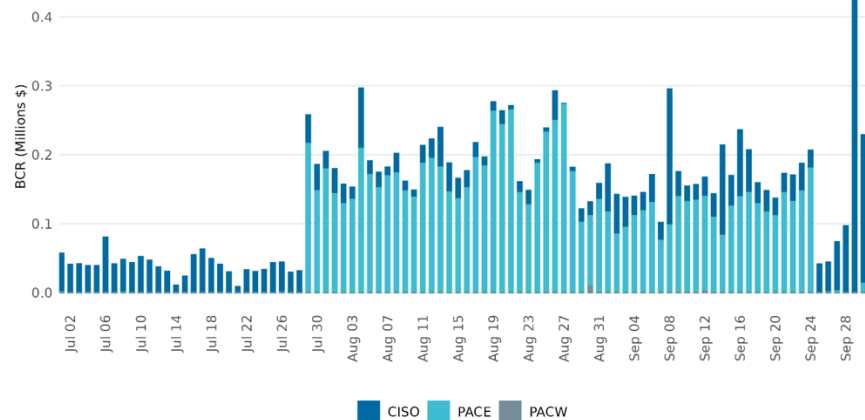
- Total costs at just over \$1 billion, consistent with historical trends
- Highest costs attributed to peak-load days early in the month



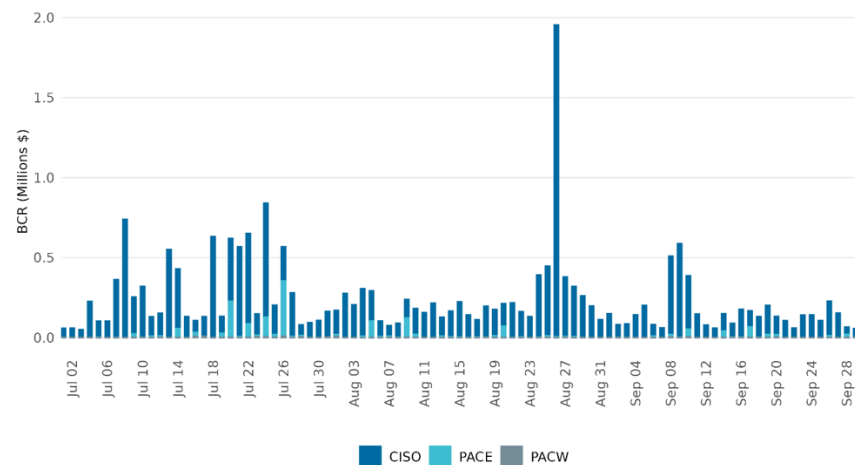
This metric includes cost for energy and AS from both day-ahead and real time markets, bid cost recovery, offsets and now the cost of imbalance reserves and reliability capacity

CAISO BCR in September is consistent with amounts seen in previous months since EDAM launch

IFM BCR



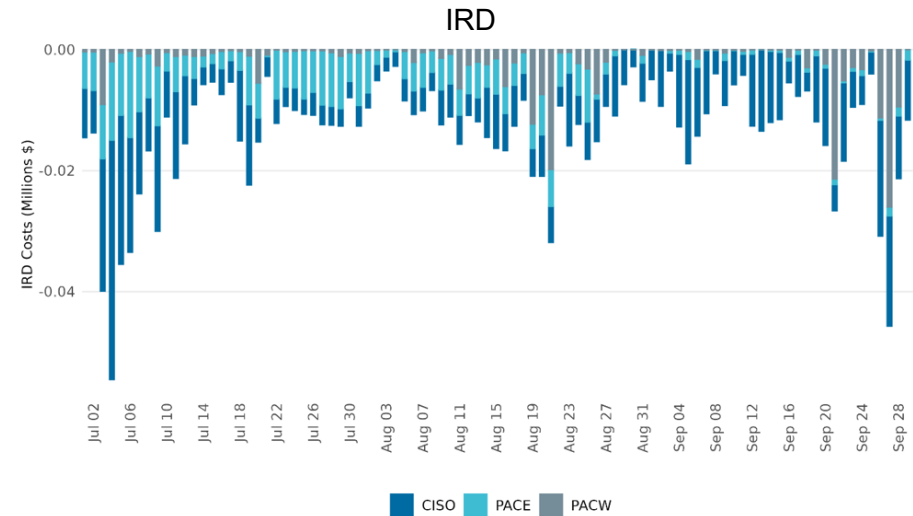
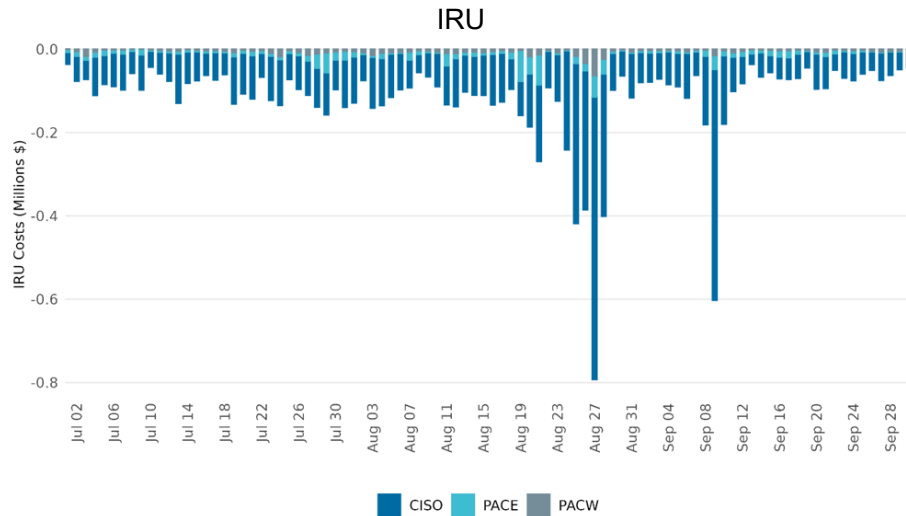
RTM BCR



AREA	IFM					RTM				
	May	Jun	Jul	Aug	Sep	May	Jun	Jul	Aug	Sep
CISO	3.68	2.23	1.23	0.72	2.11	8.59	3.87	7.96	7.8	4.48
PACE	0.36	0.08	0.545	5.45	2.95	1.49	0.11	0.99	0.432	0.27
PACW	0.11	0.005	0	0.009	0.002	0.25	0.025	0.06	0.028	0.027

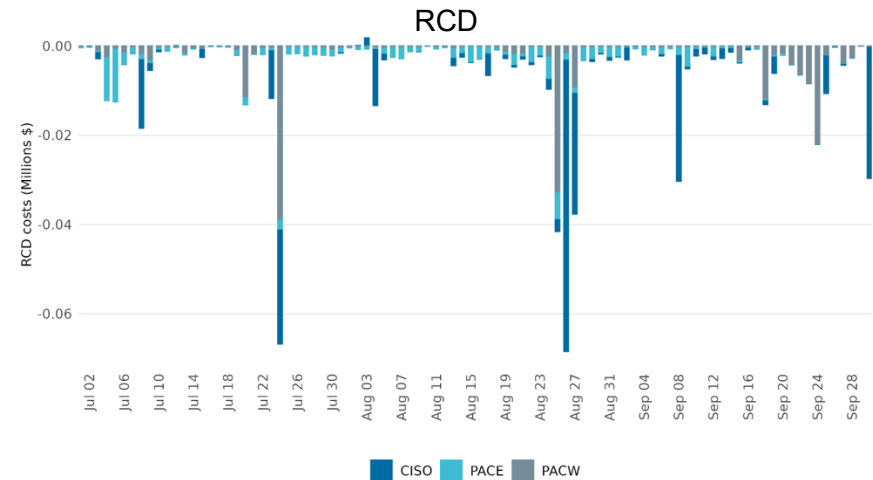
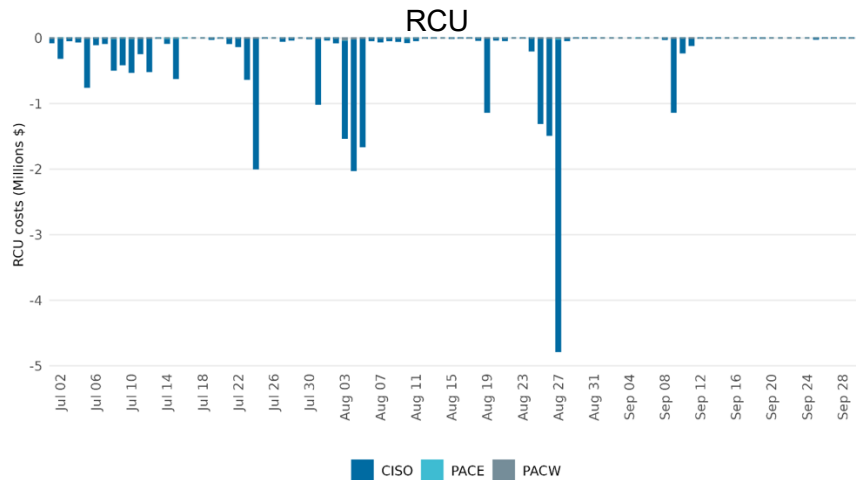
The issue driving the large amount BCR in PACE for July 29th – Sep 24th has been fixed

Across all EDAM areas, IR costs are on average \$3.9 million through September



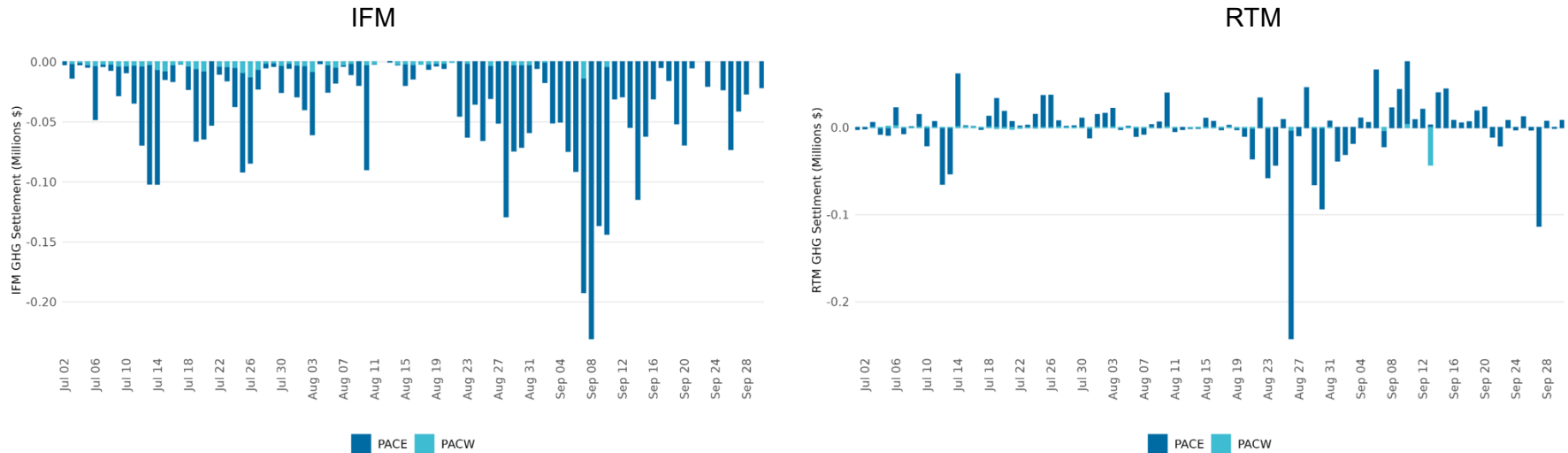
	IRU Total Costs (\$million)					IRD Total Costs (\$million)				
BAA	May	June	July	Aug	Sep	May	June	July	Aug	Sep
CAISO	-2.07	-1.79	-2.39	-4.47	-2.52	-1.23	-0.36	-0.28	-0.16	-0.27
PACW	-0.36	-0.10	-0.16	-0.32	-0.12	-0.16	-0.12	-0.20	-0.12	-0.02
PACE	-0.22	-0.48	-0.34	-0.51	-0.24	-0.21	-0.06	-0.03	-0.09	-0.12

Across all EDAM areas, RC costs are on average \$8.2 million through September



	RCU Total Costs (\$million)					RCD Total Costs (\$million)				
BAA	May	June	July	Aug	Sep	May	June	July	Aug	Sep
CAISO	-9.06	-2.58	-8.16	-14.5	-1.51	-0.84	-2.82	-0.06	-0.12	-0.09
PACW	-0.22	-0.01	-0.01	-0.04	0.00	-0.02	-0.05	-0.07	-0.05	-0.07
PACE	-0.32	-0.03	-0.03	-0.03	-0.02	0.00	-0.01	-0.05	-0.06	-0.02

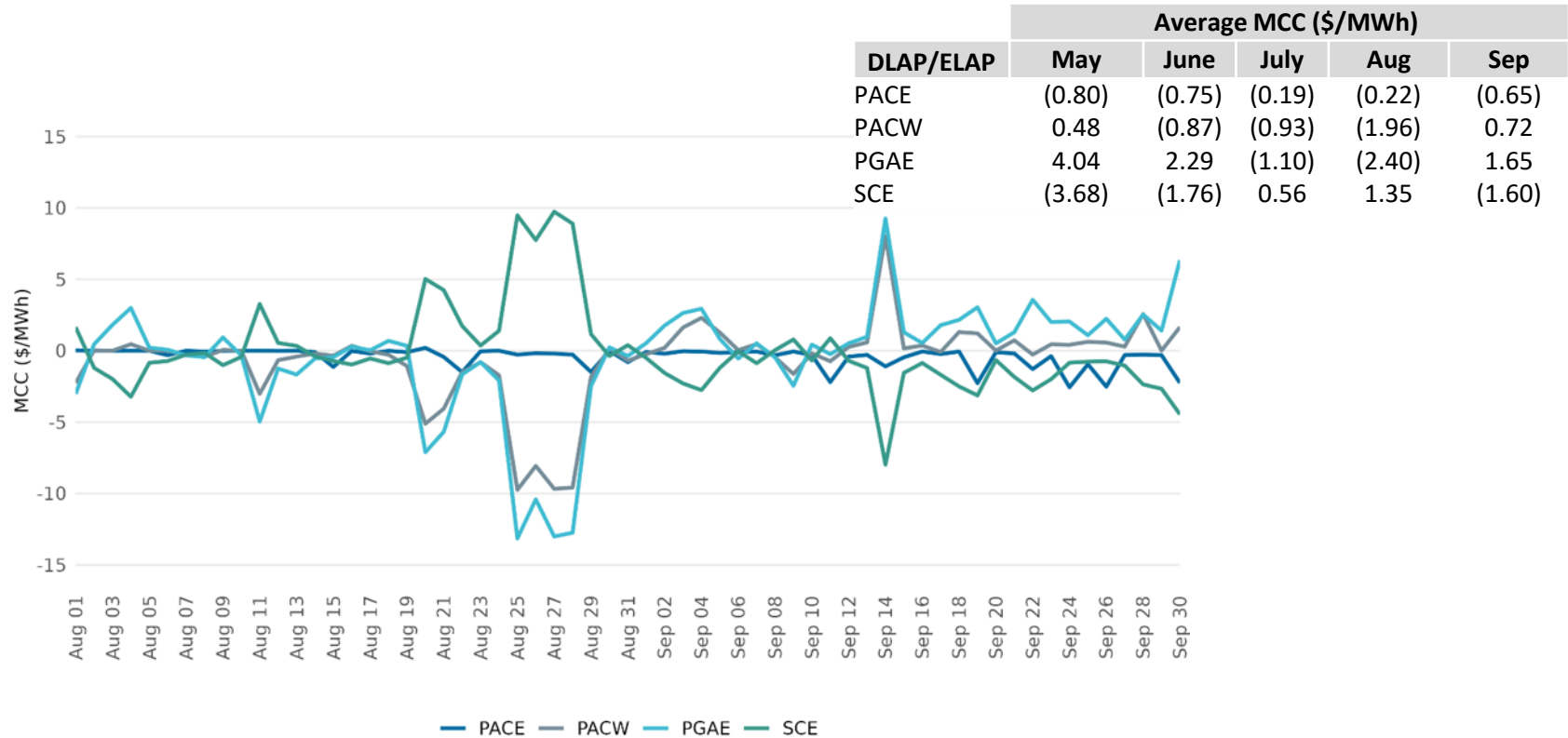
GHG settlement in September was \$1.5 million, up from August's \$1.3 million, a 14 percent increase



	IFM GHG Costs (\$ million)					RTM GHG Costs (\$ million)				
BAA	May	June	July	Aug	Sep	May	June	July	Aug	Sep
PACW	-0.28	-0.20	-0.86	-0.92	-1.65	-0.18	-0.18	0.12	-0.37	0.18
PACE	-0.01	-0.03	-0.10	-0.05	-0.02	0.001	0.002	0.01	-0.001	-0.04

Negative values indicate a payment to the Scheduling Coordinator and positive values, which will only occur in RTM, indicate a buyback amount

Congestion pattern flipped to South to North in September



- Congestion led to higher prices in the north and lower prices in the south
- PACW congestion costs followed a trend similar to that of Northern California, as PACW is geographically closer to the region

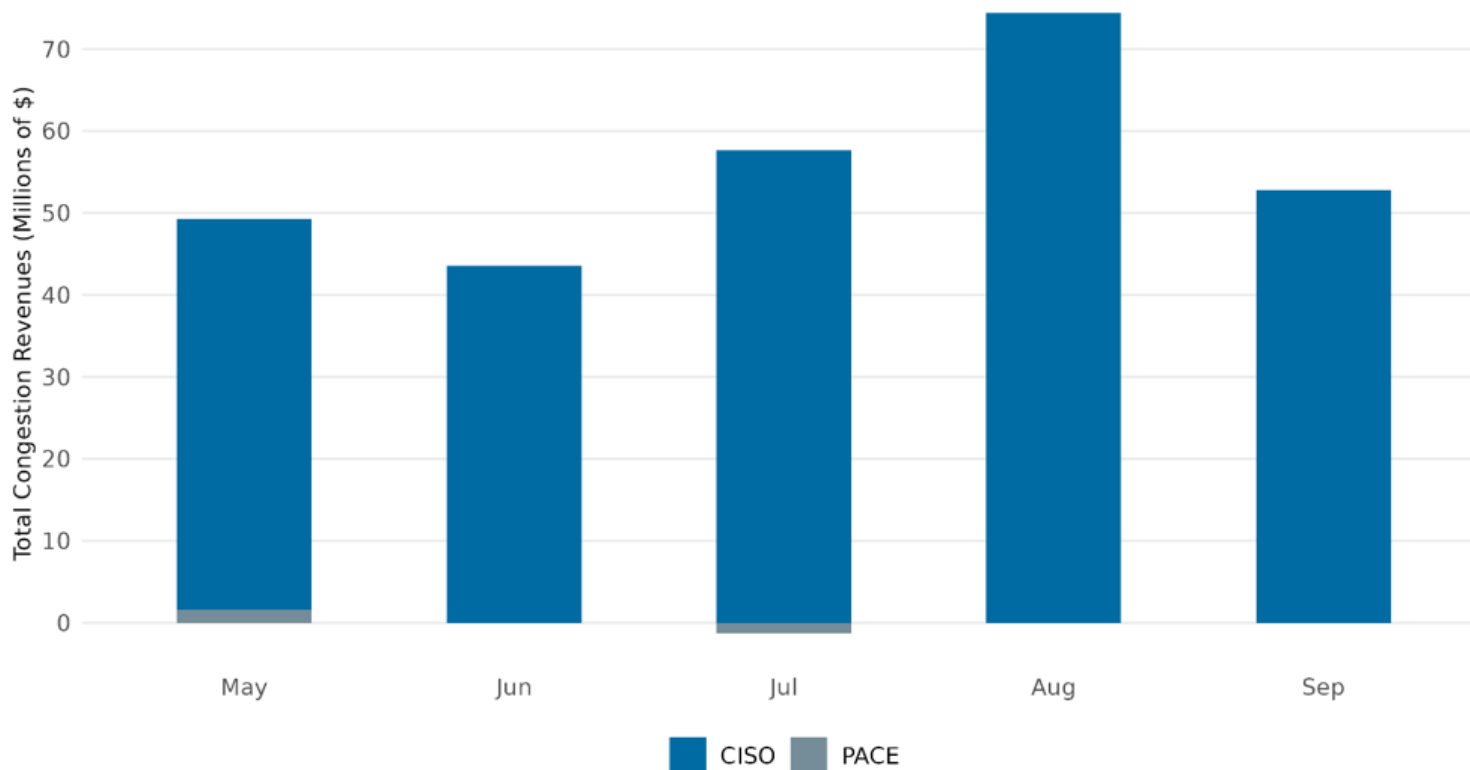
Average congestion impacts across EDAM areas in September are limited to CISO area constraints

LAP Congestion Price Impact (\$/MWh)												
Origin of Congestion	July				Aug				Sep			
	PACE	PACW	PGAE	SCE	PACE	PACW	PGAE	SCE	PACE	PACW	PGAE	SCE
CISO	-0.19	-0.92	-1.04	0.58	-0.22	-1.96	-2.40	1.35	-0.65	0.72	1.65	-1.60
Base	-0.19	-0.92	-1.09	0.64	-0.21	-1.73	-2.11	1.16	-0.64	0.72	1.52	-1.52
IRD	0.000	0.000	0.02	-0.01	0.000	0.000	0.01	0.00	-0.007	-0.004	0.08	-0.04
IRU	-0.002		0.03	-0.05	-0.007	-0.23	-0.31	0.19	0.000	0.00	0.05	-0.04
PACE			-0.05	-0.05								
Base			-0.05	-0.05								
IRD												
IRU			-0.001	-0.001								

**Calculated by sum of mcc impact / total number of intervals for the month*

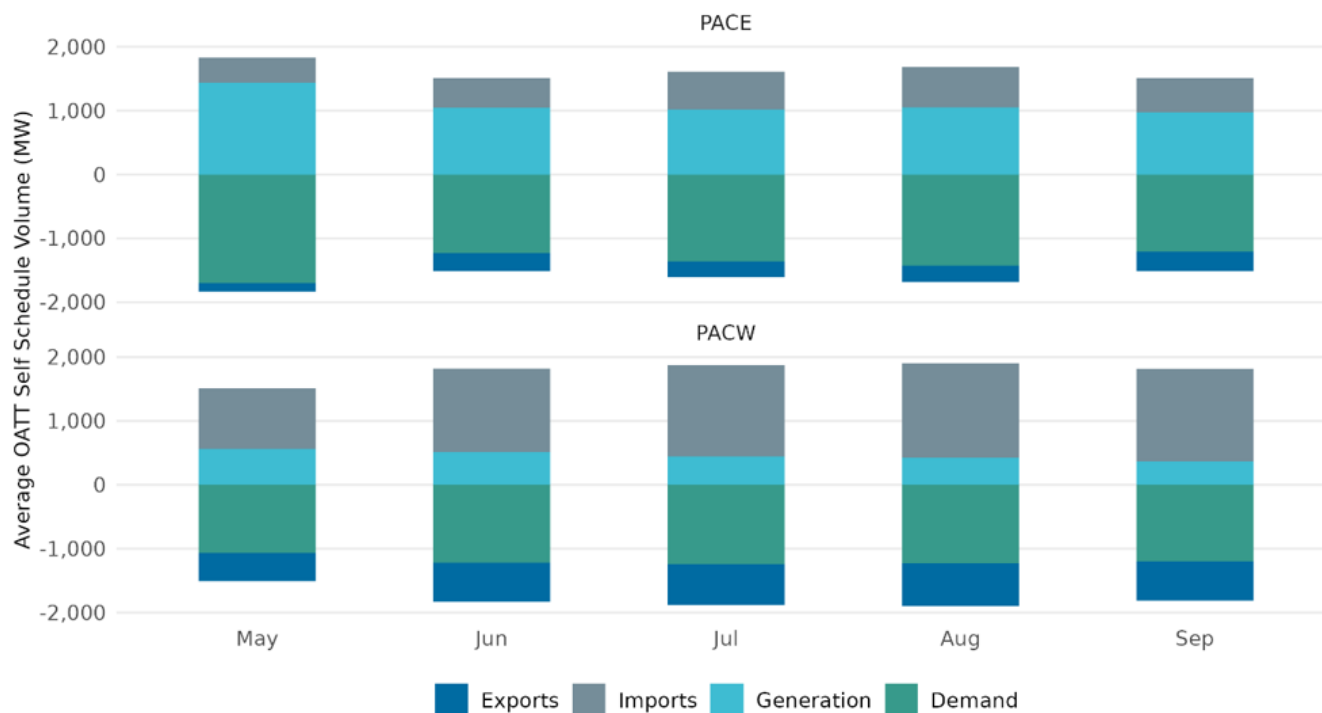
- In September, CISO constraints, on average, impacted PACE ELAP prices by -\$0.65 and PACW ELAP by \$0.72
- Congestion arose largely from energy product while IR congestion was minimal
- There was no PAC area congestion for flow-based constraints

Total EDAM congestion revenues in September were \$52.7M due to CISO area constraints



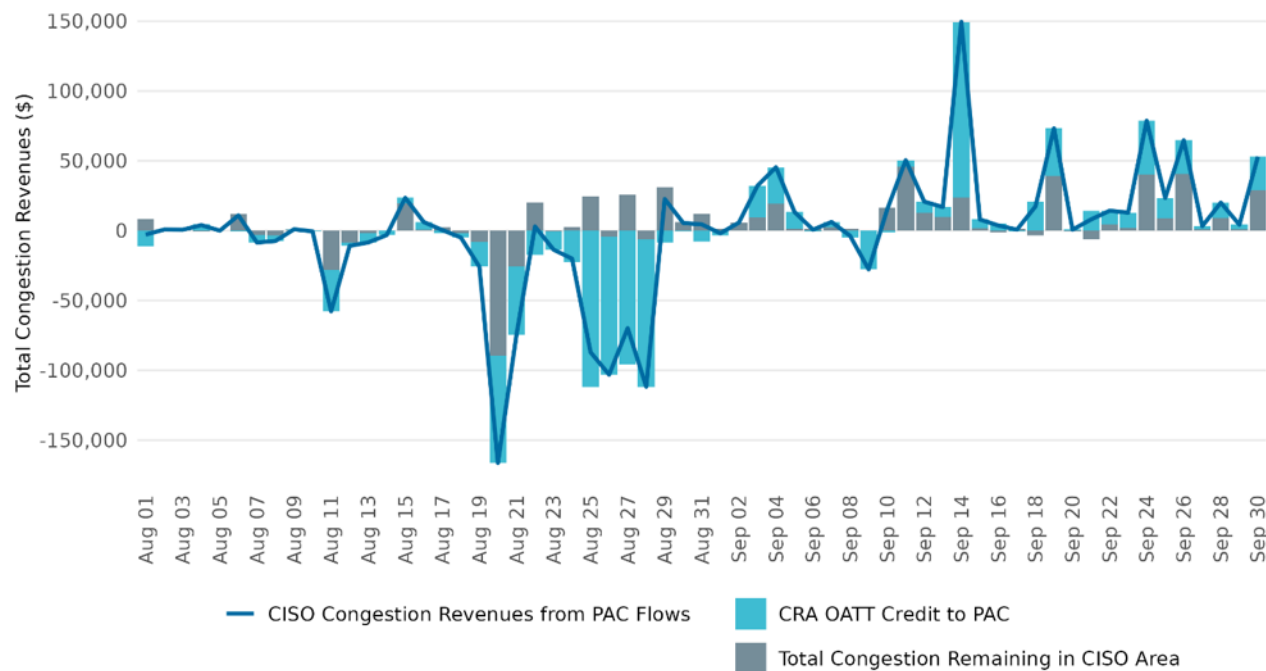
Over 99 percent of collected congestion revenues in EDAM arose from CAISO constraints

The volume of CRA eligible self-schedules remains steady since EDAM implementation



The proportions of OATT balanced self-schedules to overall self-schedules for PACE and PACW were 46% and 72% in September

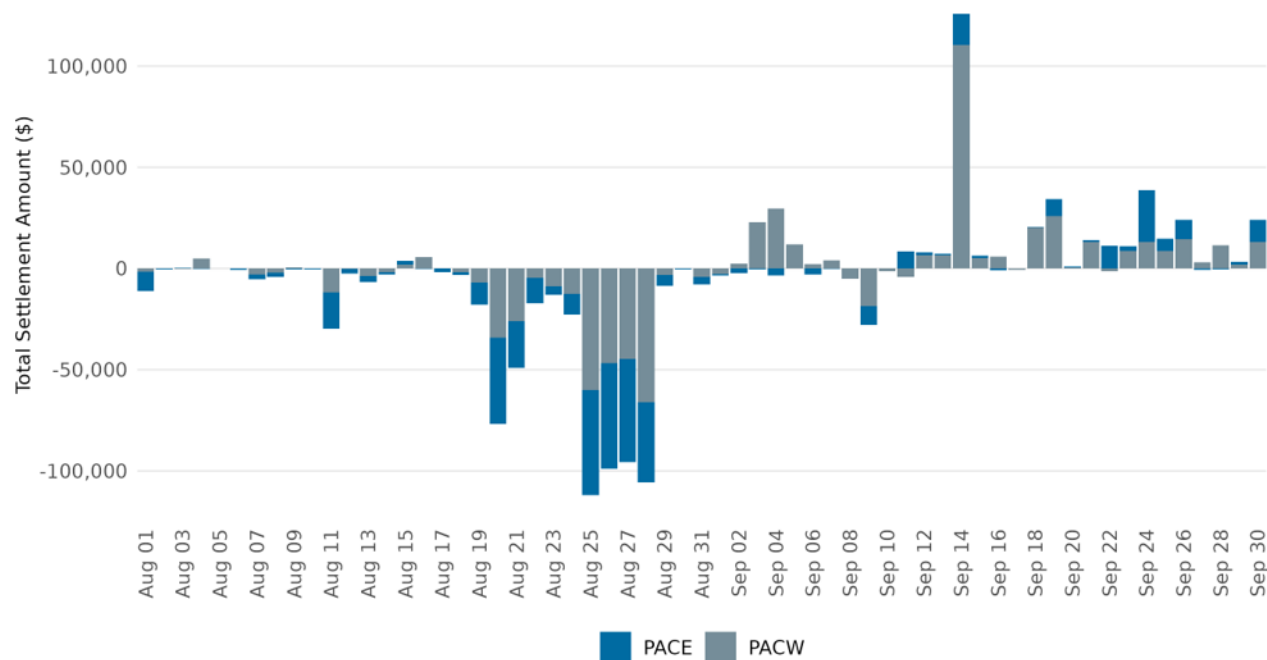
Congestion revenues from PAC transactions on CISO constraints in September totaled \$710k



- Totals include both revenues allocated back to PAC for OATT credits as well as congestion revenues from non-OATT transactions
- About \$392k credited back to PAC for self schedules associated with OATT rights leaving approximately \$318k in the CAISO area

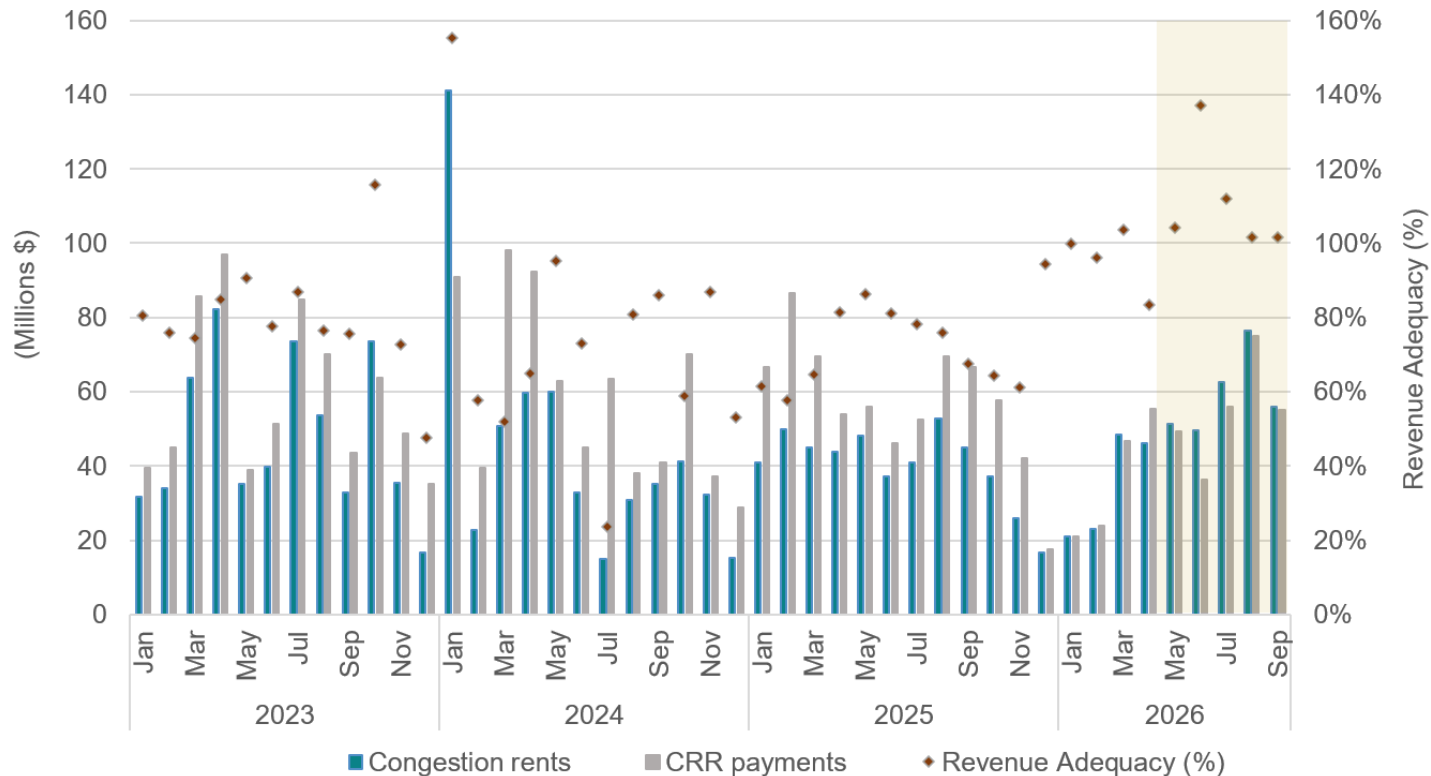
Revenue allocation for parallel flows from exercised transmission rights on CISO constraints totaled \$392k

Estimated congestion revenue allocation to PAC areas from OATT credits



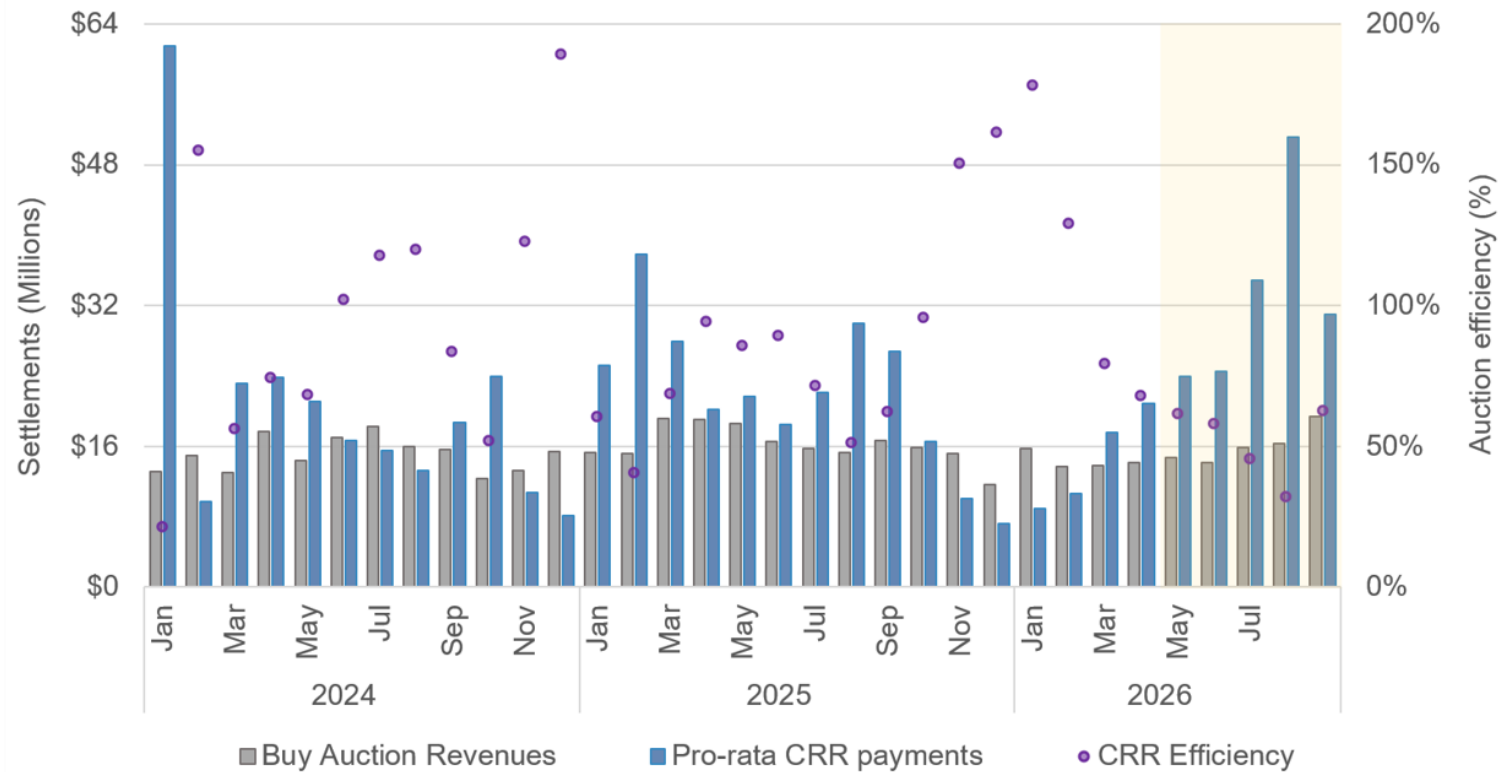
- Negative values reflect a charge back to PAC due to their schedules originally receiving congestion payments for providing counterflow to congestion in CISO areas
- \$83,300 for PACE and \$308,400 for PACW in September

CRR revenue adequacy has been over 100% at the system level since EDAM launched



There is minimal impact on CRR revenue adequacy from the EDAM implementation given the low levels of congestion revenues involved so far in the congestion revenue allocation process

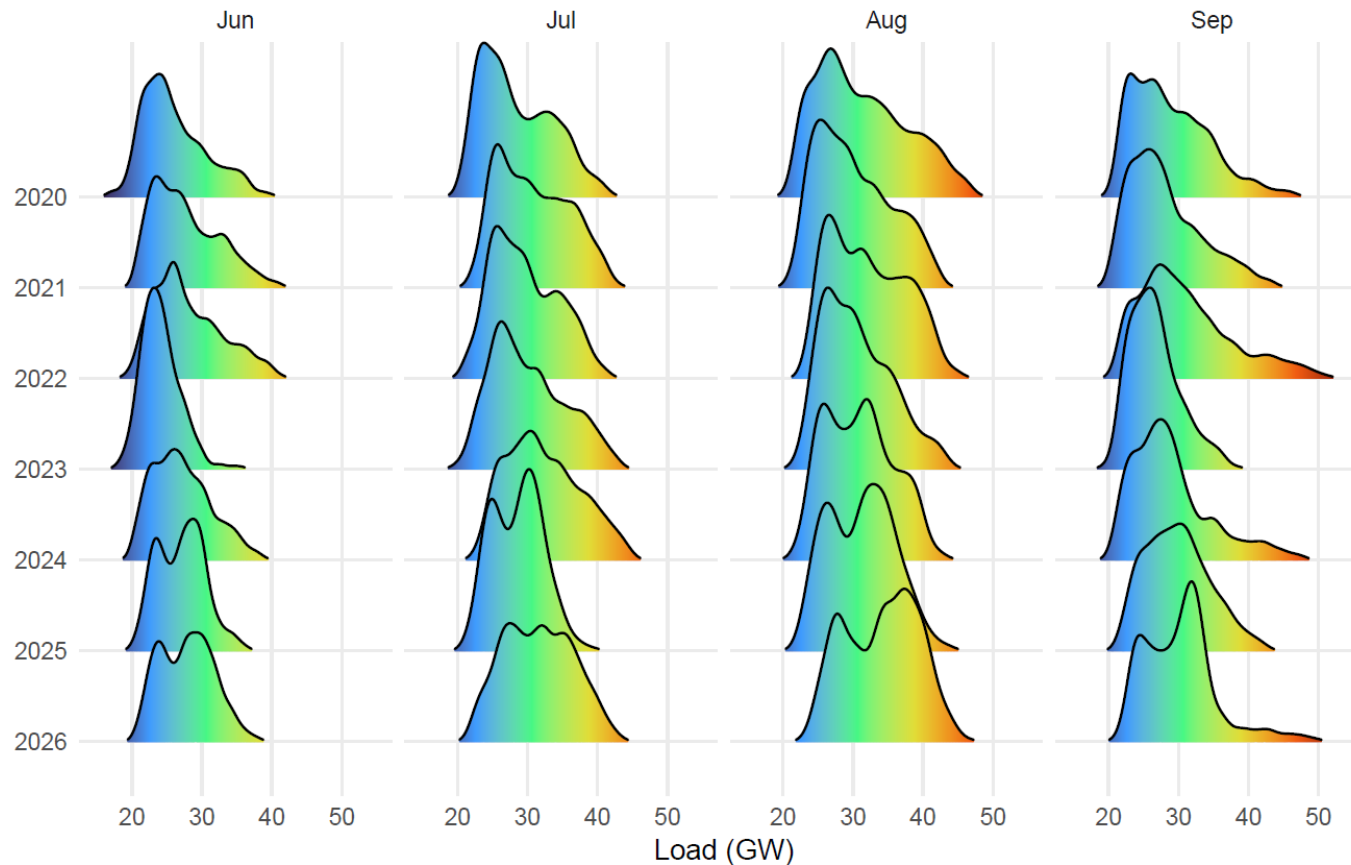
CRR auction efficiency increased to 62 percent in September



This outcome is mainly due to lower congestion maintaining steady levels of auction revenues. This is not driven by EDAM implementation

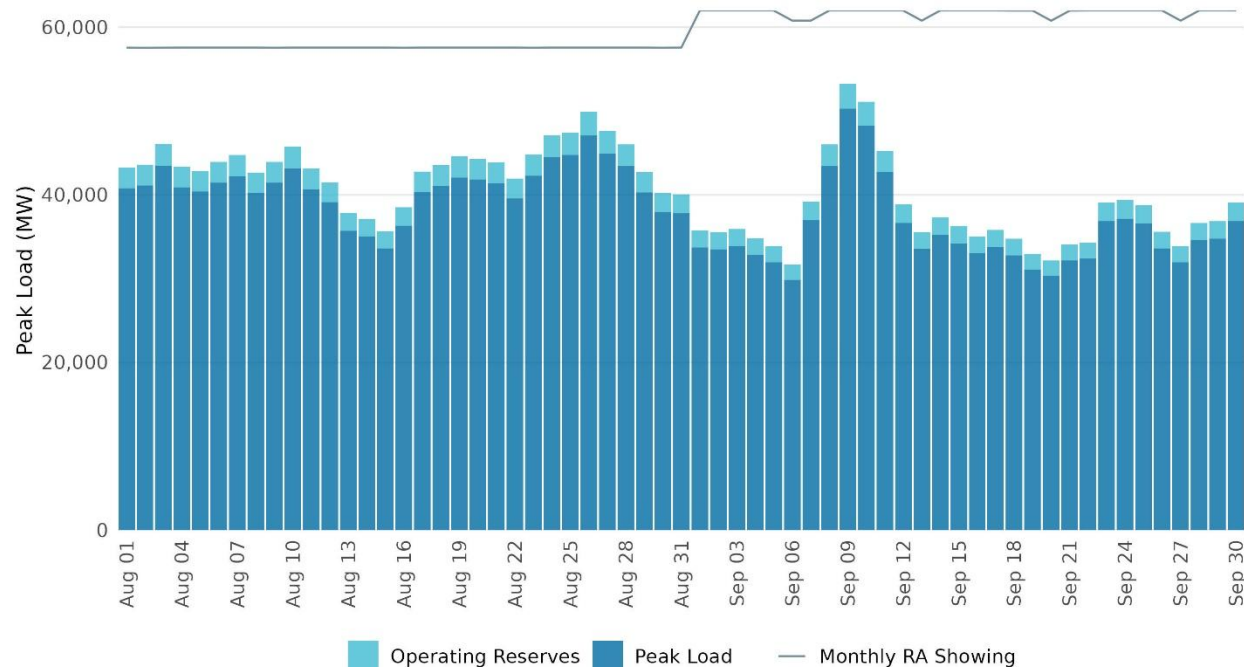
SUMMER CONDITIONS

The ISO peaked at 50,335 MW on September 9



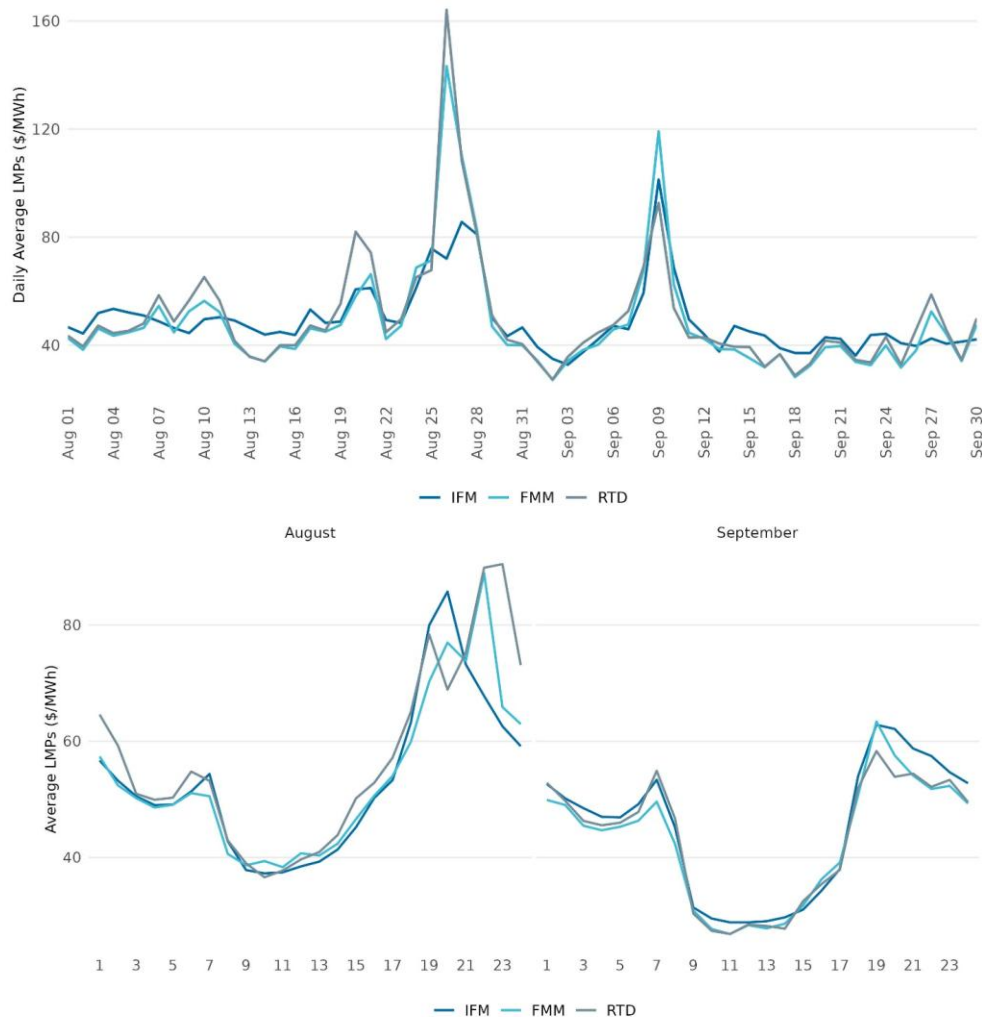
The September 9 peak of 50,335 MW was higher than the August ISO peak of 47,140 MW and reached the highest peak of the year. It was only about 3.3% below the all-time record of 52,061 MW on September 6, 2022.

There was sufficient RA supply available in the system to meet CAISO's load conditions



- The highest five-minute average peak load for September was 50,252 MW.
- The September peak exceeded the CEC month-ahead forecast of 46,360 MW.
- Actual load remained below monthly RA showings throughout September, leaving sufficient RA headroom.

ISO market prices decreased in September, with daily prices peaking on September 9

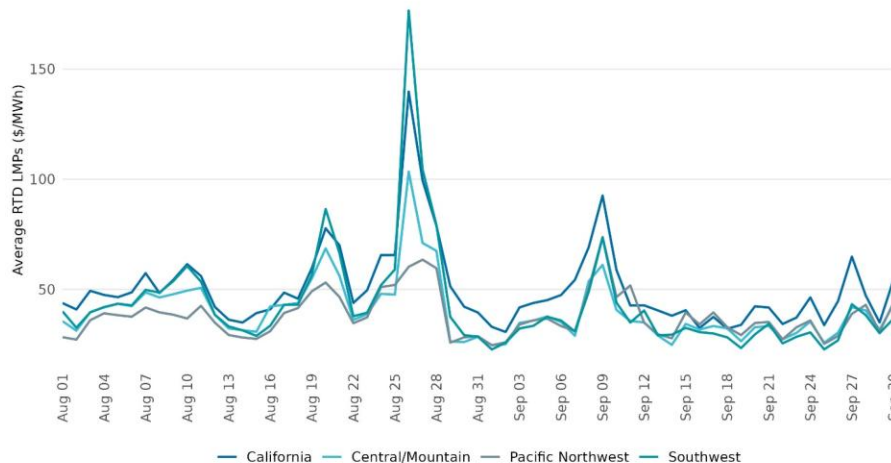


ISO market prices were generally lower in September than in August.

Daily prices peaked on September 9 across IFM, FMM, and RTD.

Hourly prices peaked at HE19 in September across IFM, FMM, and RTD.

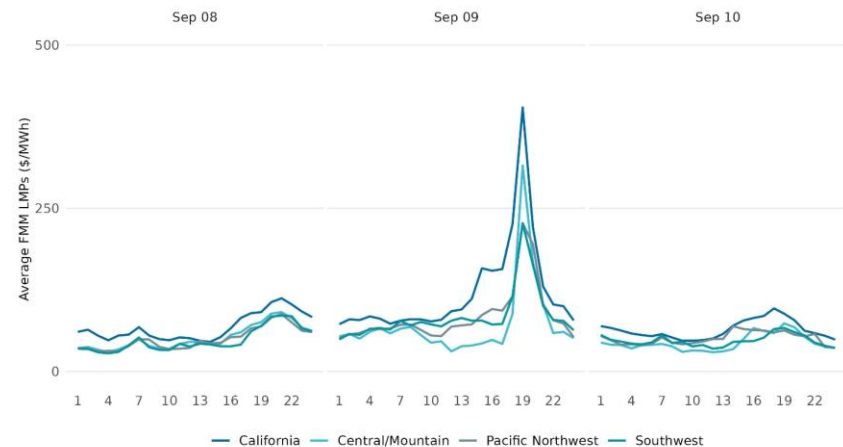
Regional FMM and RTD prices were generally lower in September, with notable increases on September 9



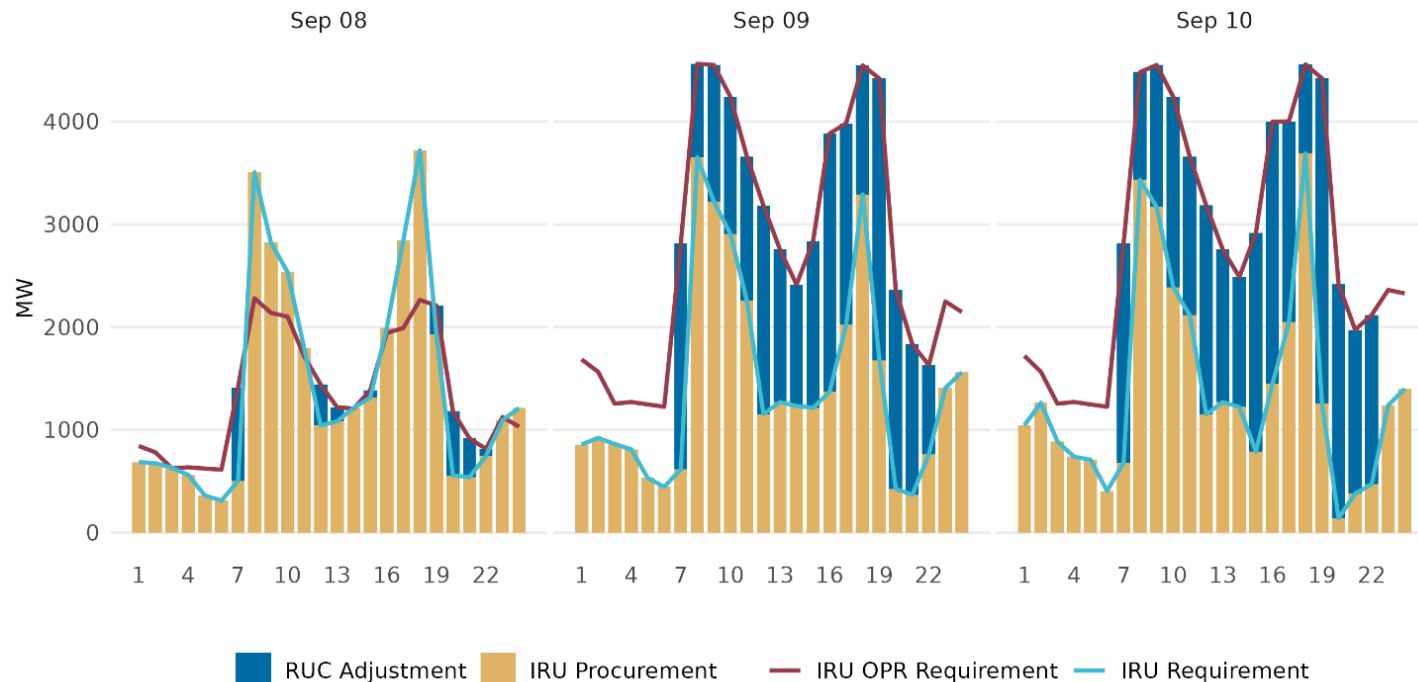
Daily average prices peaked in California on September 9 at about \$121/MWh in FMM and \$93/MWh in RTD.

Hourly prices spiked during the evening hours on September 9, particularly in California.

California average hourly prices peaked at \$405/MWh in FMM and \$193/MWh in RTD on September 9.

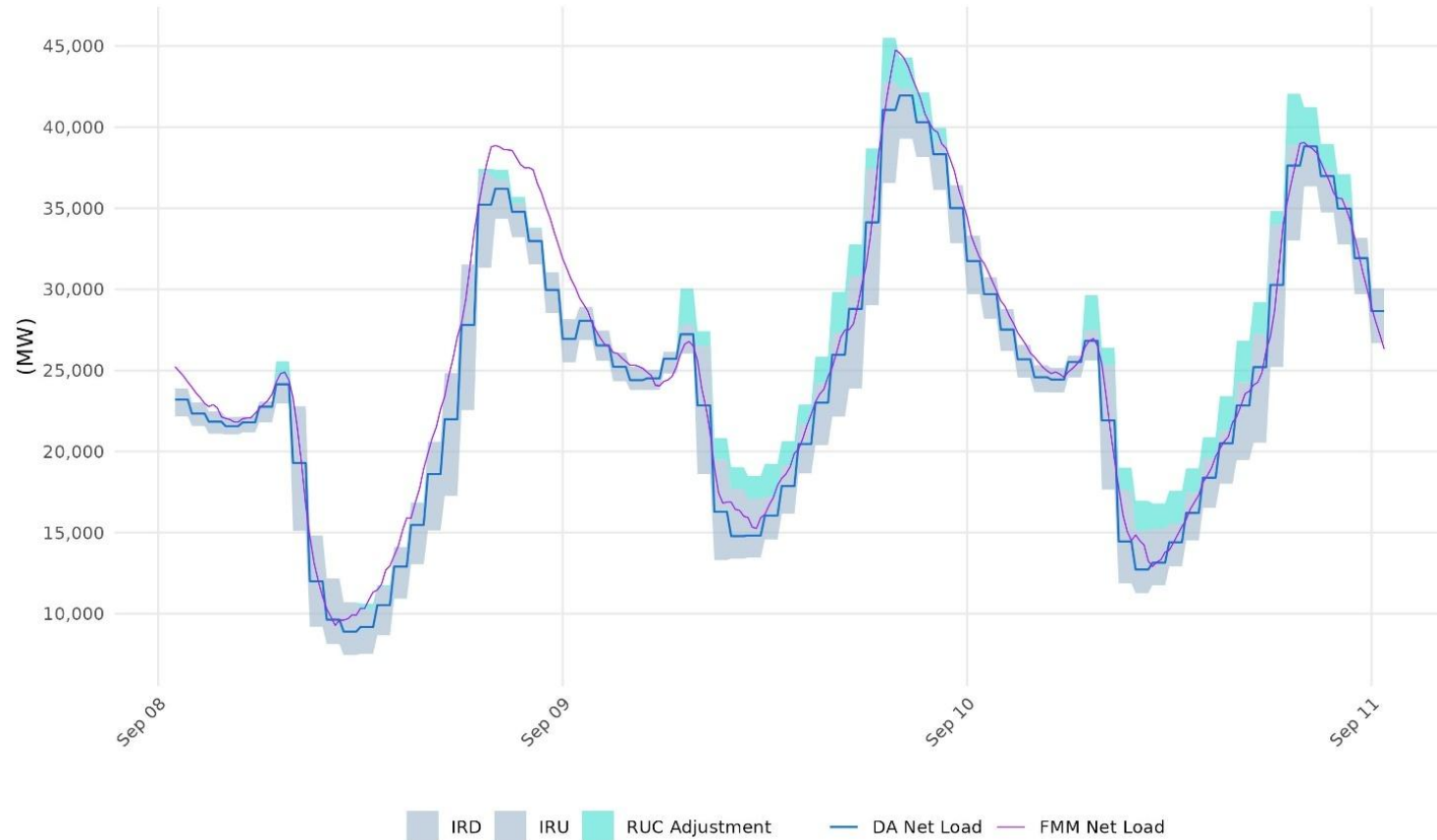


The combined IRU procurement and RUC adjustment were sufficient to meet the IRU full requirement during peak load days



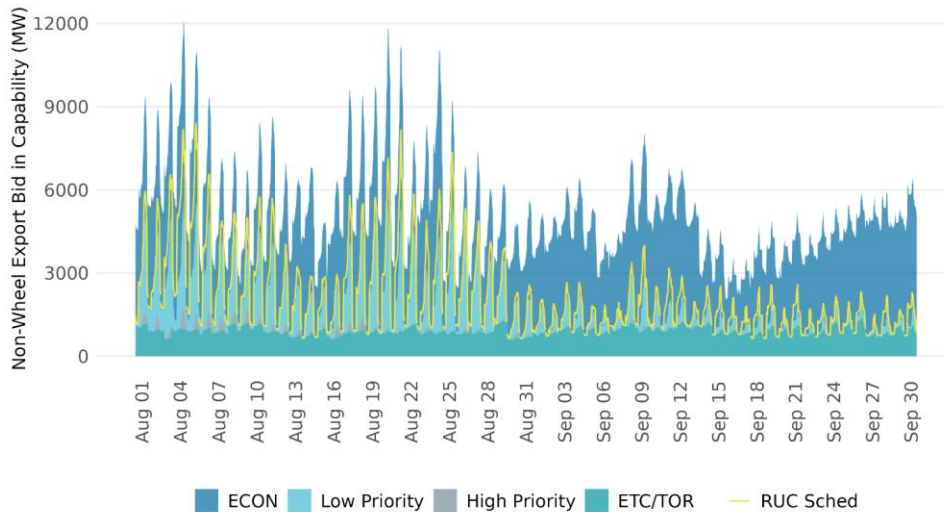
- The IRU procurement is following the IRU requirement from the market.
- RUC adjustment could compensate the shortfalls for IRU operation requirement during peak hours

RUC adjustments on September 9 complemented the IR procurement to meet all operational requirements



Net-load under-forecast error in day-ahead led to large realized uncertainty in real time that was not fully covered by Imbalance Reserves

Export volumes in September decreased compared to August.



The total of bid in export volume in September was lower comparing to August.

The highest RUC scheduled was in hour ending 18 on September 9th, at about 3,999MW.

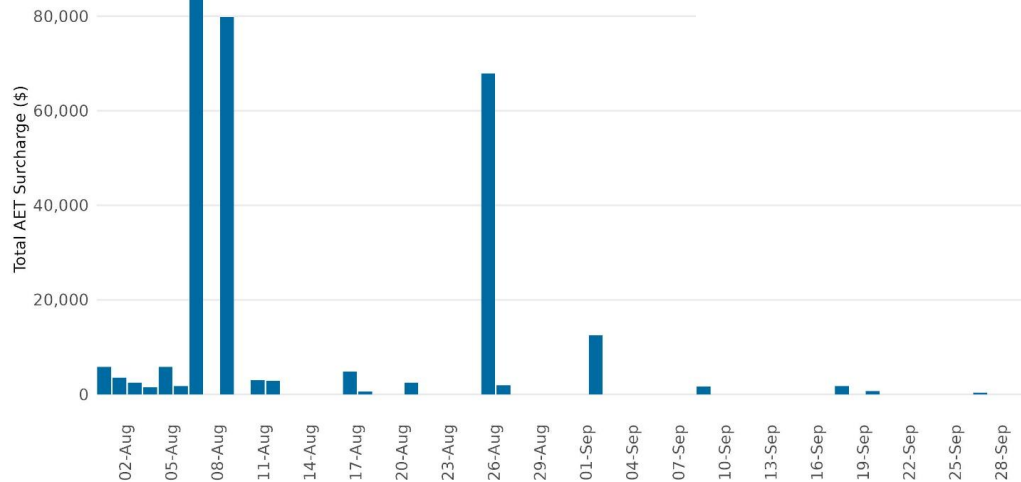
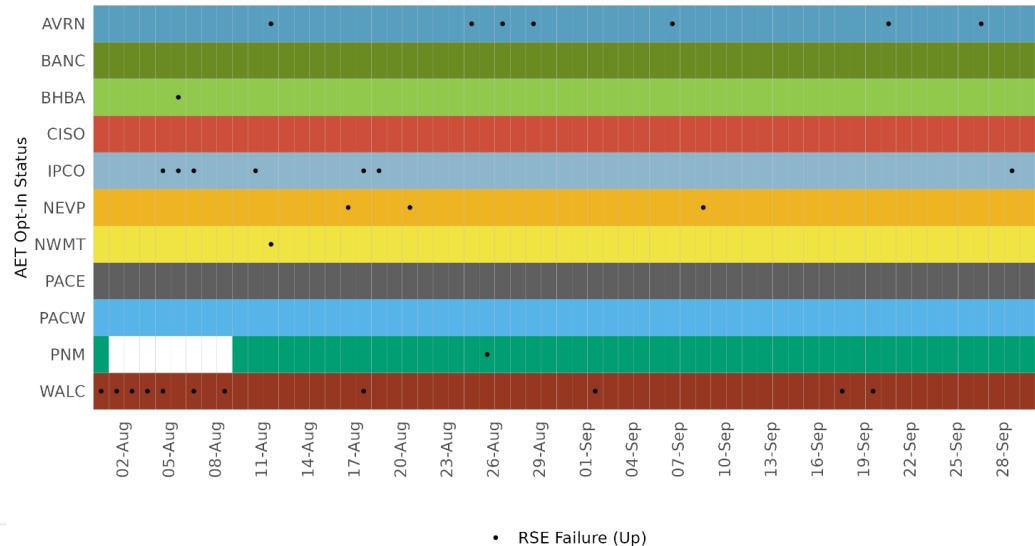
The volume of exports cleared in real time peaked at 5074MW on September 9. Low-priority bids constituted a significant portion of cleared exports.



In September, the same 11 WEIM BAAs opted in for AET as in July and August

There were fewer upward RSE failures in September

Six WEIM BAAs did not have any upward RSE failures



AET surcharges totaled about \$17K in September

AET surcharge was only assessed for a total of five trading days in September

The ISO is tracking several EDAM Market Issues

The following issues are new:

- Greenhouse Gas (GHG) Reference Point for Multi-Stage Generators (MSGs): An MSG resource submits a single GHG bid in the EDAM and this bid should cover the MSG to the plant Pmax. There is a software issue that is not applying the GHG bid to all MSG configurations. Status: Open
- Capacity Counting in the Resupply Test: The resupply test that occurs in the SIBR application and occurs five hours before the relevant trade hour is not accounting for day-ahead awards correctly. EDAM BAAs that fail to e-tag day-ahead intertie awards may be included in the EDAM up pool in the real-time market when they should be excluded. Status: Open

The ISO is tracking several EDAM Market Issues

The following issues are new:

- Missing Scheduling Point Intertie (SP-Tie) Pricing Point: The Master File definitions for two SP-Tie combinations, DGAP_BPAT-APND/BPAT.PGE and DGAP_NWMT-APND/PGE.COLSTRIP, were not implemented. CAISO will correct all day-ahead and real-time market prices for these two SP-Tie pricing points from October 1-14, 2026 to be equal to the SP-Tie price on DGAP_BPAT-APND/CAPTAINJACK_PGE.

The ISO is tracking several EDAM Market Issues

The following issues have previously been reported:

- Reliability Capacity Awards at negative prices: RC has been awarded at negative prices due to several factors, including software issues with MSG transitions, market-driven conditions related to optimality of solution and price formation. Status: Open
- In RUC when RCU and RCD bid prices are \$0, the optimization may procure both RCU and RCD in the same hour. This is not a logic issue but reflects an interplay with \$0 bids. CAISO will continue monitoring to ensure the new market functionality

The ISO is tracking several EDAM Market Issues

The following issues have previously been reported:

- Missing IR deployment scenarios in the CRR clawback mechanism: The CRR clawback calculation does not account for IR deployment scenarios due to incomplete payload data from the market application to the CRR system. This issue impacts May 1, 2026 and remains on-going. The ISO is working to correct this in the T+70 BD settlement statements
- Flow Discrepancies for Intertie Constraints in the CRR system: When interties are mapped to multiple Intertie Constraints, the IFM flow calculation logic produces inaccurate results, leading to downstream misallocation of CRR revenues. Status: Open

The ISO is tracking several EDAM Market Issues

The following issues have previously been reported:

- High Reliability Capacity Down prices due to solution limited by IFM commitment: Reliability Capacity Down can only be awarded to resources that are on-line and committed by the IFM. Additionally, down capacity range is limited by energy self-schedules, A/S and IR awarded in IFM. This issue is not a software issue but due to the requirement to run RUC only after IFM is complete so this issue is considered closed.
- Non-Participating Resources in RUC: To prevent RUC solution failures and ensure timely day-ahead market publication, select generator and MSG configurations were excluded from RUC participation and this resulted in a shutdown of affected MSG plants.
Status: Open

The ISO is tracking several EDAM Market Issues

The following issues have previously been reported:

- Daily Energy Limit not counted in EDAM RSE: Due to a software issue, the daily energy limit for use-limited resources is not enforced in the EDAM RSE allowing these resources to be credited for more capacity than is available in the market. Status: Open
- Bid Cost Recovery for Hybrid Resources: There is an issue processing the submitted bid costs for hybrid resources which is resulting in high bid cost recovery payments. Status: Open
- Bid Cost Recovery for Dispatchable Demand Resources (DDRs): There is an issue processing the submitted bid costs for DD Rs which is resulting in high bid cost recovery payments. Status: Open

The ISO is tracking several EDAM Market Issues

The following issues have previously been reported:

- Low-Priority Exports in RUC: Low-priority exports receive a \$250 proxy Reliability Capacity Up bid in RUC and will be curtailed when RUC prices are \$250 or higher. There are two software issues impacting the bid set-up and curtailment for low-priority export. Status: Fixed on October 1, 2026
- High-Priority Exports in RUC: Under the current implementation, high-priority exports (PT exports) do not receive a proxy Reliability Capacity Up bid in RUC. As a result, PT exports cannot be reduced through RUC. Status: Open



Next year's forum: March 17, 2026

**Tentative until confirmed though a in the ISO's Daily Briefing*

Reference

- A comment template will be available following the meeting. Please email us your comment template document to ISOstakeholderaffairs@caiso.com by Nov 12, 2026.
- Visit forum webpage for more information:
<https://www.caiso.com/meetings-events/topics/market-performance-and-planning-forum>
- If you have any questions, please contact Brenda Marquez at bmarquez@caiso.com or isostakeholderaffairs@caiso.com

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