Market Performance and Planning Forum

Q2

June 26, 2025

Forum Reminders:

- This quarterly forum that engages stakeholders in review of market performance issues and in high level dialogue on release planning, implementation and new market enhancements. This is intended to foster open dialogue and sharing of ideas and perspectives
- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
- The meeting is structured to stimulate dialogue and engage different perspectives.
- Please keep comments professional and respectful.
- Please try to be brief and refrain from repeating what has already been said so that we can manage this time efficiently.

Instructions for raising your hand to ask a question

- Open the Participant and Chat panels from the bottom right.
- 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.
  - **Note**: *3 only works if you dialed into the meeting.

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

- You may also send your question via chat to **Hannah Pearson** or to all panelists.

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

Objective: Enable dialogue on implementation planning and market performance issues

- Review key market performance topics
- Share updates to 2024-2025 release plans, resulting from stakeholders inputs

Market Performance and Planning Forum

Agenda – June 26, 2025
9 a.m. – 1 p.m. (PST)

Time:	Topic:	Presenter:
09:00 – 09:05	Introduction, Agenda	Hannah Pearson, Stakeholder Affairs
9:05 – 11:30	Market Performance Update	Market Performance and Advanced Analytics Short Term Forecasting
11:30-12:00	Policy Update	Becky Robinson, Market Policy Development
	2025 MPPF Schedule	Hannah Pearson, Stakeholder Affairs

Market Performance Update

Agenda for Market Performance Update

1. Storage enhancement and FRP performance
2. Pricing of congestion from multiple contingencies
3. Enforcement of contingencies for FRP
4. Enhancement to mitigate for market disruptions
5. Net transfer constraint for CAISO area
6. Market issues
7. Renewables reductions and storage
8. Storage resource performance
9. Congestion and CRRs
10. AET performance
11. DA and RTM load conformance
12. Wholesale prices, costs for CAISO and WEIM
13. Price correction discussion
14. Activation of gas nomograms
15. Renewable forecast accuracy
16. General metrics

Storage enhancement and FRP performance

Market Performance and Advanced Analytics

Storage FRP and SOC modelling

- Through previous analysis, CAISO identified a condition where the impact on state of charge is not factored in when awarding upward flexible ramping product (FRP) to storage resource

- On June 3, 2025 an enhancement was activated in the real-time market to account for the impact of upward FRP awards on the state of charge (SOC) of batteries

- The change accounts for the impact to the SOC of storage resources providing upward FRP in all future intervals within each market run

- This change is documented in the Market Operations BPM section 7.8.2.5 and in the Market Operations PRR #1627

Enhancement to the SOC constraint

- Two separate constraints account for SOC usage: One for energy only and one for energy and ancillary services.
- The Flexible Ramping Up (FRU) award was added to the energy and ancillary service SOC constraint (SOC^{AT}) as shown below:

$$SOC_{i,t} = SOC_{i,t-1} - (EN_{i,t}^{(+)} + \eta EN_{i,t}^{(-)})\frac{\Delta T}{T_{60}}$$

Energy only SOC constraint

$$SOC_{i,t}^{AT} = SOC_{i,t-1}^{AT} - (FRU_{i,t} + EN_{i,t}^{(+)} + \eta EN_{i,t}^{(-)} + ATRU_t RU_{i,t} - ATRD_t \eta_i RD_{i,t})\frac{\Delta T}{T_{60}}$$

Addition of FRU

Energy and AS SOC constraint

$$\underline{SOC_{i,t}} \leq SOC_{i,t} \leq \overline{SOC_{i,t}}$$

$$\underline{SOC_{i,t}} \leq SOC_{i,t}^{AT} \leq \overline{SOC_{i,t}}$$

Both the energy only and energy and AS SOC must be within the upper and lower SOC limits in all intervals for all resources

Example: Battery with low SOC is awarded FRU in FMM

Battery Characteristics	
Pmax (MW)	200
Pmin (MW)	-200
SOC max (MWh)	800
SOC min (MWh)	0
Initial Condition SOC (MWh)	50

Time Interval	Energy (MW)	FRU (MW)	SOC (MWh)	SOC^{AT} (MWh)
5:00	40	0	40	40
5:15	40	0	30	30
5:30	0	60	30	15
5:45	0	60	30	0

- The battery is limited by the SOC^{AT} constraint in the final interval of the case

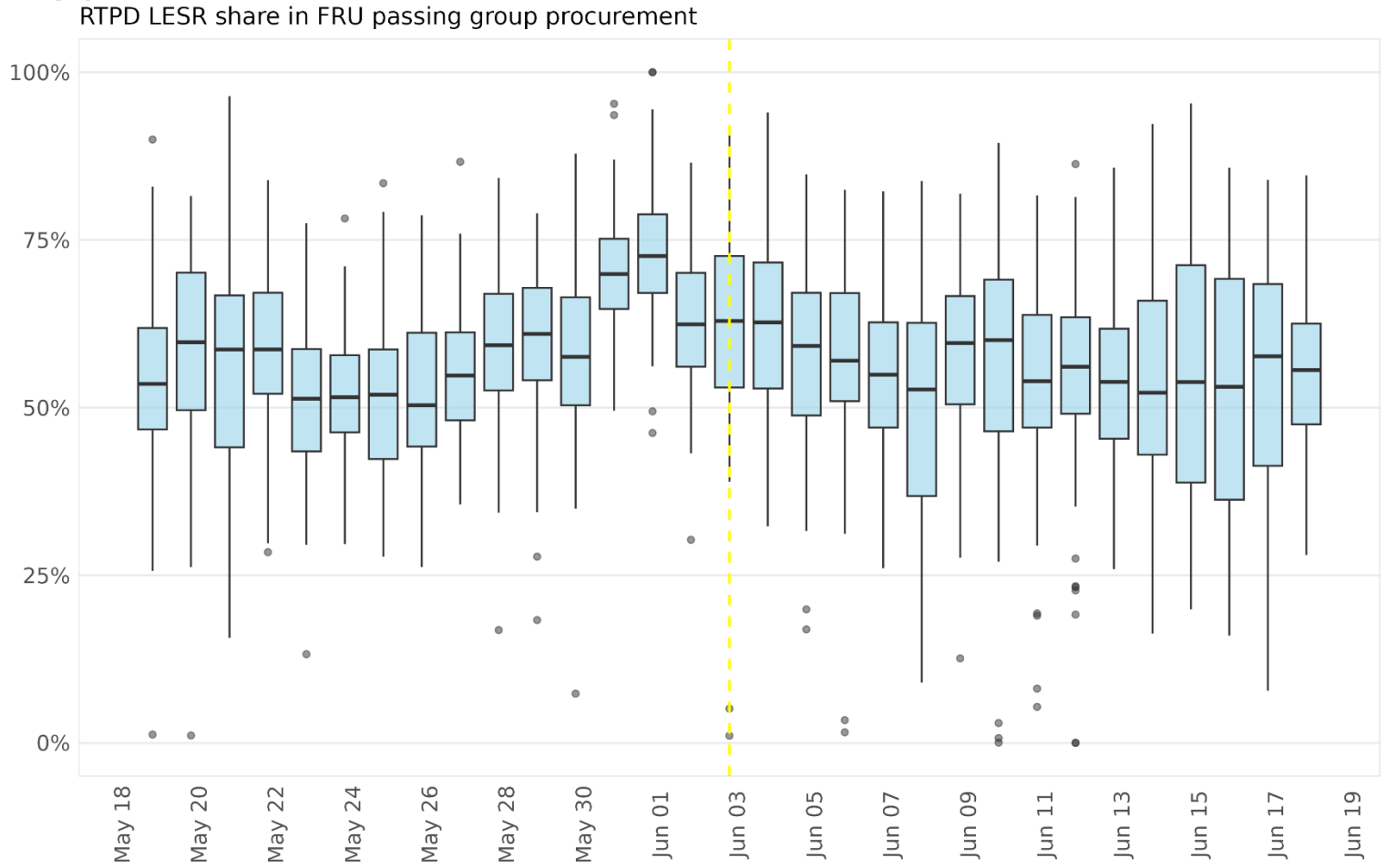
More complex example with regulation awards

Battery Characteristics	
Pmax (MW)	200
Pmin (MW)	-200
SOC max (MWh)	800
SOC min (MWh)	0
Initial Condition SOC (MWh)	100

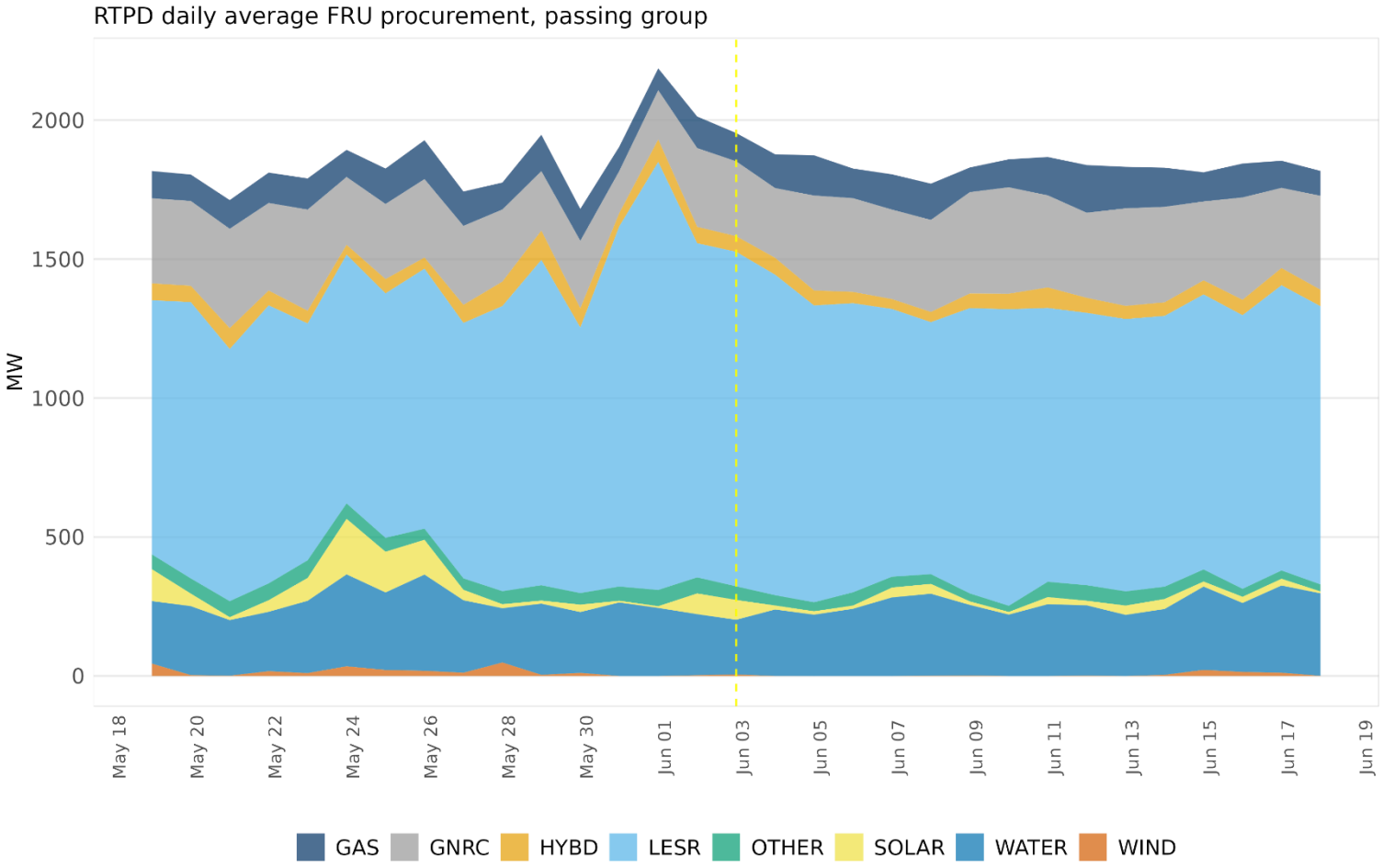
Time Interval	Energy (MW)	FRU (MW)	Ru (MW)	AT_Ru	Rd	AT_Rd	SOC (MWh)	SOC _AT
5:00	40	0	160	0.1	0	0.2	90	86
5:15	40	0	0	0.1	200	0.2	80	84
5:30	0	60	0	0.1	0	0.2	80	69
5:45	0	120	80	0.1	0	0.2	80	37

Charging efficiency is assumed to be 0.8

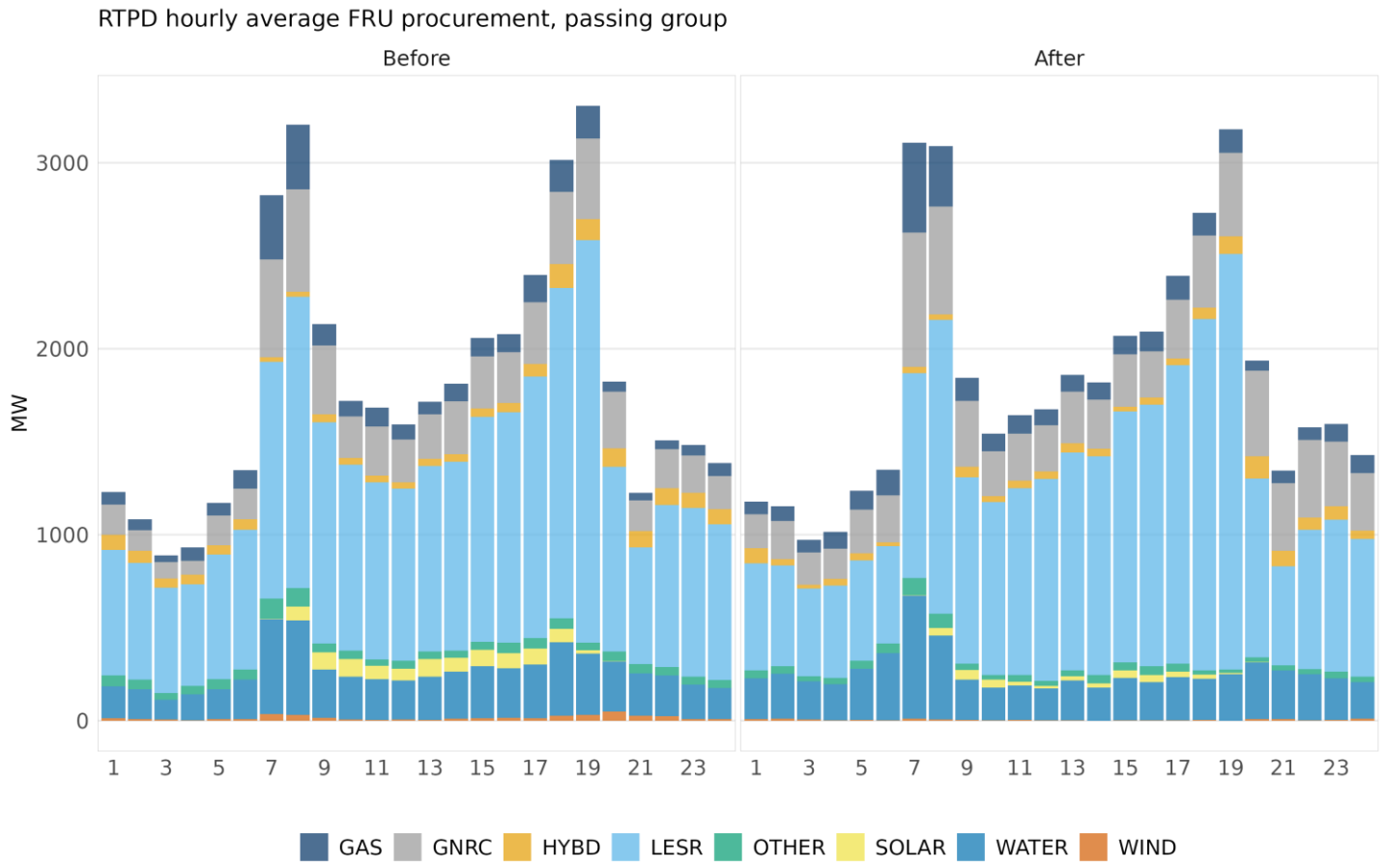
LESR share in flexible ramping up product remains stable post activation. Lower ends of daily distributions have slightly declined



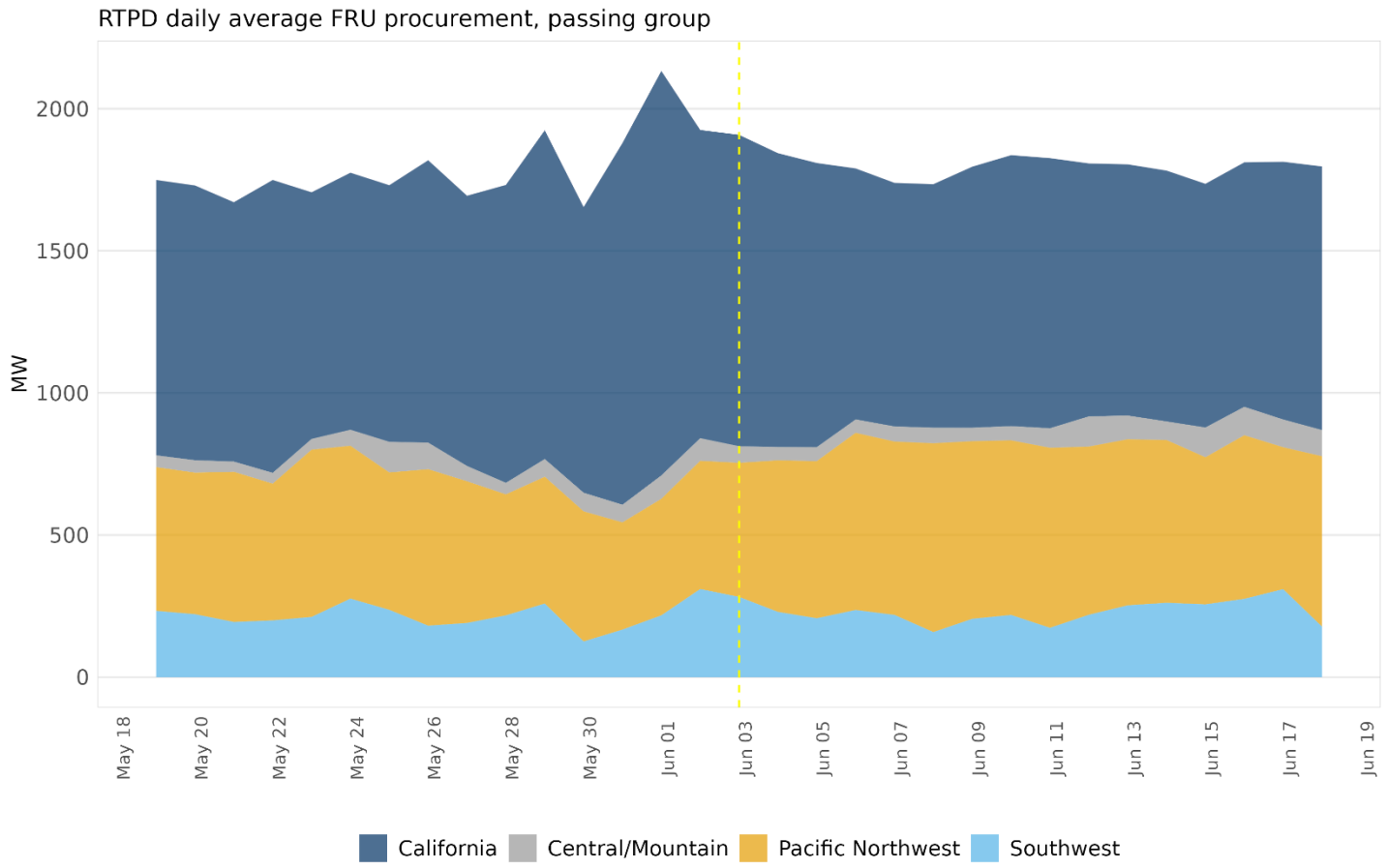
Daily average by resource combination in FRU procurement remains stable post activation: no significant shift



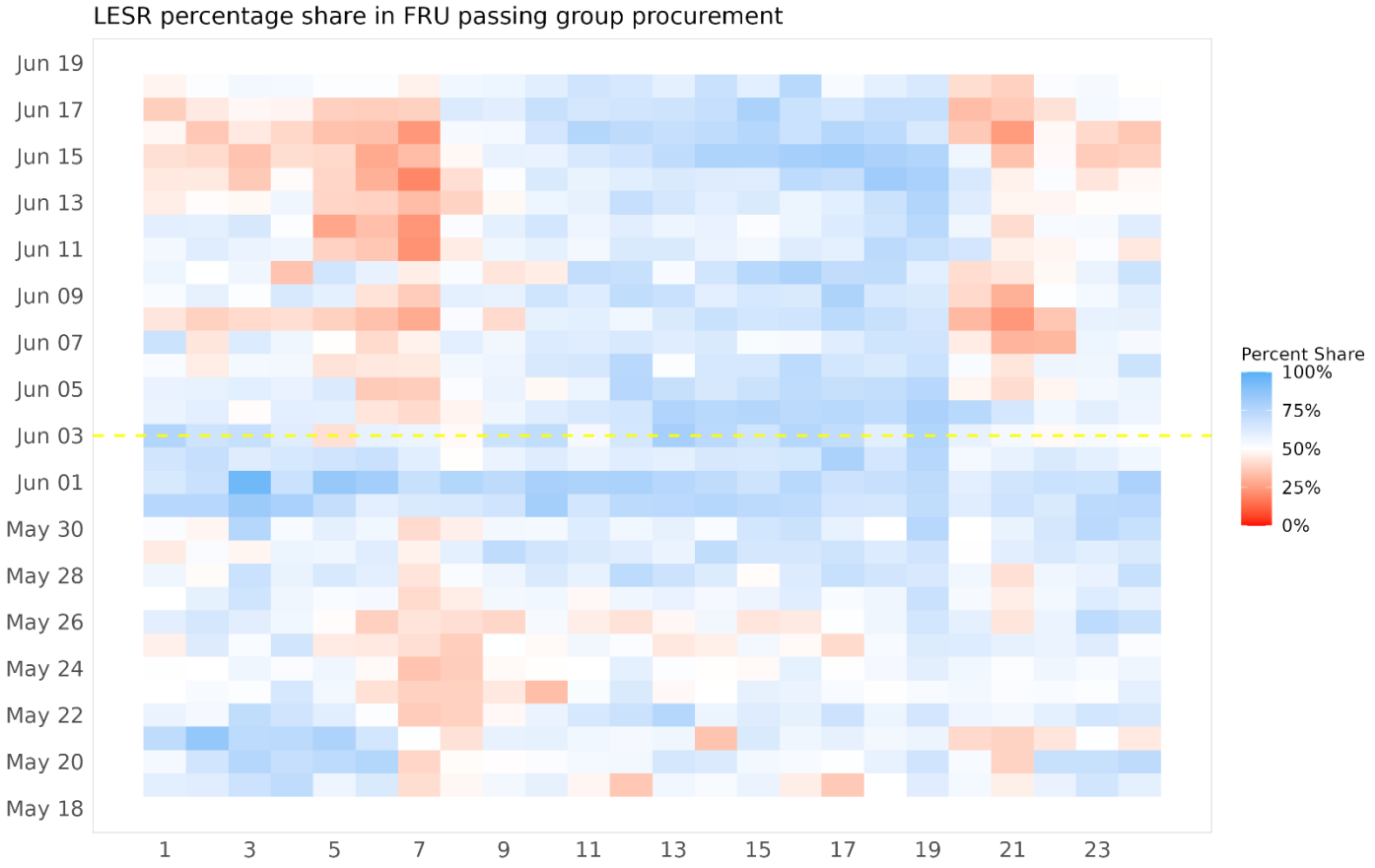
On average, the hourly shares of FRU on different technologies does not show yet a noticeable change



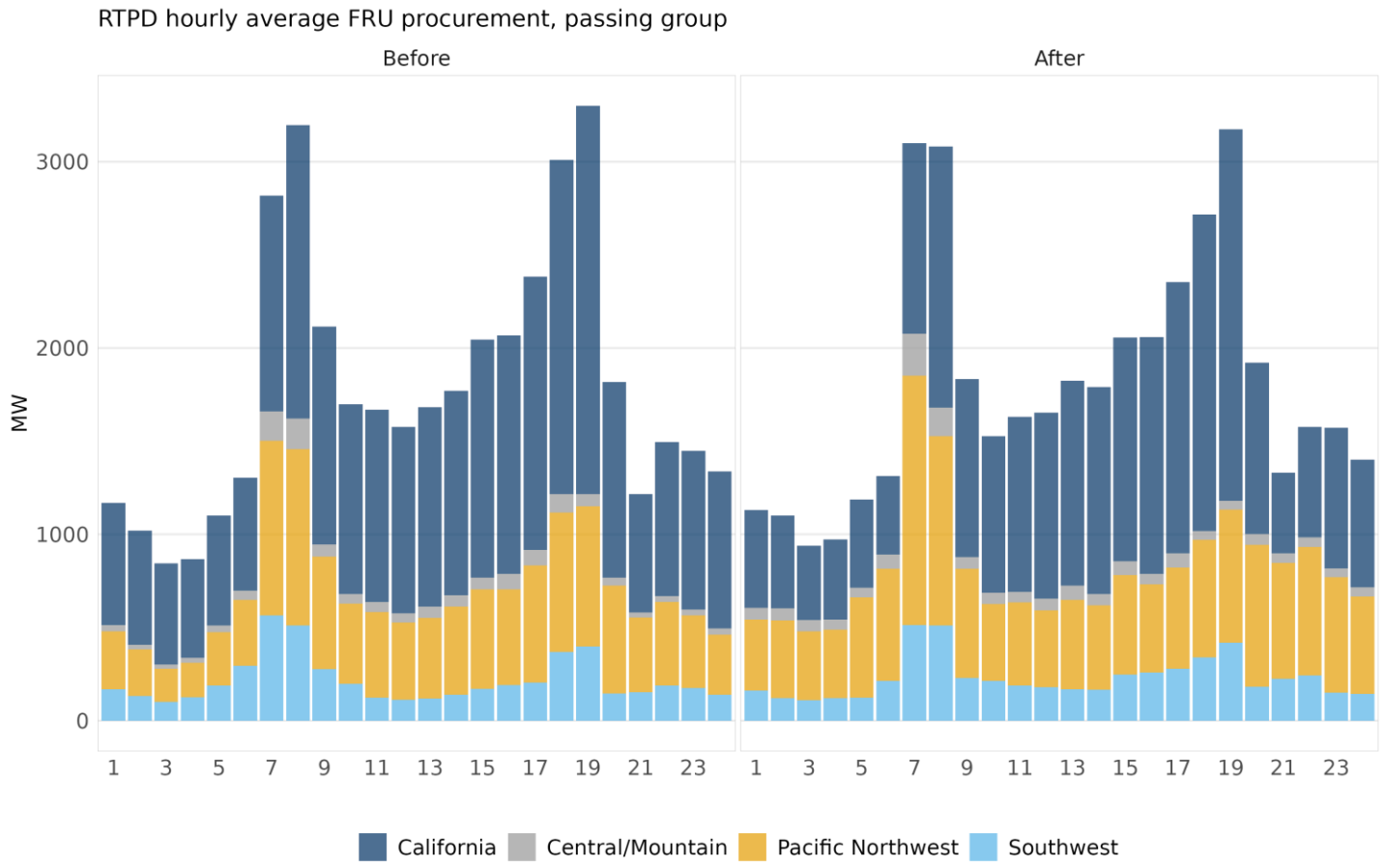
Slight Shift in daily average by region: slight decrease observed in California post activation.



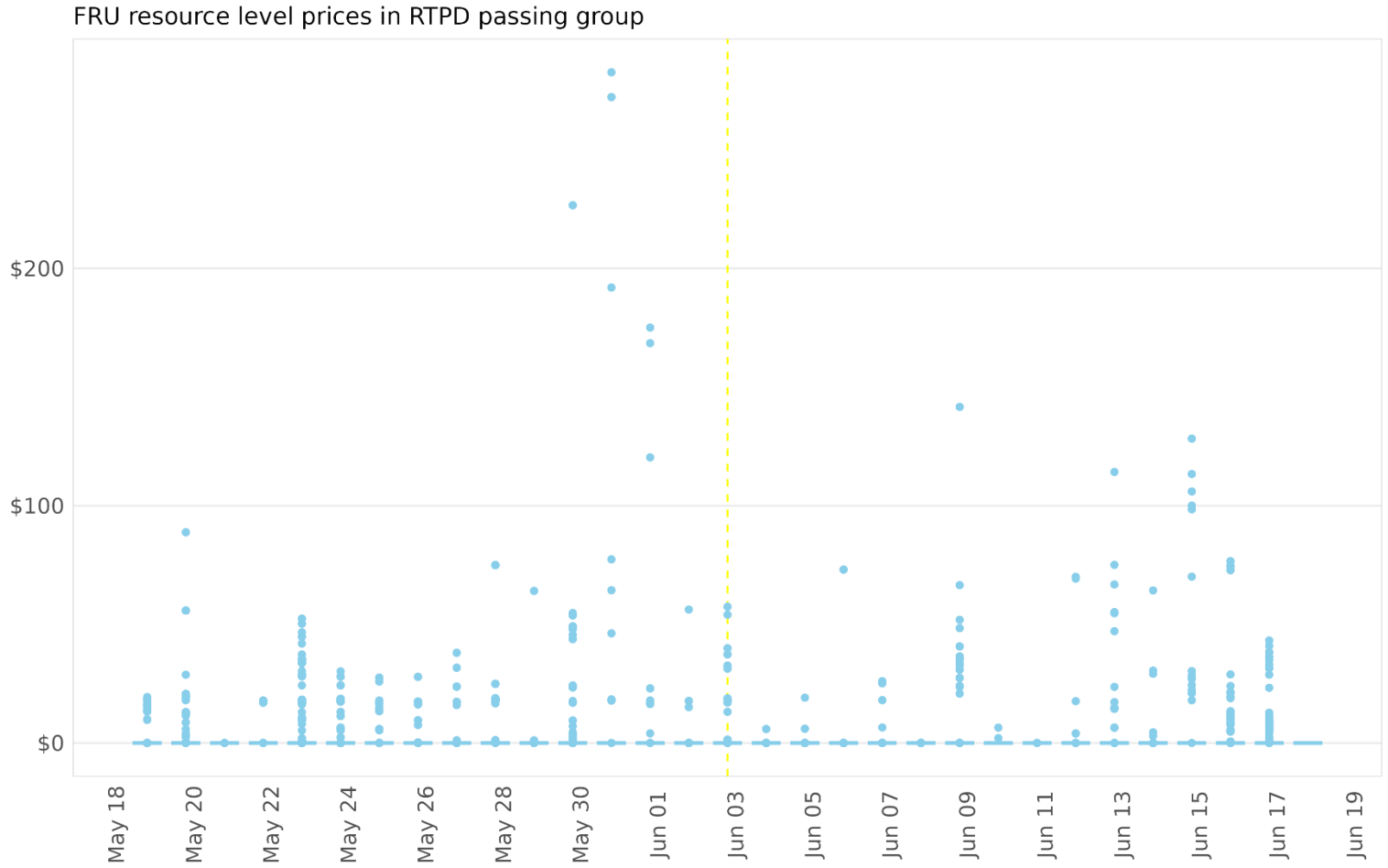
The hourly profile of share on storage resources show less FRU awards to storage for the morning and evening peaks



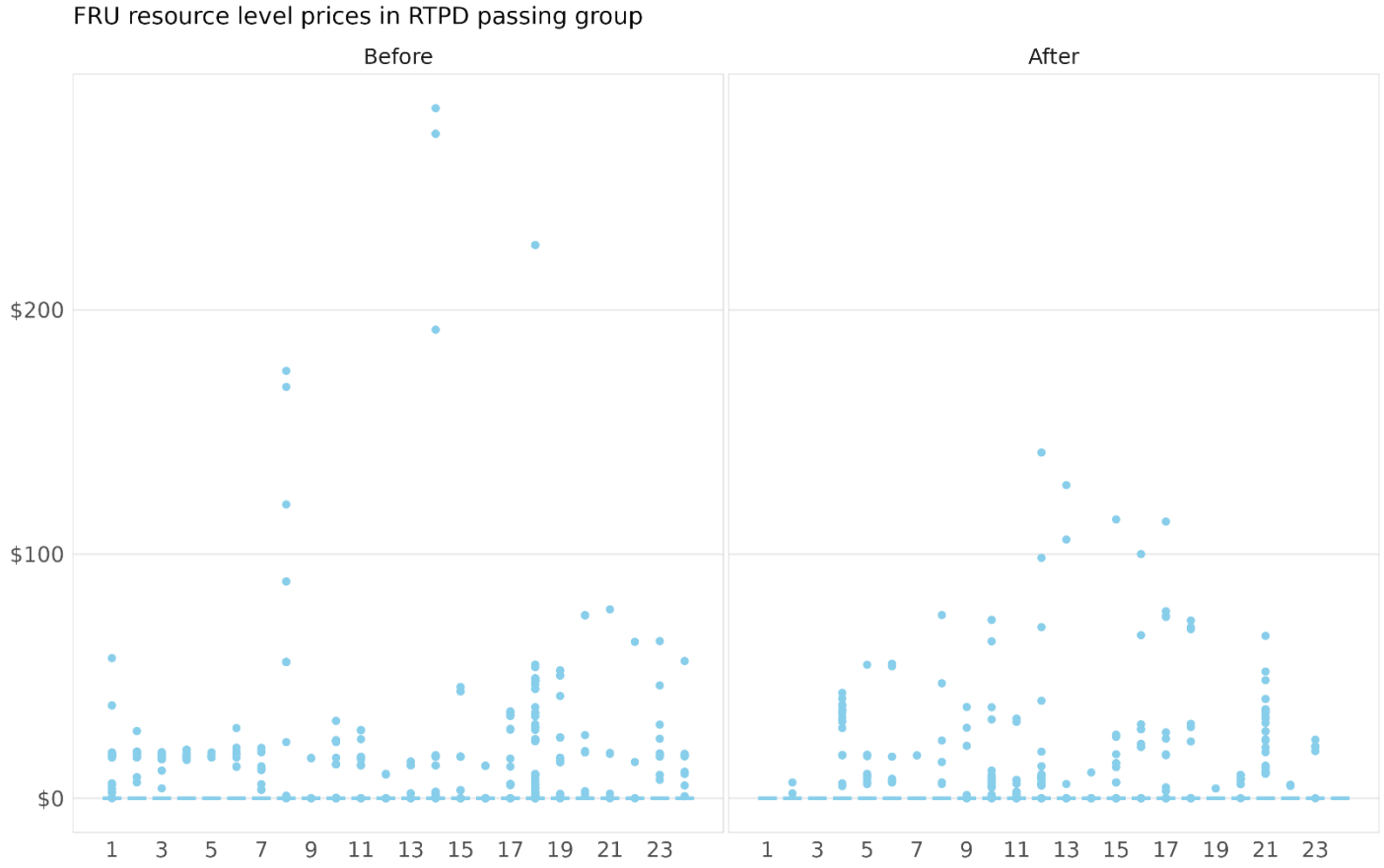
Hourly average by region: California showed slightly decreased in early morning and late hours of the day



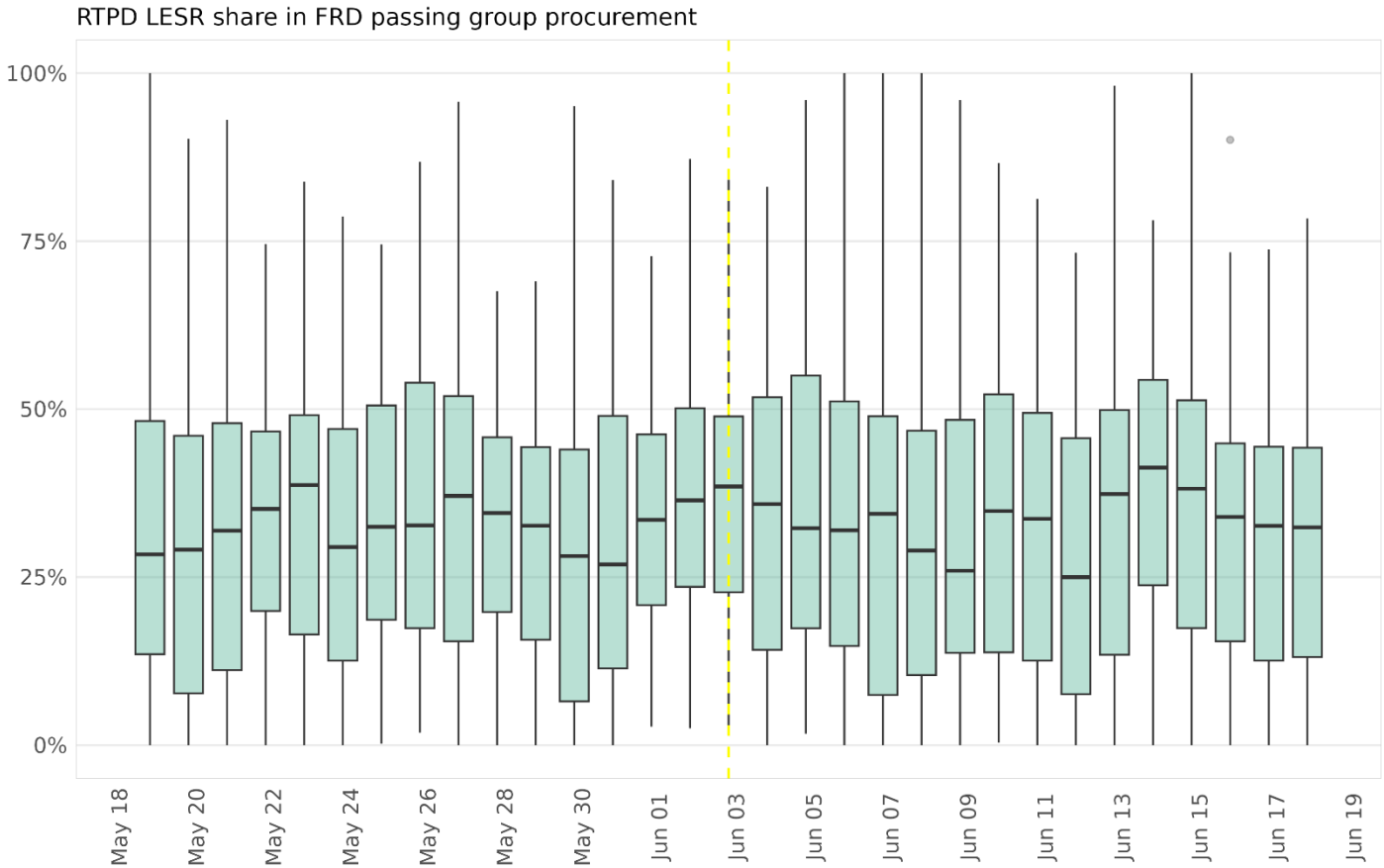
Daily distribution of resource level FRU prices showed no significant shift: majority of values remained zero.



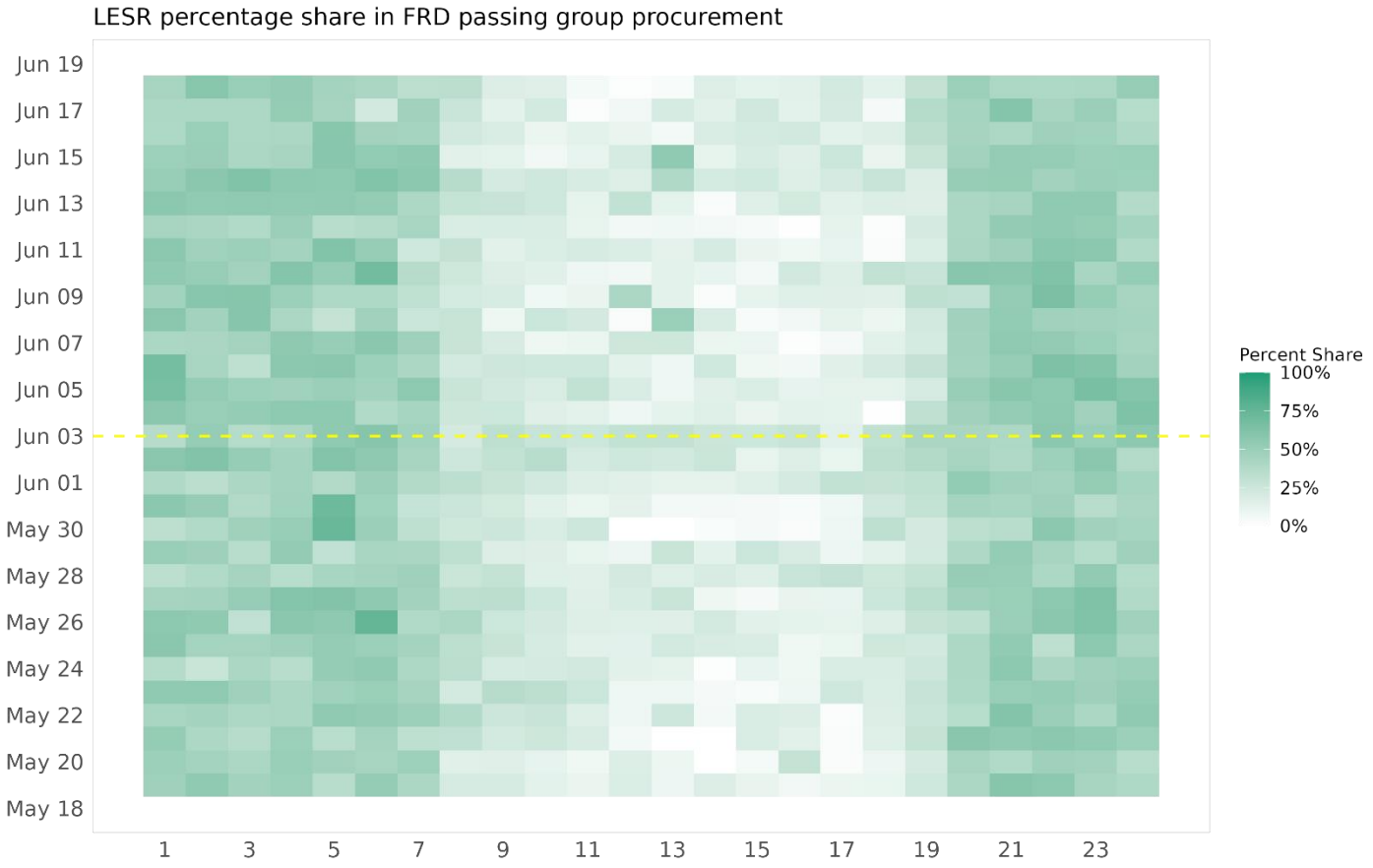
No significant change in hourly distributions of FRU resource level prices: 75th percentiles remained zeros pre & post activation



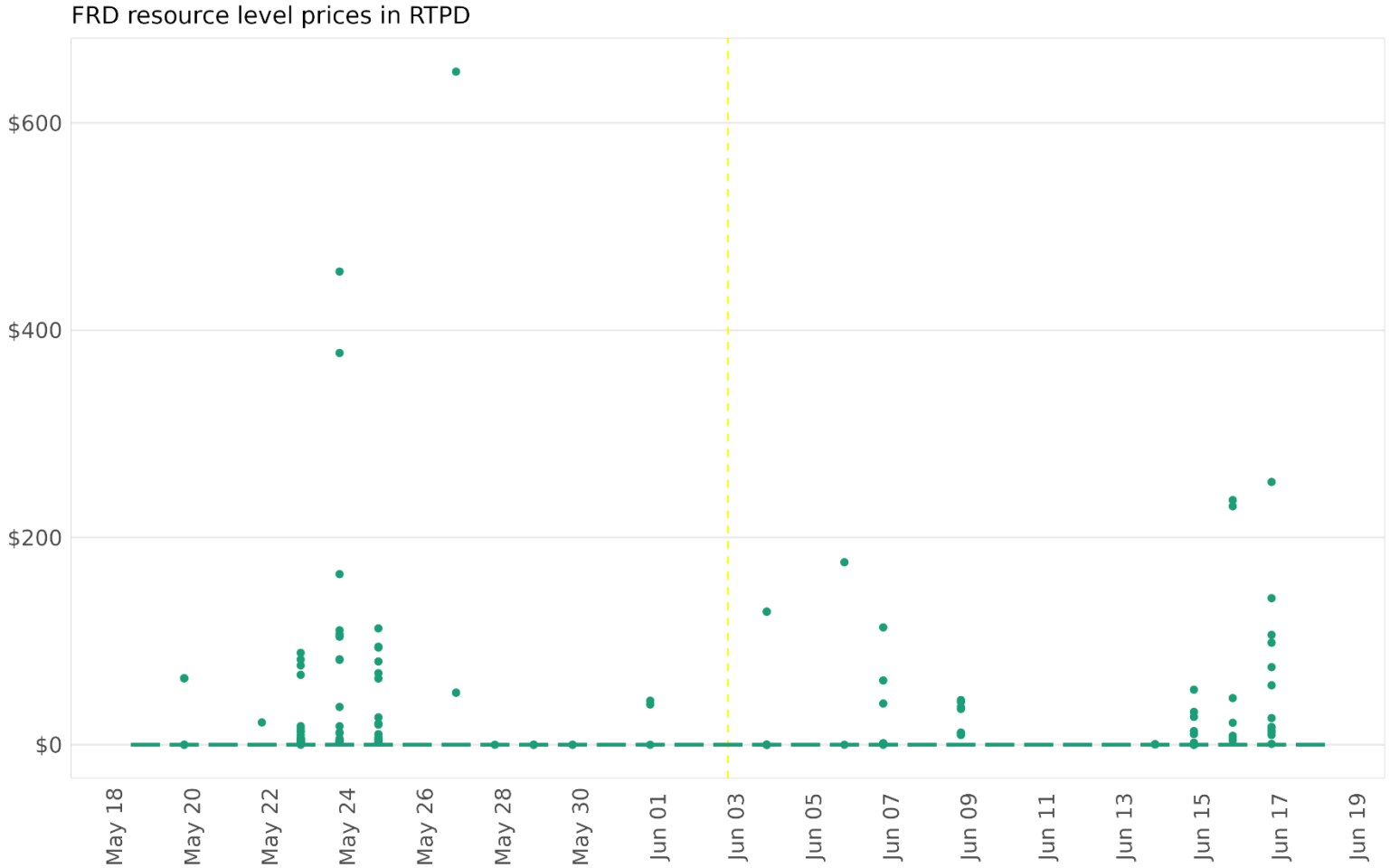
LESR share in flexible ramping down product remains stable post activation



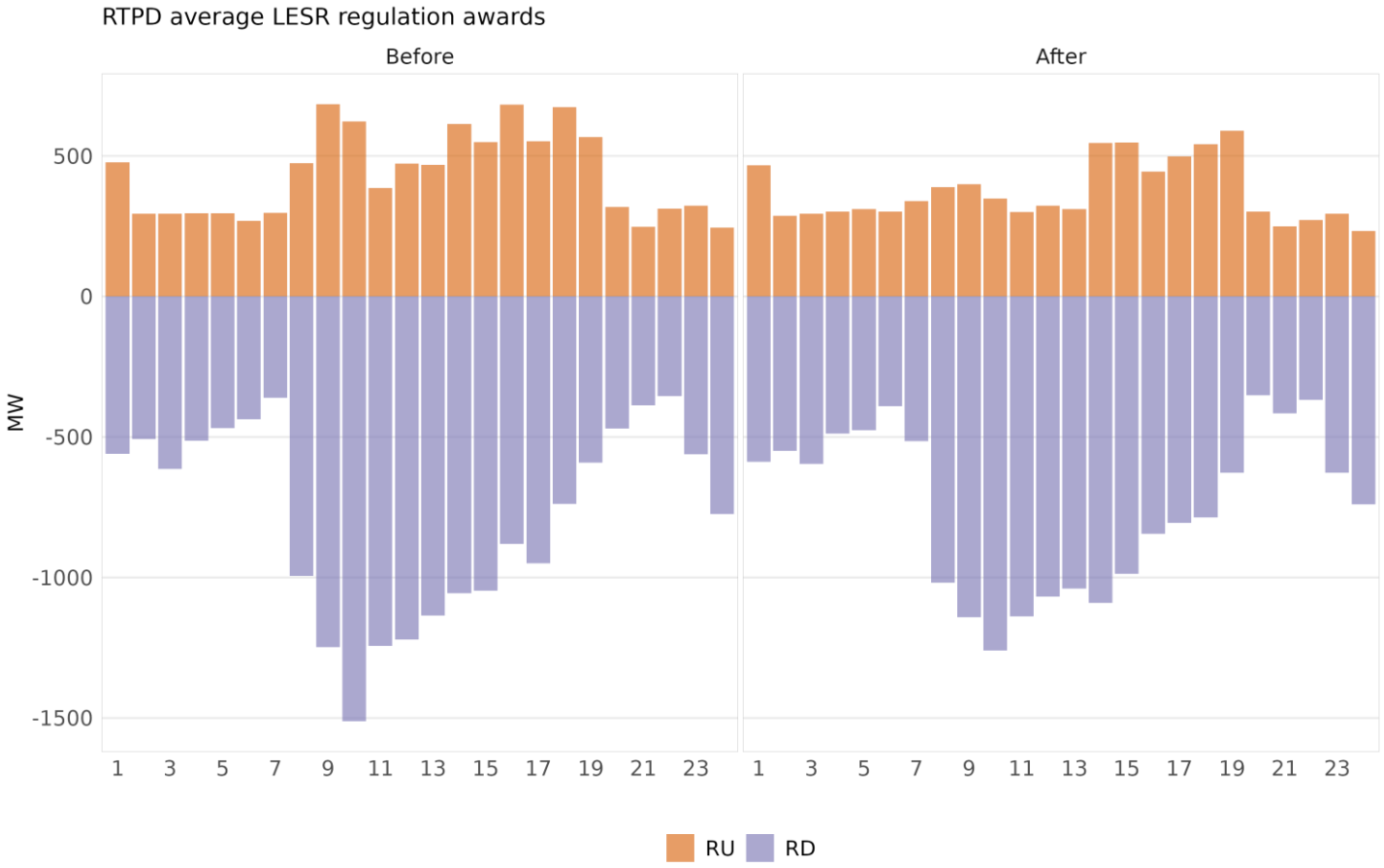
LESR share in flexible ramping down product remains stable post activation



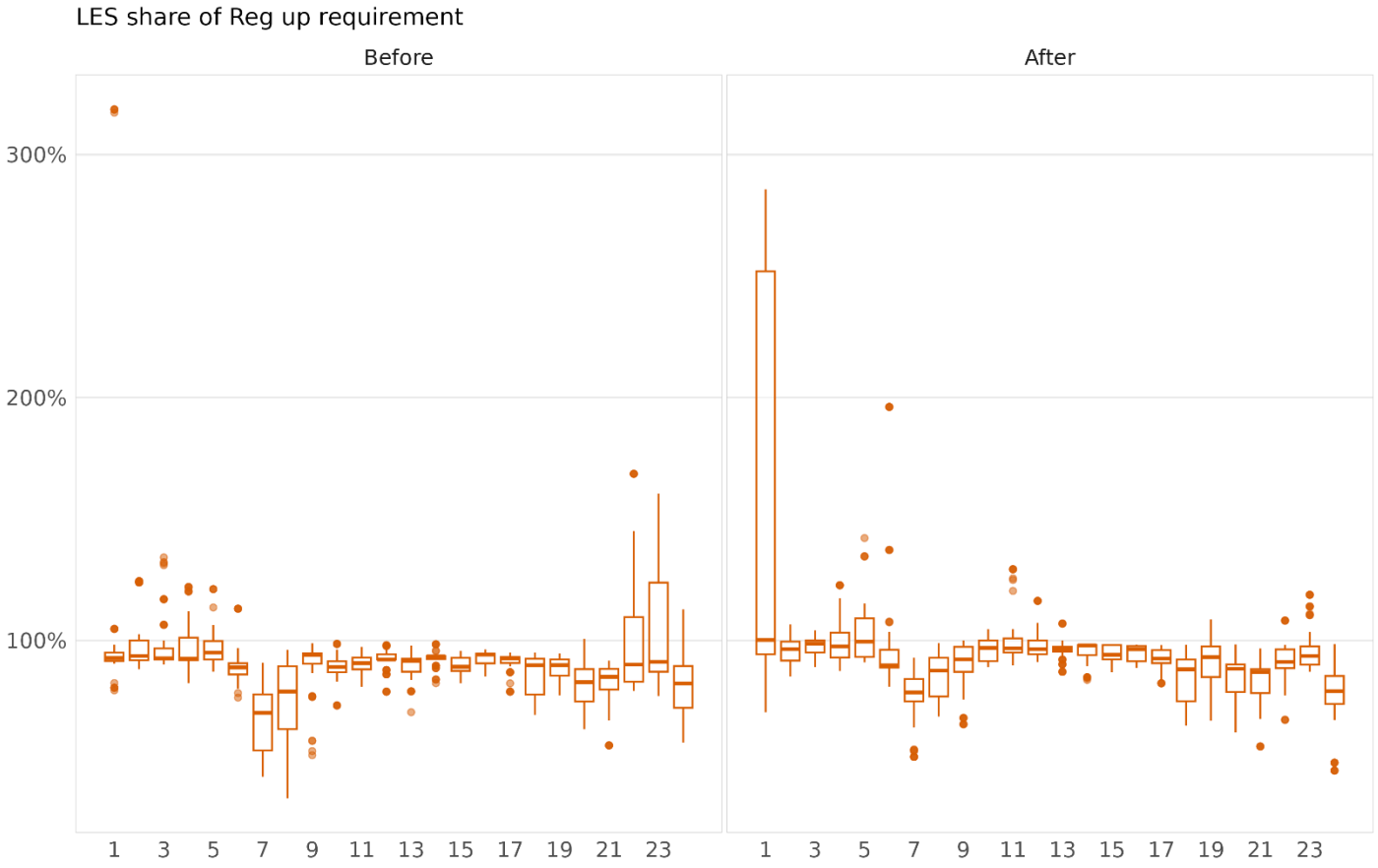
FRD resource level prices remained low pre and post activation



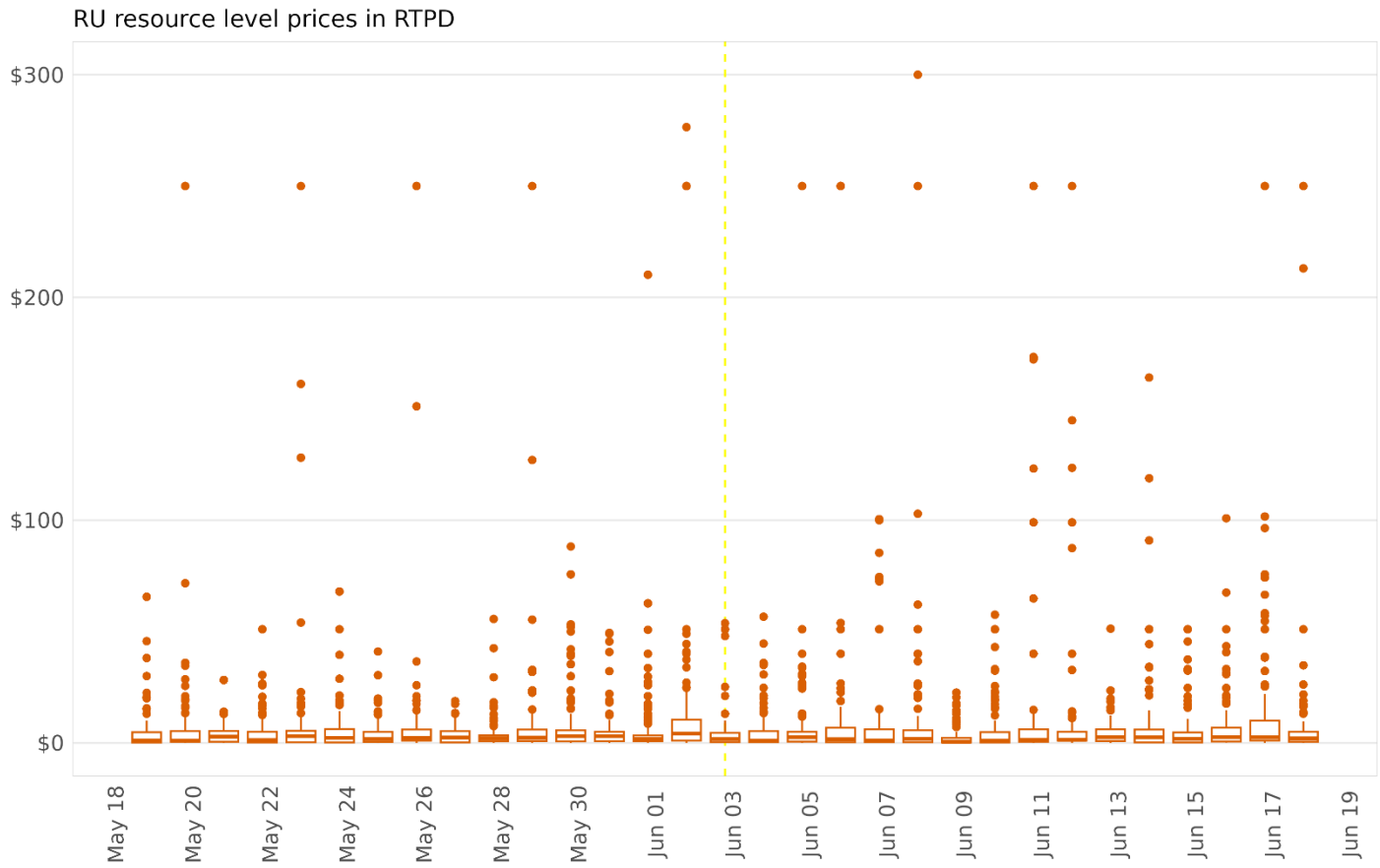
LESR hourly average regulation awards remained stable post activation.



LESR share in Regulation up requirement remained stable post activation.

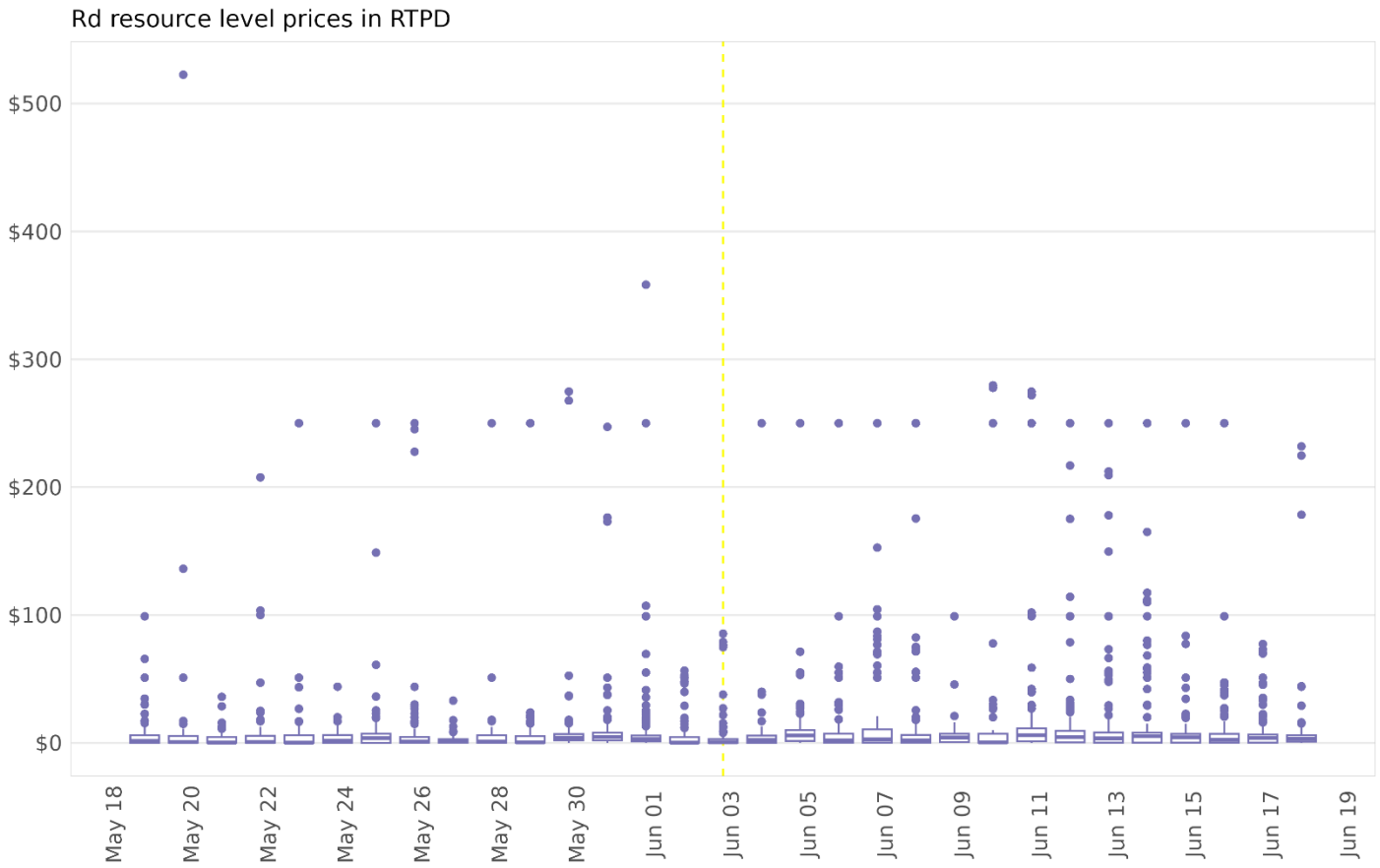


Resource level regulation up prices remained non-negative.

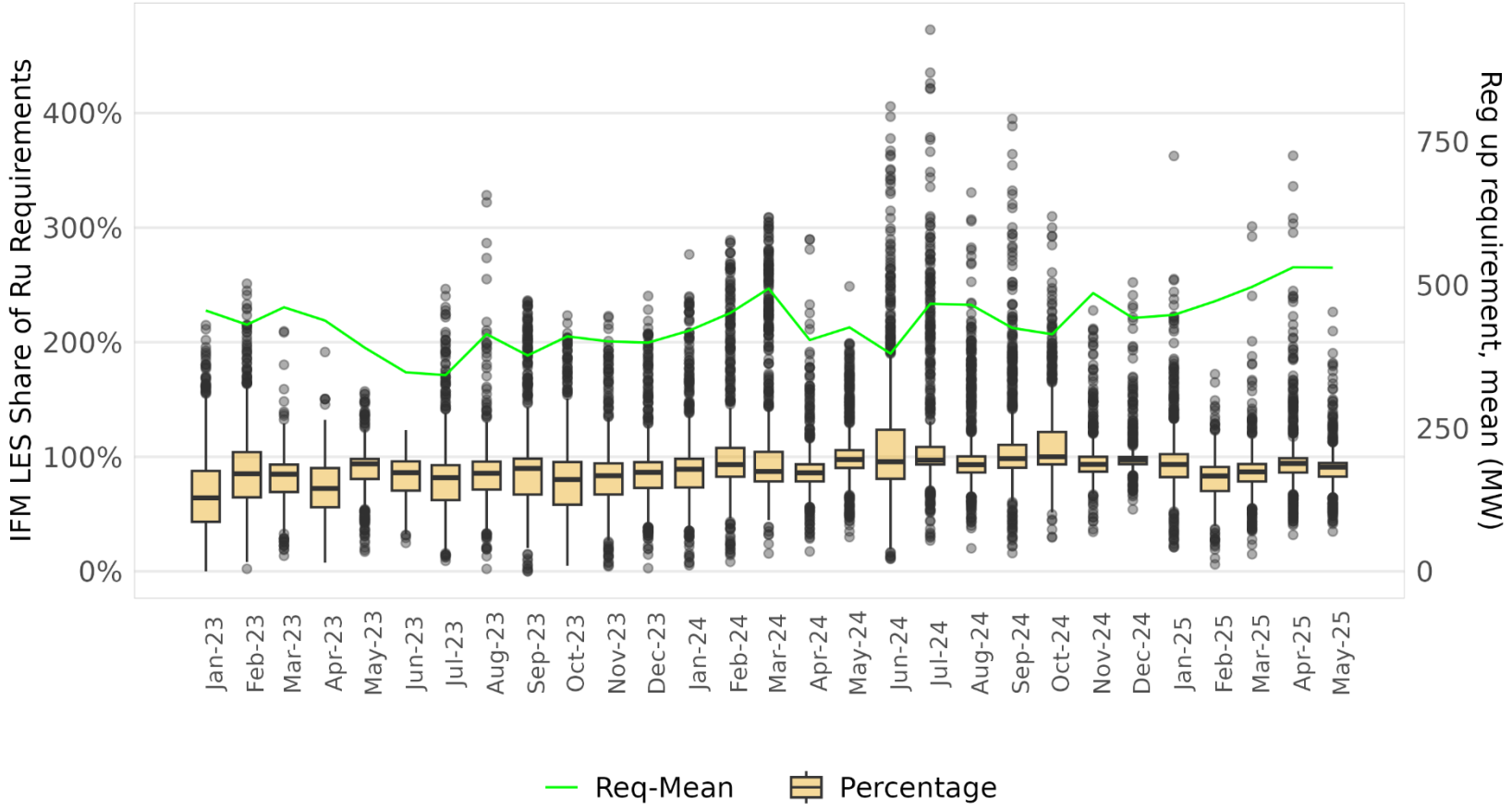


LESR share in Regulation down requirement remained stable post activation.

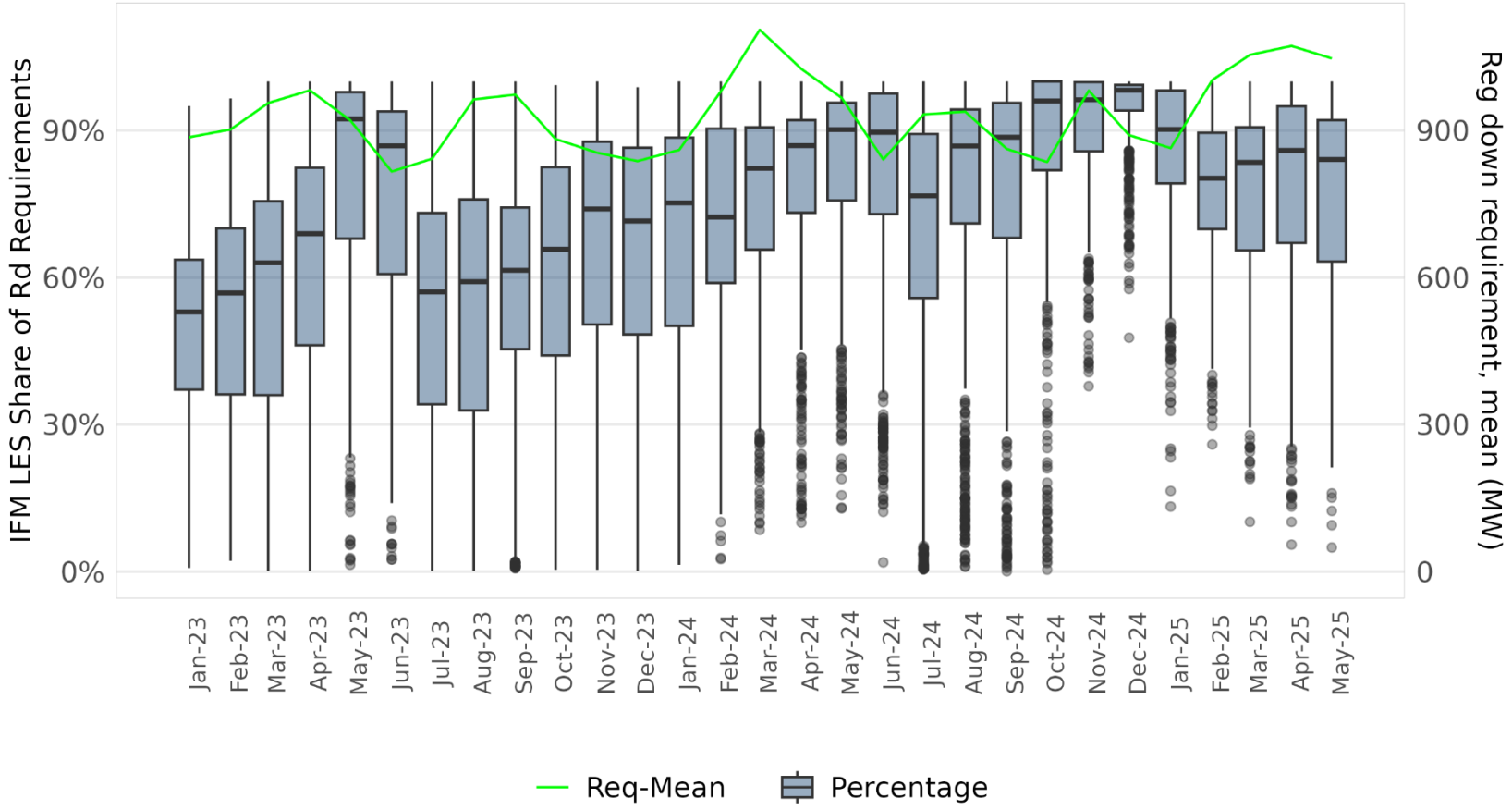
Resource level regulation down prices remained non-negative.



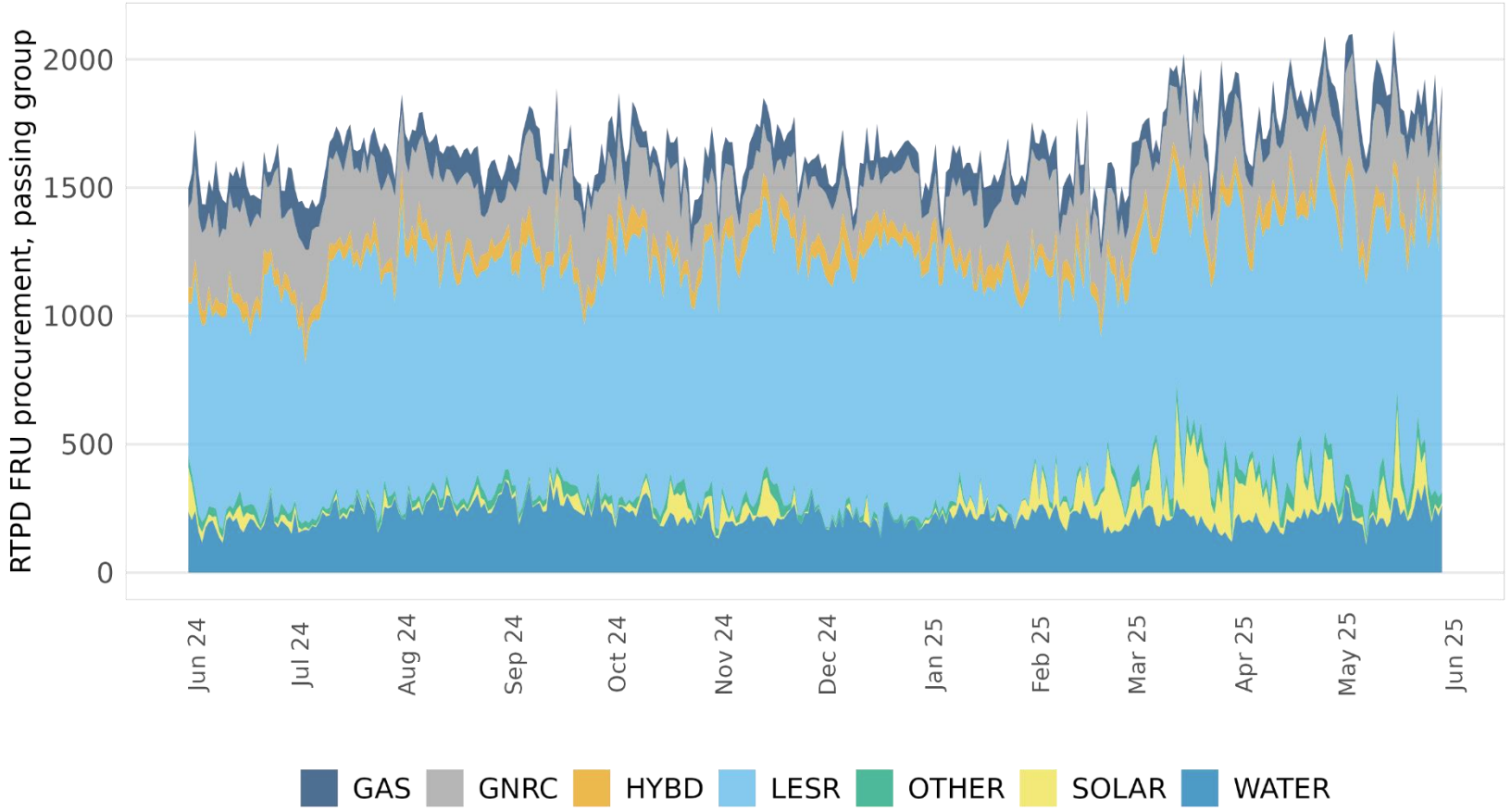
The market for upward regulation market continue to be saturated by storage resources procuring over 100 percent of the requirements



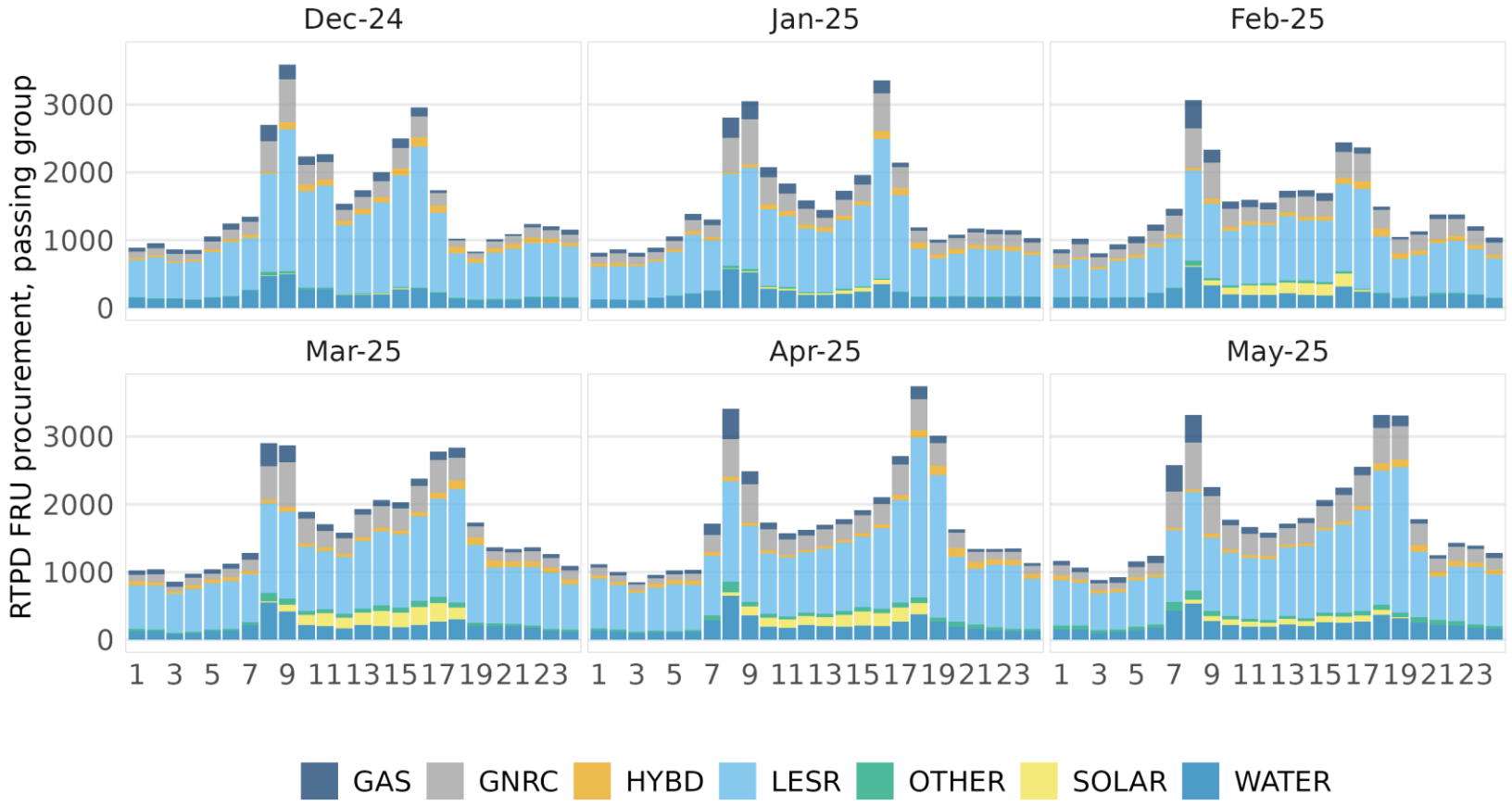
Procurement of regulation down continue to be dominated by storage resources



Upward FRP procurement is supported by various types of technologies with the main share coming from storage resources



Storage resources tend to support upward FRP procurement throughout the day



Pricing of congestion from multiple contingencies

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CAISO's plan to enhance congestion pricing for multiple contingencies

- On March 20, 2025, during the MPPF, the CAISO announced a plan to improve how congestion pricing handles multiple contingencies

- The enhancement will ensure that, when a transmission constraint is relaxed under multiple contingencies, only the most relaxed contingency is priced at the penalty price during the scheduling run

- This approach will address compounded pricing effects caused by simultaneous relaxation of transmission constraints across multiple contingencies

- The CAISO is currently exploring the enhancement under evaluating additional stressed scenarios to determine any further refinements

- Following this assessment, the CAISO will hold a stakeholder to socialize the findings and final proposal before proceeding with a formal BPM change process

Enforcement of contingencies for FRP

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CAISO's upcoming enforcement of contingencies in FRP deployment scenarios within the FMM

- Flowgates can be base case or contingency related constraints
- Currently, the CAISO enforces only base case flowgates in FRP deployment scenarios across both the FMM and RTD
- CAISO had plan to start enforcing contingency-based flowgates in FRP deployment scenarios in the FMM, but not in the RTD effective June 27
- This change improves FRP deliverability, as the FMM is the key market where the CAISO may:
  - Commit additional resources to ensure FRP sufficiency, and
  - Procure incremental ancillary services if necessary

CAISO's upcoming enforcement of contingencies in FRP deployment scenarios within the FMM

- The outcome being addressed under pricing of multiple contingencies (previous topic) for energy may also manifest under the FRP scenarios
- Additional analysis is being assessed for the feature of multiple contingencies for FRP related to pricing implications
- CAISO is postponing the activation of contingencies for FRP until the enhancement for pricing congestion from multiple contingencies is implemented

Enhancement to mitigate for market disruptions

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CAISO's market disruptions -Background

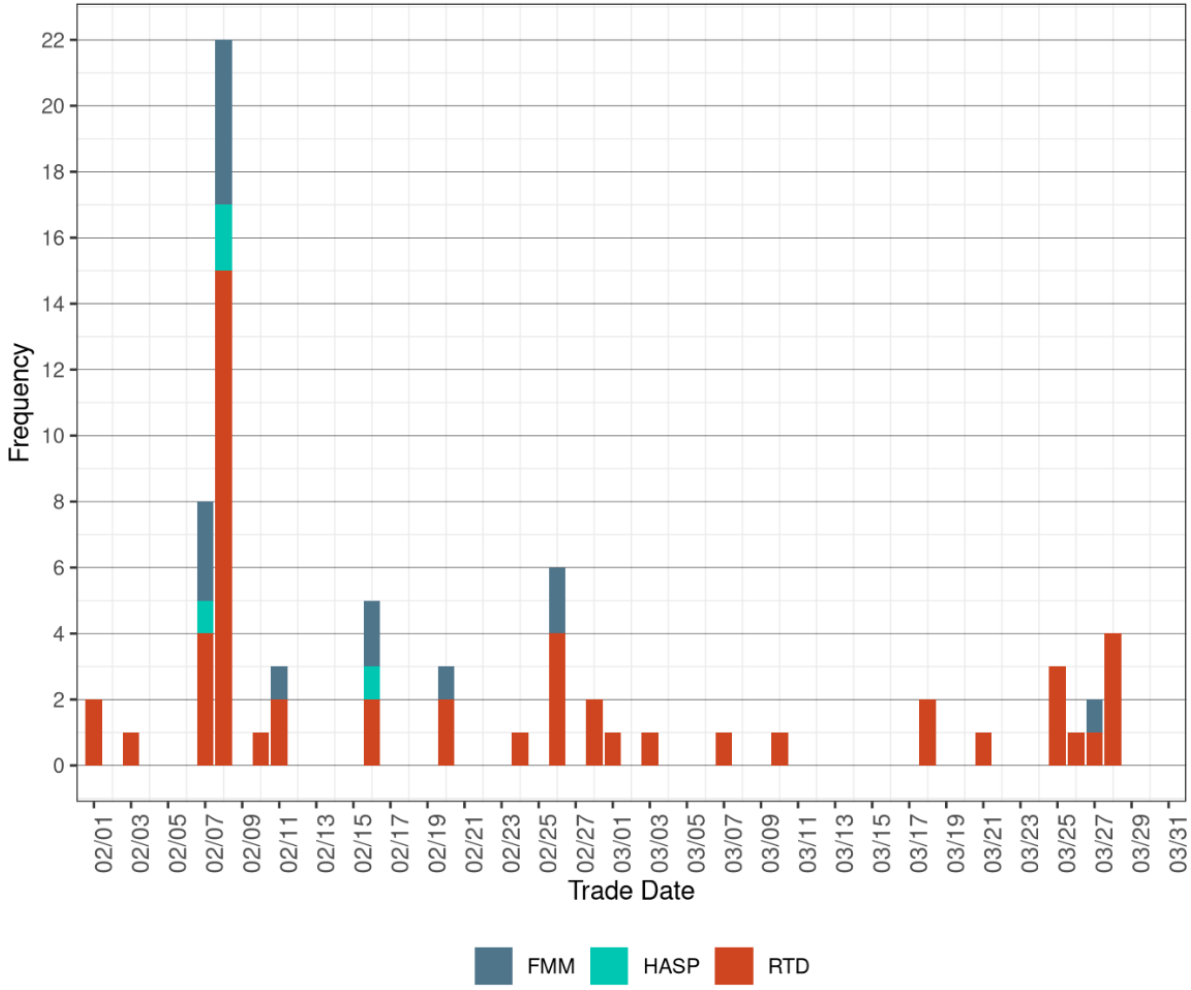
- The market clearing process of the CAISO markets relies on a complex optimization engine to achieve a market solution
- The optimization engine achieves a least cost solution while considering all bid-in costs and enforcing all modeled system and resource constraints
- The region defined by all constraints is known in the mathematical jargon as the feasible region, where the optimal solution resides
- Under certain complex scenarios, there may be constraints that are not feasible to manage; *i.e.,* there is no feasible region to achieve an optimal solution and, thus, there is a market infeasibility/failure
- A market infeasibility/failure means there is no market solution; this is known also as a *market disruption*

CAISO's market disruptions -Current practice

- A market disruption impacts all resources in the system, even if the infeasible constraint is related to a single resource

- One tool available to address market disruptions is to make the resource with the infeasibility non-participating in the market
  - Effectively, the resource is not longer dispatched through the market
  - CAISO notifies the scheduling coordinator of the action taken
  - The resource does not receive a schedule or award
  - The resource is settled based on its actual production point
  - CAISO generally reports in the performance reports the instances of market disruptions

Market disruptions are more potential to happen in the real-time market



Software enhancement

- As part of the market clearing process, the CAISO is exploring a software enhancement to identify infeasible constraints and the magnitude of the infeasibility
- This information can be used to model the infeasible constraint by relaxing it by the amount of infeasibility to regain feasibility
- The market can then find a solution by clearing schedules and awards for all resources
- This will eliminate the need to exclude the resource from participating in the market
- There is a potential for a resource's schedule/award not to recognize all the resource's constraints, but any deviations will likely be less than the deviation that arises from making the resource non-participating

Benefits of the potential software enhancement

- This enhancement addresses a practical problem of market disruptions to minimize market failures
- Current tariff provisions recognize various steps the CAISO can take to prevent a market disruption, including removing resource bids
- The software enhancement takes a less intrusive approach and is more effective than relying on operator manual actions
- The CAISO proposes to describe the mechanics of the software enhancement through a regular BPM change process
- The CAISO proposes to report on the instances that this software enhancement trigger in the market performance reports
-

Net transfer constraint for CAISO area

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The CAISO has developed new constraints for managing net transfers

- Key system constraint introduced
  - CISO_NET_IMPORT_ITC
    Includes all dynamic import ETSRs for the CAISO-BA
  - CISO_NET_EXPORT_ITC
    Includes all dynamic export ETSRs for the CAISO-BA
  - CISO_NET_ITC
    Represents the full set (imports and exports) of CAISO-BA dynamic ETSRs
- Using net transfer constraints, particularly under stressed grid conditions, can be a better alternative to limiting individual CAISO-BA dynamic transfers ETSRs
- This can provide CAISO-BA operators the ability to proactively manage net import/export transfers
- This type of constraint is already available to WEIM BAAs; this enhancement is to provide the same tool for CAISO BAA operators

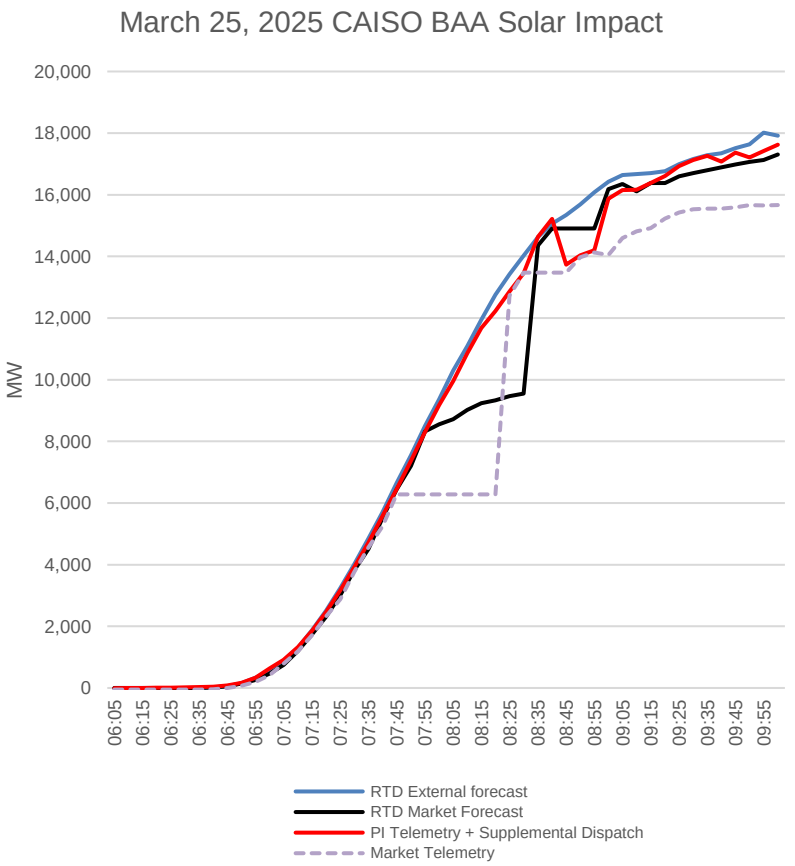
Market Issues

Short Term Forecasting

Market Performance and Advanced Analytics

Issue 1: March 25th Persistence Forecast Using Stale Telemetry

- The EMS payload used to create the Persistence forecast had an issue the morning of 3/25. From 7:55-8:30 a.m., the persistence forecast was using the telemetry data from 7:40 a.m.
- CAISO and WEIMs VERs on persistence were impacted, with largest errors observed in solar due to the timing being during the solar on-ramp.
- Protection to fall back to the vendor-supplied forecast is planned for implementation by July if EMS payload is not received for 3 consecutive intervals, limiting impact to forecast in the future.



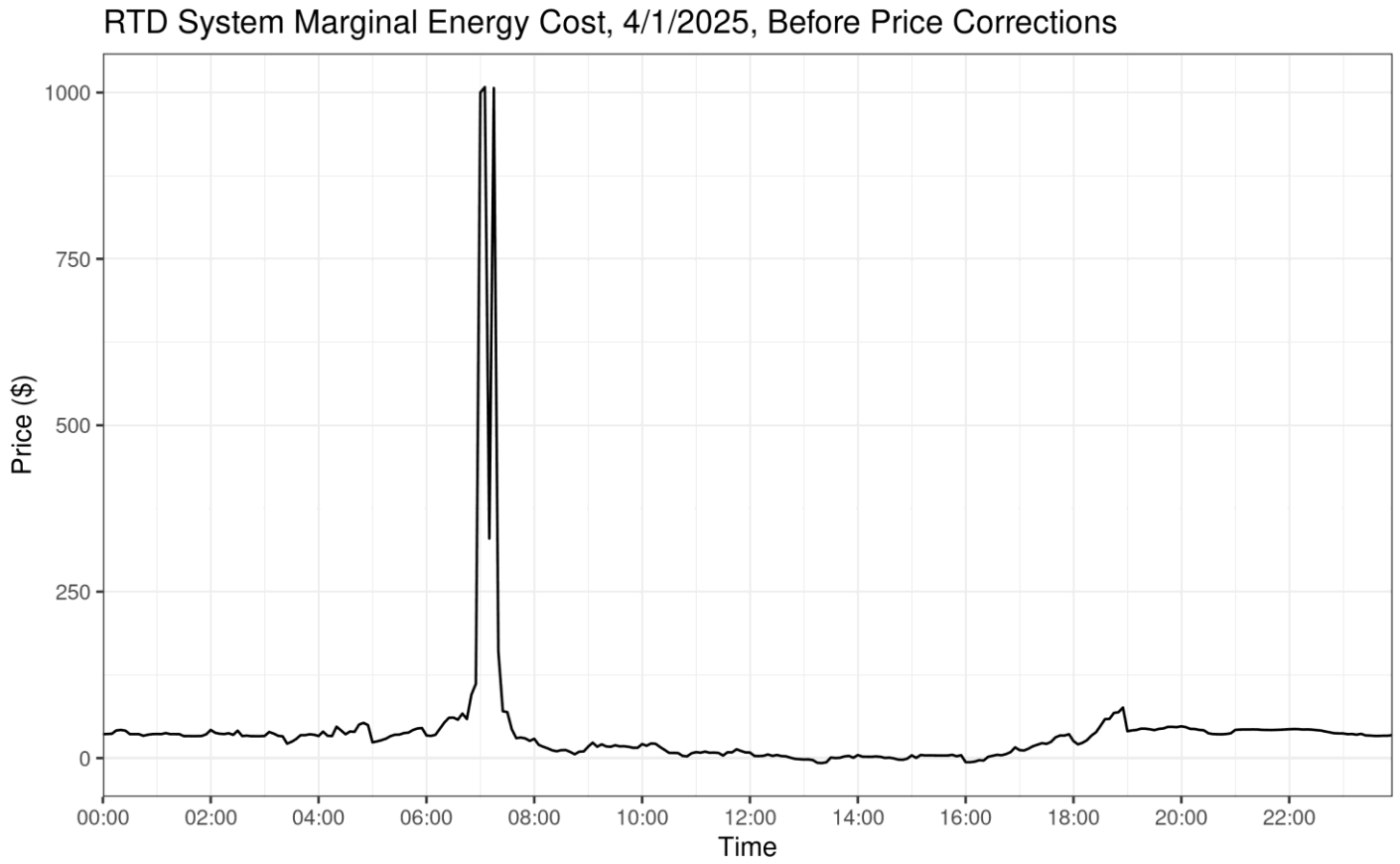
Issue 2: April 1st Load Forecast

- Actual load data fed into forecasting models was impacted due to PI Server issues, causing the forecast to trend off incorrect actual load
- PI data was impacted in CAISO, APS, and IPCO from HE3 to HE12
  - Market impacted limited to HE8
- Additional alerting thresholds on the PI servers were implemented 4/4 to prevent future issues and impacts

Issue 1: Market Impact

- The stale telemetry during the morning ramp led to a CISO contingency run
- The prices for CISO contingency runs are subject to price corrections in RTD due to an outstanding defect
- The CISO contingency run corrections are performed with interval replacement for impacted intervals and apply across all BAAs in the market
- The contingency corrections are the only corrections performed for this issue

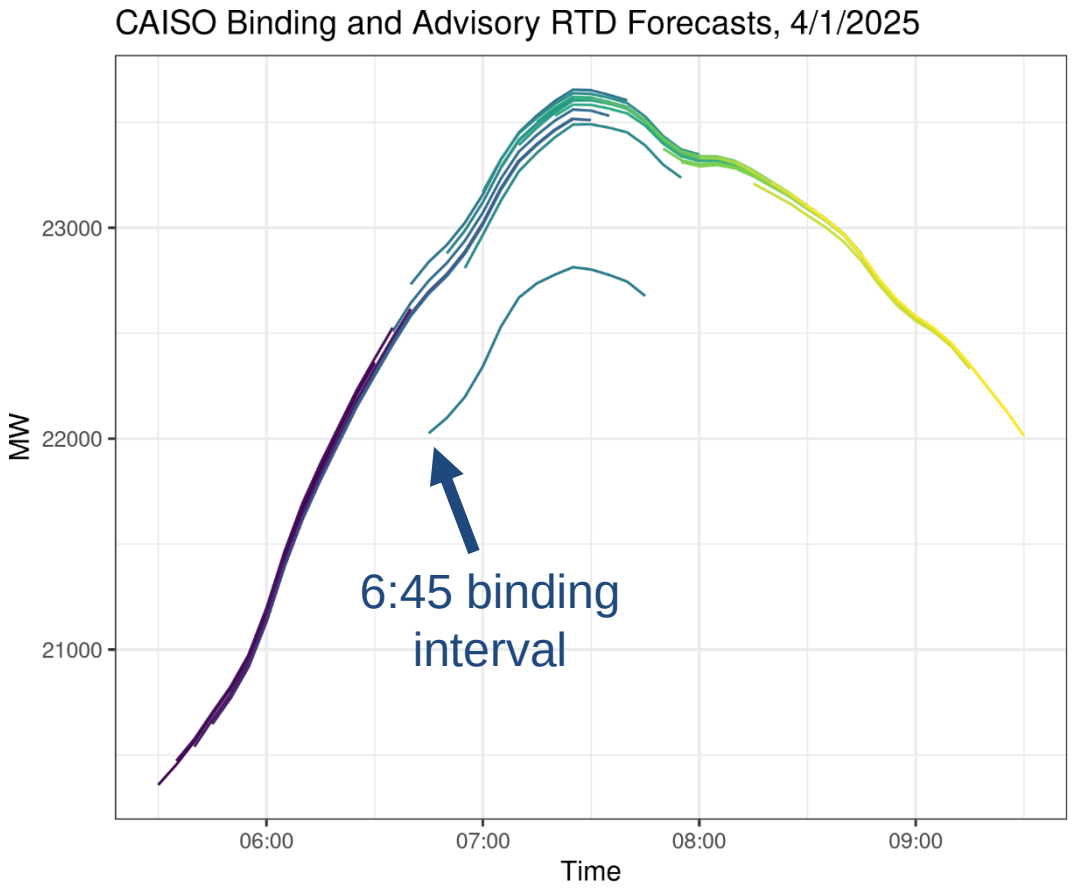
Issue 2: Market impact



The issue caused the SMEC to spike to $1,000 for 3 RTD intervals in HE 8

Issue 2: Market impact

- The low forecast in the 6:45 case positioned the market incorrectly going into HE 8
- This combined with low battery SOC and FMM to RTD VER differences to cause the HE 8 price spikes
- The price spikes were corrected



This figure shows the binding and advisory forecasts used by each RTD run. The first point on each line represents the binding interval, and all subsequent intervals are advisory intervals within that market run

Renewables reductions and storage

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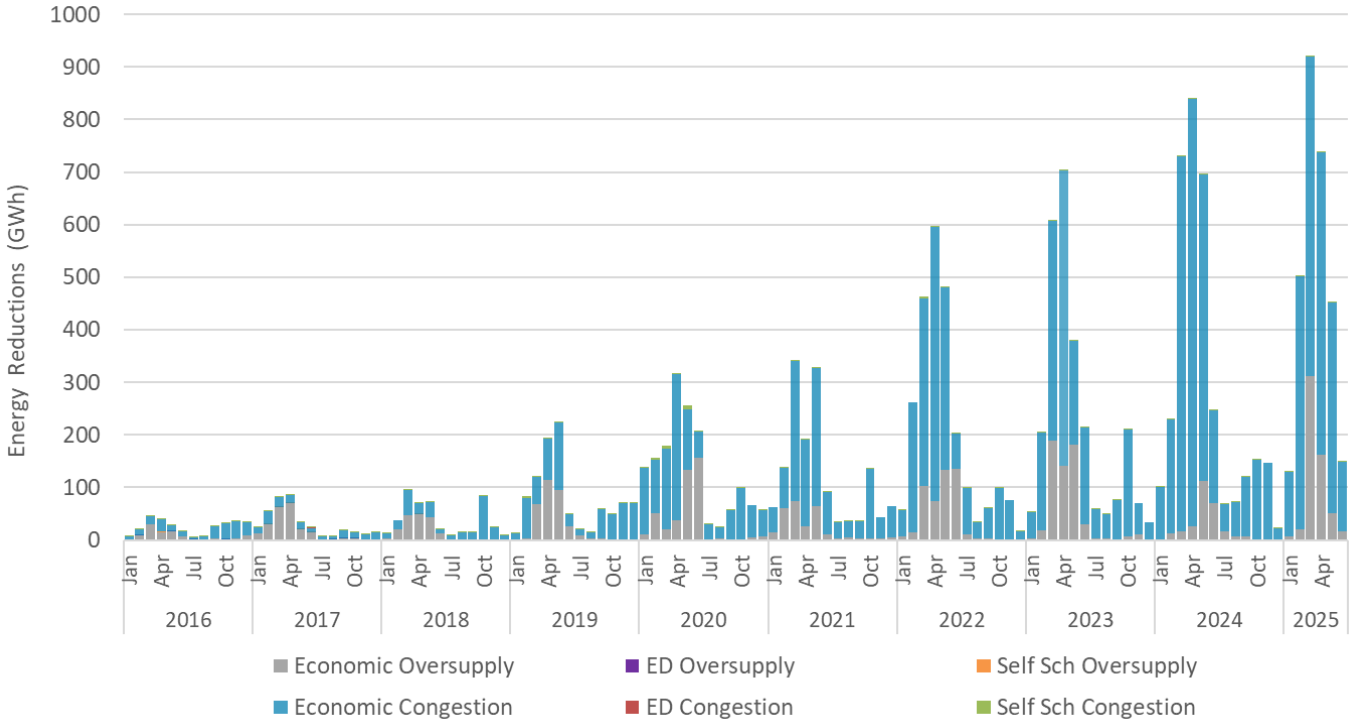
Production of renewable resources

- Renewable resources, like other type of generation, can participate in the market with economic or self-schedule bids
- Based on price and location, the market will redispatch resources to address either oversupply or congestion
- The term "*curtailment*" was originally used when renewable resources used to self-schedule and the market required to curtail these
- In recent years, renewable resources have significantly increased their economic dispatch participation with price bids, allowing the market to economically redispatch. Curtailments of self-scheduled are a rare condition

About 80 percent of reductions of renewable production is mainly driven by economic congestion relief

Instances of congestion are classified based on whether there is a negative marginal congestion component of the resource price.



There can be cases where both congestion and oversupply result in reductions.

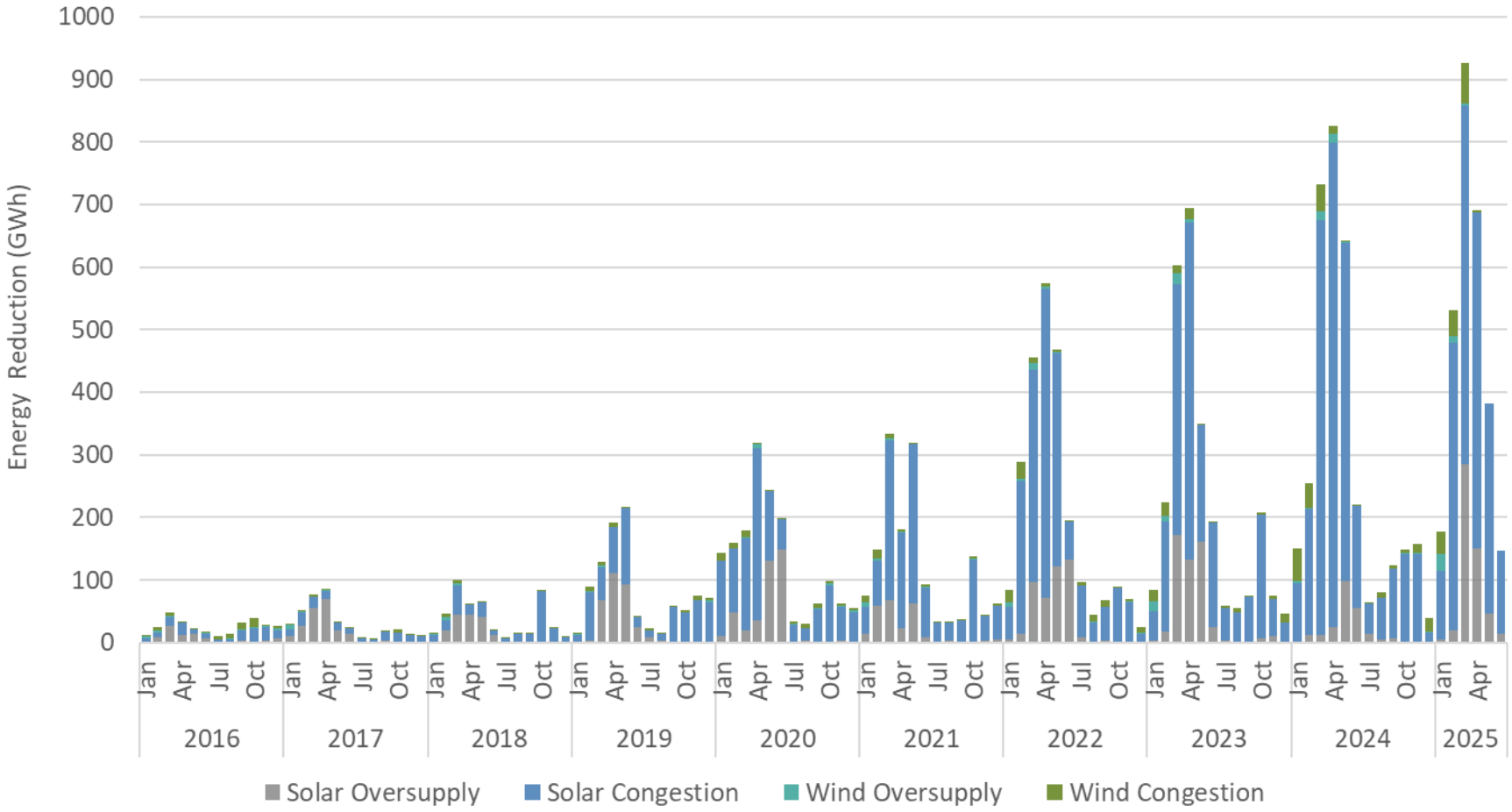
This classification is based on original market dispatches and prices and is not based on counterfactual assessments to surgically identify the extent of congestion impact from transmission upgrades.

The annual CAISO's transmission planning process provides an opportunity for stakeholders to explore the benefits of reducing congestion from transmission upgrades.

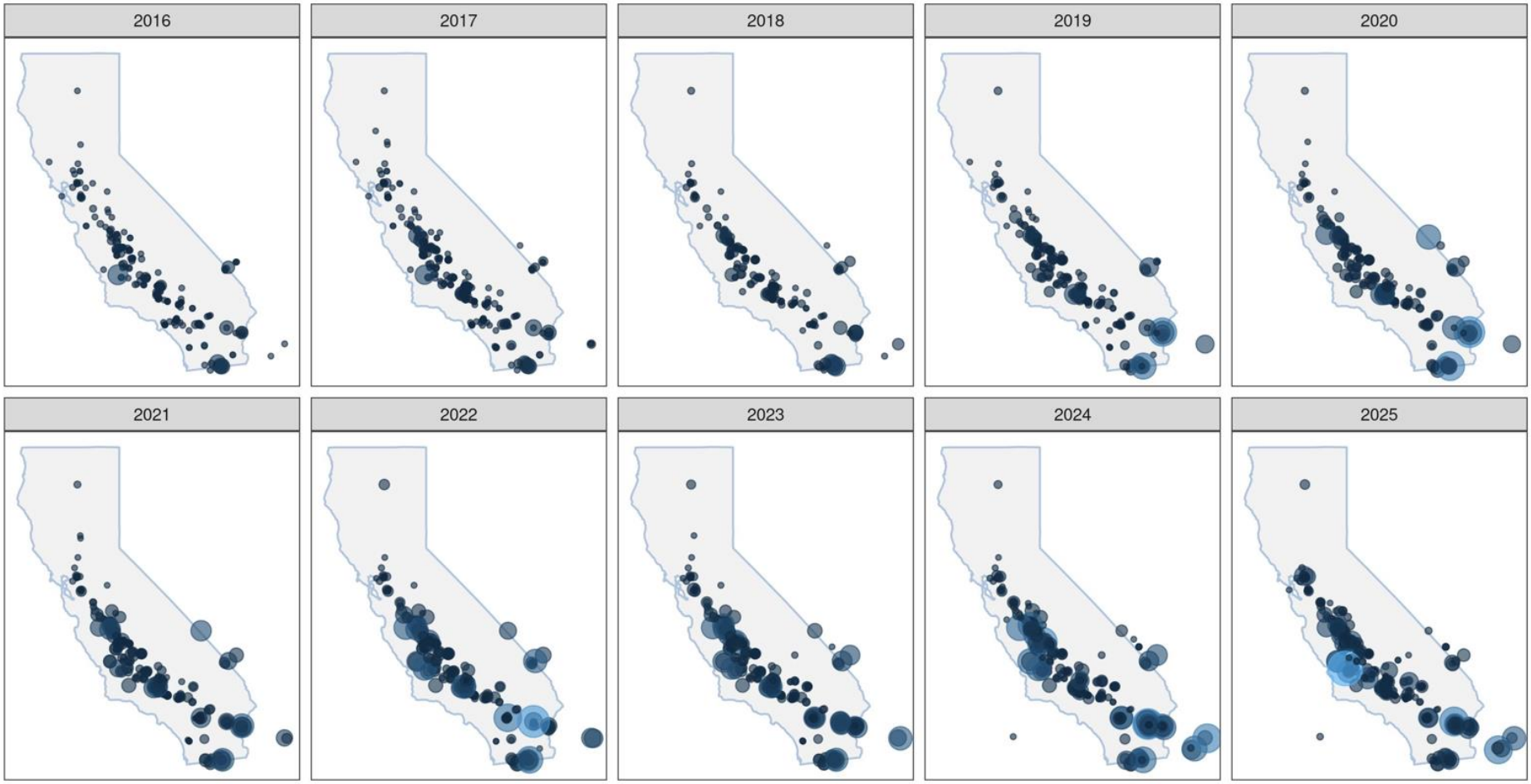
Production of renewable resources

- The extent of congestion is widespread, going from major and regional conditions to more local conditions
  - For instance, northbound congestion on Path 15 would require all resources in southern California to reduce generation
- When managing congestion, any type of generation including renewables can be decrementally dispatched
- The majority of reduction of renewable production has been driven by congestion
- Integration of storage resources has helped manage oversupply by charging during hours when solar production is plentiful
- Although reductions of renewable production due to congestion see an increasing trend, the integration of collocated resources can offset the need for further reductions

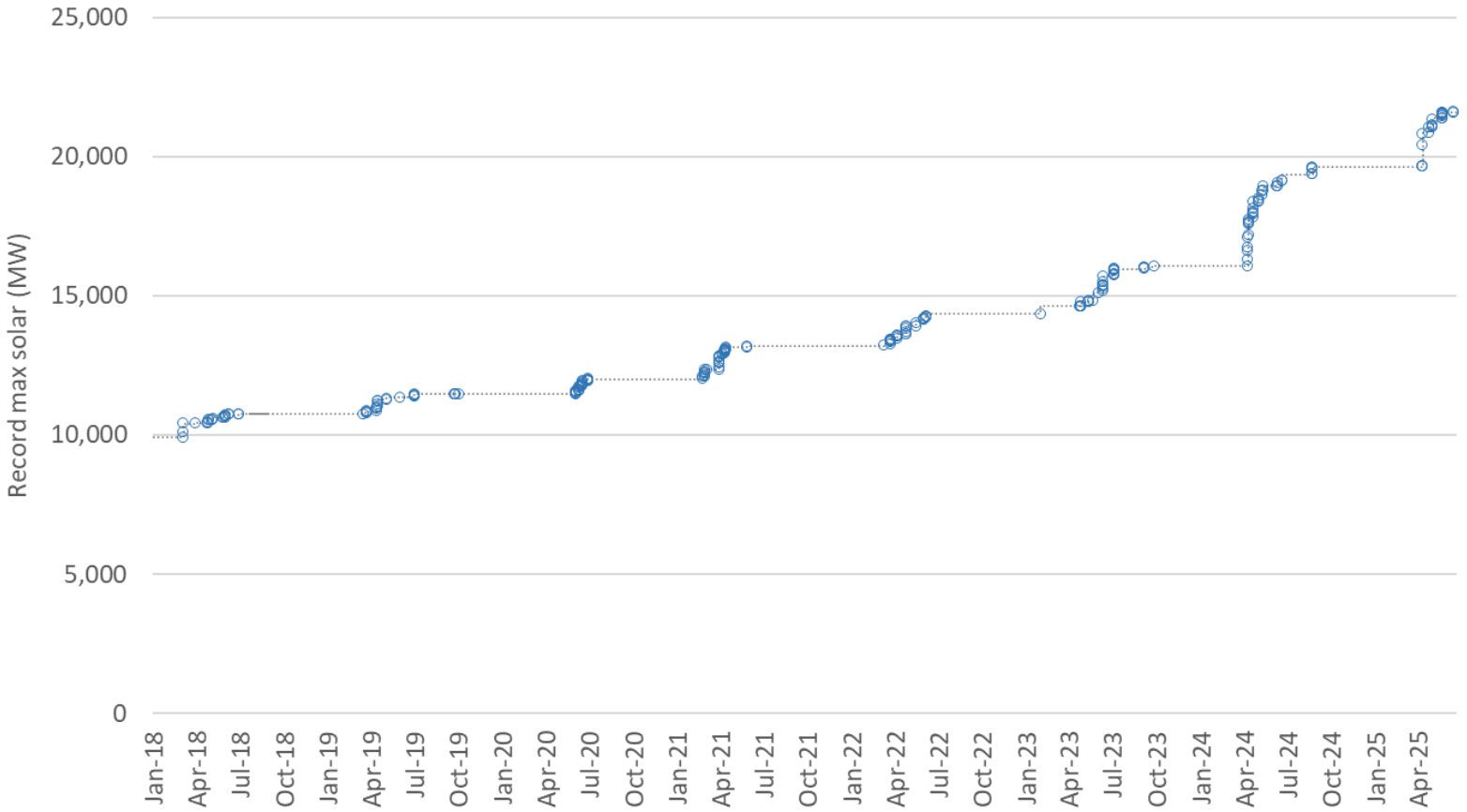
About 94 percent of production reduction is for solar resources



Reduction of renewable production has increased throughout the ISO footprint



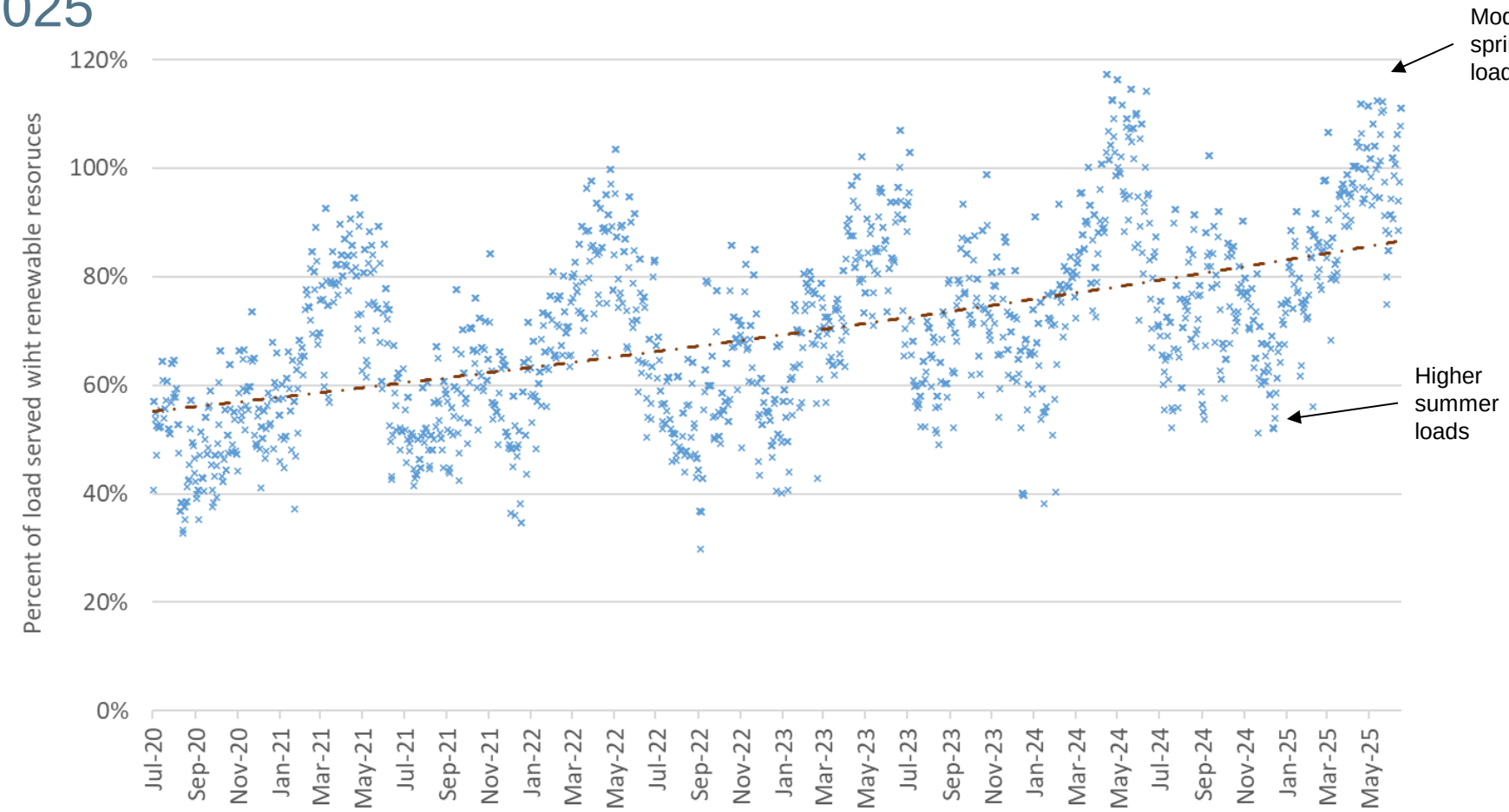
While solar production exceeded the 21 GW mark in 2025, there were less records of max solar production relative to 2024



Each dot represents a new max production record over time

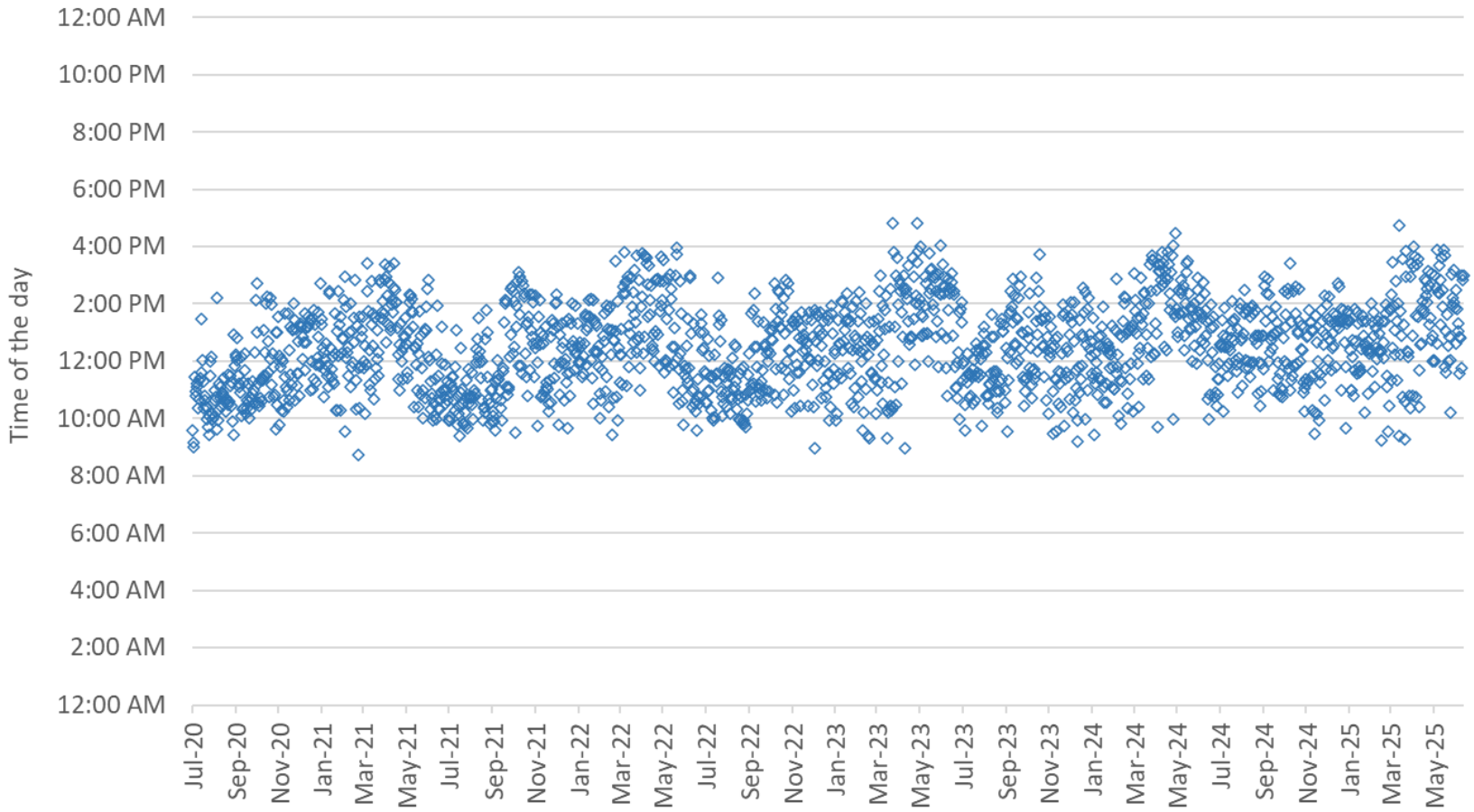
Solar records tend to happen mainly during the shoulder months of April to July

Over 40 days so far in 2025 observed load served fully with renewable resources, comparable to the frequency observed 2025



The maximum level of load served with renewables is just below 120%
The load definition consists of the forecast component plus pumps and charging side of storage

The maximum level of load served by renewable resources happens during midday hours when batteries are charging, solar production is high, and demand is low

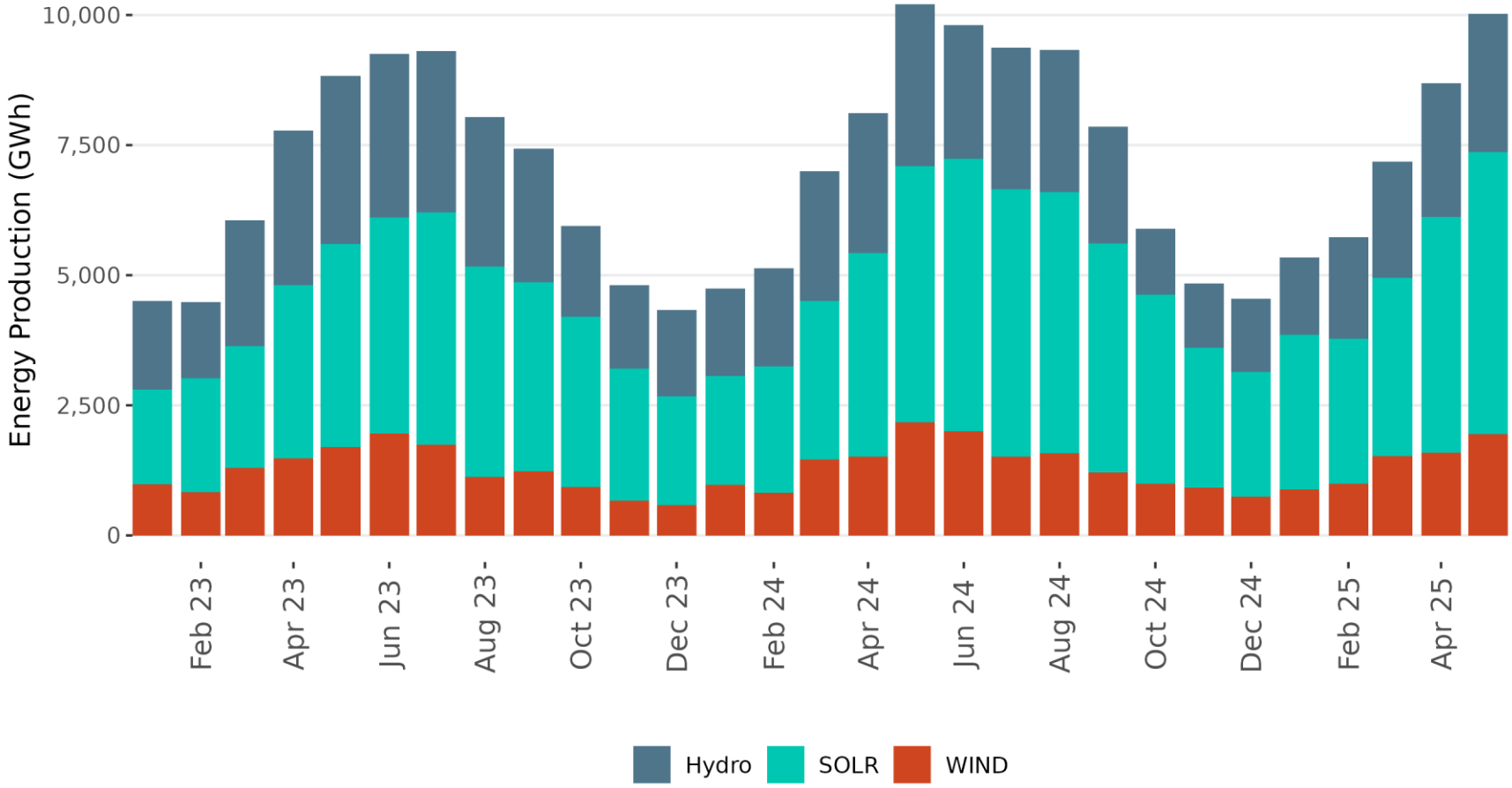


Nuances to consider when calculating ISO's system statistics

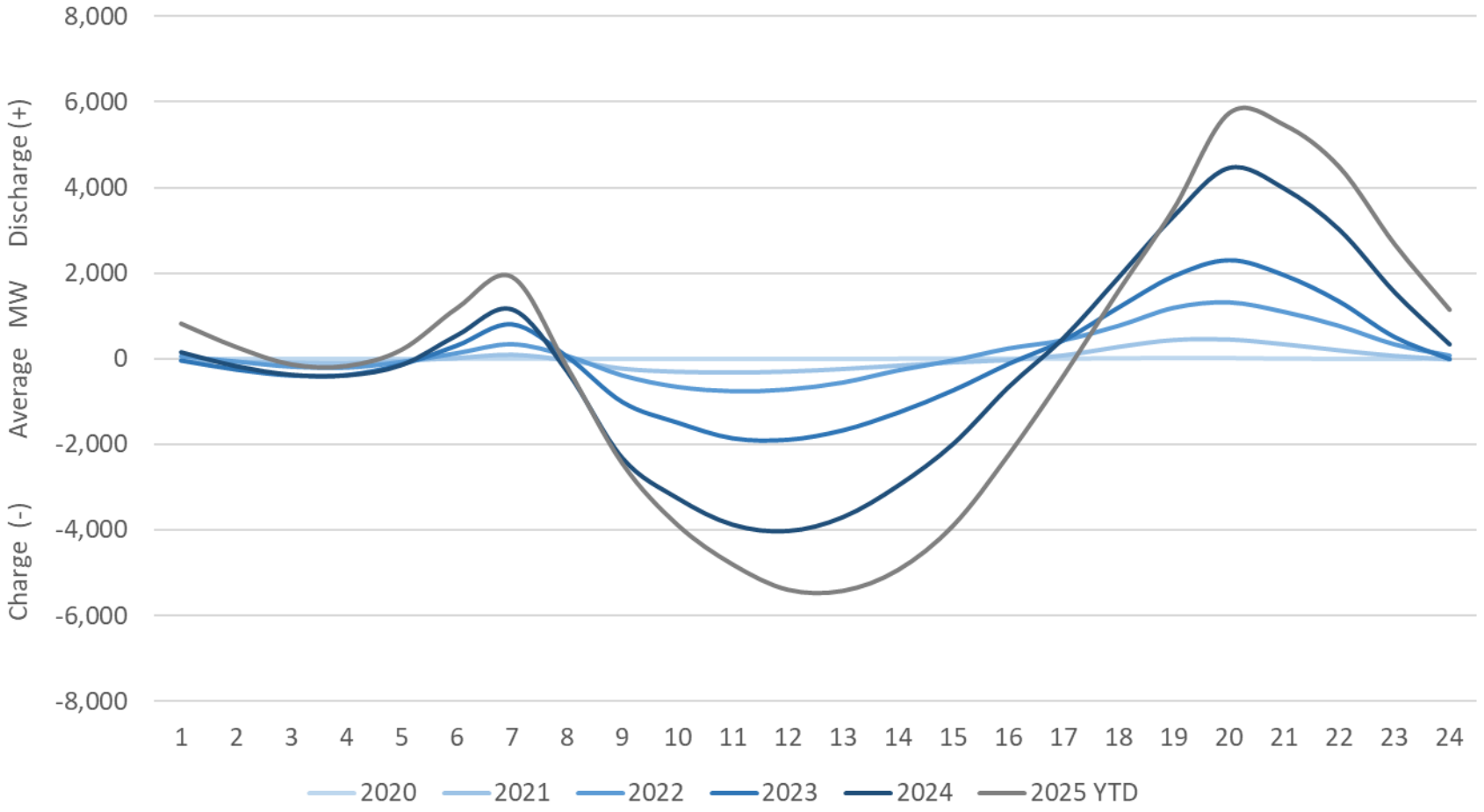
- As the ISO system evolves and new technologies are integrated, there is a growing interest in tracking different statistics on the ISO's system performance

- The use of different conventions can lead to largely different statistics and records:
  - Variable energy resources, includes only wind and solar
  - Renewable resources also includes small hydro, geothermal and bio resources
  - Non-emitting clean resources may also include large hydro and nuclear
  - Total CAISO load needs to include pumps and charging of storage resources

Solar production higher in 2025 than previous years

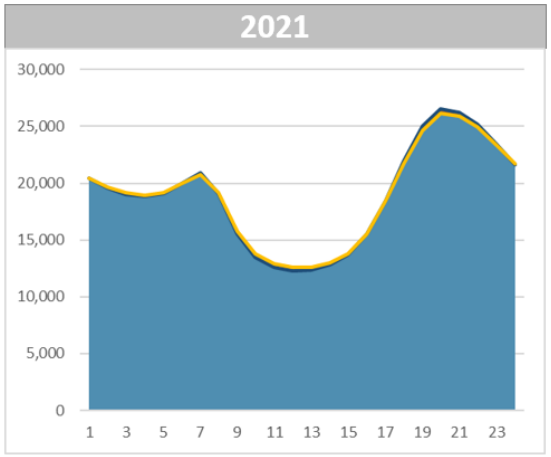


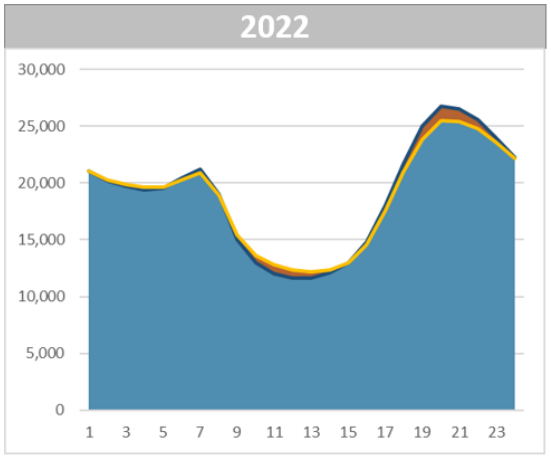
Storage resources have significantly increased the energy arbitrage from midday hours to peak hours

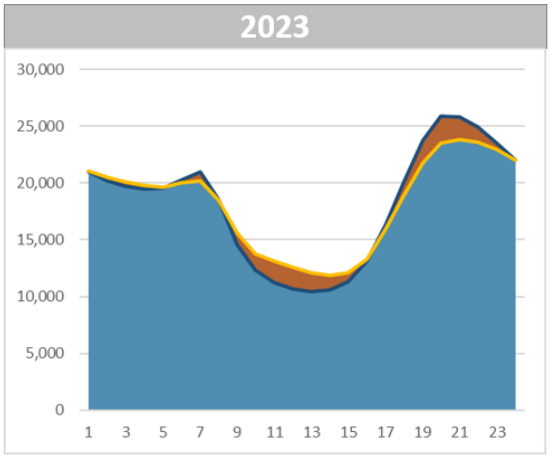


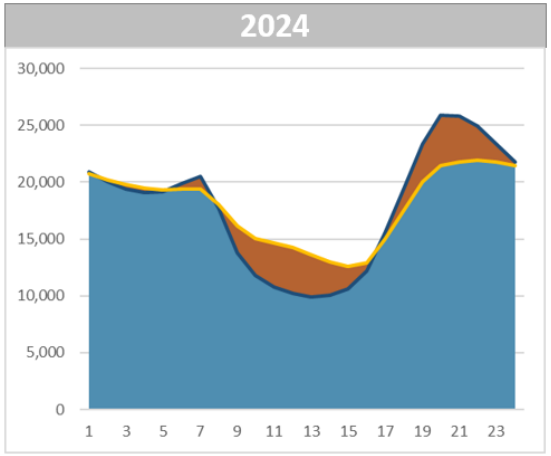
This metric includes both stand-alone and hybrid resources

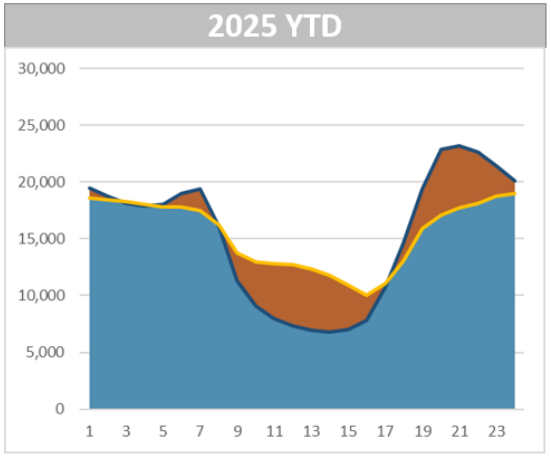
Storage resources are helping to flatten the net load that needs to be met with conventional resources

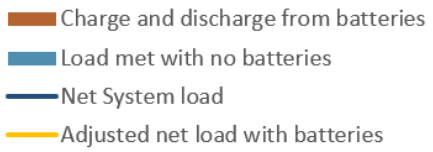






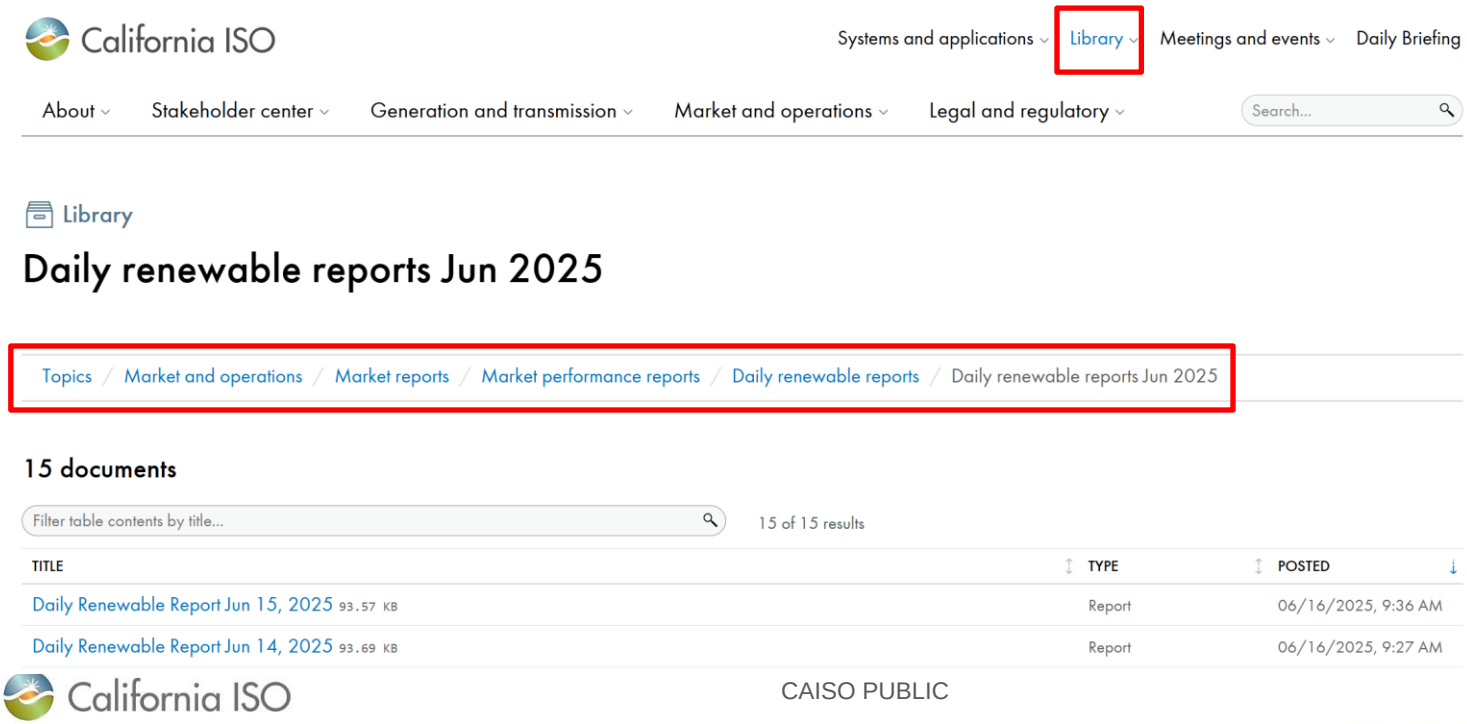






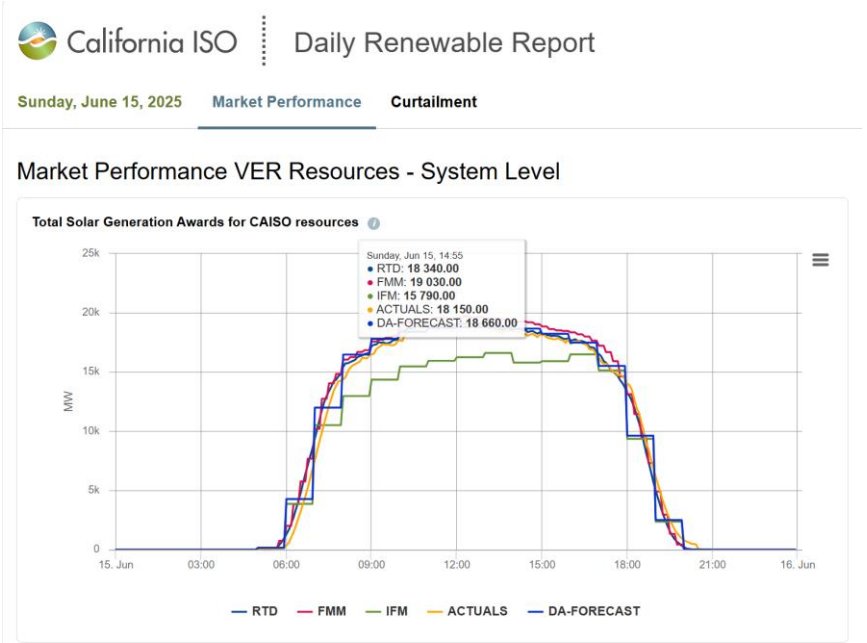
Daily Renewable Report

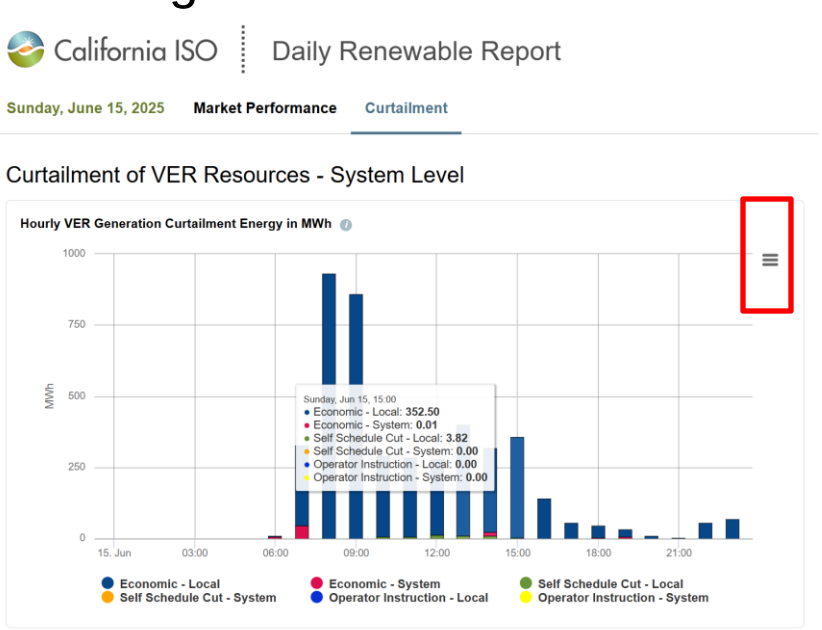
- CAISO has transitioned to a new Daily Renewable Report that is posted each day on CAISO website (starting June 1st)
- This is a new dynamic dashboard for market participants to better view key metrics of renewable resources.
- This report can be found under Library -> Topics



Daily Renewable Report

- It has additional charts organized in two different tabs
  - Including hourly, daily, and YTD charts
  - Distinction between WEIM and CAISO resources
- Other features include hovering over charts for Market Types in Market Performance and Curtailment Types in Curtailment Tab
- Download CSV file of each chart data using the three lines button





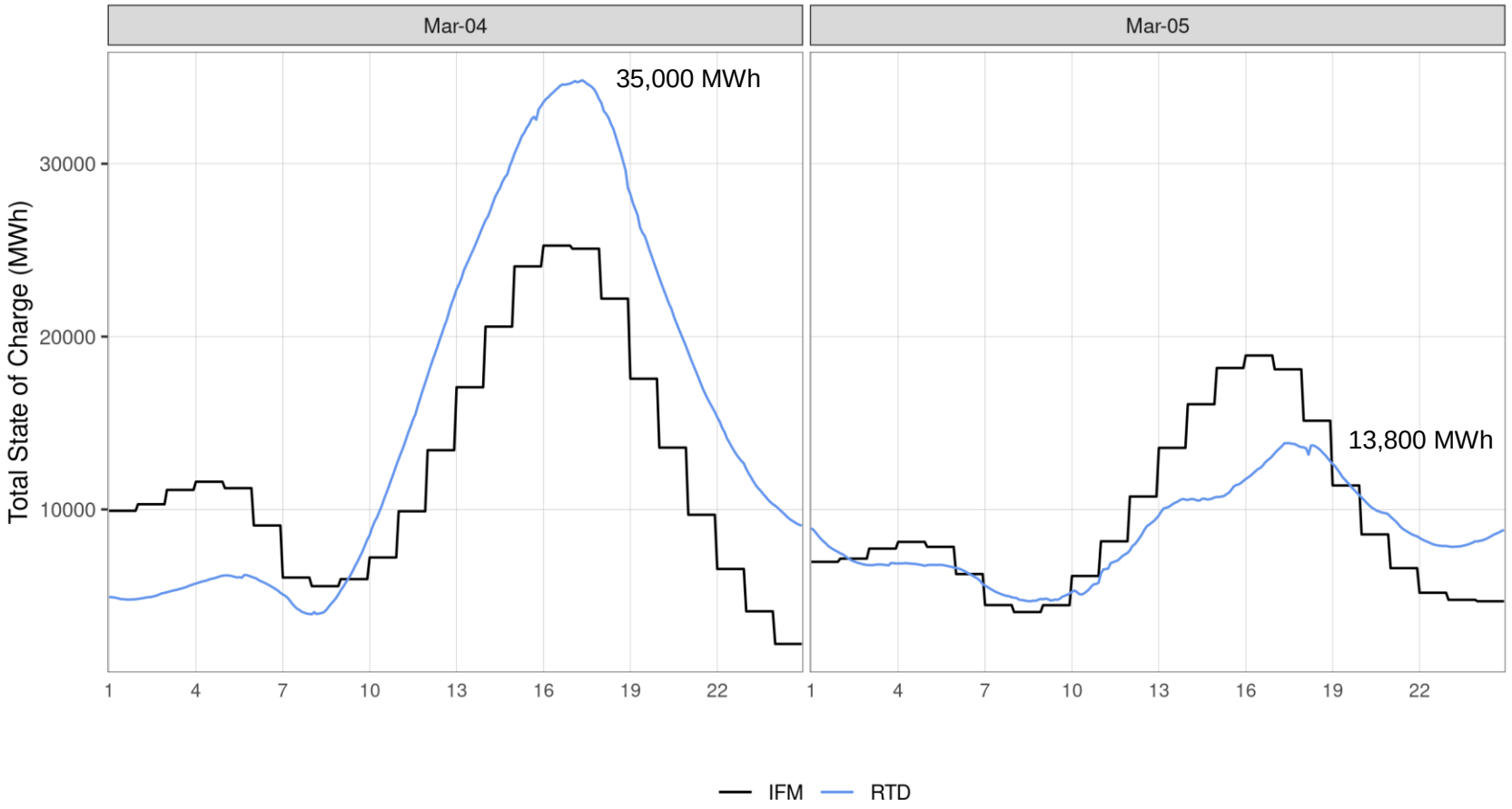
Analysis of storage resource performance

Market Performance and Advanced Analytics

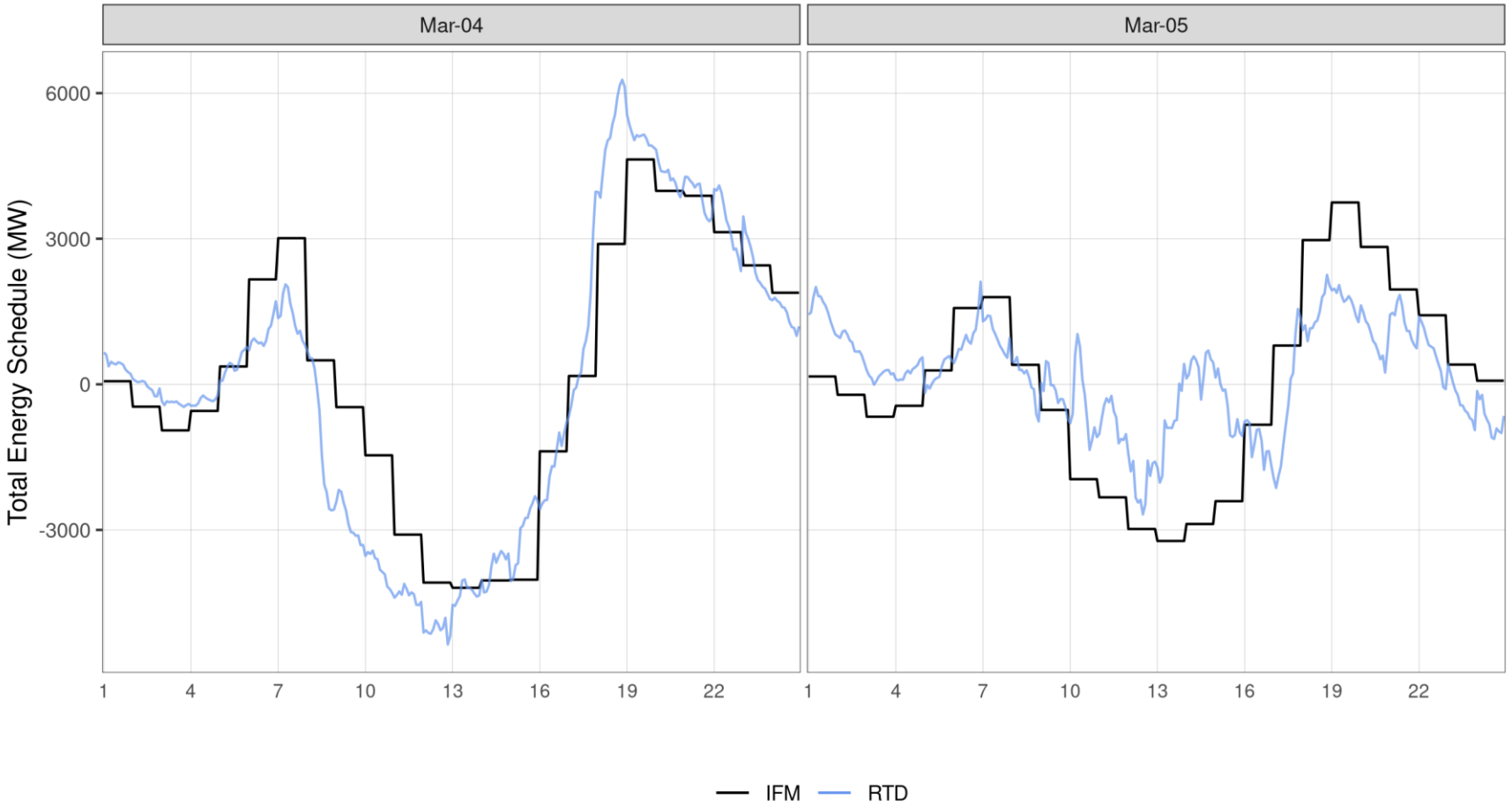
Scenario 1: Low SOC during the evening peak

- On March 5, 2025, CAISO experienced a low level of fleet-wide battery SOC going into the evening peak
- This was due to higher prices through the middle of the day which minimized battery charging through the solar hours
- The condition was observed in both day-ahead and real-time markets
- For analysis purposes, storage resource performance is assessed relative to an adjacent day. Both March 4 and 5 were weekdays with similar load and system conditions

Total SOC achieved prior to evening peak on March 5 was significantly lower than on the March 4



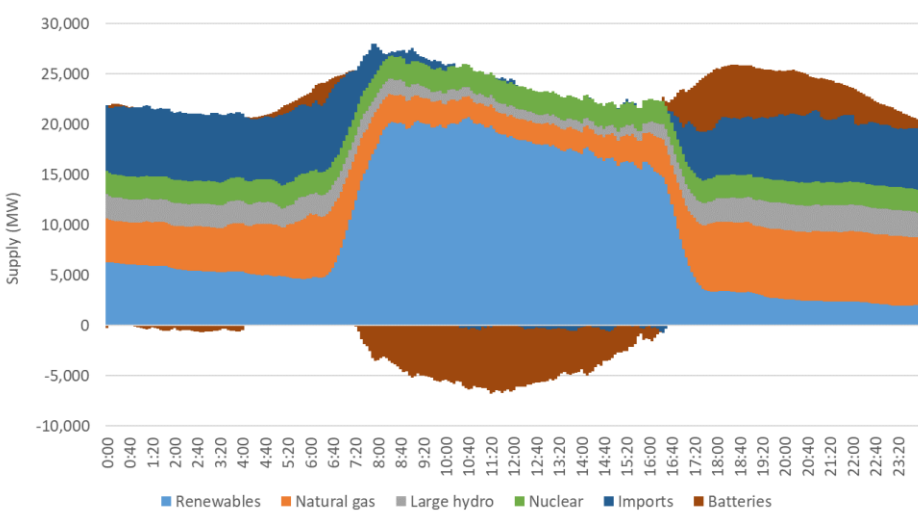
Dispatches on March 5 were significantly lower than on March 4



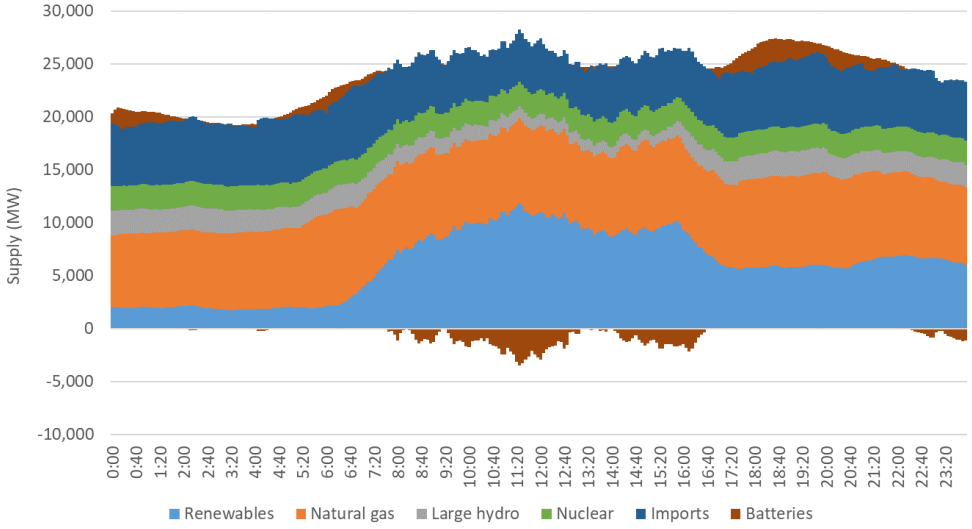
The dispatch difference was moderate in day-ahead but quite larger in real time

Low VER output resulted in RT LMP increases – Why?
Natural gas supply and imports replace loss of VER supply

March 4 (normal day)



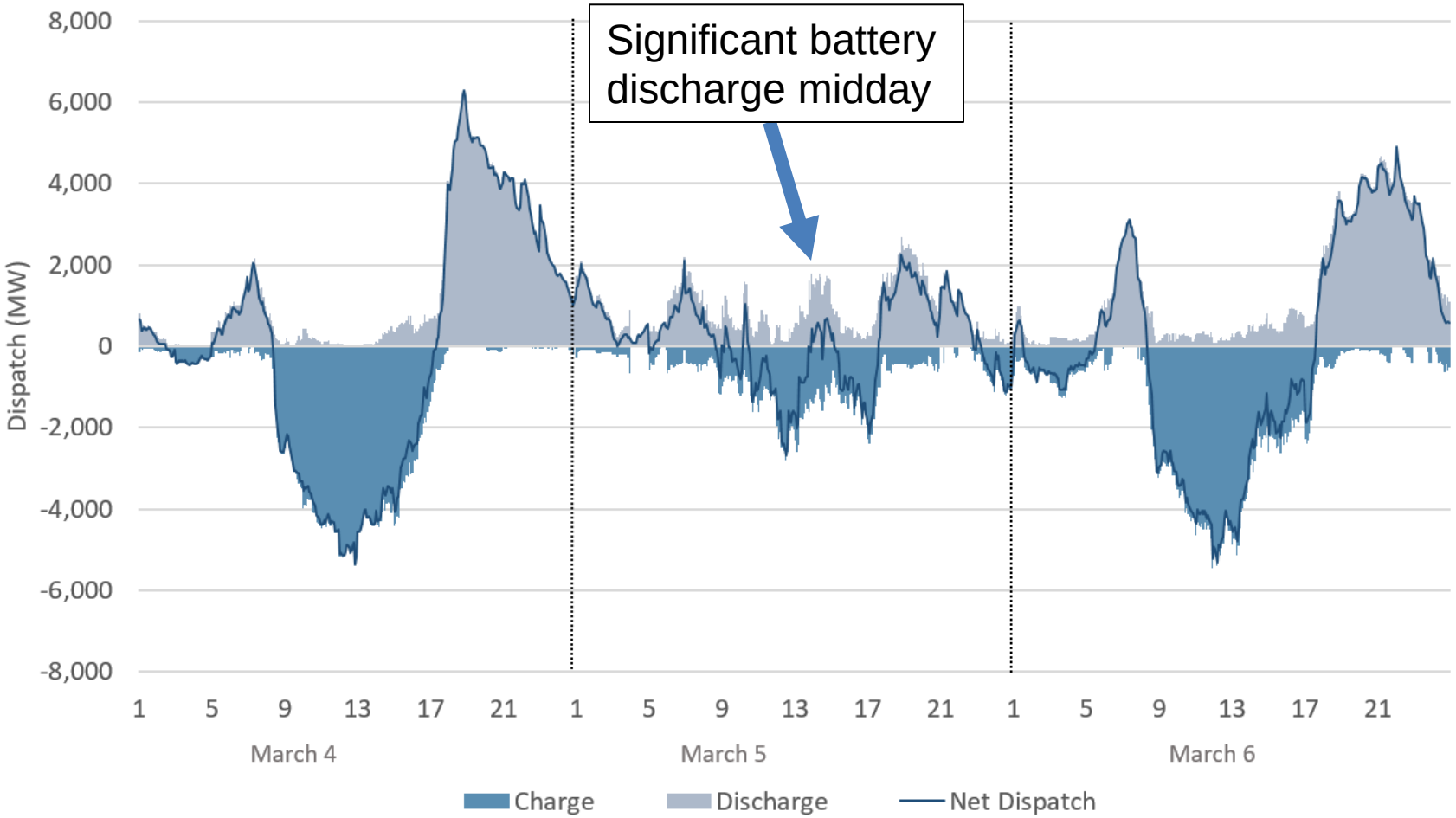
March 5 (low SOC)



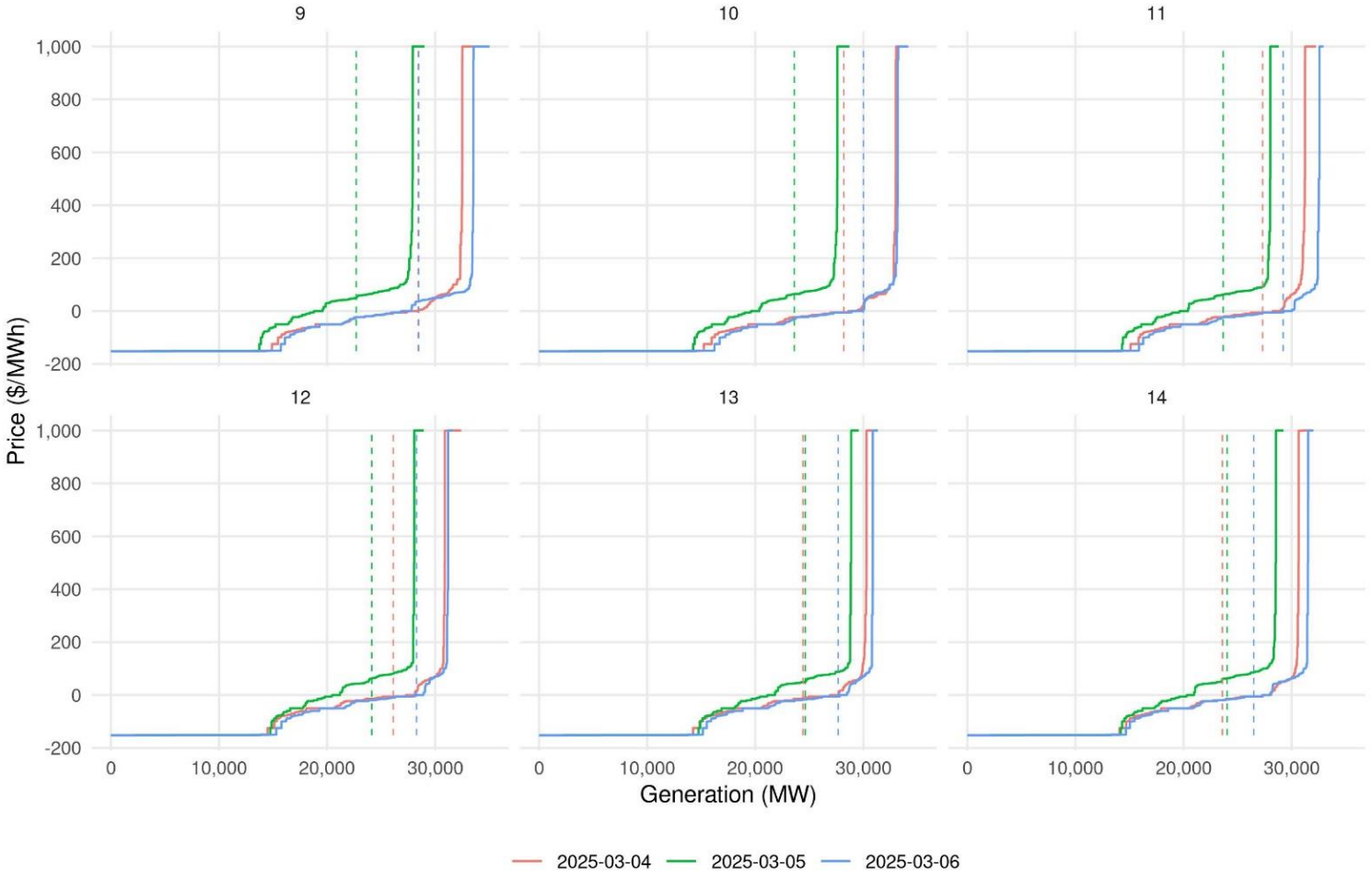
Large difference in renewables output between the two days

The result is that gas and imports picked up the slack, and battery charging is minimal

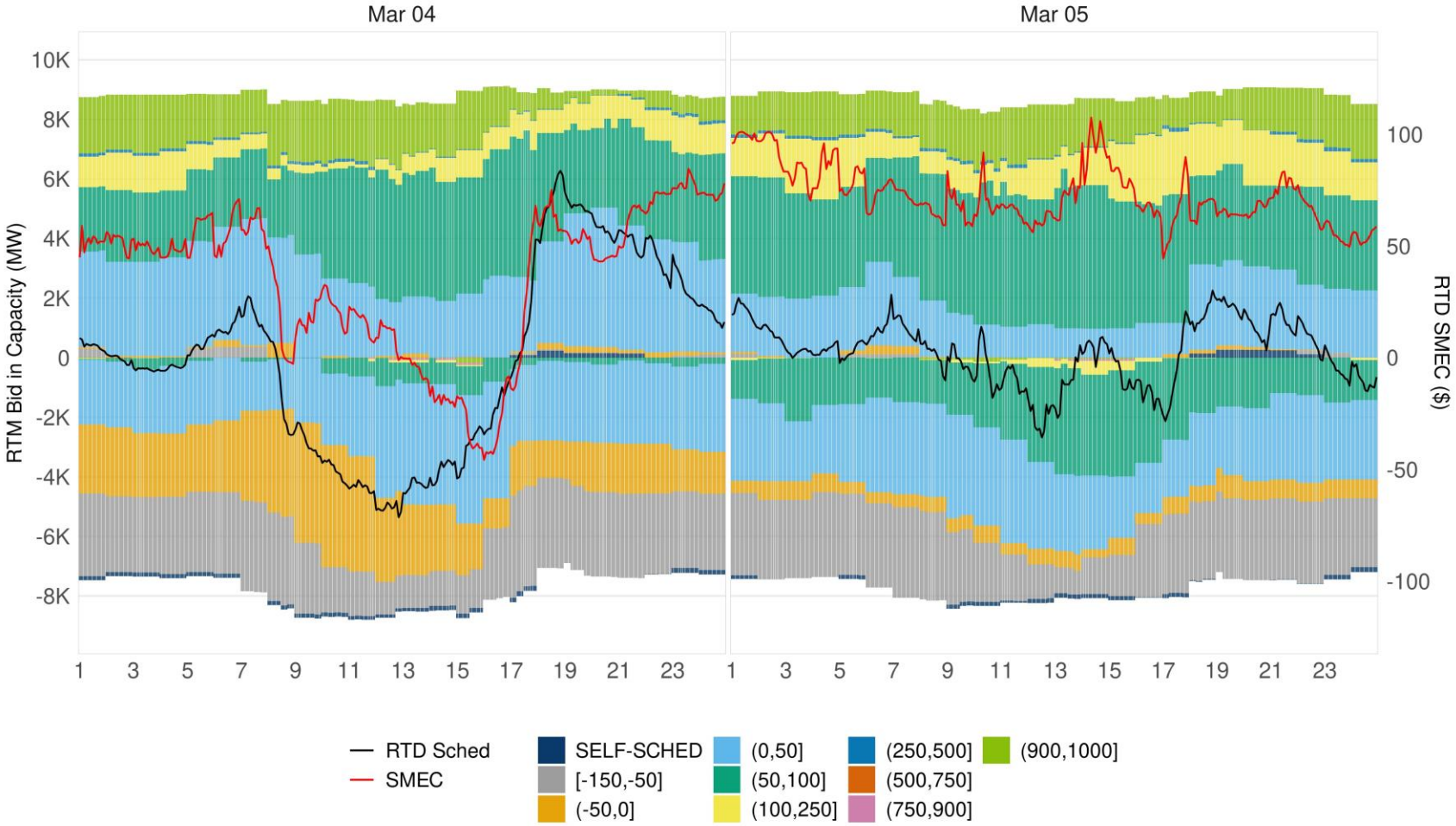
On March 5, given high clearing prices batteries had minimum charging and indeed were economically discharging during midday hours



With less VER production, the supply bid stack was shorter and pricier. Resulting in higher clearing prices

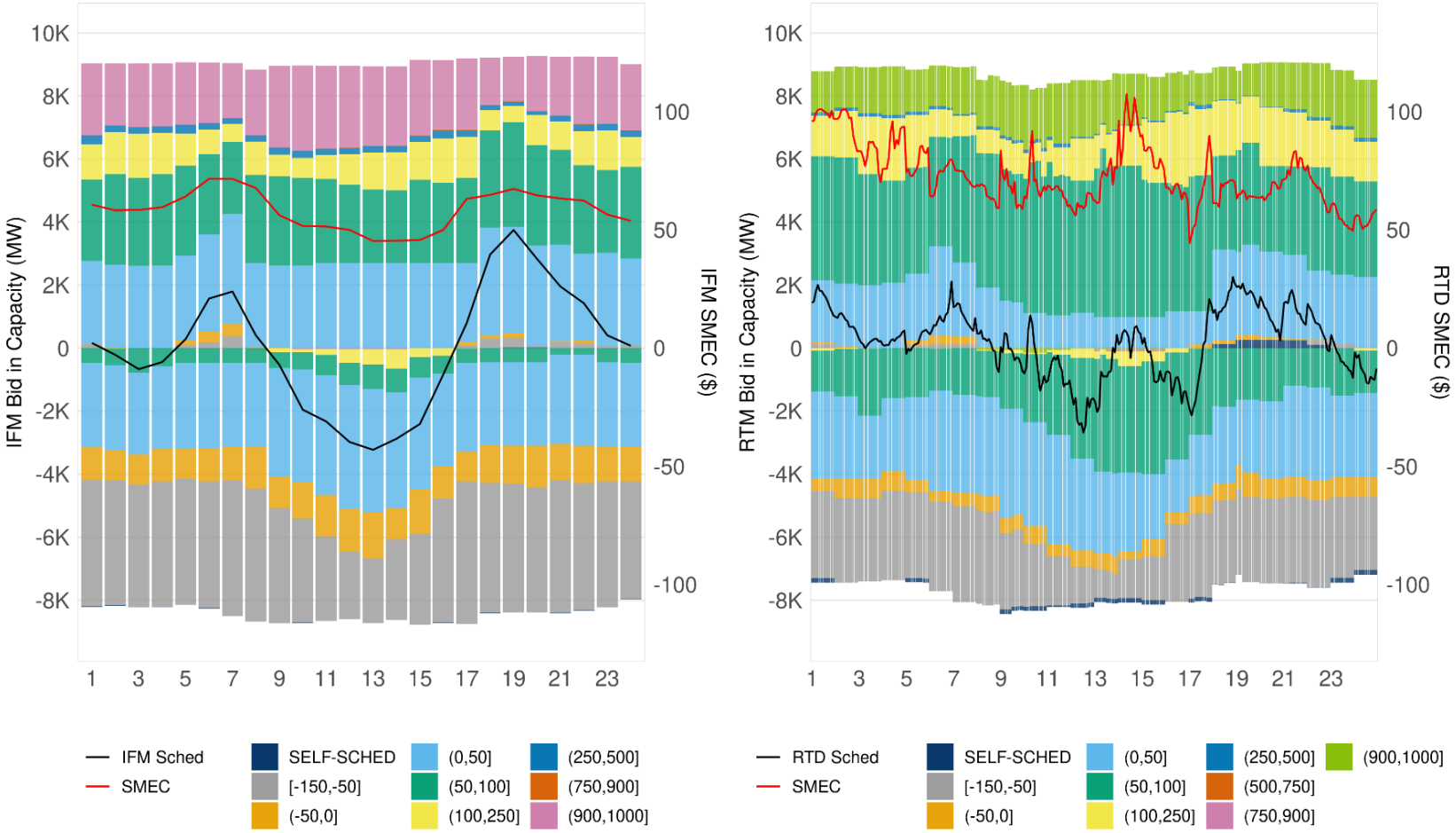


Storage resources adjusted bids in real-time but it was not sufficient



Some bids let storage resources to be economic to discharge

Real-time had a very different profile of dispatches relative to day-ahead on March 5



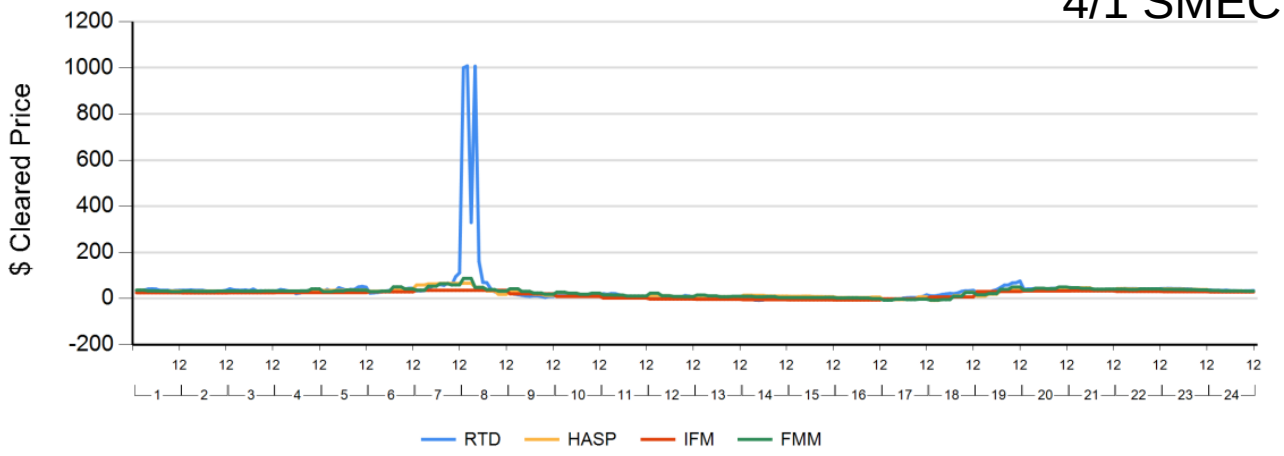
Summary of Issue 1: LOW SOC to support evening peak

- Low discharge and low battery availability in the evening due to limited charging in the middle of the day
- Limited charging due to elevated RT prices as a result of lower VER output and increase of natural gas/imports supply to offset the VER reduction
- Economics do not support charging batteries under these circumstances (prices). Some batteries indeed can discharge at those prices

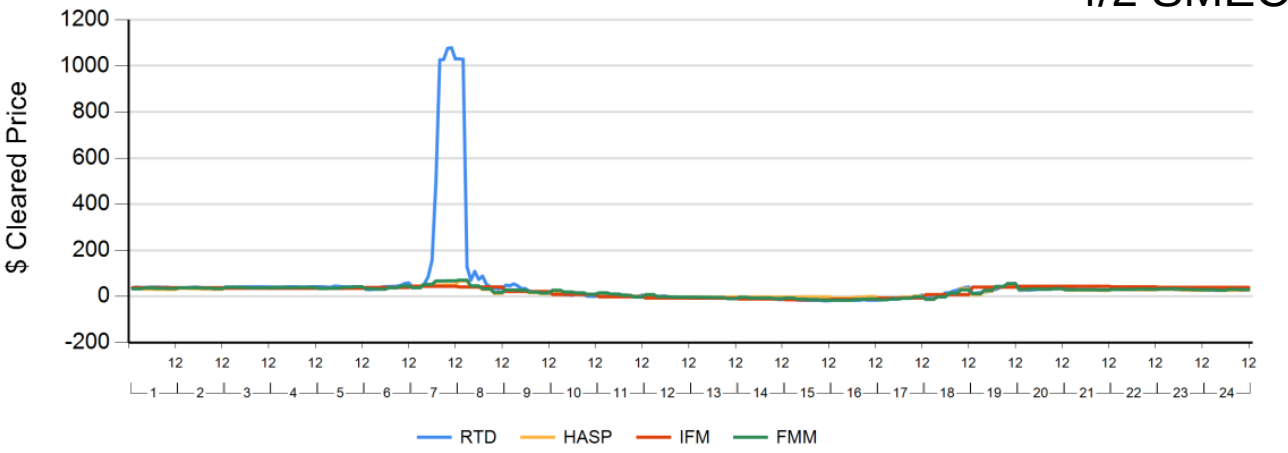
Scenario 2: Morning price spikes in early April

- 4/1 and 4/2 RTD price spikes across the system (DLAP and ELAP) , from the cost component
- RTPD prices for the same period remained low

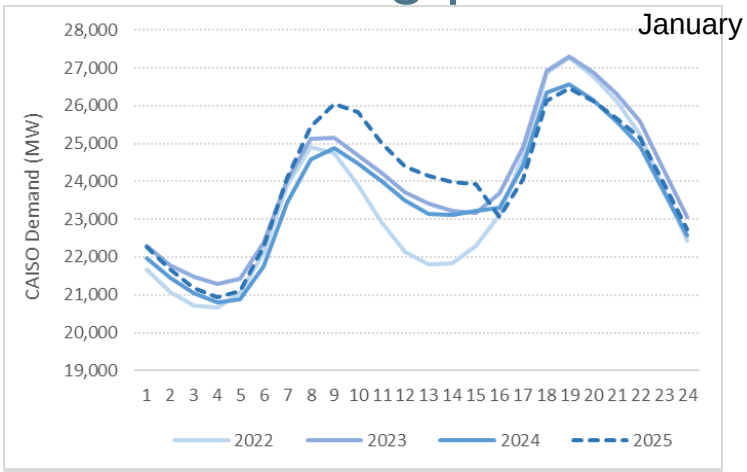
4/1 SMEC

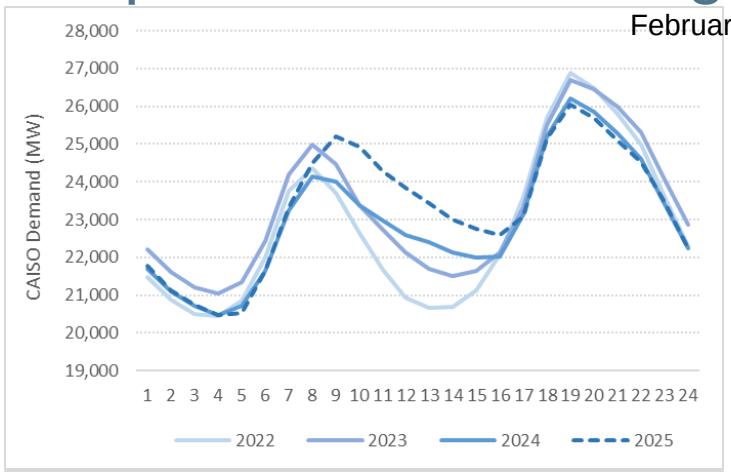


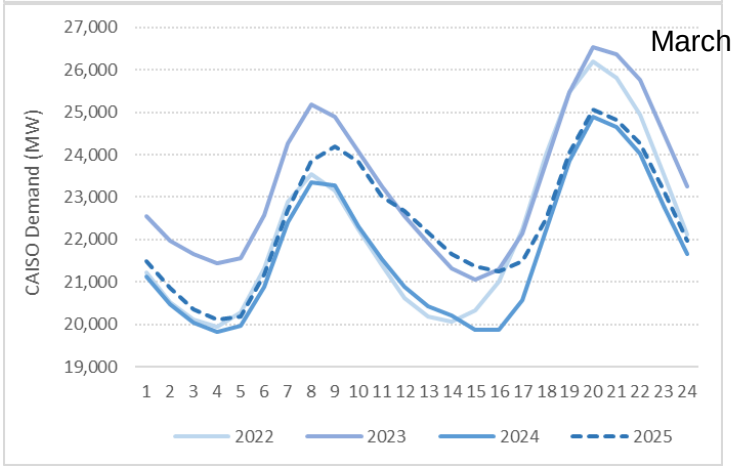
4/2 SMEC

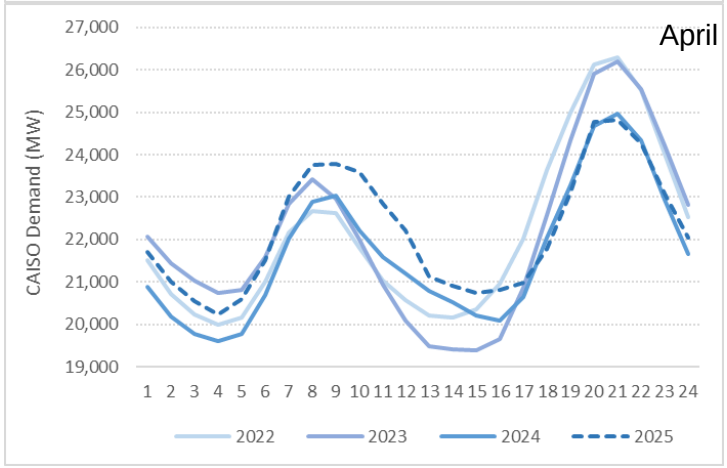


In winter months, the morning peak is becoming as high as the evening peak and has implications for storage



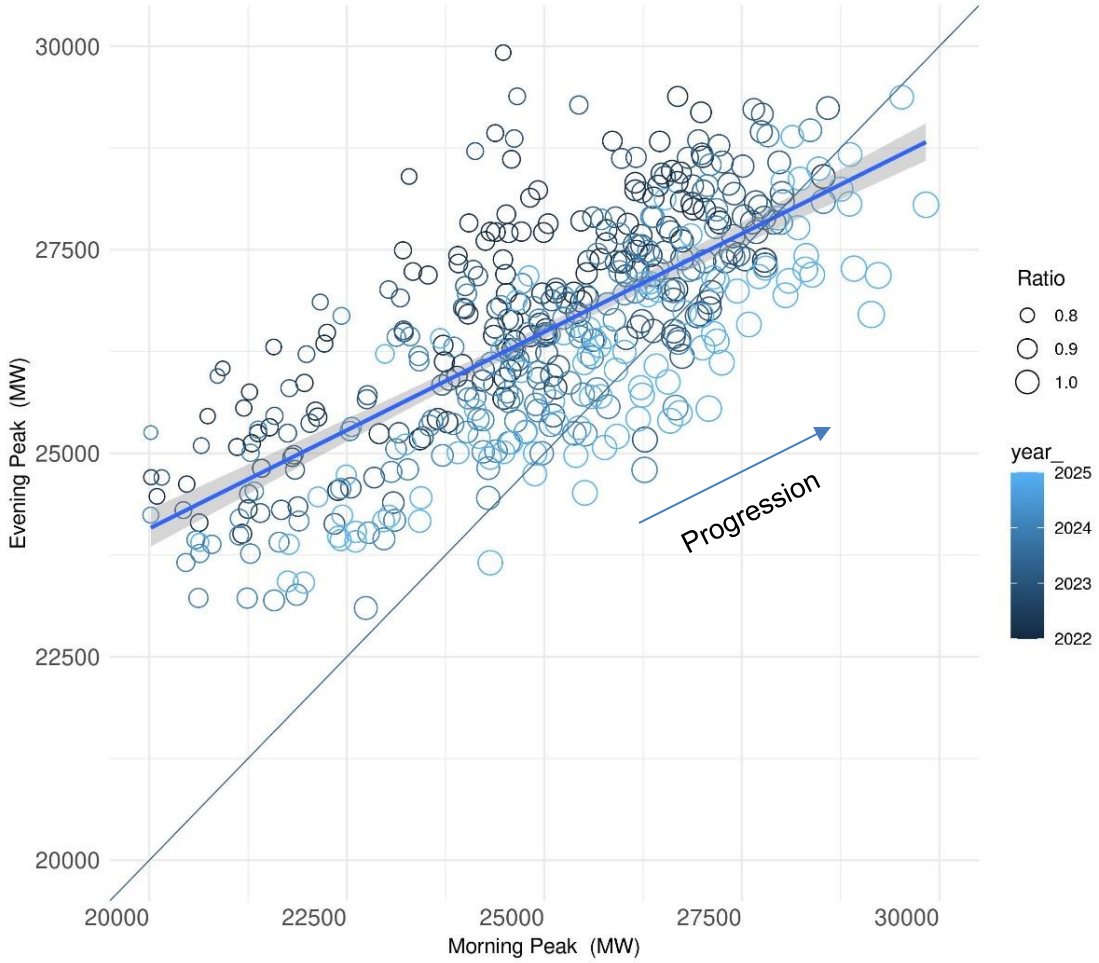






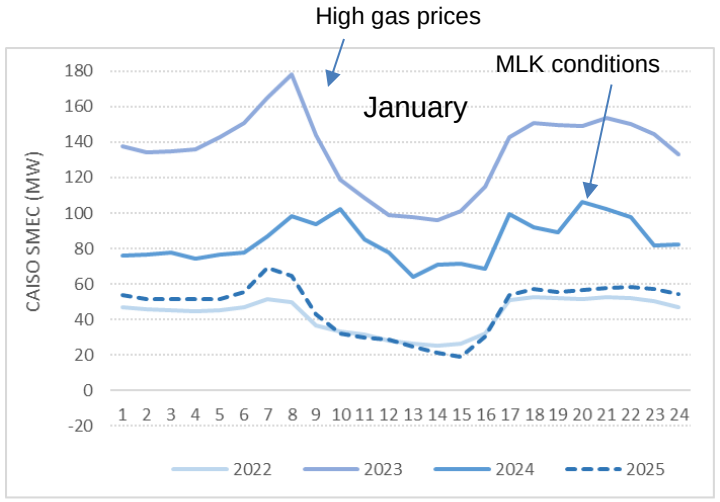
Should we count on storage resources to meet both morning and evening peak? How can the storage management incorporate changes of VER supply?

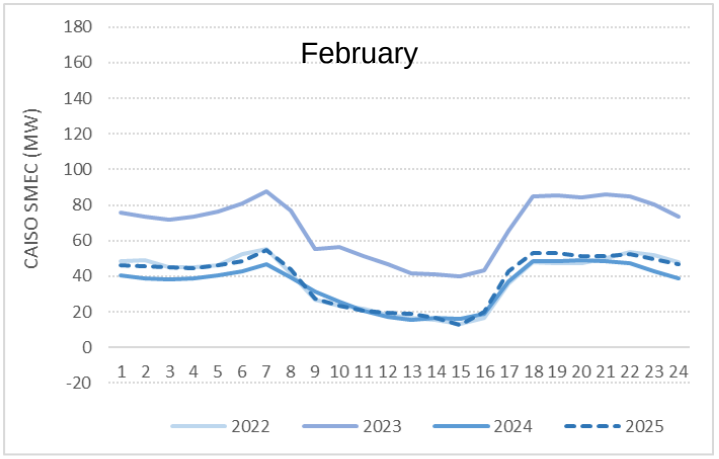
In winter/spring periods, morning load peak is becoming as high as the evening load

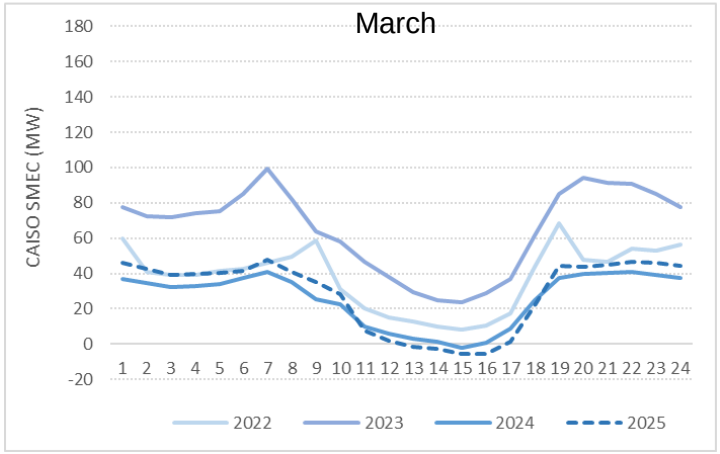


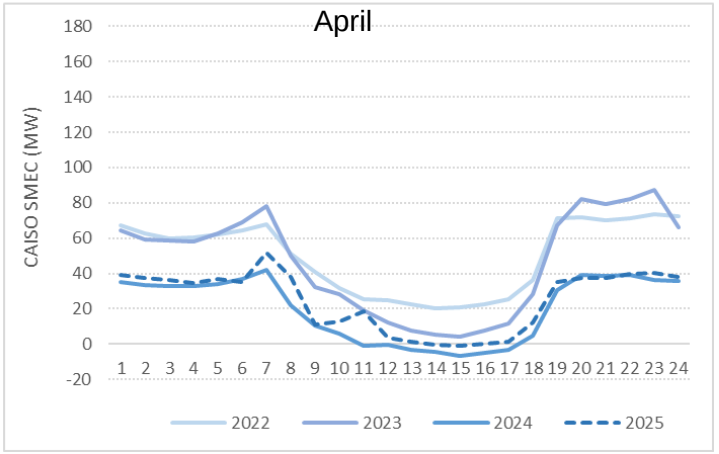
Real-time prices reflect the overall supply/demand dynamics

- Price increase along the morning and evening peaks
- Prices decrease in midday hours due to plentiful supply
- Spikes can happen in tight ramping conditions
- Real-time prices has both direct implications on how storage resources are managed





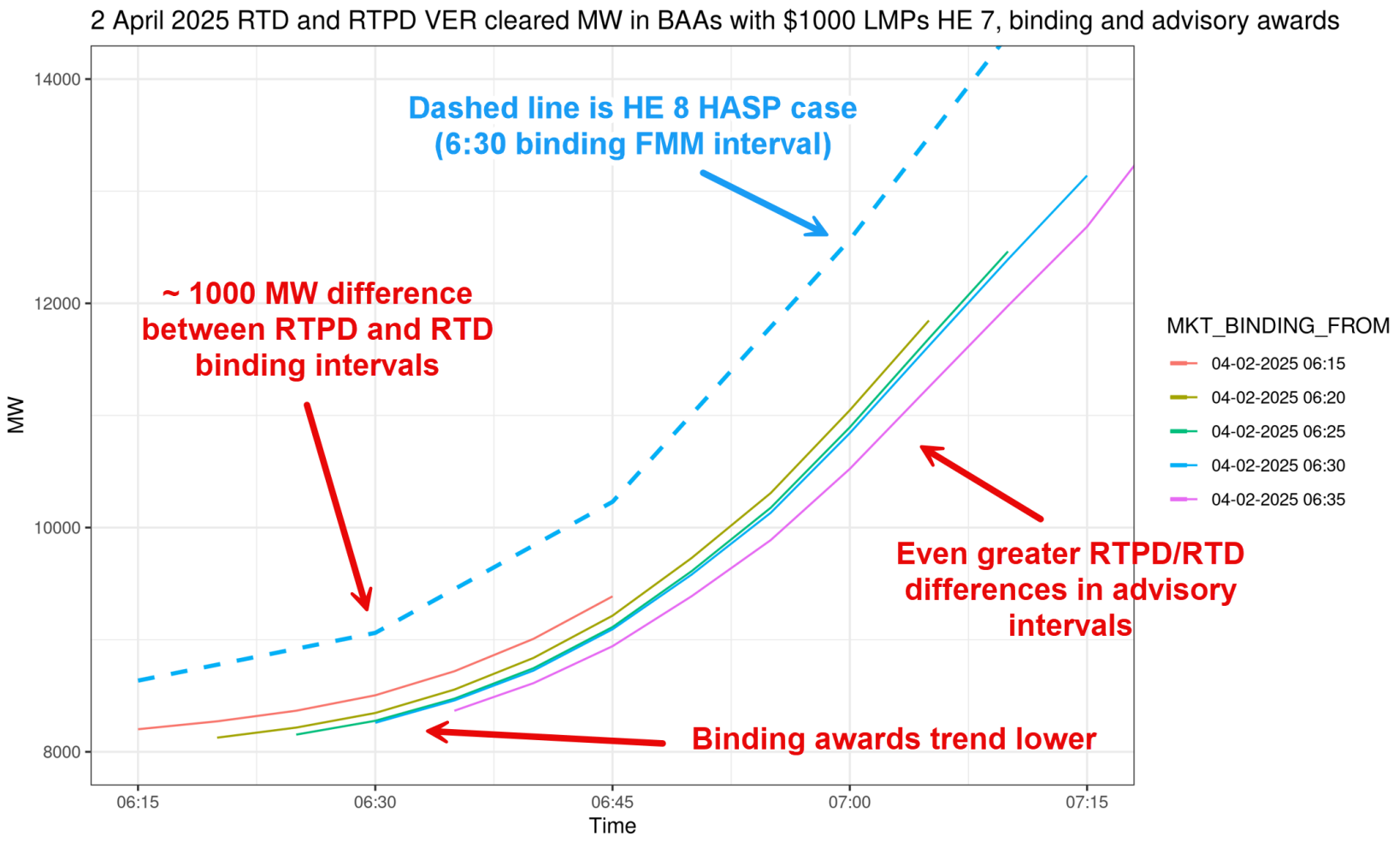




What caused sudden price spike in HE 7 on 4/2?

- SMEC jumps from $50 at 6:15 to $1,000 at 6:35
- PNW is isolated from price spike ($20-$40 LMP), while the rest of the WEIM also sees $1,000 prices
- Main drivers of price spike:
  - Large VER forecast differences from FMM to RTD
  - Low battery SOC:
    - Need to dispatch high price batteries in advisory intervals
    - Opportunity cost setting price between binding and advisory intervals

What causes tight conditions: Advisory to binding VER



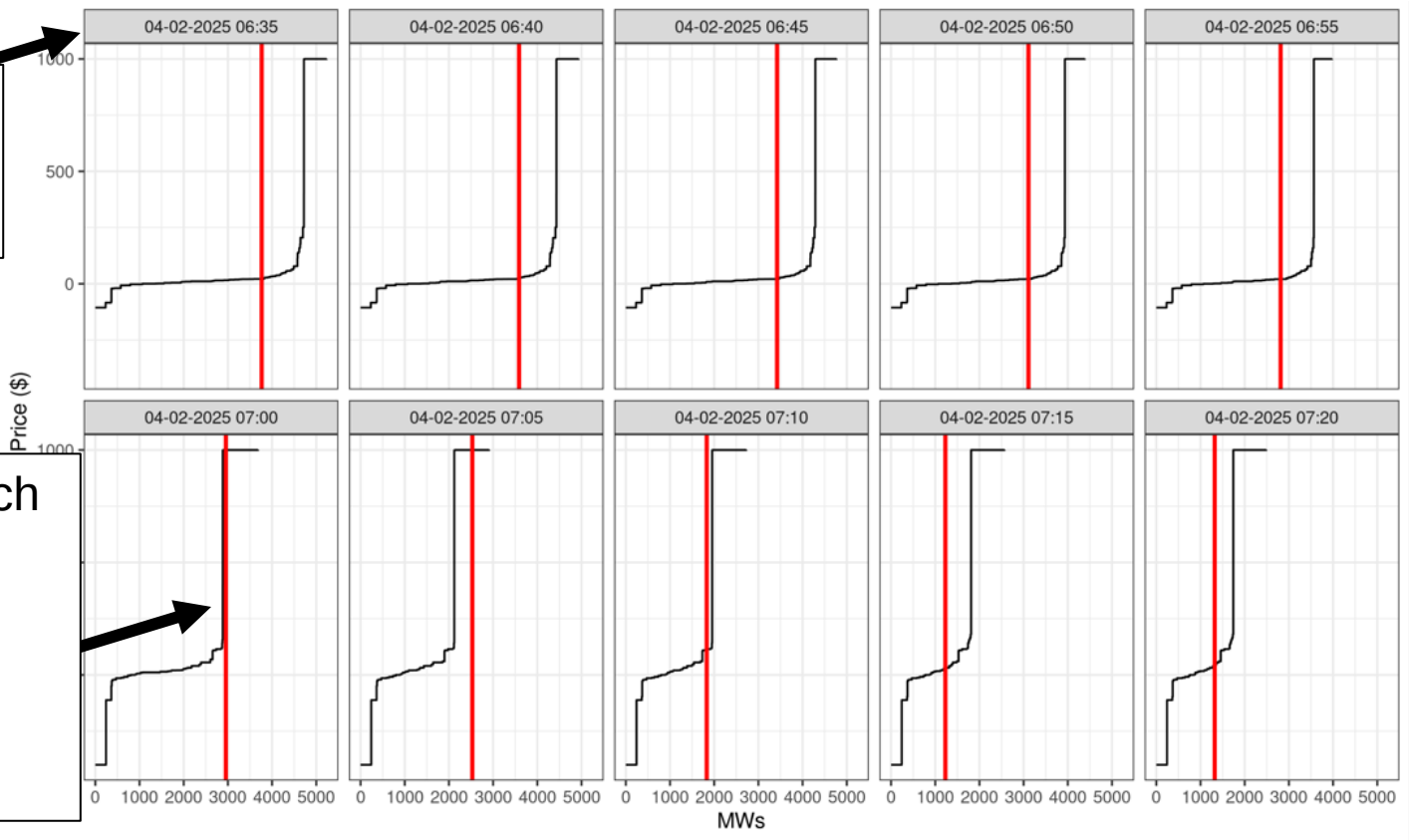
Battery opportunity costs: binding and advisory prices

- The market optimizes each resource over all market intervals with no preference towards the binding interval
- If a battery has limited SOC and there is a future interval with a high price, it will save its SOC for the highest priced interval
- The opportunity cost of holding the SOC until a future interval can set the price in the binding interval when there are tight conditions in the advisory intervals

Battery bids and dispatches, binding and advisory

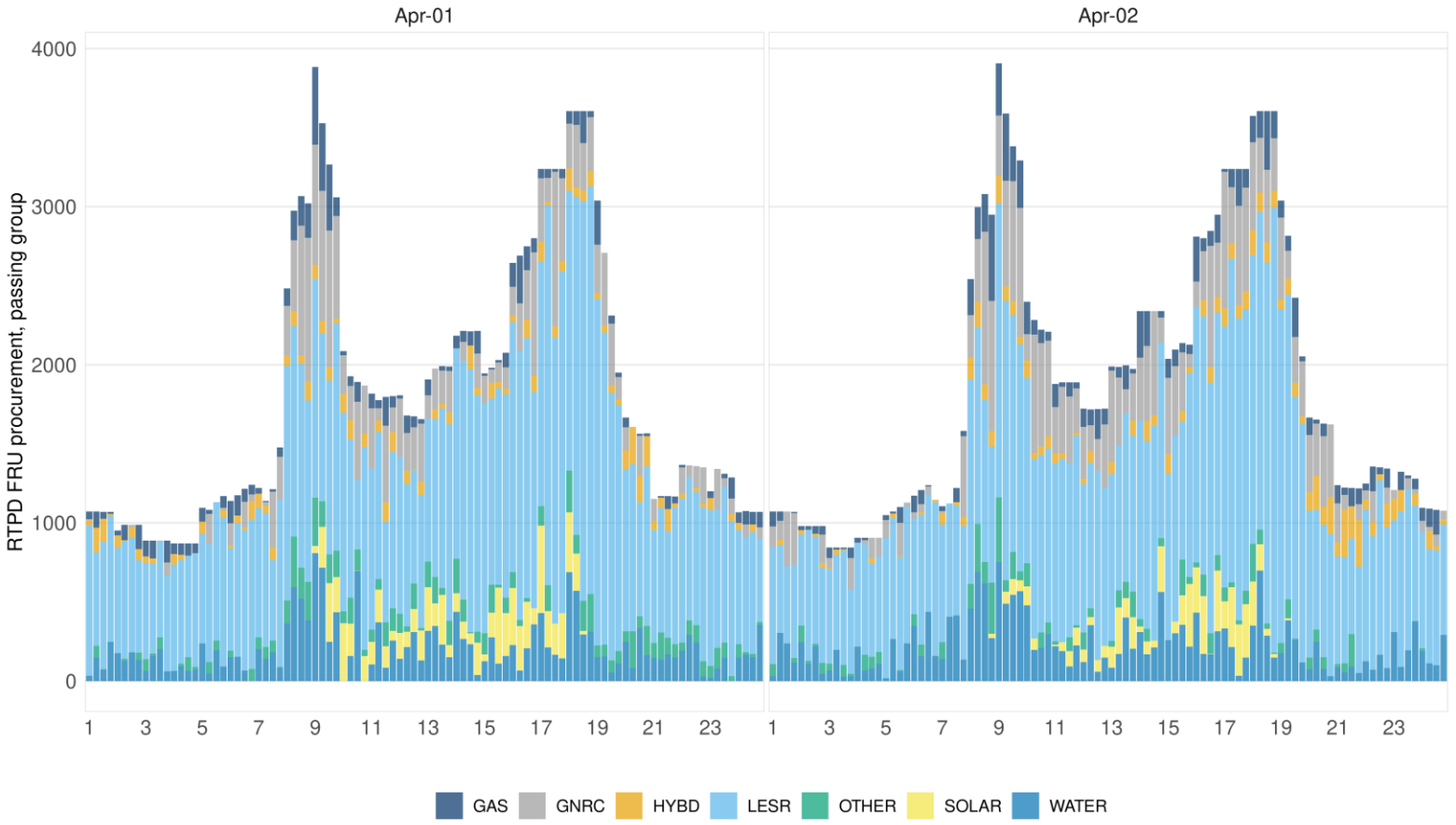
- Battery bid curves based on available SOC in each interval of 6:35 case (first with $1000 price). Red line is cleared MW

First interval is binding, all others advisory



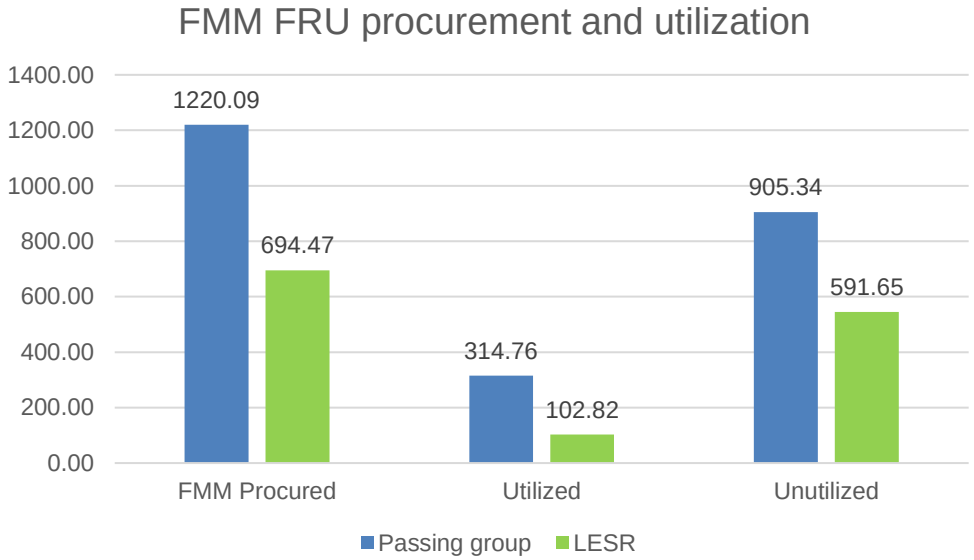
We need to dispatch $1000 batteries in 7:00 and 7:05 advisory intervals, they set price in binding interval

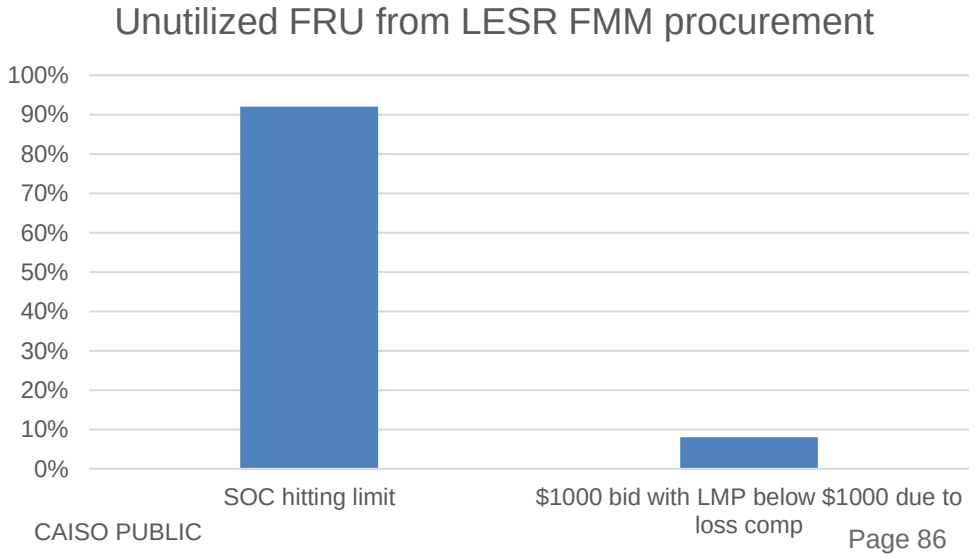
A significant portion of FRU procurement was from batteries (LESR) among the various fuel types



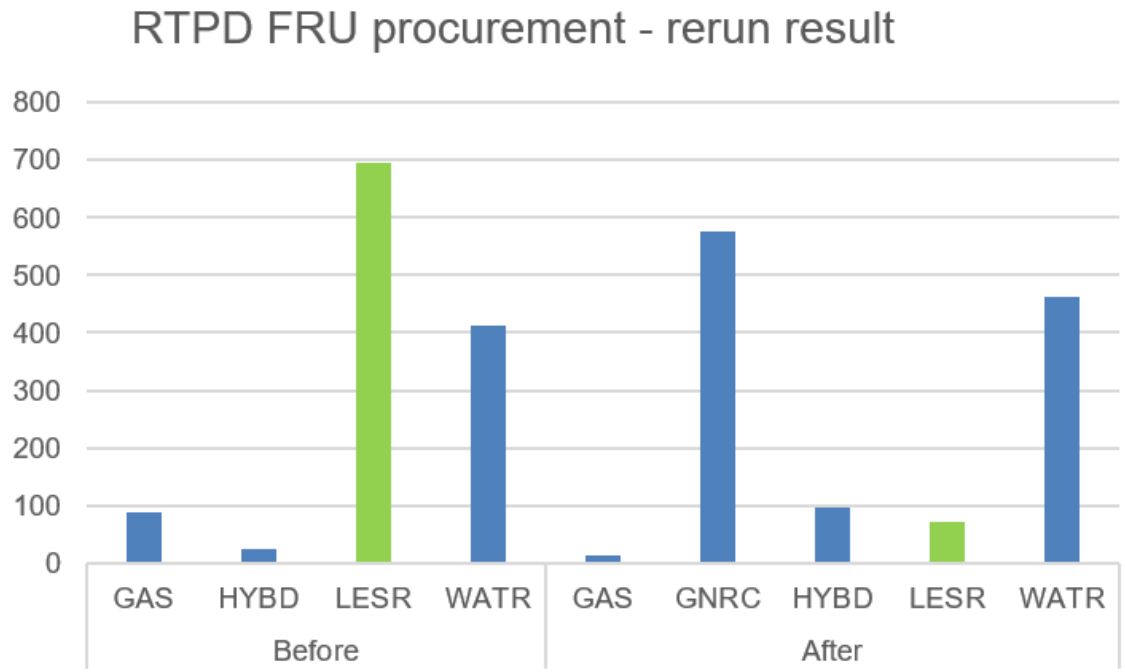
FRU utilization example 4/2 @ 06:35

- 57% of pass group FRU procured from LESR
- More than 90% of the LESR procurement could not be used due to insufficient SOC
- The FRU SOC enhancement has since been implemented



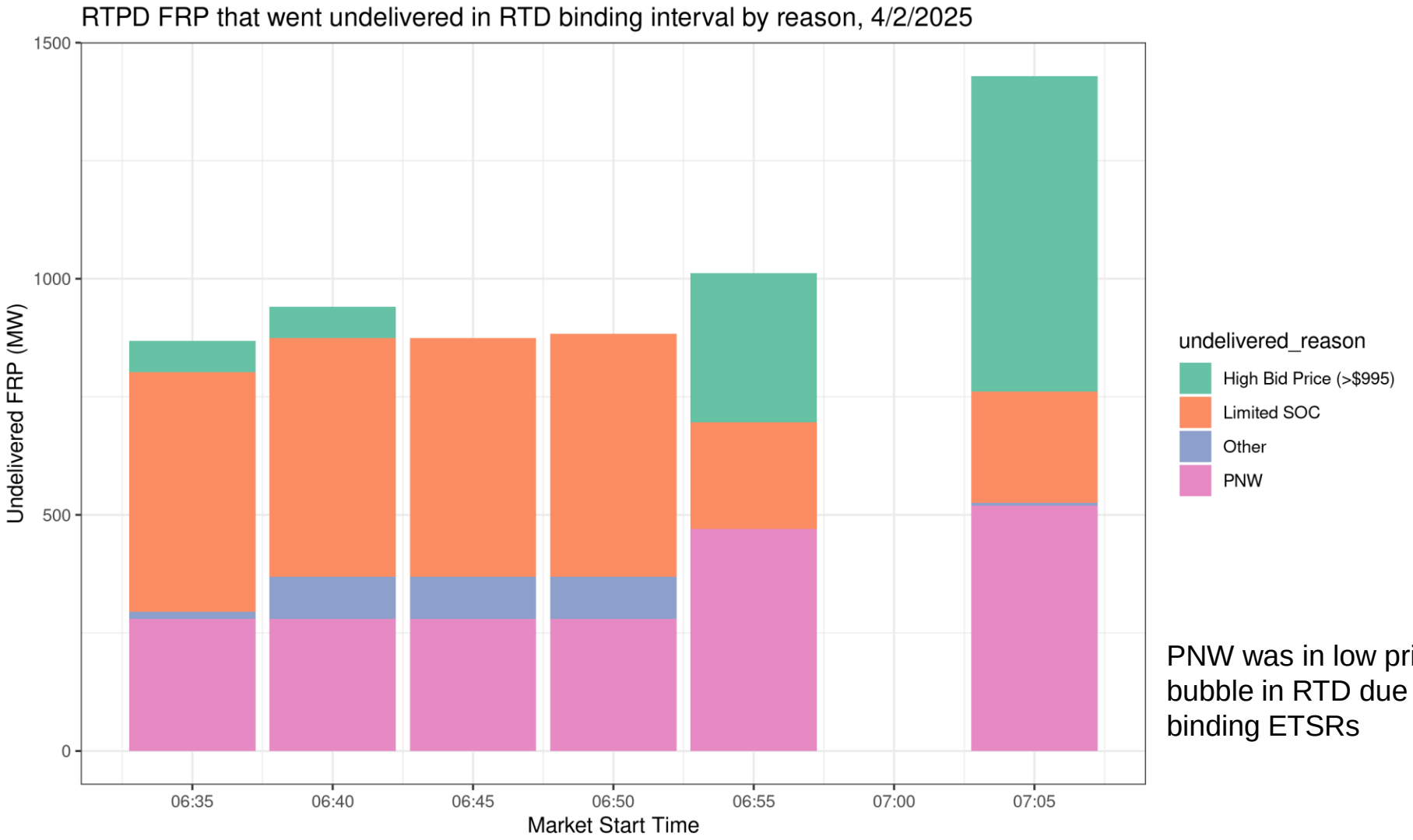


A counterfactual scenario with the enhancement in place shows the effect of the proposed enhancement



- Procurement from LESR reduced to 70MW
- GNRC and water fuel types picked up the gap

Why was FRP not delivered when RTD price was $1,000?



PNW was in low price bubble in RTD due to binding ETSRs

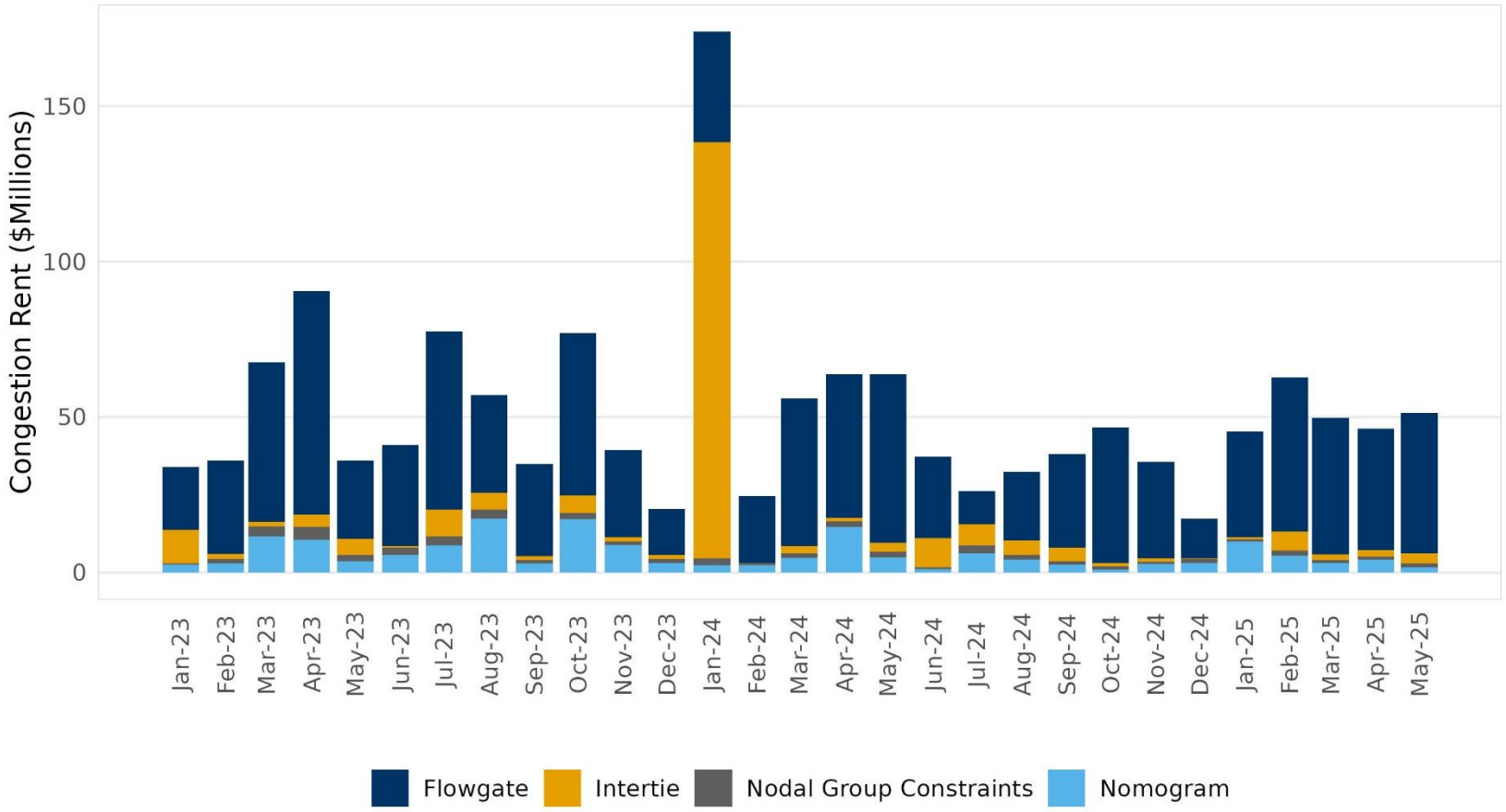
Summary: Drivers of tight ramp capability for morning peak

- Large VER forecast deltas between FMM and RTD limit FMM commitments and create tight conditions in RTD
- Significant amount of RTPD FRU is unavailable in RTD
  - FRP awarded to storage without sufficient SOC
  - PNW isolated from rest of system in RTD
- There are no CAISO infeasibilities, but prices do hit $1,000
- FRP is awarded to resources with $1,000 bids with no binding interval opportunity cost ($0 FRU price)
- Load conformance is normally entered for all intervals in case. This puts pressure on limited SOC across the full time horizon

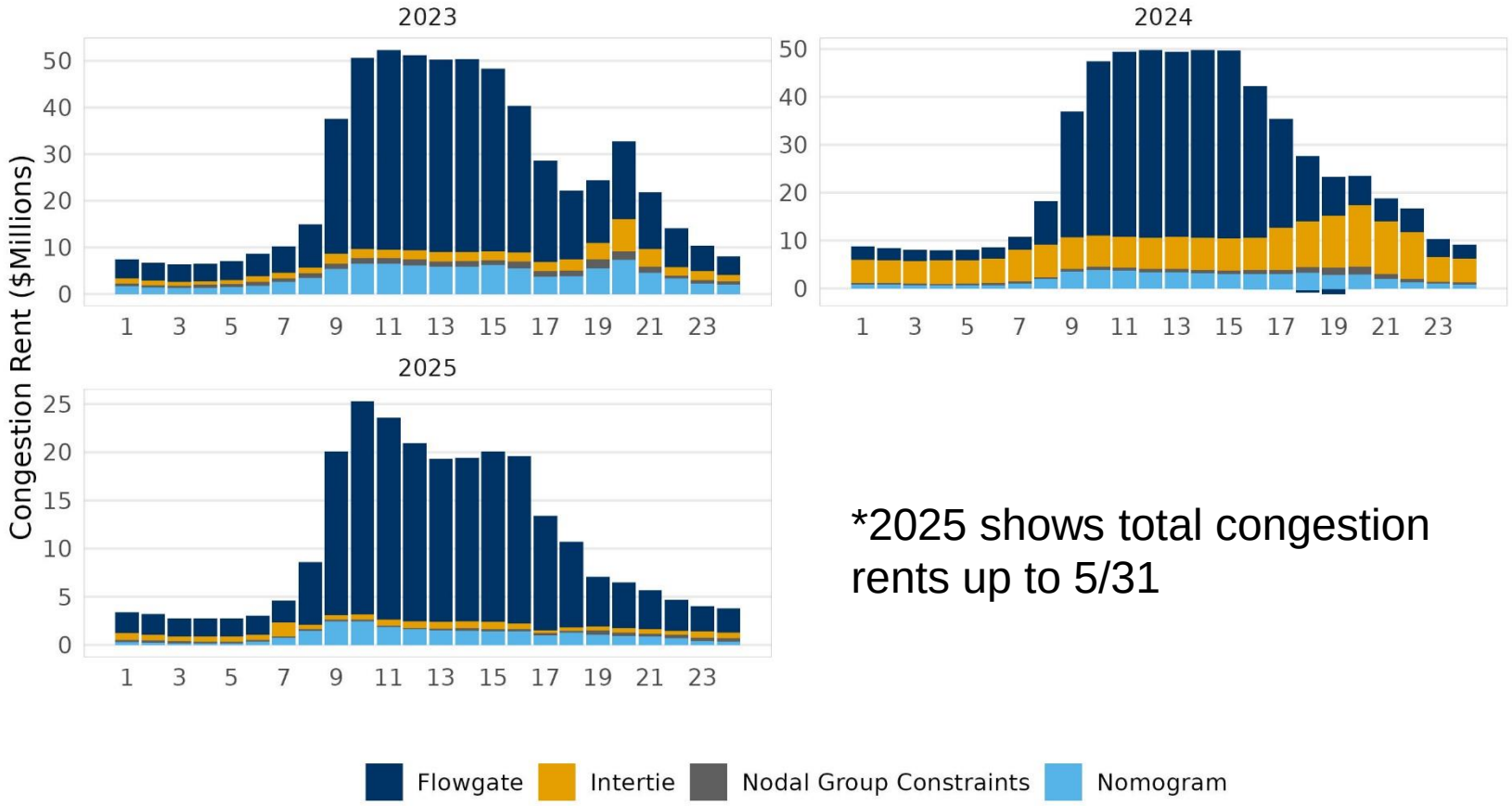
Congestion and CRRs

Market Performance and Advanced Analytics

Spring congestion rents are slightly down from 2024

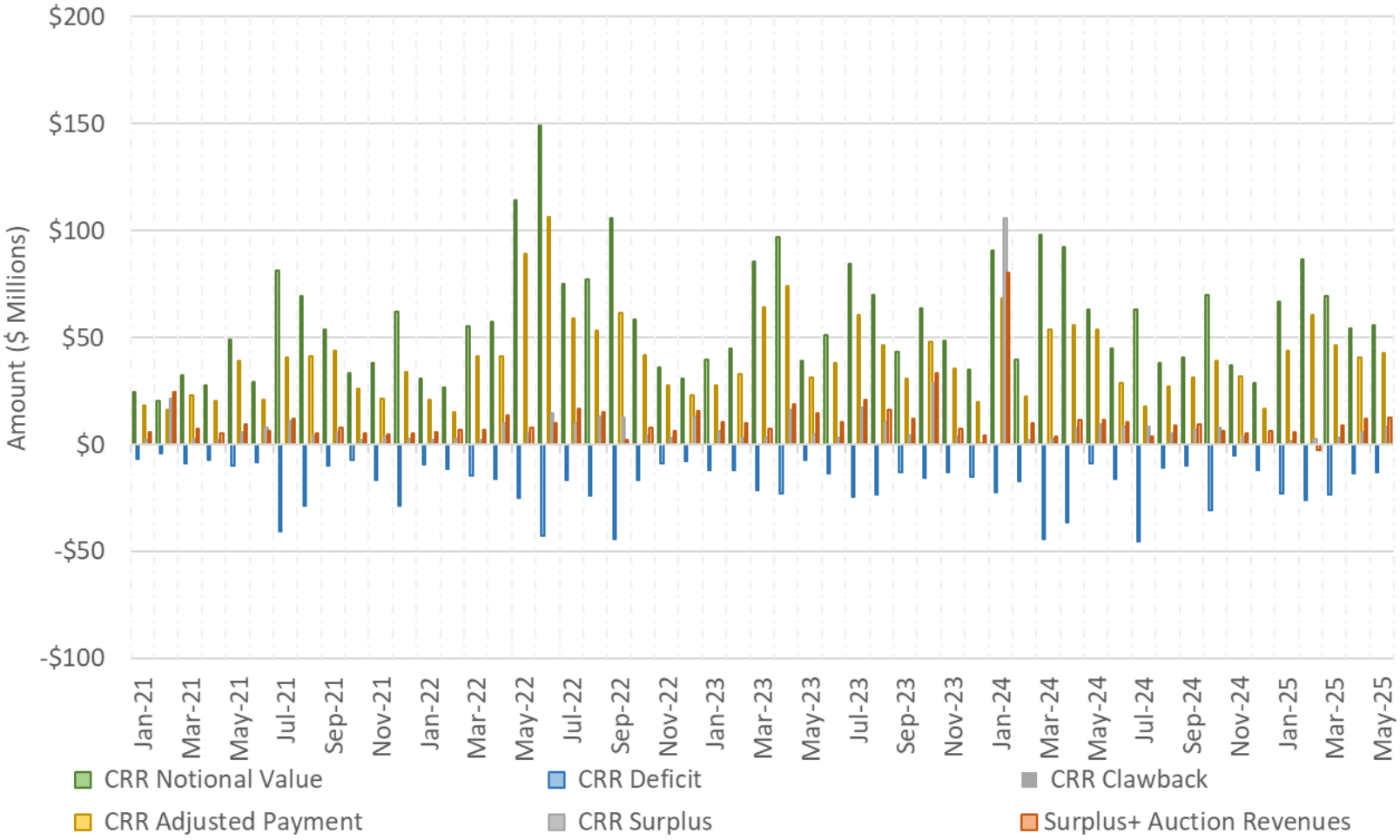


Hourly profile of congestion rents remains consistent into 2025

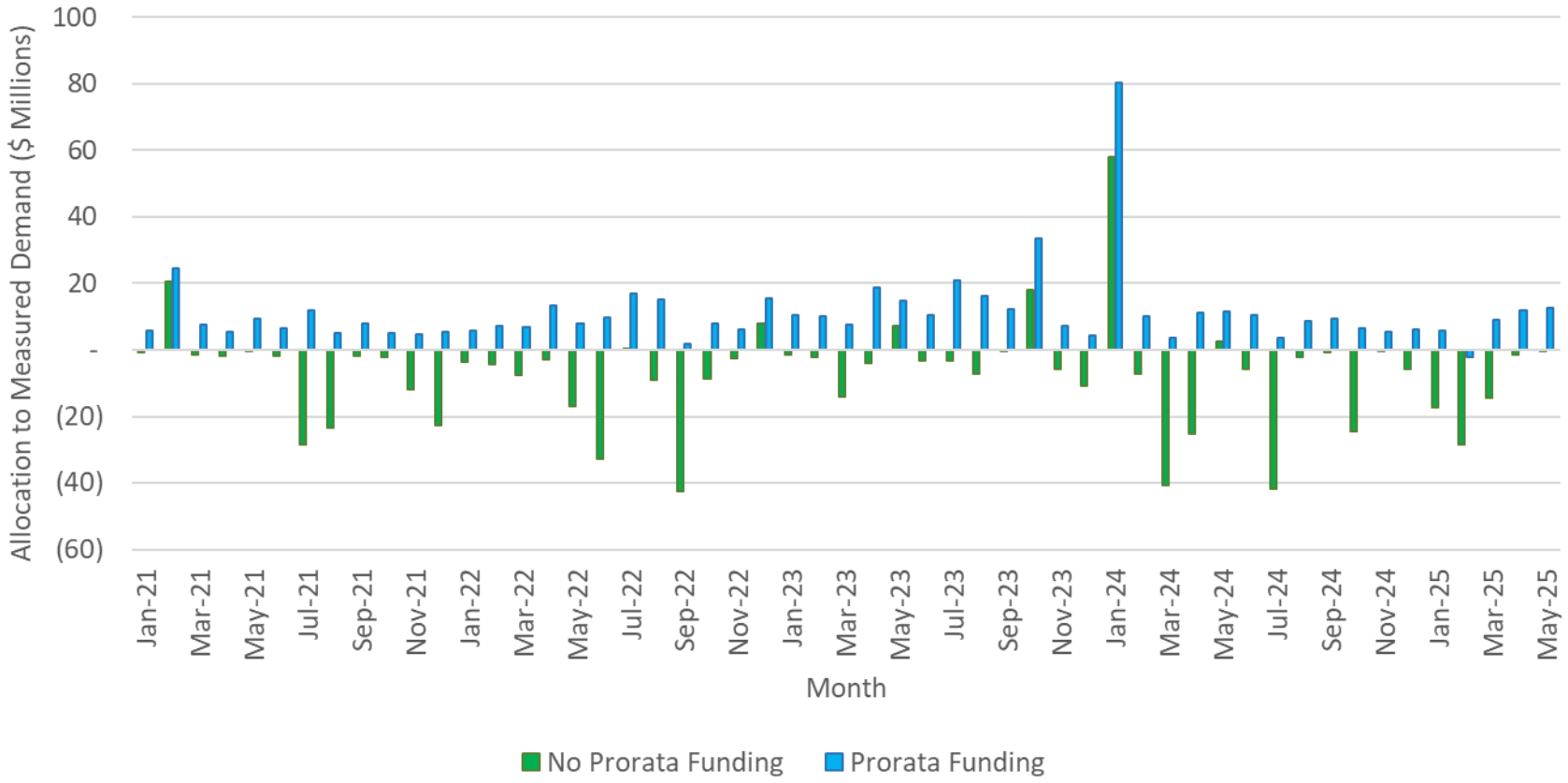


*2025 shows total congestion rents up to 5/31

CRR performance in Spring 2025 is similar to Spring 2024



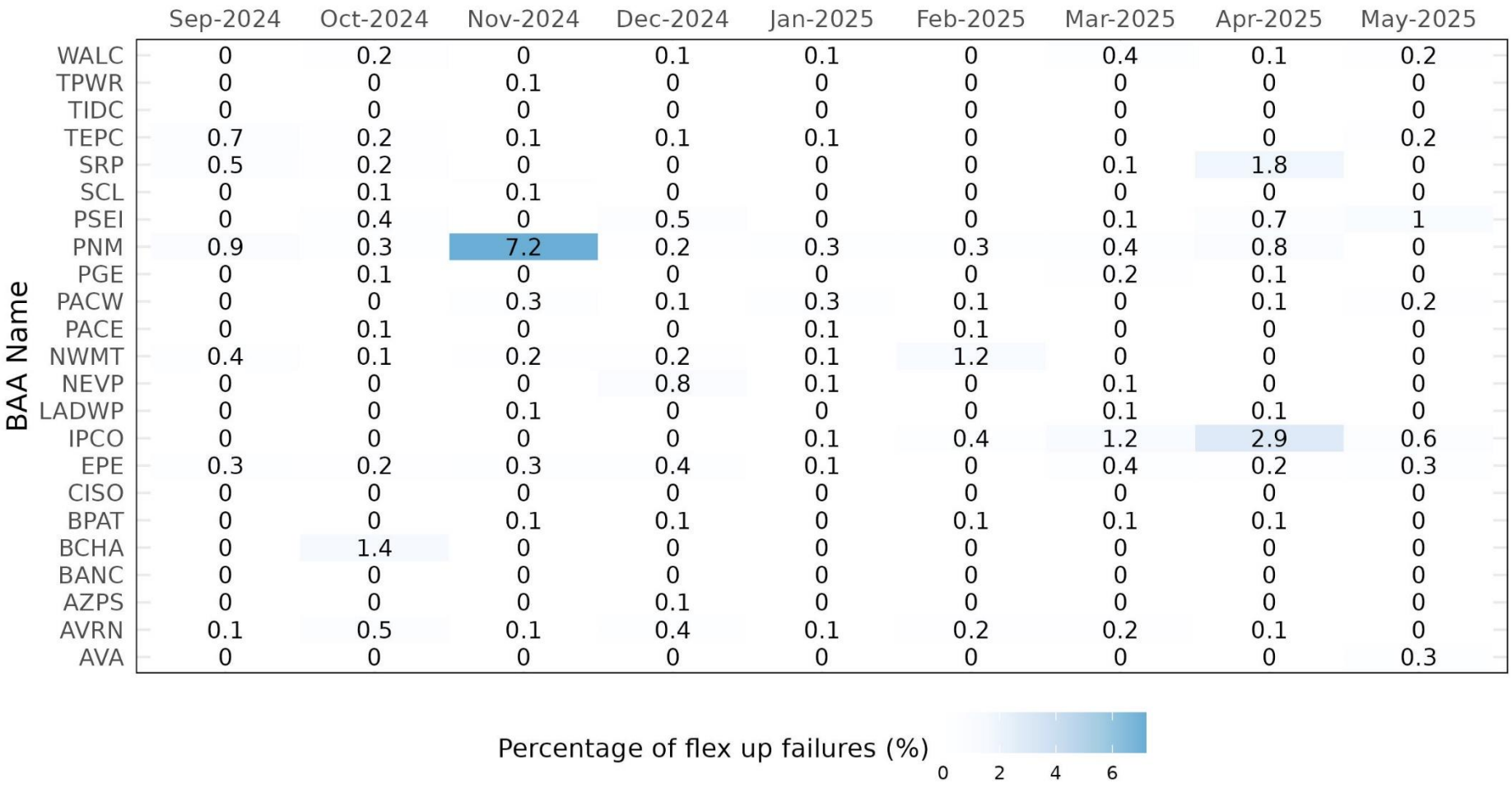
Pro-rata funding has eliminated the uplift to measured demand for revenue inadequacy and results in additional surplus to measured demand



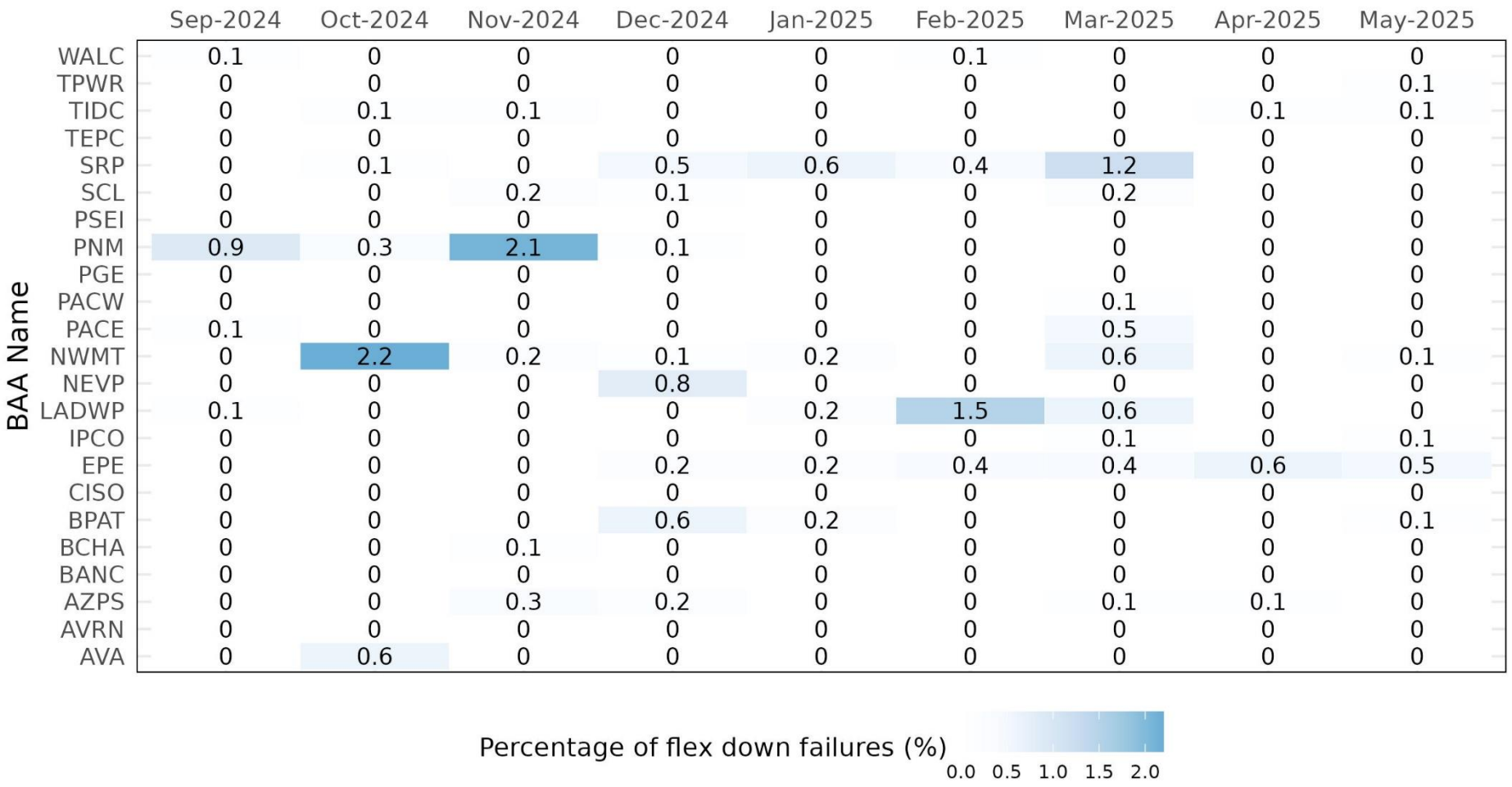
Assistance energy transfer

Market Performance and Advanced Analytics

Flexible ramp up test failures in 2025 so far are low, with highest value at 2.9%

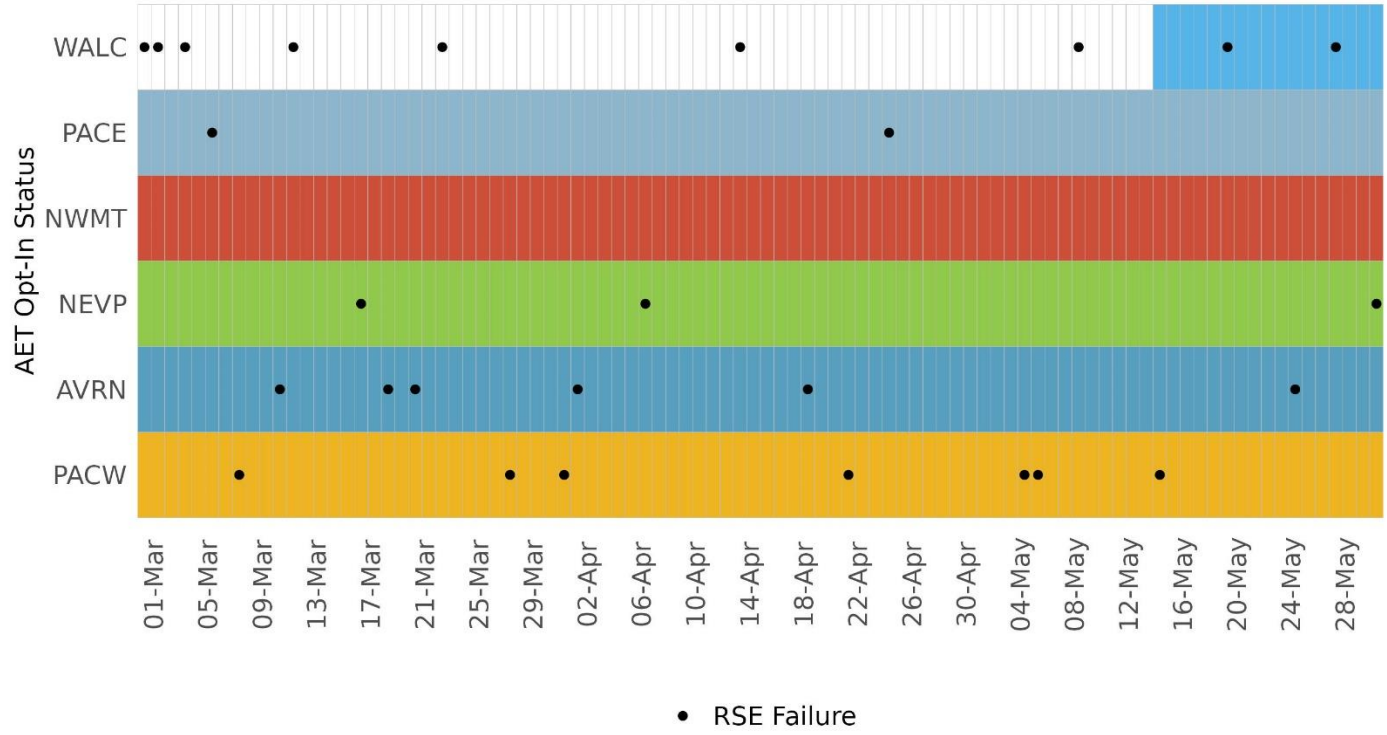


Flexible ramp down test failures in 2025 so far are low, with highest value at 1.5%

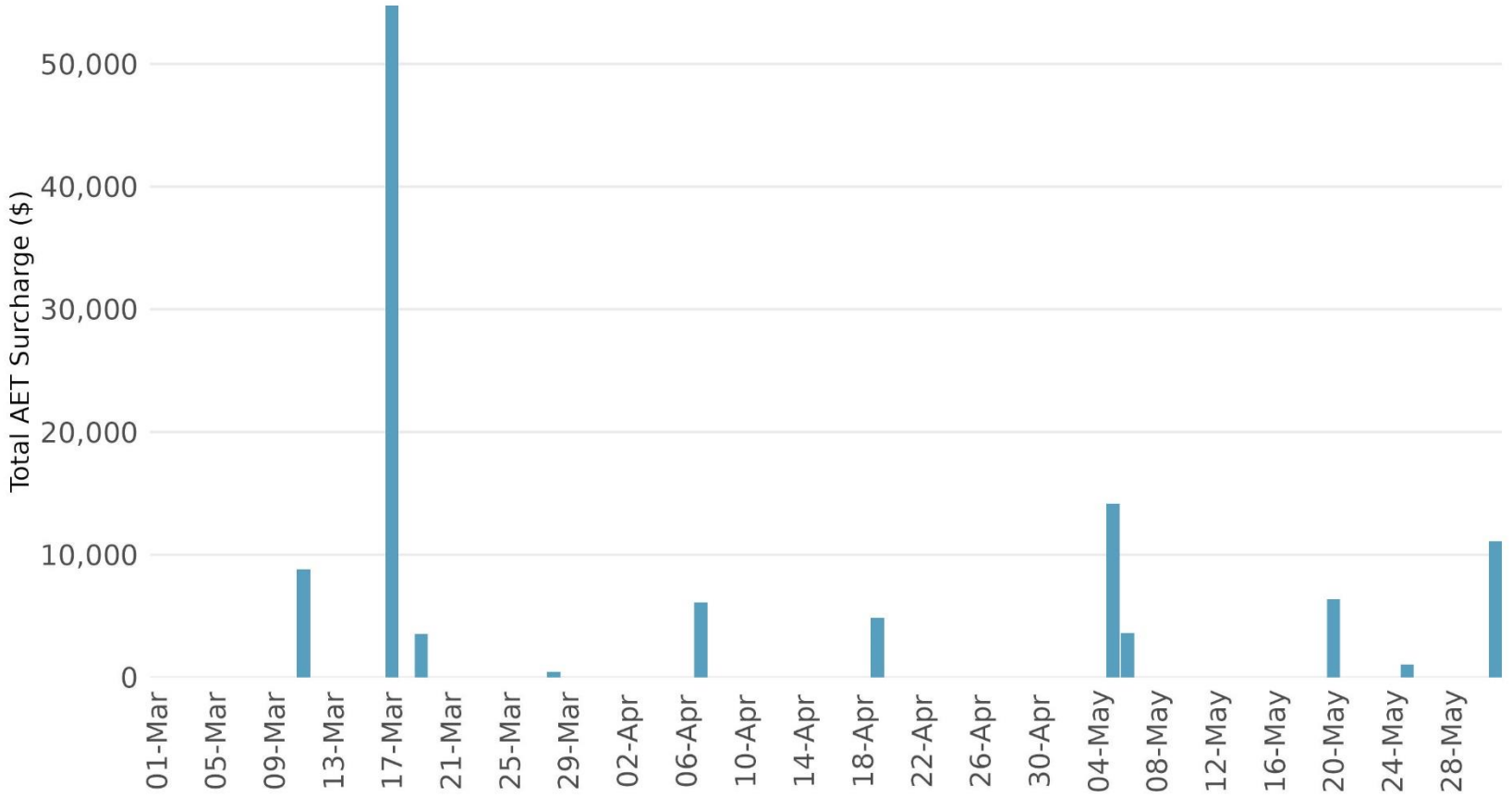


The WEIM facilitated balancing area access to assistance energy transfers, providing operational benefits

- There were six WEIM balancing areas opting into the assistance energy transfer (AET) program during winter conditions in 2025
- This program allows areas to receive energy transfers when they do not meet resource sufficiency requirements



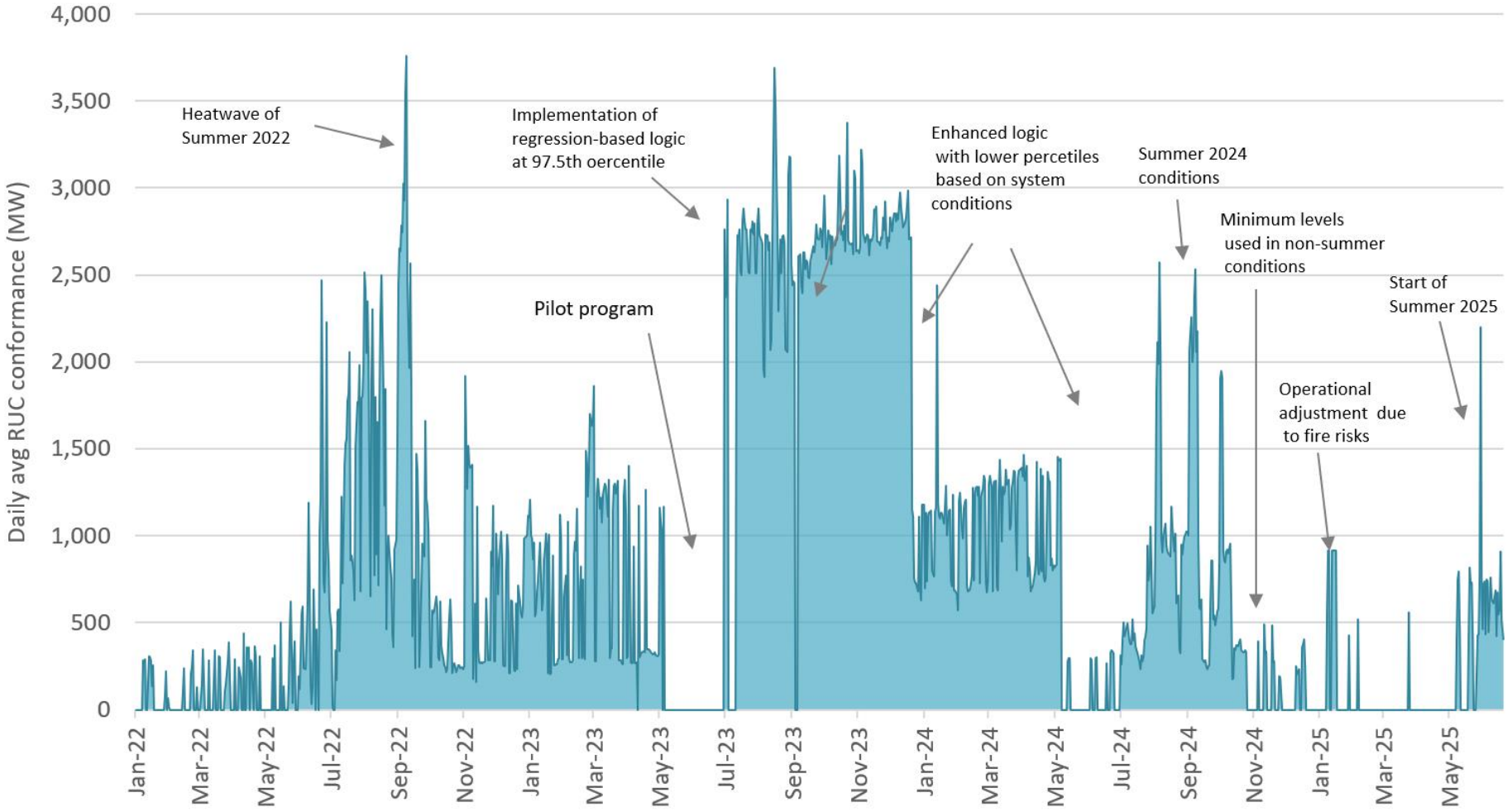
The total AET surcharges assessed were about $114,846 for all the BAAs that opted in



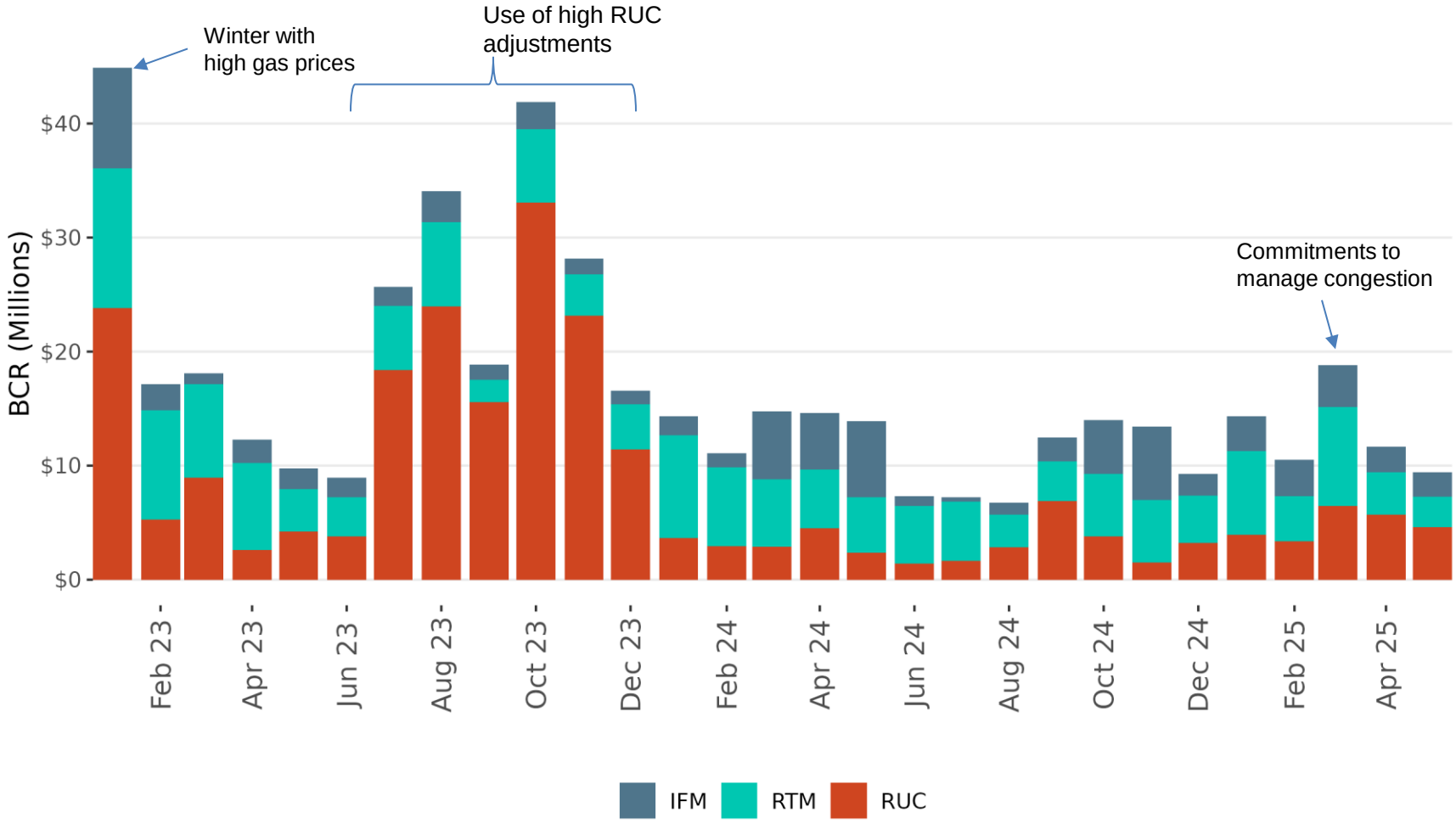
Load Conformance

Market Performance and Advanced Analytics

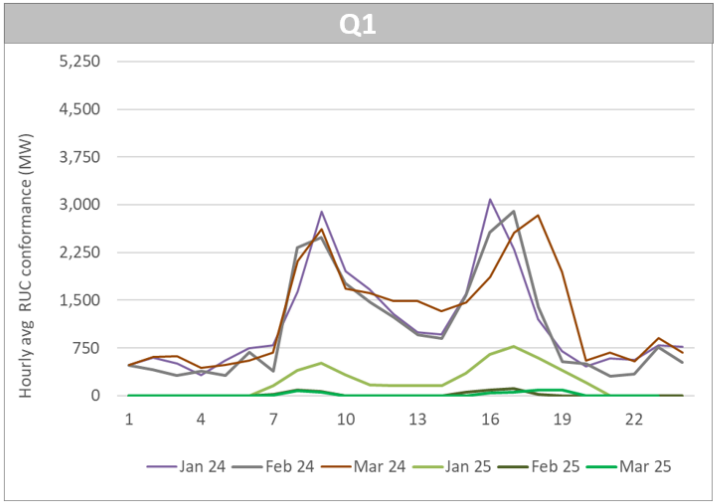
Between Nov 2024 and May 2025, there were no RUC adjustments in 80 percent of the days

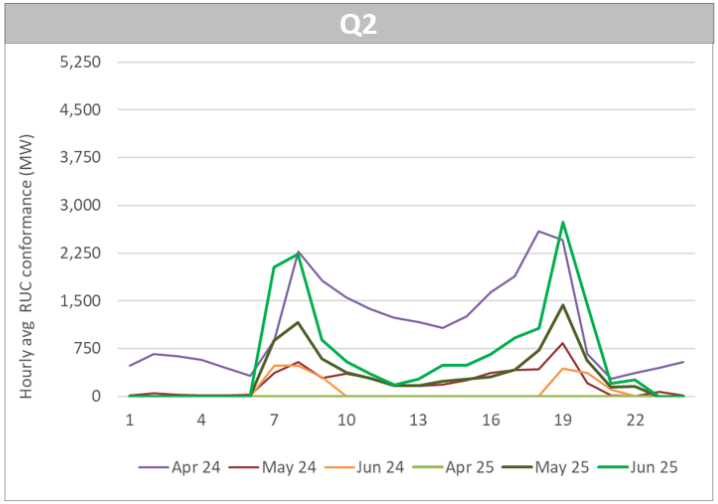


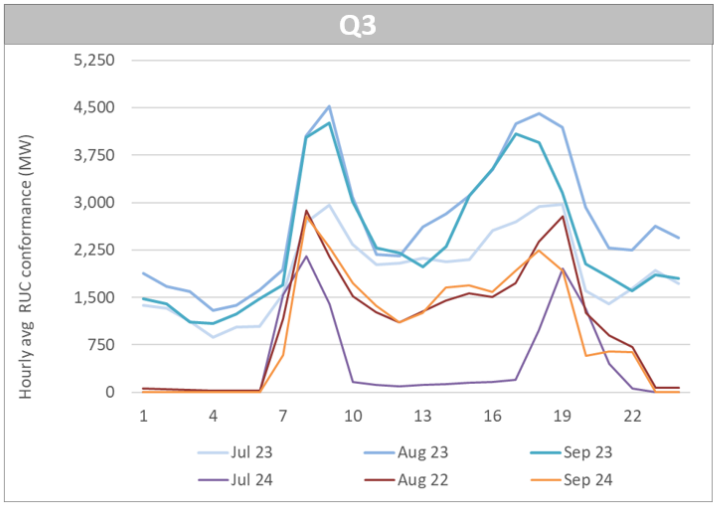
High bid cost recovery in RUC subsided since the enhancement to the requirement estimates in December 2023

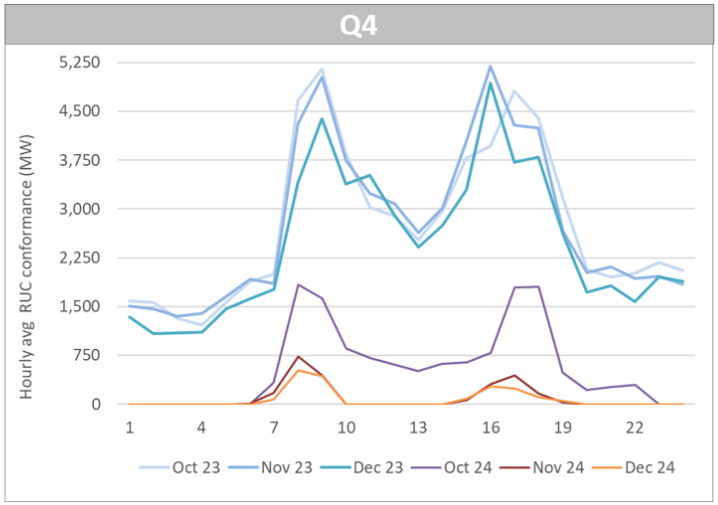


The hourly profile in winter months have shown low level of RUC adjustments

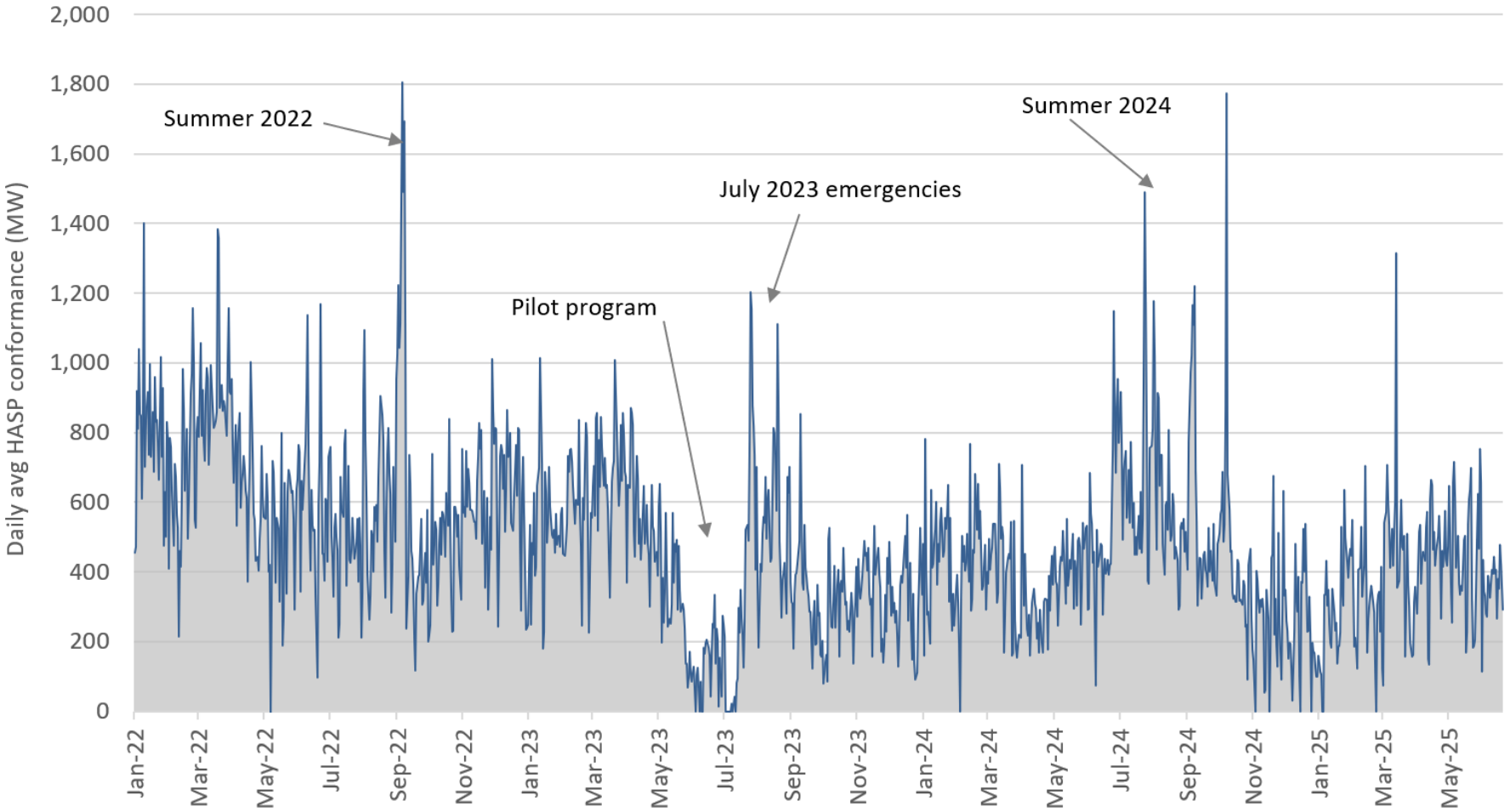








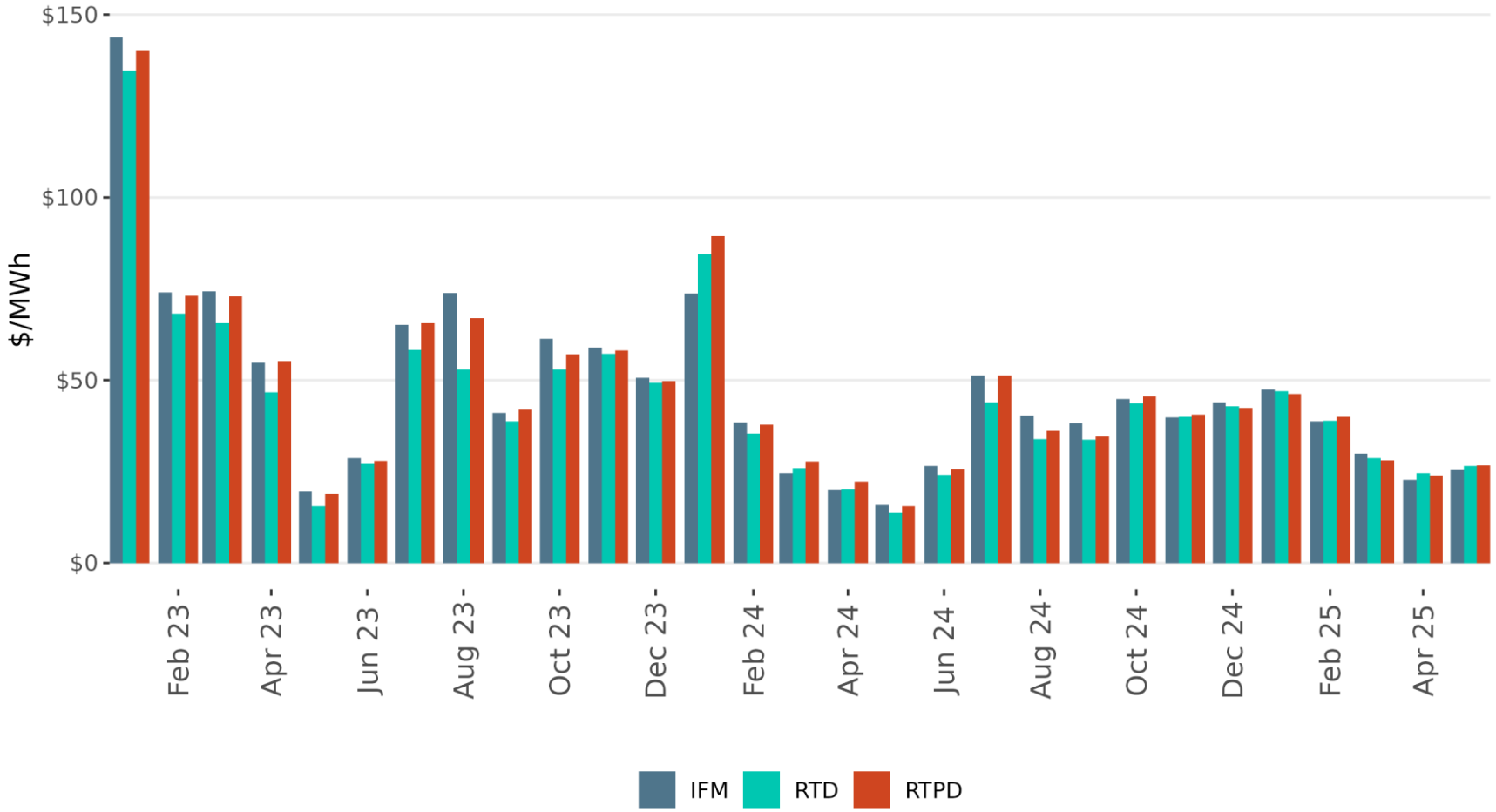
ISO continues to assess the root causes for the need to use load conformance in real time



Gas and Power index prices, and market costs

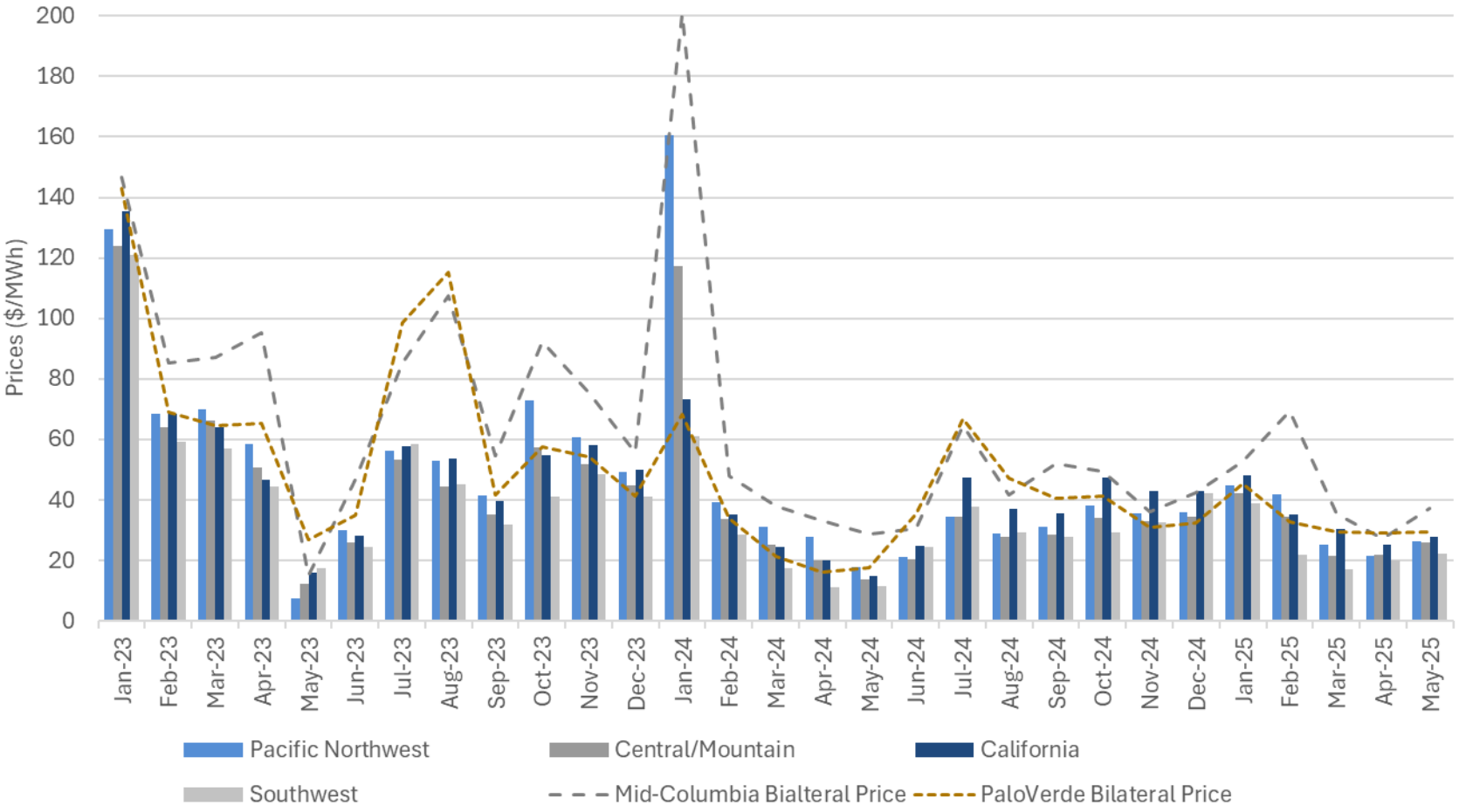
Market Performance and Advanced Analytics

Prices stayed stable since coming out of Winter into the Spring shoulder months

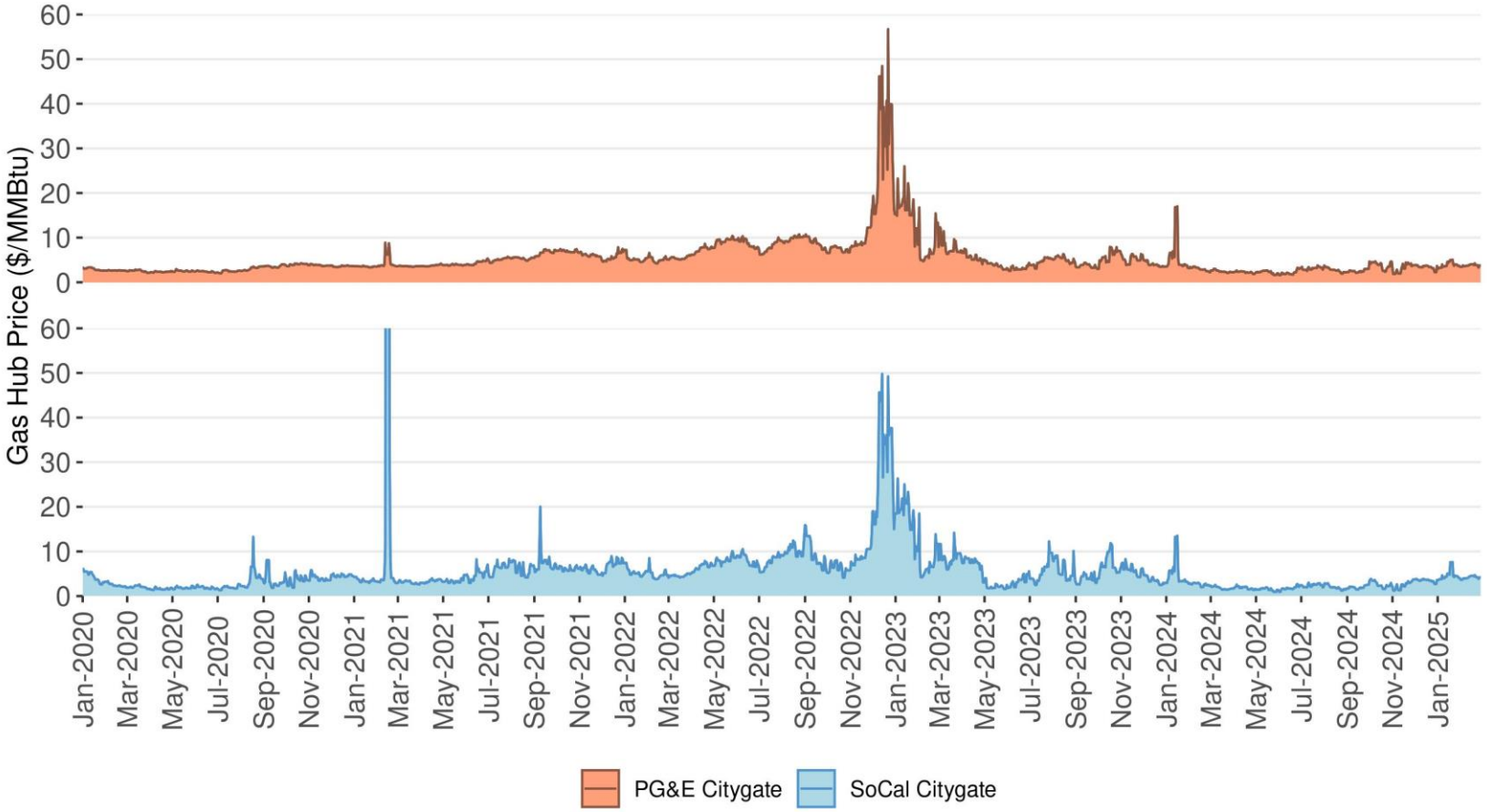


Note: Metric Based on System Marginal Energy Component (SMEC)

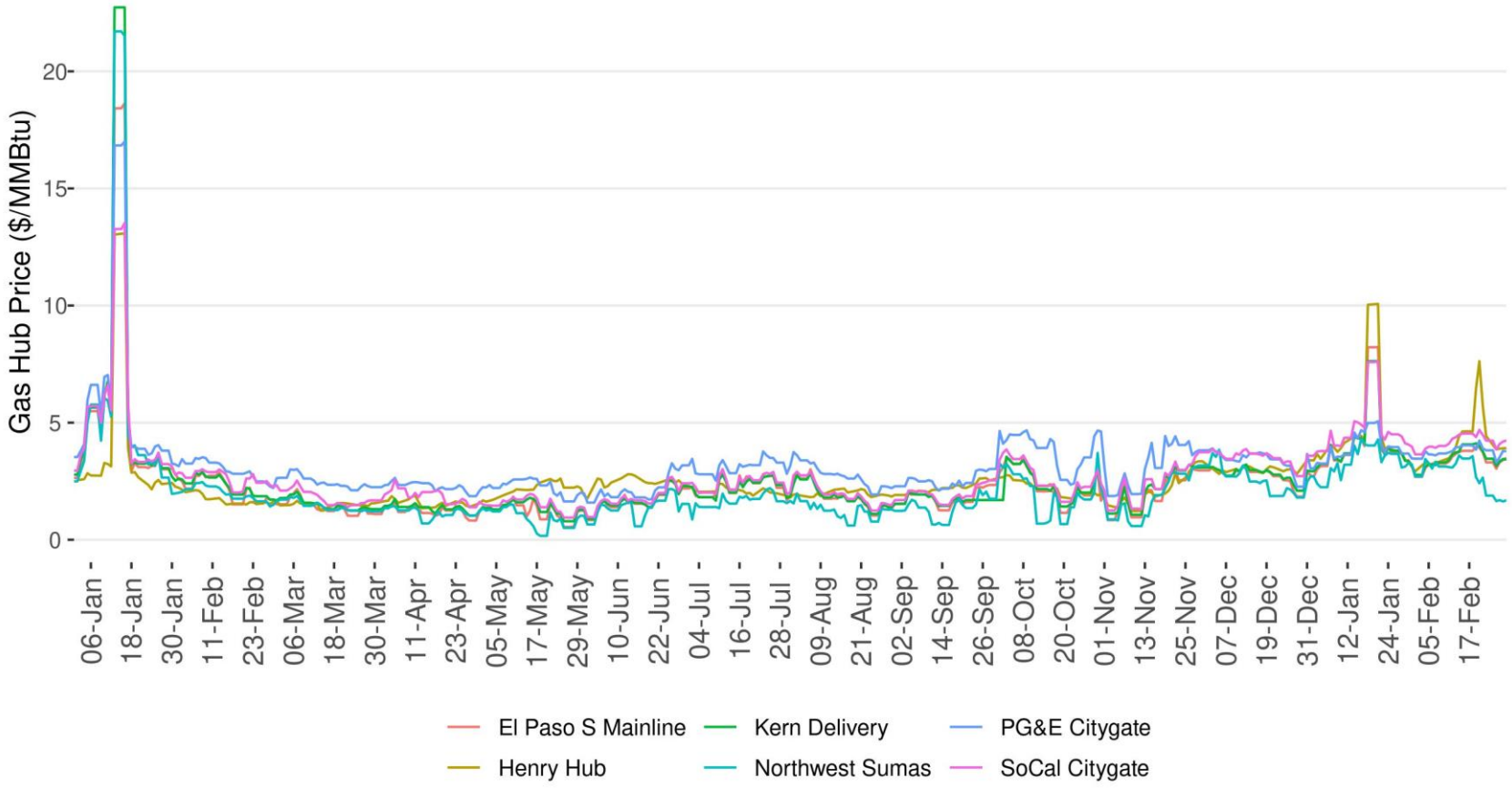
Real-time prices in the western energy imbalance market remain stable through Spring



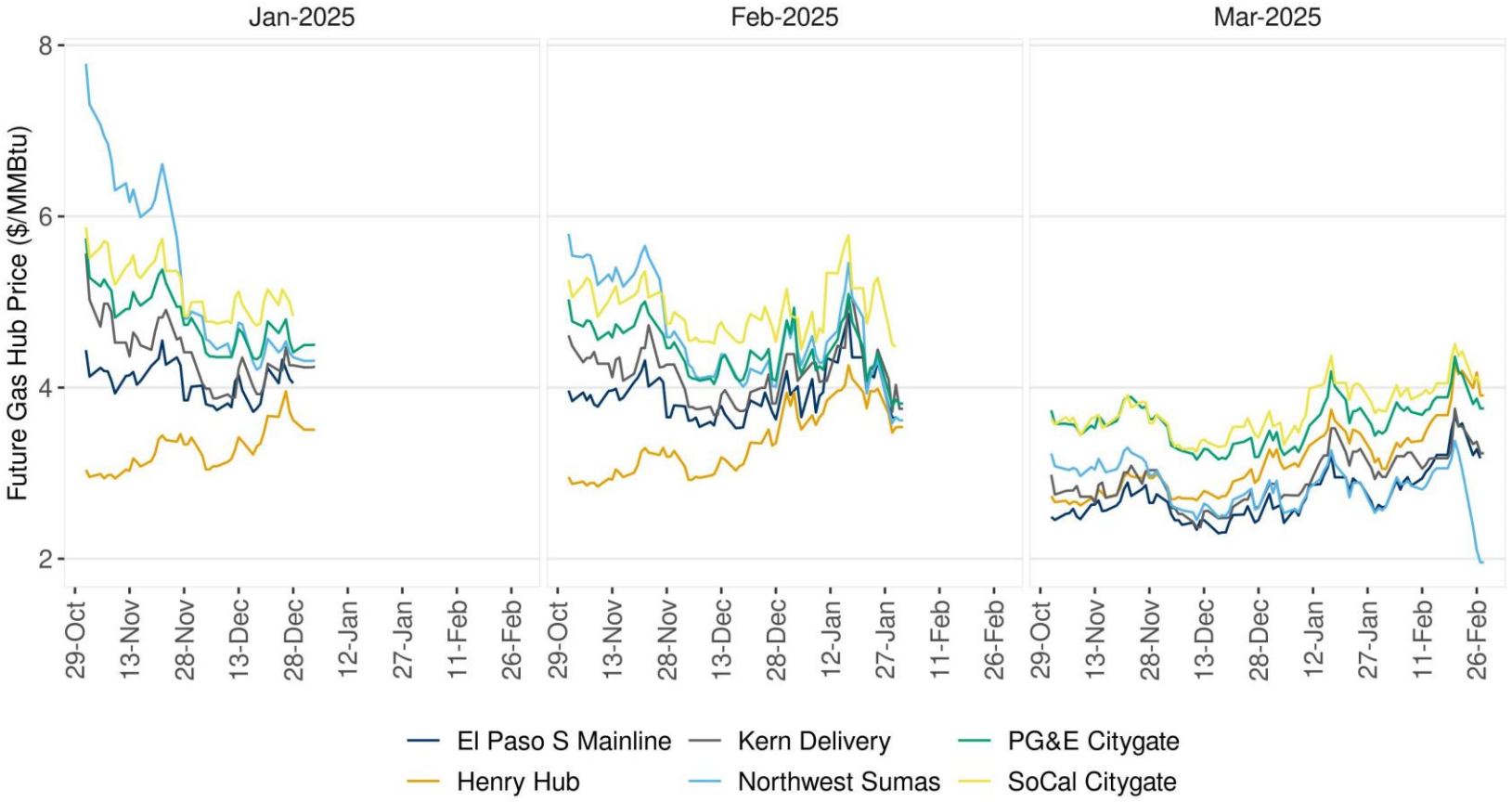
California next-day gas prices has seen lower levels in January 2025 compared to January 2024



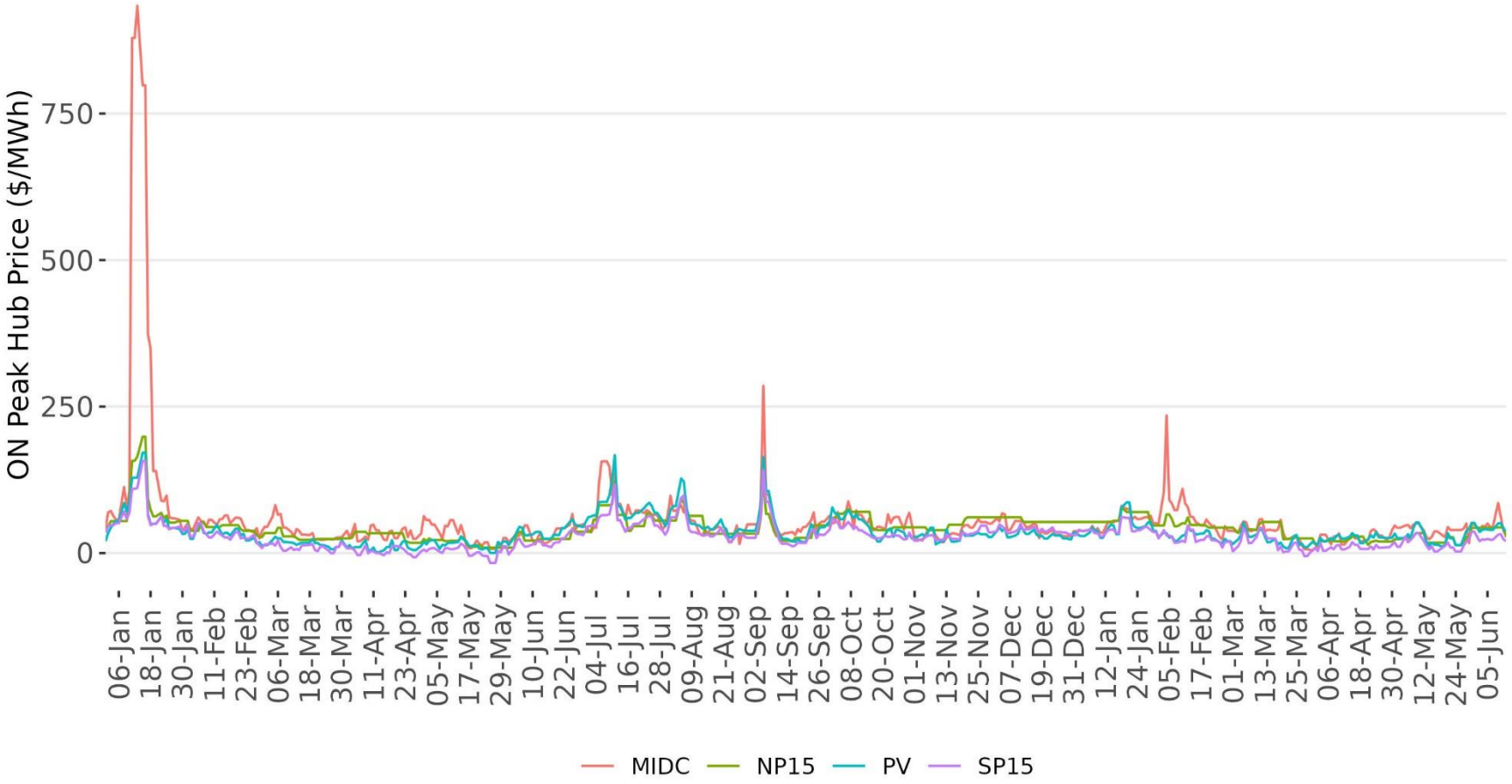
Western next-day gas prices reached elevated levels in mid-January 2025



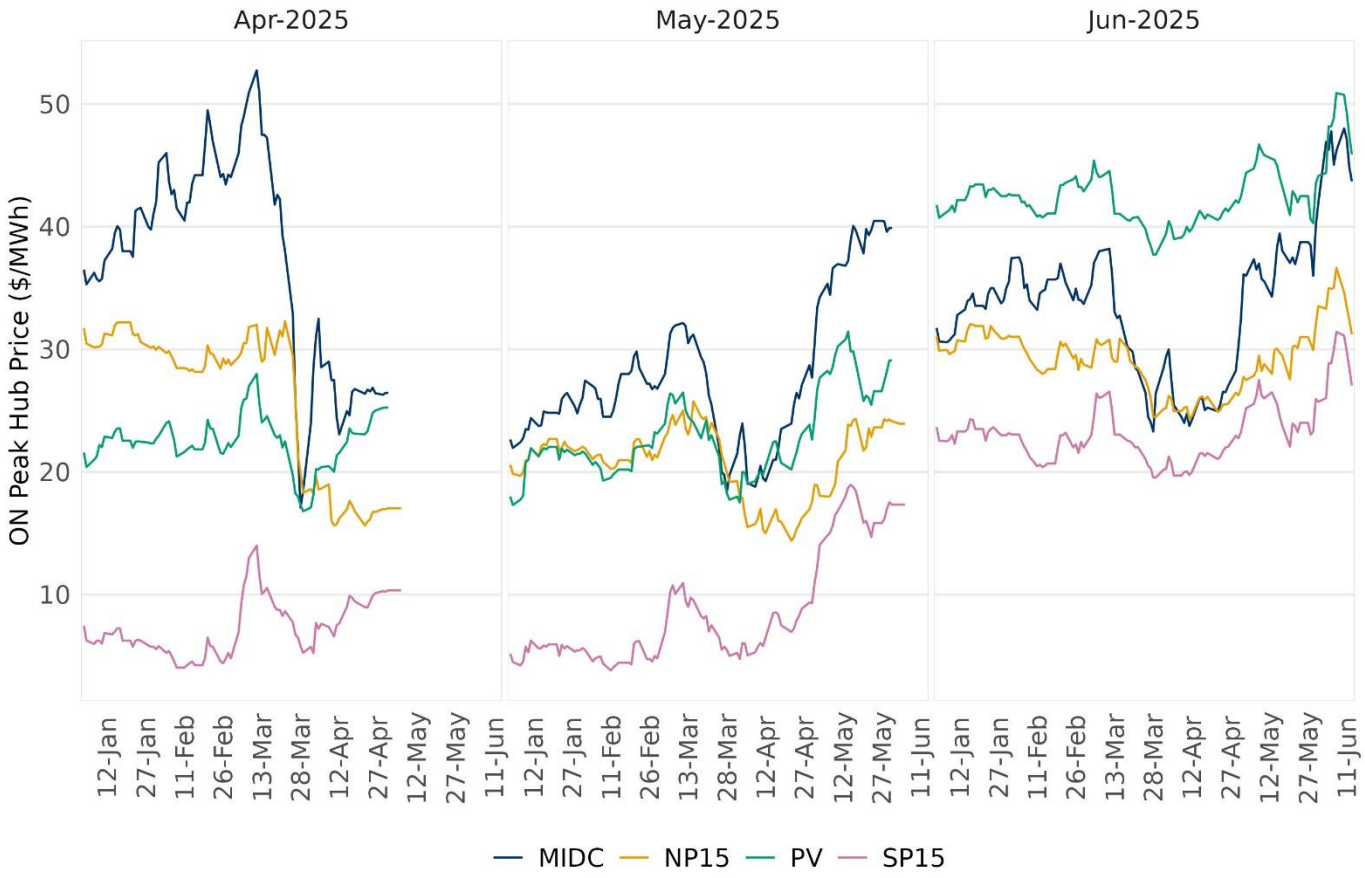
Future gas prices for winter 2025 declined during year-end trading but spiked in January 2024



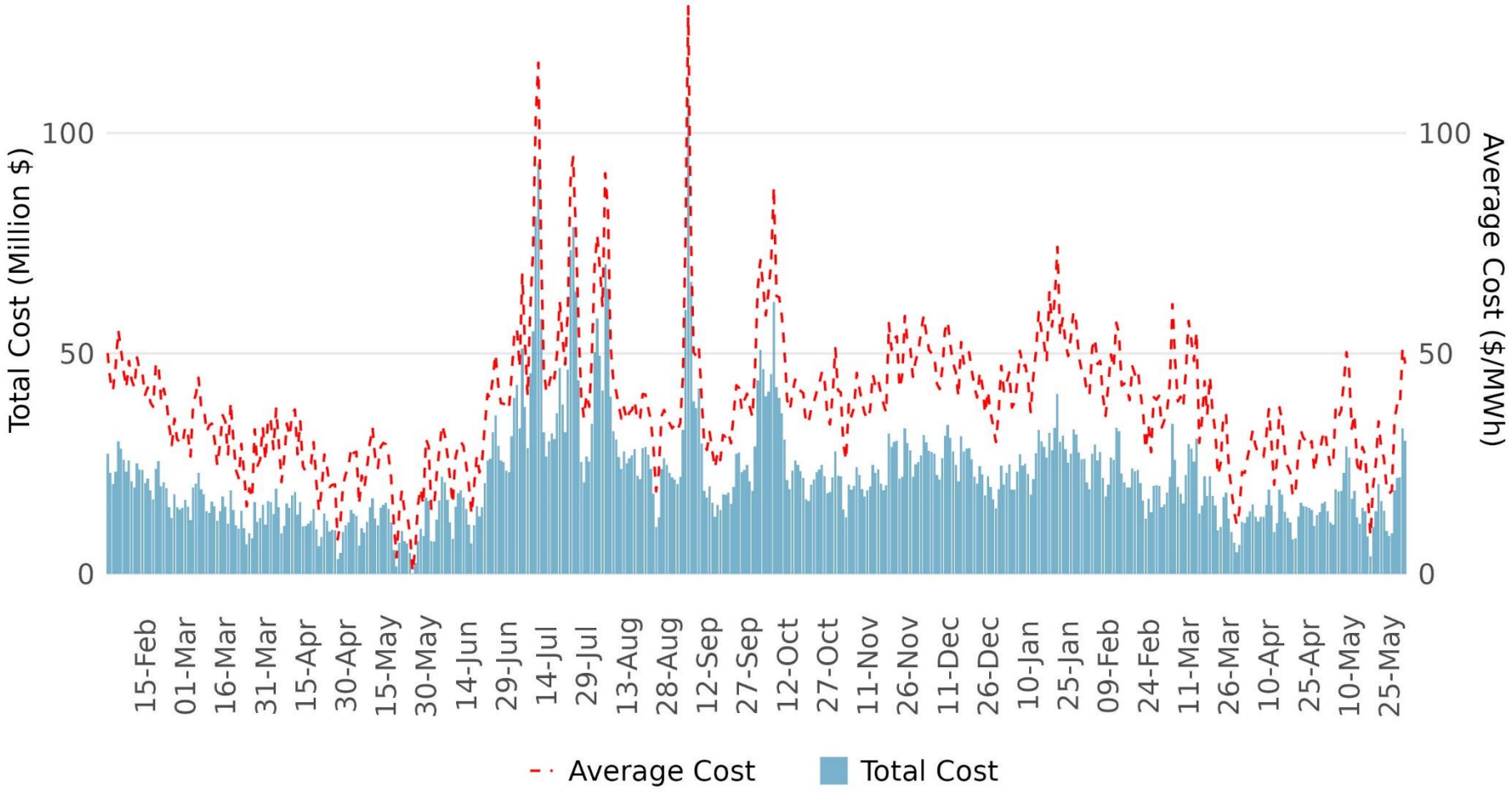
Next-day on-peak bilateral power remained below $55/MWh for March, April, and May



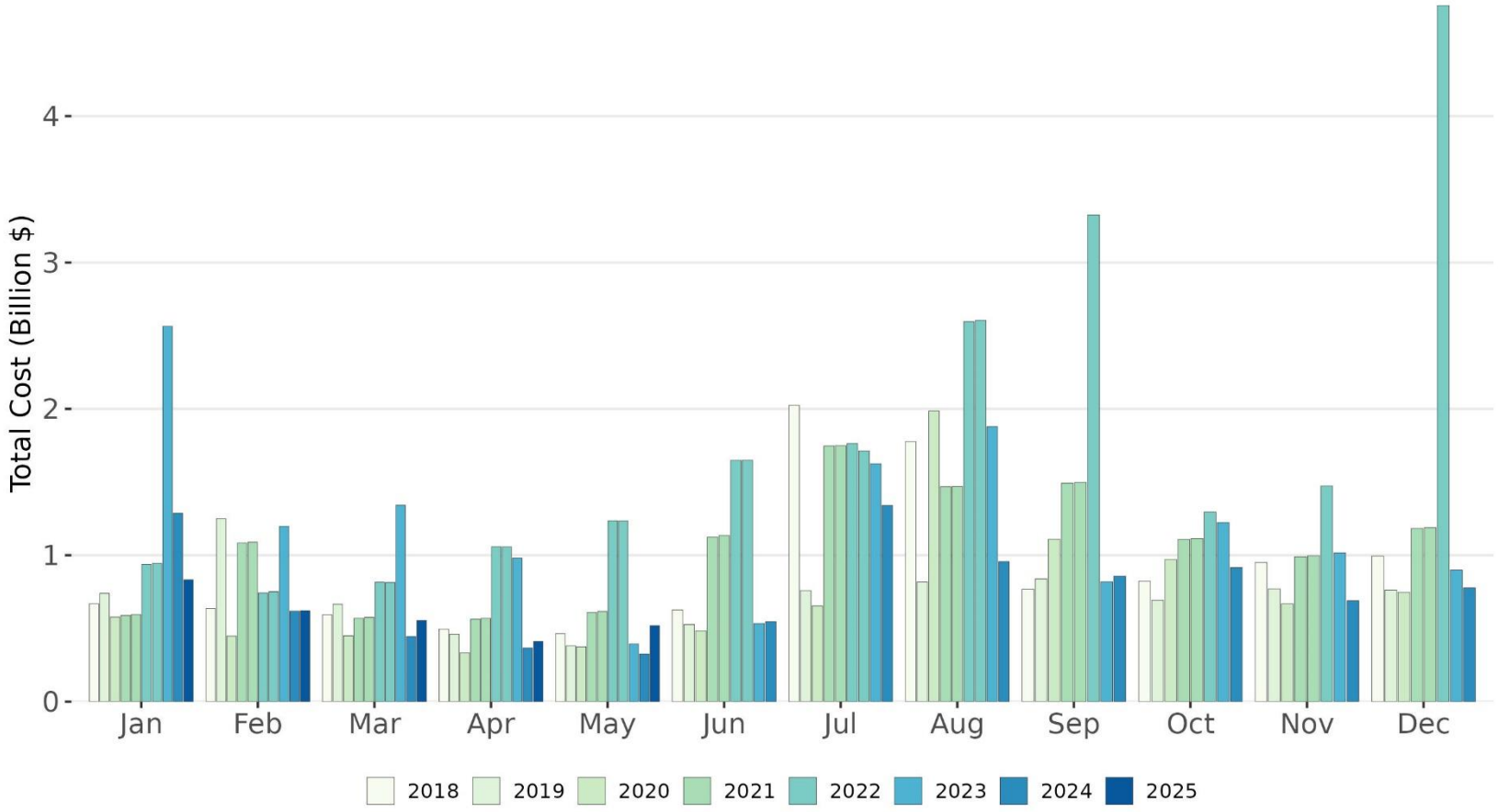
Future on-peak bilateral power prices for April and June 2025 ranges between $10/MWh to $53/MWh and remains low for May 2025.



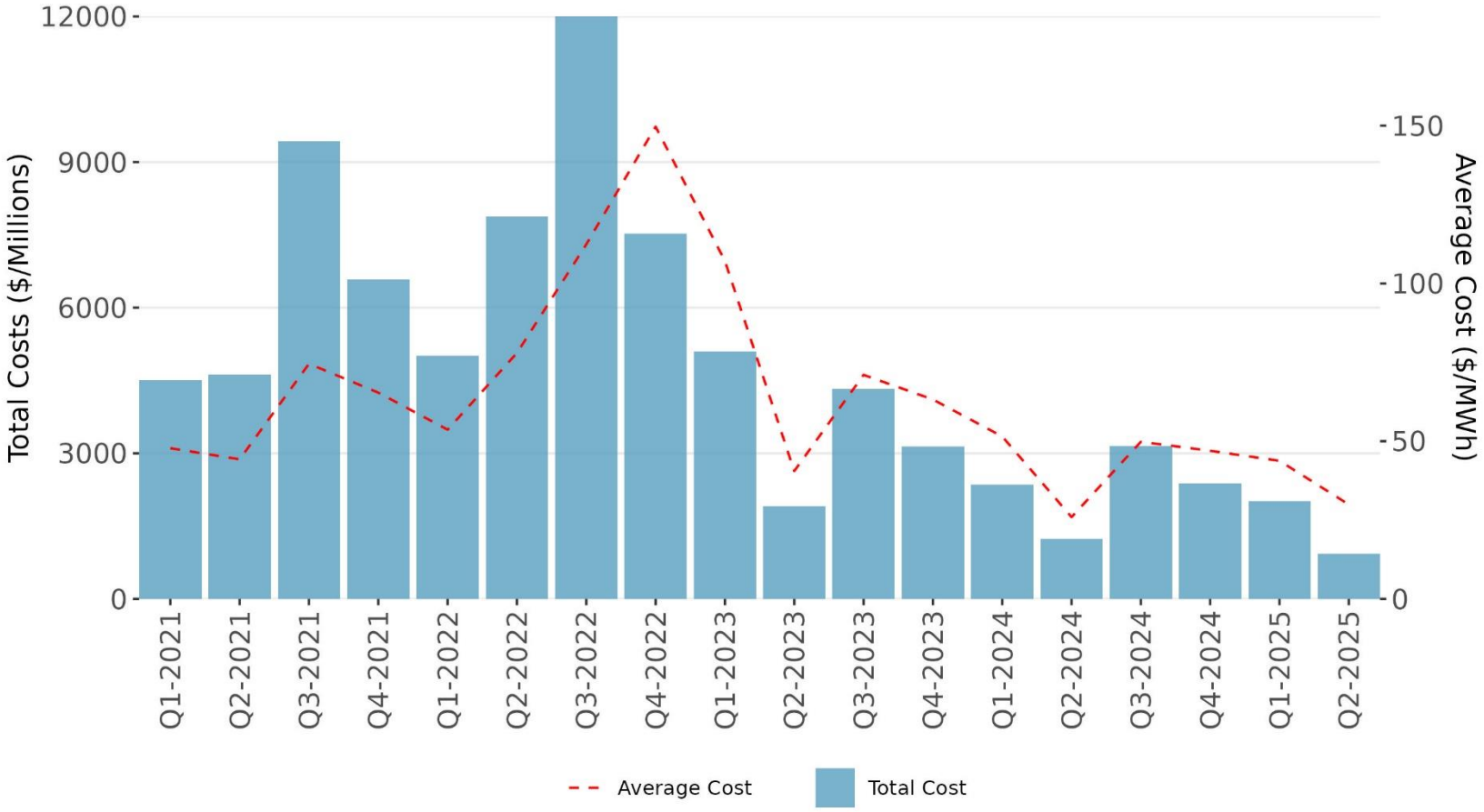
Daily market costs reached the highest level on January 21, 2025



Monthly totals for April and May 2025 is higher than previous year.



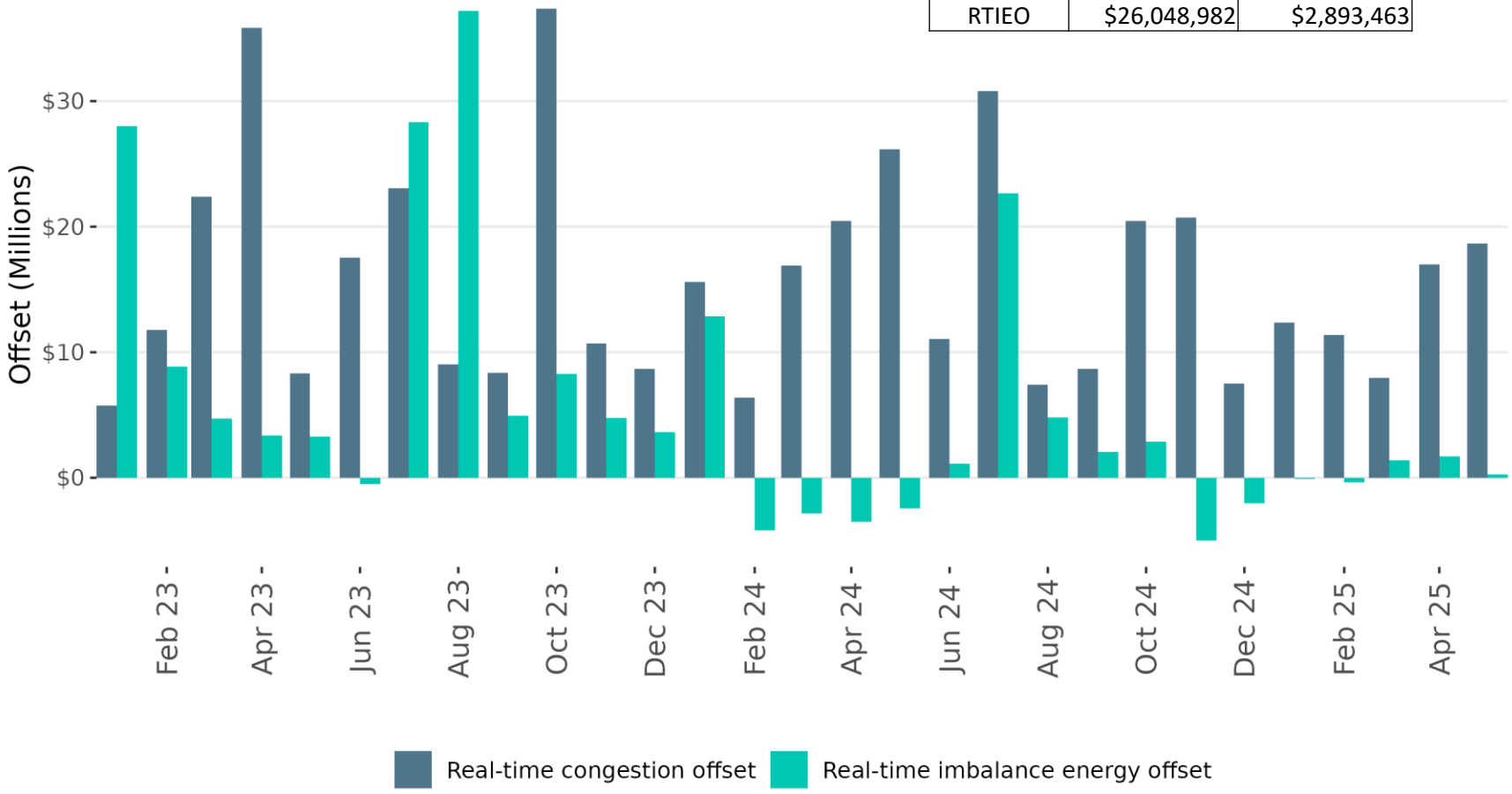
Q1 2025 total costs are $2.01B lower than Q1 2024 total costs



Note: Q2 2025 includes data for April and May

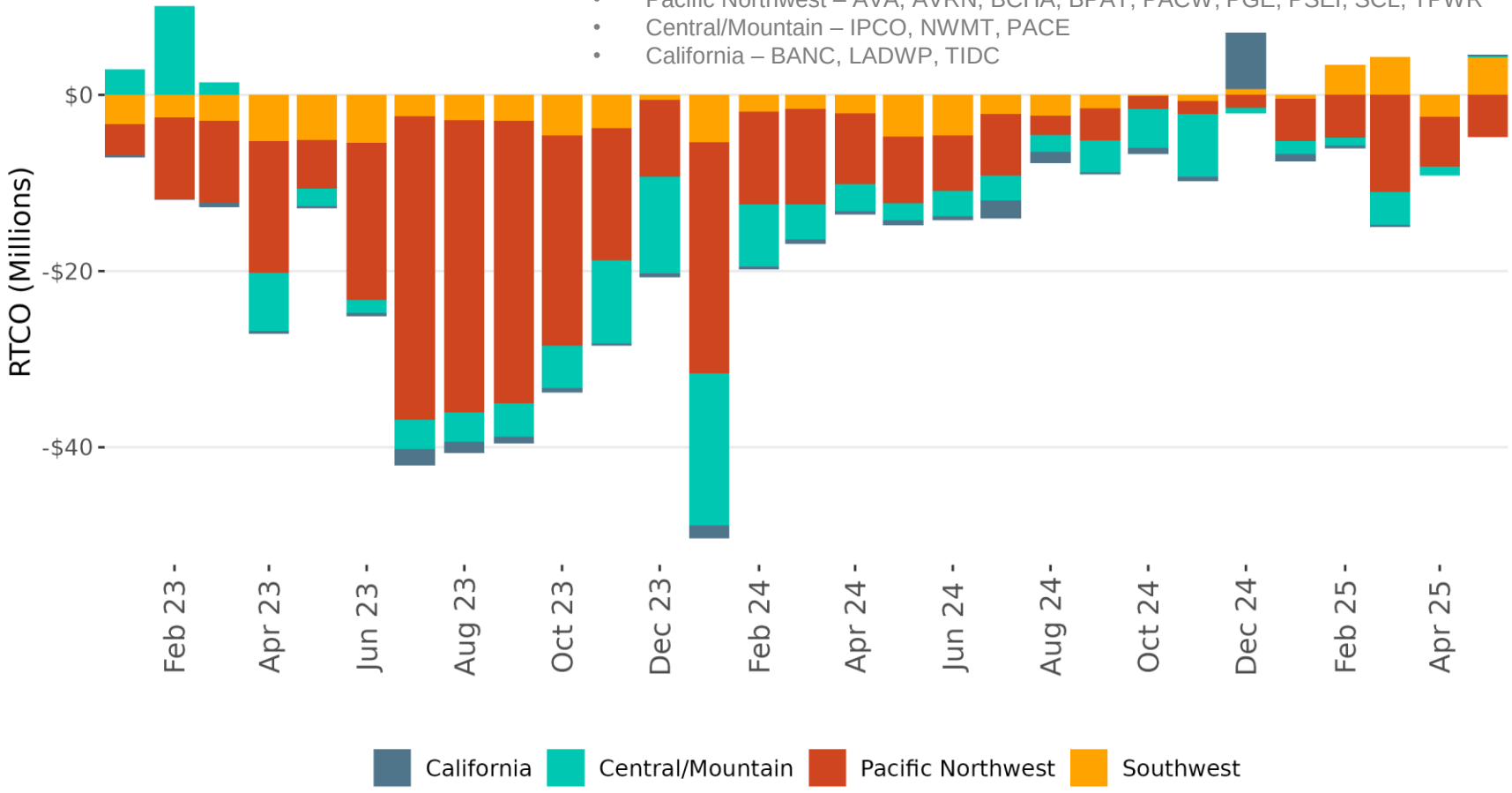
ISO area real-time congestion offset cost fell since last November

Costs	2024	2025 (YTD)
RTCO	$192,136,529	$67,336,652
RTIEO	$26,048,982	$2,893,463



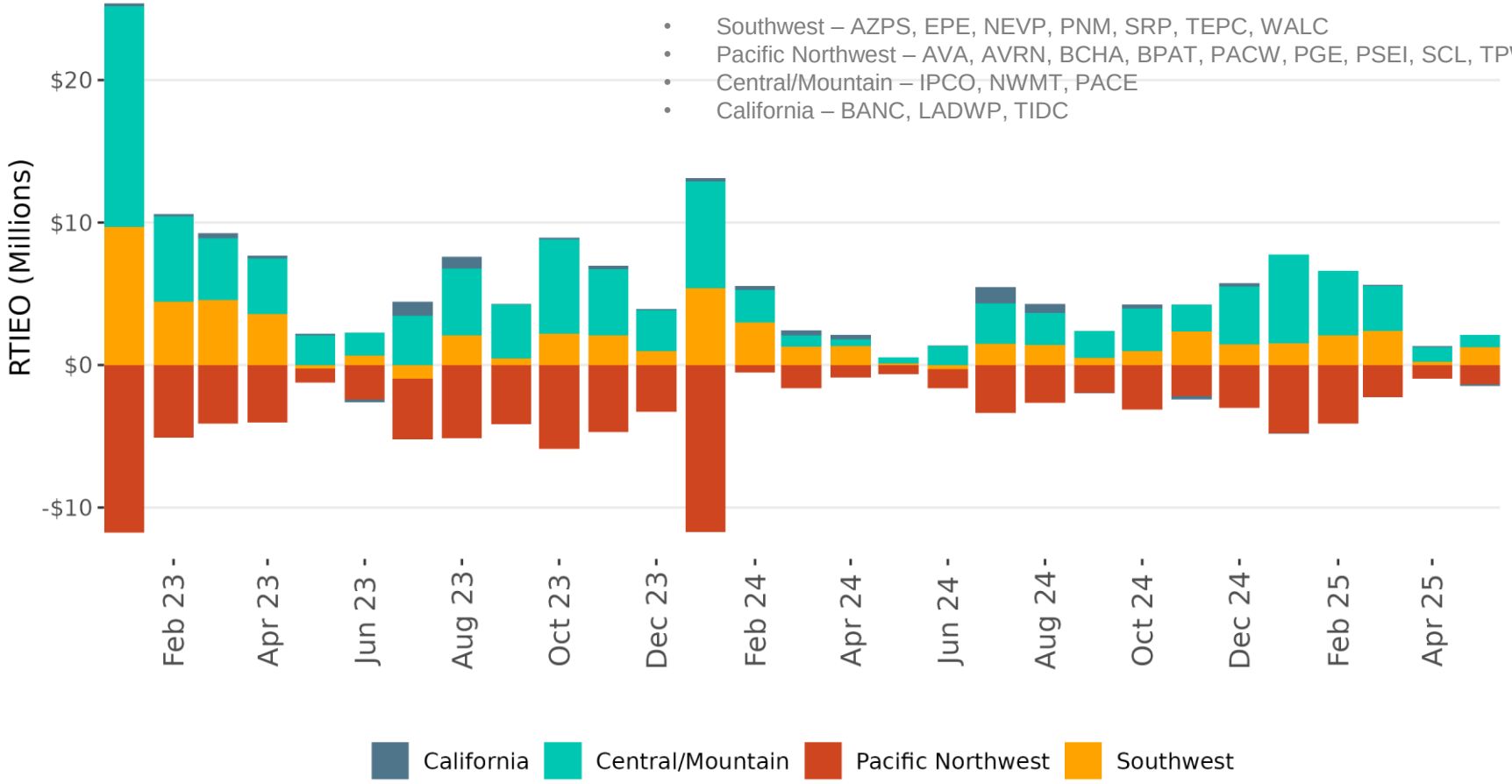
Pacific Northwest is allocated approximately 66 percent of total net Real time congestion offset for all WEIM entities

- Southwest – AZPS, EPE, NEVP, PNM, SRP, TEPC, WALC
- Pacific Northwest – AVA, AVRN, BCHA, BPAT, PACW, PGE, PSEI, SCL, TPWR
- Central/Mountain – IPCO, NWMT, PACE
- California – BANC, LADWP, TIDC



Real time imbalance energy offset has been low since January 2024

- Southwest – AZPS, EPE, NEVP, PNM, SRP, TEPC, WALC
- Pacific Northwest – AVA, AVRN, BCHA, BPAT, PACW, PGE, PSEI, SCL, TPWR
- Central/Mountain – IPCO, NWMT, PACE
- California – BANC, LADWP, TIDC

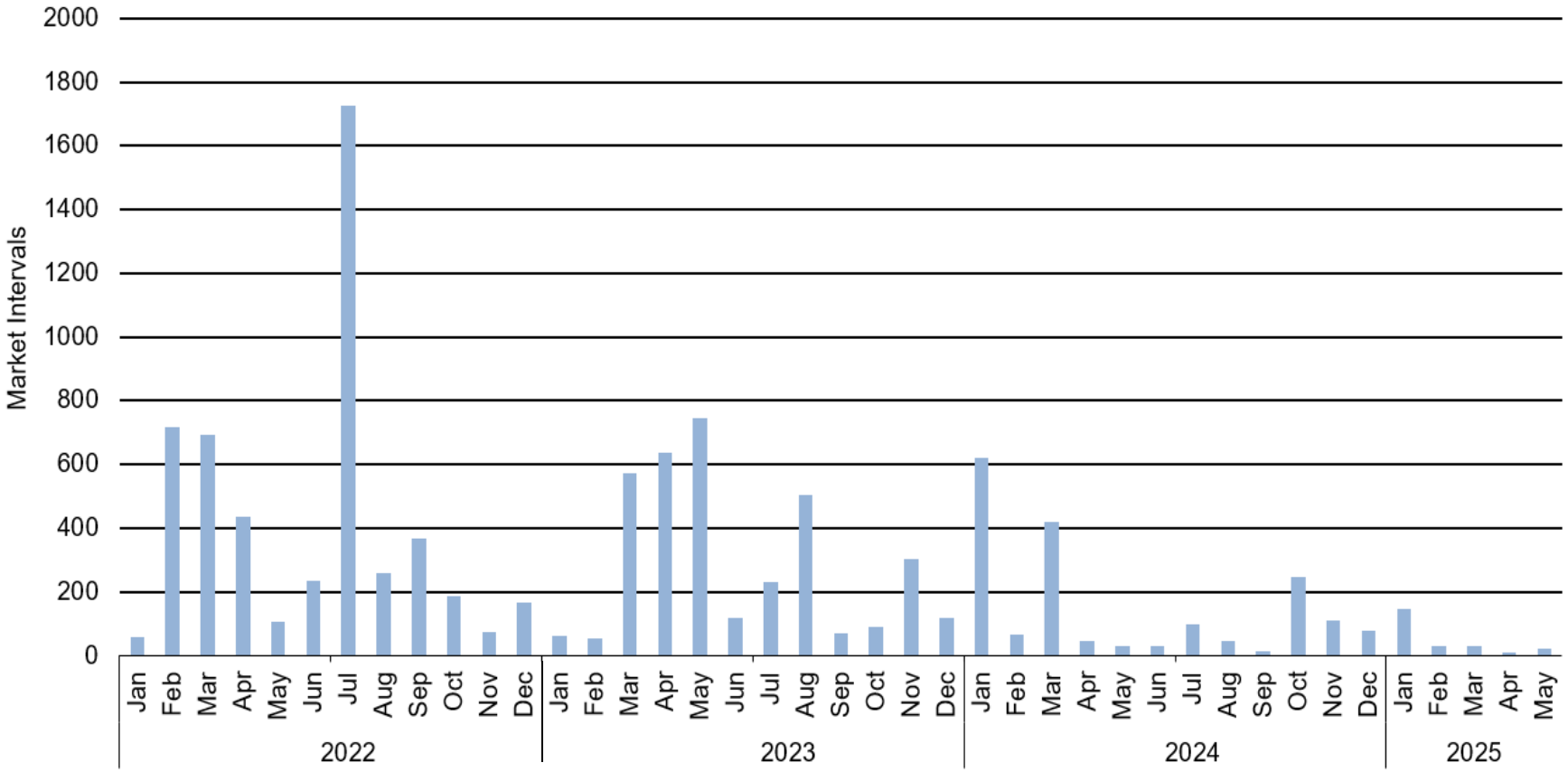


* Does not include CAISO

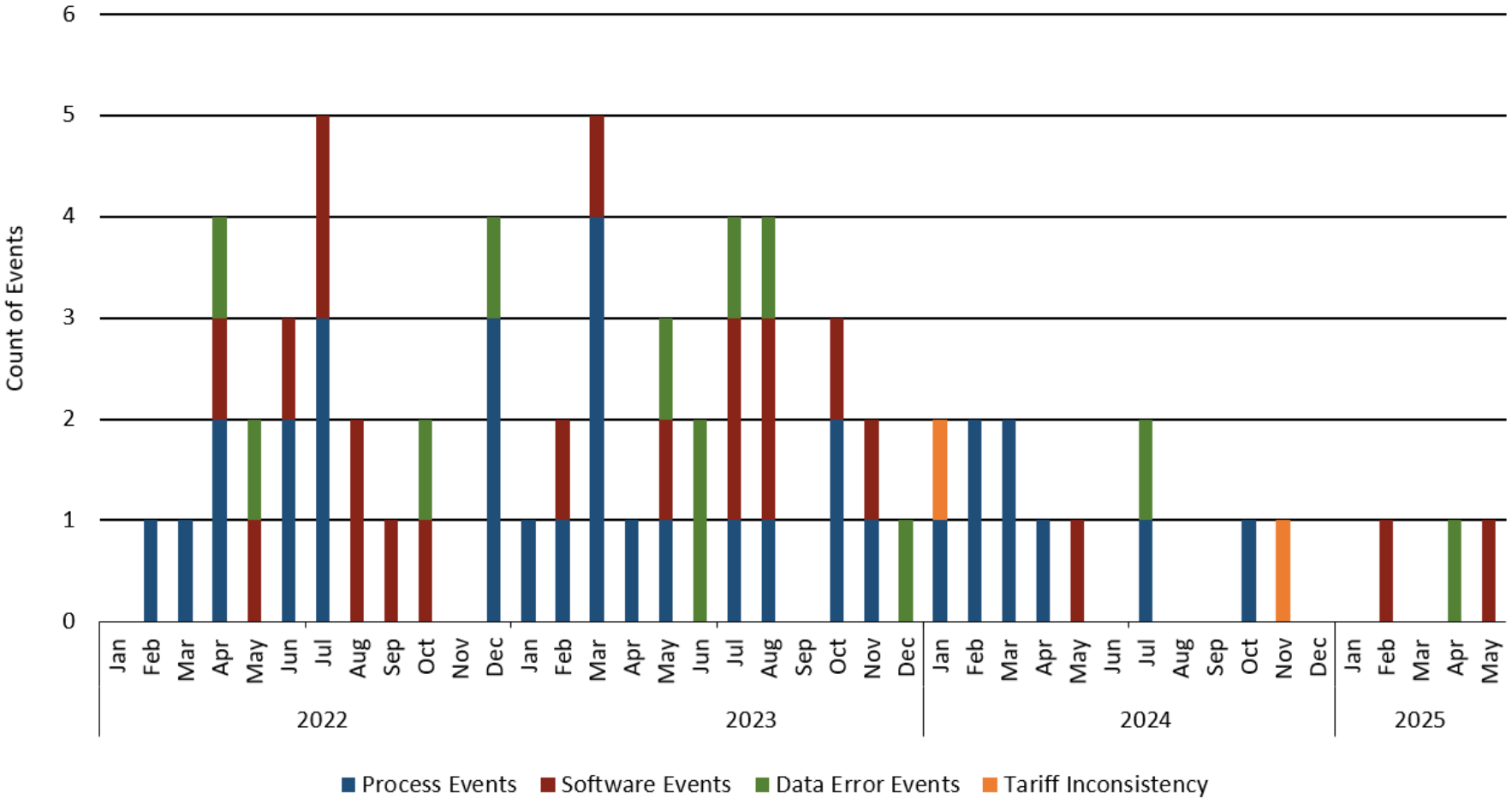
Price Corrections

Market Performance and Advanced Analytics

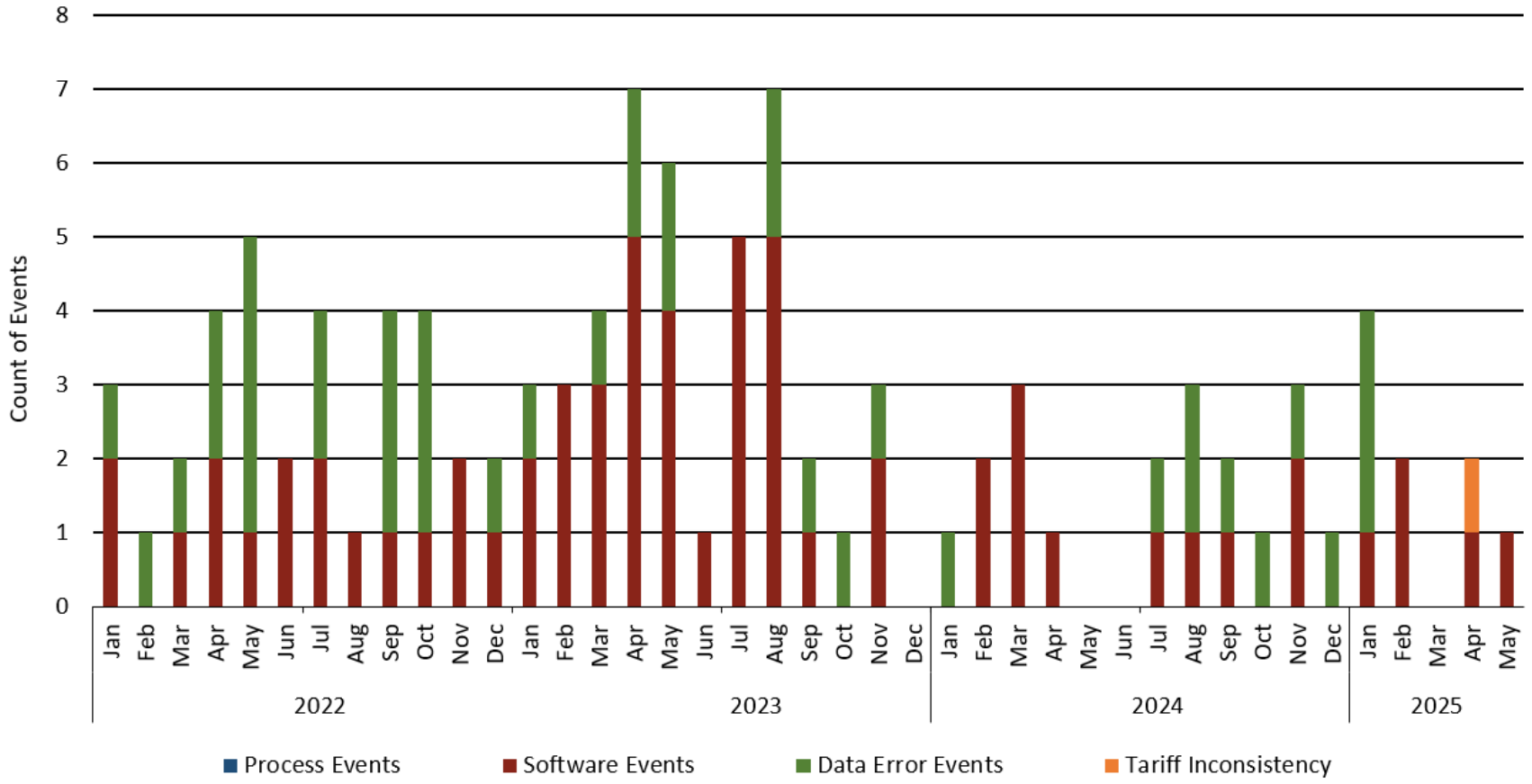
The frequency of market intervals with price corrections have decreased in recent years



CAISO price correction events have decreased in recent years



WEIM-related price correction events have decreased from 2022-2025



Existing process to communicate price corrections

- The CAISO provides information to market participants related to price corrections via OASIS. This information is on the CAISO's OASIS website under the Atlas Reference tab → Price Correction Messages →Price Correction Summary**.**
- Prior to October 22, 2024, during the biweekly market update call the CAISO discussed price corrections events, including their reason, for the last reporting period.
- On October 22, 2024, the CAISO announced the new daily Price Correction Summary report on OASIS in the CAISO Readiness Notes available at https://www.caiso.com/documents/readiness-notes-new-price-correction-summary-report-in-oasis.pdf
- The CAISO continues to host biweekly market update calls and will discuss significant price correction events on those calls.

Congestion Pricing on Multiple Contingencies

- In 2022-2023, the ISO would correct high shadow prices to $1000 due to a software defect that would not price multiple contingencies correctly

- In January 2024, there was a software fix to this issue that eliminated the need for ongoing price corrections related to that specific issue

- The ISO continues to validate high shadow prices. Valid high congestion shadow prices may still occur, potentially resulting in LMPs exceeding the soft offer bid cap.

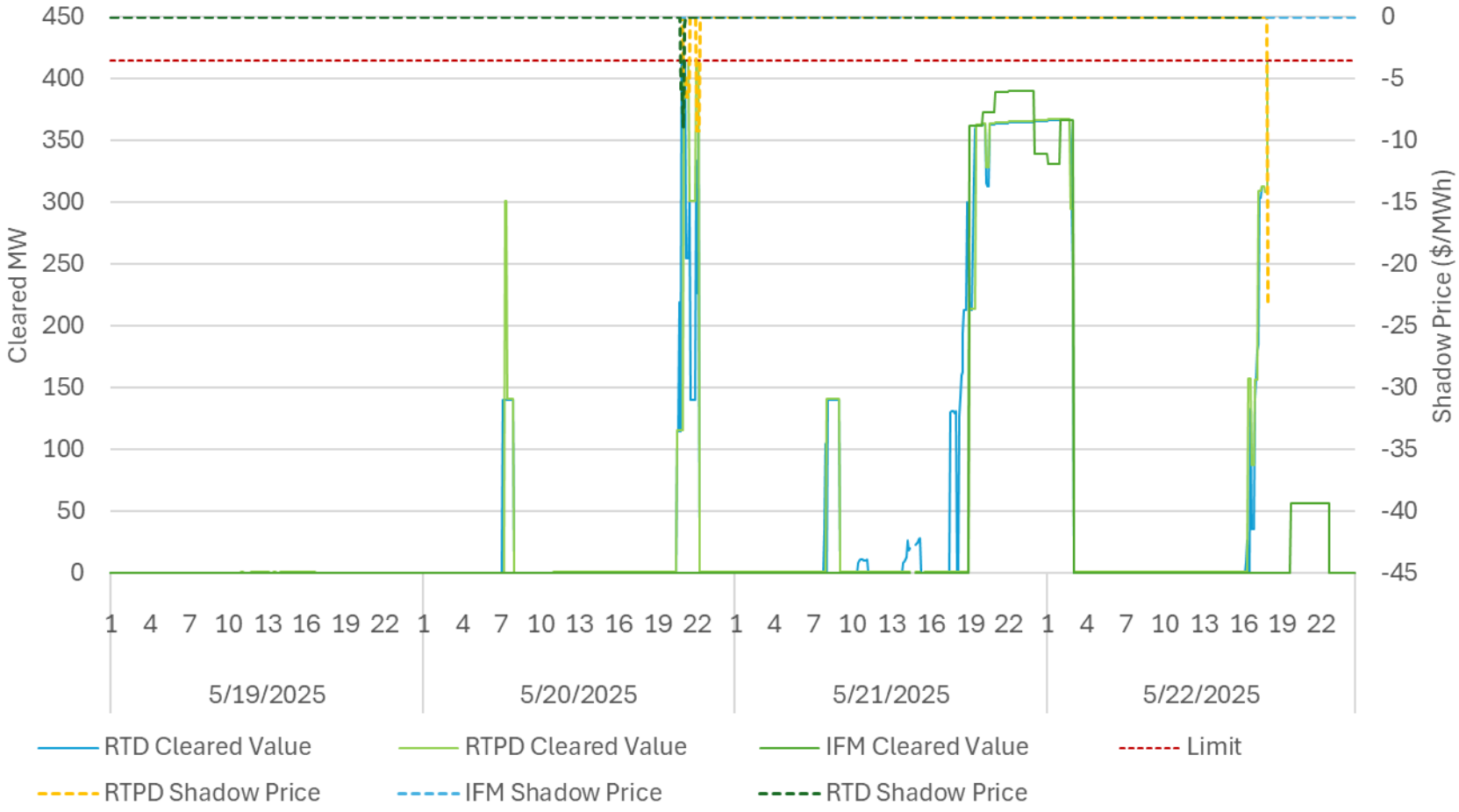
- This can happen when resources with low shift factors with respect to transmission constraints are economically awarded due to congestion.

Maxburn Gas Nomogram

Maxburn Gas Nomogram enforced

- MAXBURN_ALISO_SDGE nomogram was enforced in the day-ahead and real-time markets for four days in May
- Nomogram was enforced in the day-ahead market from May 19 to May 22 (all 24 hours)
- Nomogram was enforced in FMM and RTD from May 19 until May 22 HE 17 interval 10 (RTD) and May 22 HE 18 interval 2 (FMM)
- Nomogram was not binding in the day-ahead market; however, it was binding for only four intervals in FMM and RTD markets

Maxburn Gas nomogram was binding for 4 intervals in FMM and RTD market



Renewable forecast accuracy

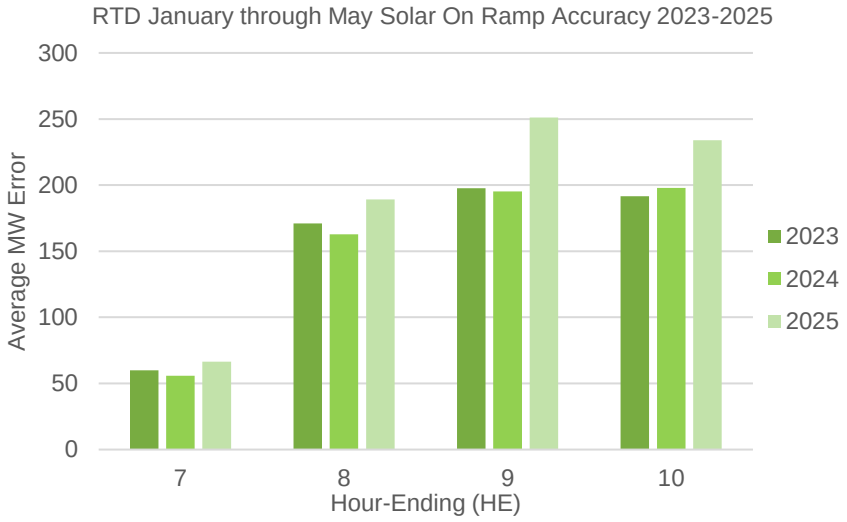
Short Term Forecasting

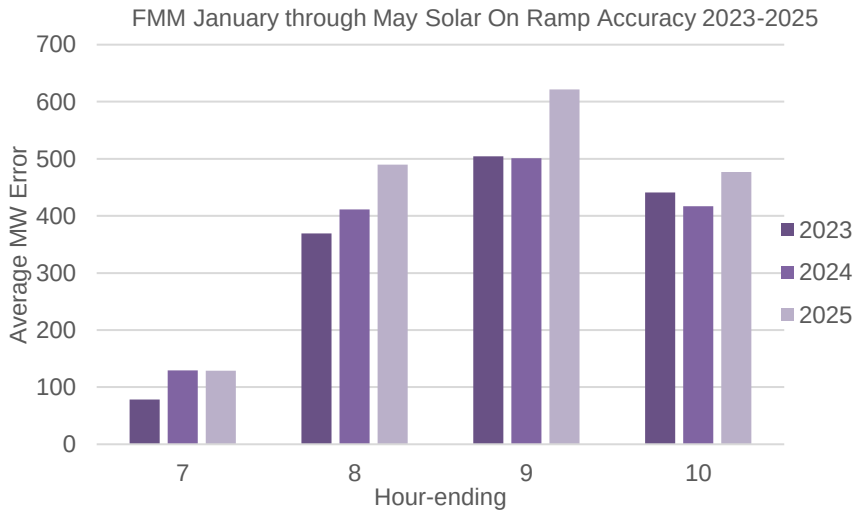
Real-time solar forecast

*MAPE = abs(Forecast – Actual)/Actual
**MAPE only calculated for intervals where Forecast > 0

Solar on-ramp forecast accuracy: 2023-2025

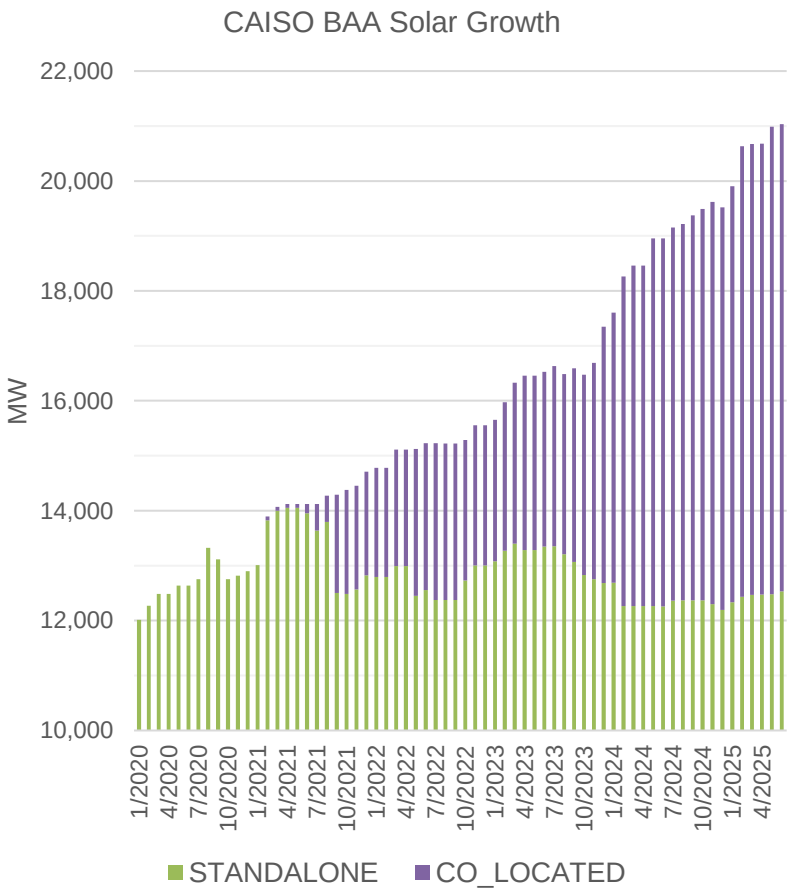
- There has been an increase in RTD and FMM solar on-ramp forecast MW error in 2025, especially HE9
- Although the error percentage has not increased significantly from previous years, the MW error is larger due to growth in solar capacity





Solar Forecast Accuracy: Observed increased solar forecast error in DA and RT March – May 2025

- Follow DOT orders and bad data quality flags cause (1) data invalidation in forecast training which can impact accuracy, and (2) persistence to turn off in RTD
  - 30-50% improvement in RTD forecast accuracy on Persistence
- 2% increase in follow DOT for all solar resources in 2025 compared to 2024
- Co-Located resources have received follow DOT orders 12.5% more often than standalone solar in 2025



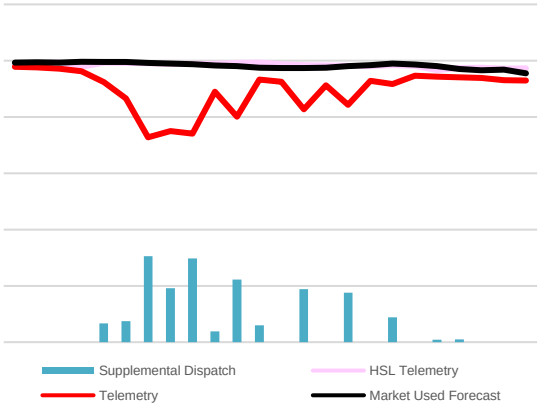
How to assist with improving VER forecast accuracy

- Ensure telemetry, HSL and meteorological station data is in good quality
  - If telemetry quality from the RIG is bad, Persistence will automatically turn off
  - Good quality telemetry data can keep persistence on in RTD
  - Increase in good data to use in forecast training
- Provide HSL, even if not required for the resource
  - HSL is required for Co-Located VERs and Hybrid VER components, and is encouraged for standalone VERs
  - HSL can be used when telemetry is impacted by follow DOT flag to keep actual information feeding the RT forecast
  - Providing HSL can assist with vendor forecast accuracy, especially for frequent or long duration follow DOT orders
  - The ISO has observed a variety of challenges in receiving accurate and reliable HSL values from resources

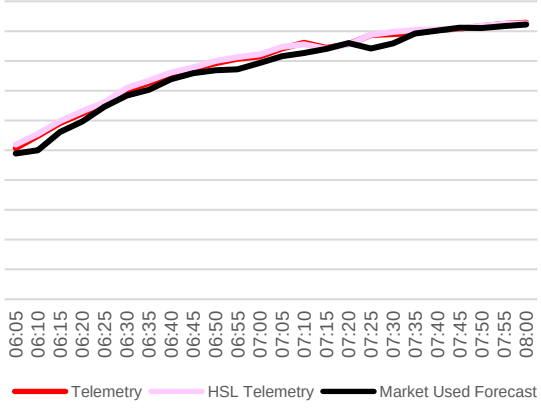
Importance of good quality HSL data

- Currently, the ISO cannot use HSL-based persistence forecasting for co-located or standalone VERs due to a variety of HSL quality issues
  - Quality HSL is needed before HSL persistence can be turned on
  - The ISO is seeking ways to ensure high quality HSL data from resources
- Good HSL:
  - Does not react to follow DOT, is equivalent to telemetry when no market dispatches are present

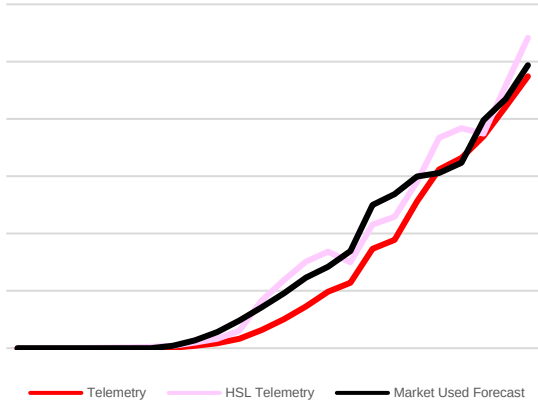
Good HSL: Not reacting to market dispatches, forecast behaves well



Good HSL: HSL and telemetry aligned when no FOLLOW DOT dispatches



Bad HSL: High-biased HSL data impacts forecast quality



General Metrics

Energy Storage Performance

Energy storage enhancements Track 2 was activated on November 1, 2023

- The original state of charge equation

$$SOC_{i,t} = SOC_{i,t-1} - \left(EN_{i,t}^{(+)} + \eta_i \, EN_{i,t}^{(-)}\right) \frac{\Delta T}{T_{60}}$$

$$\underline{SOC}_{i,t} \leq SOC_{i,t} \leq \overline{SOC}_{i,t}$$

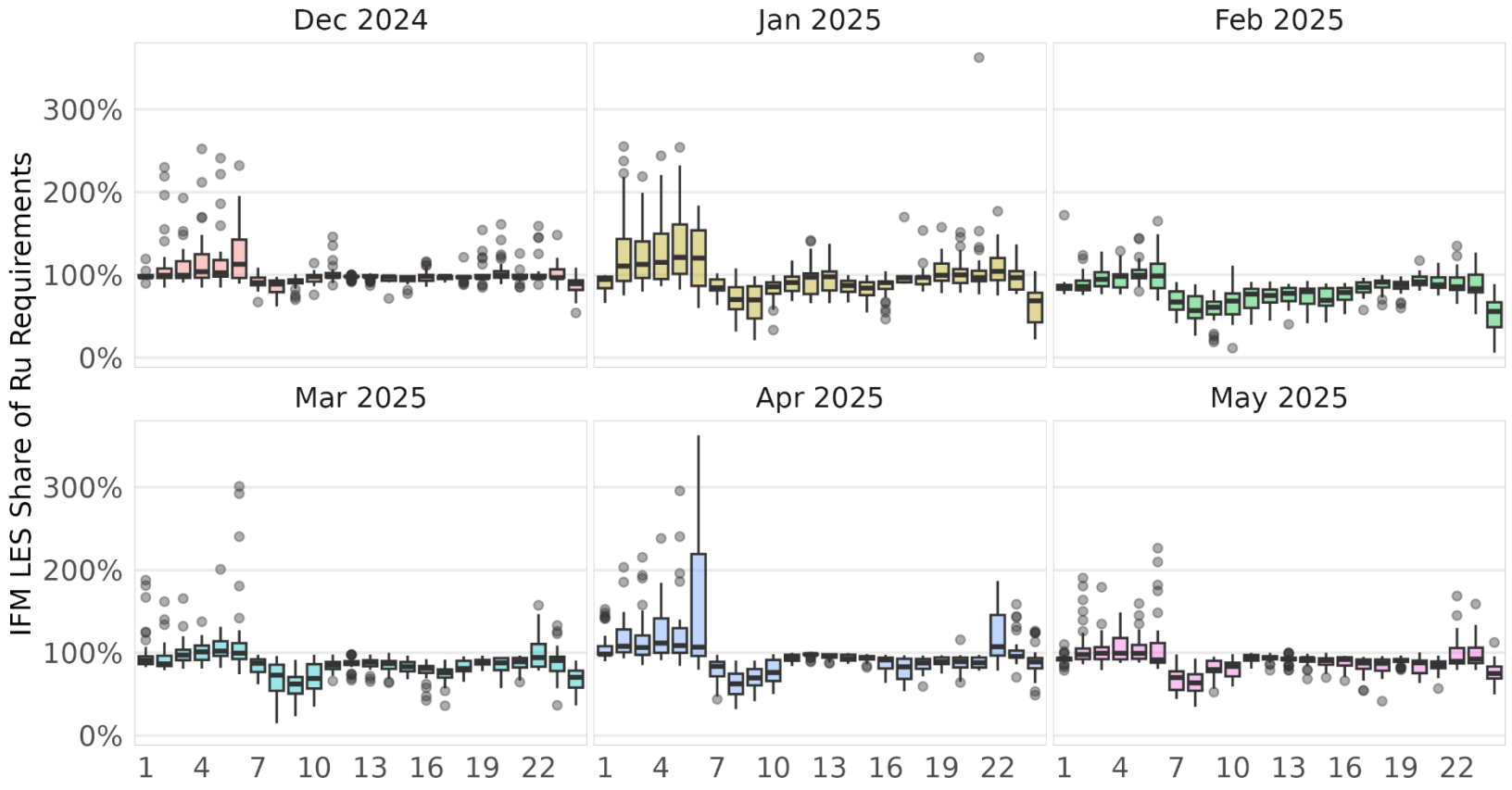
(SOC: original SOC with energy impact only)

- A new set of constraints is introduced

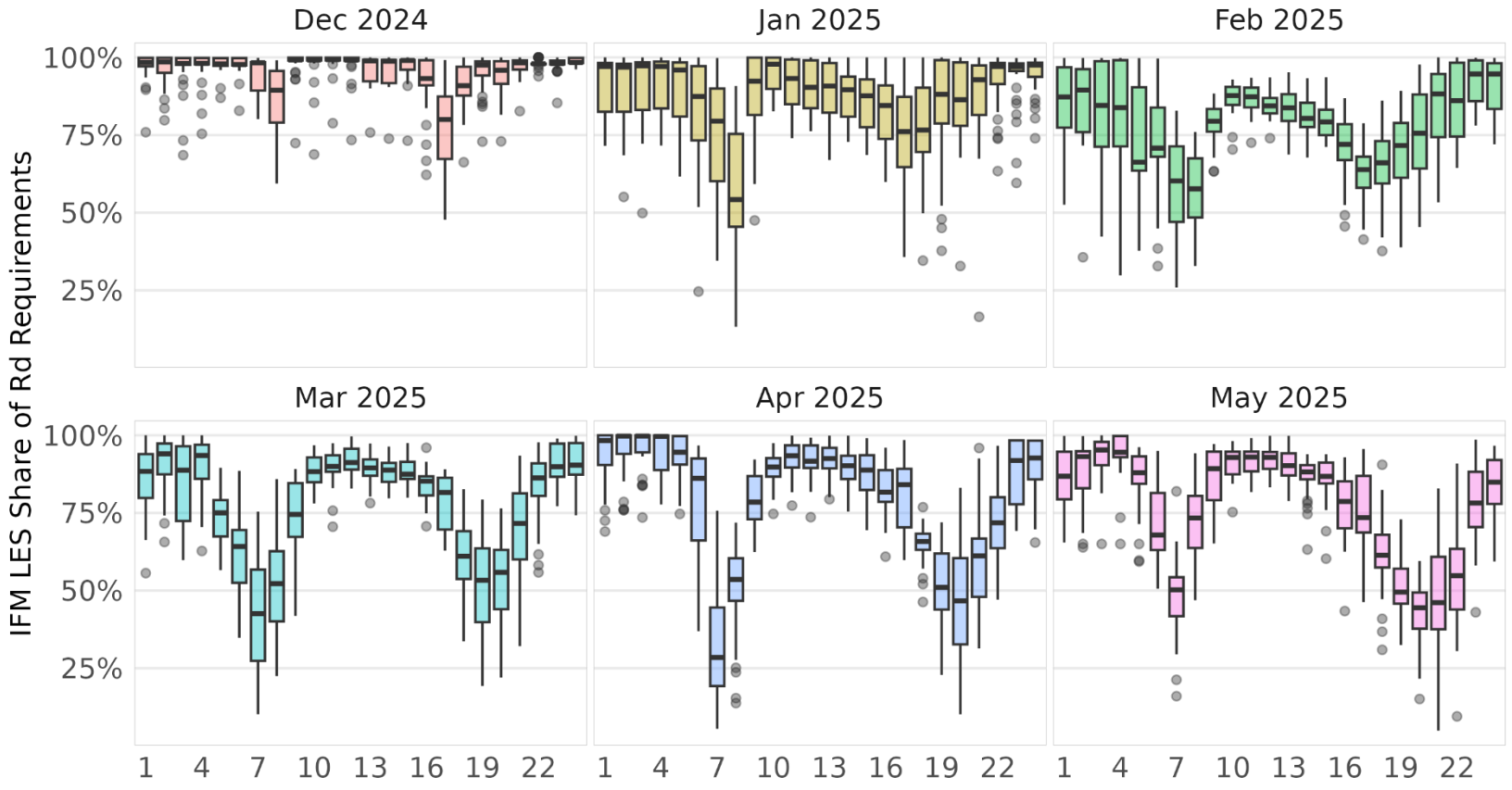
$$SOC_{i,t}^{AT} = SOC_{i,t-1}^{AT} - \left(EN_{i,t}^{(+)} + \eta_i \, EN_{i,t}^{(-)} + \boldsymbol{ATRU_t} \, RU_{i,t} - \boldsymbol{ATRD_t} \eta_i RD_{i,t}\right) \frac{\Delta T}{T_{60}}$$

(SOC^{AT} : SOC with attenuation factors)

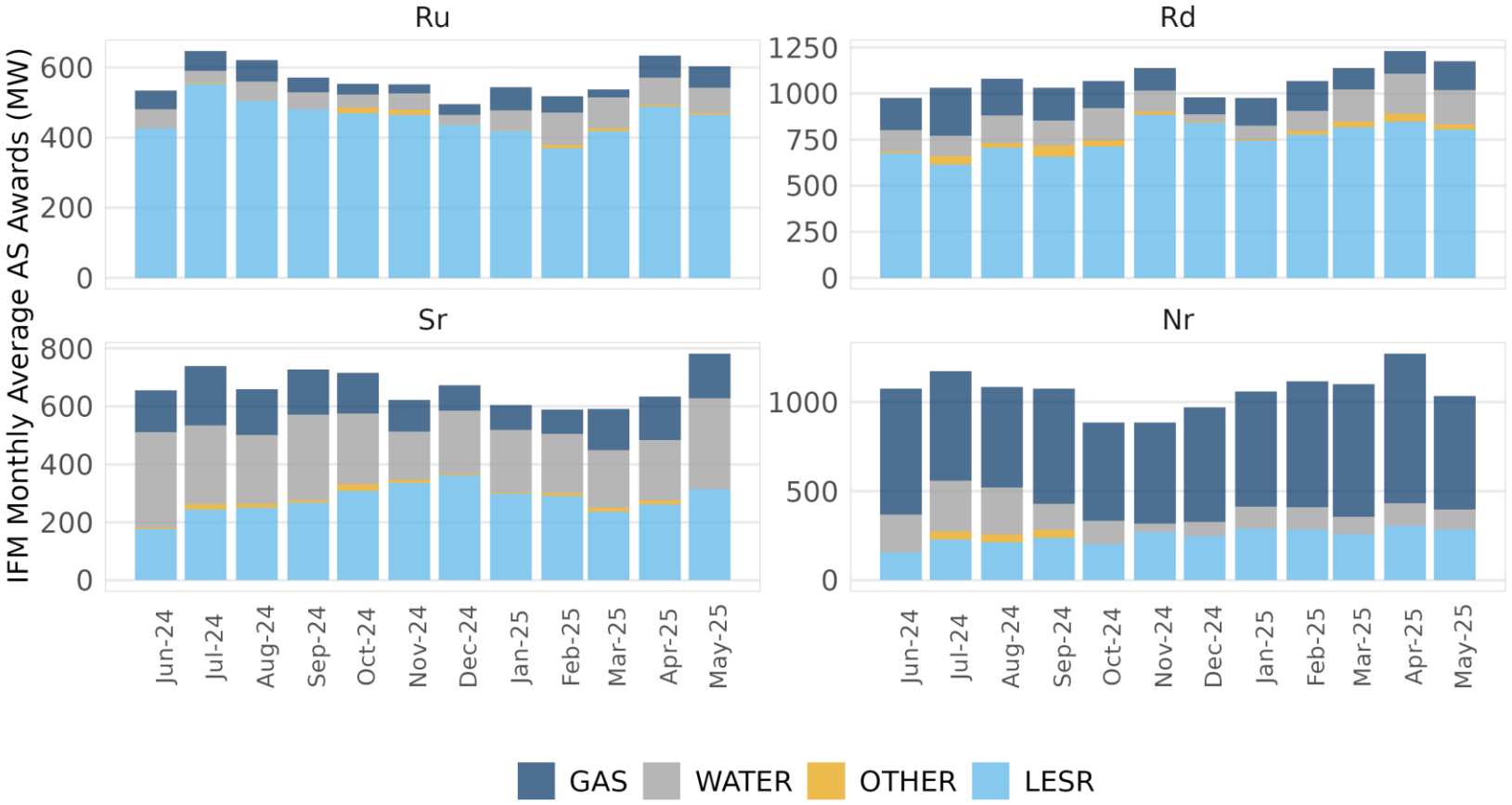
No material change in the hourly profile of the LESR percentage share of the Ru requirement after implementation of enhancements



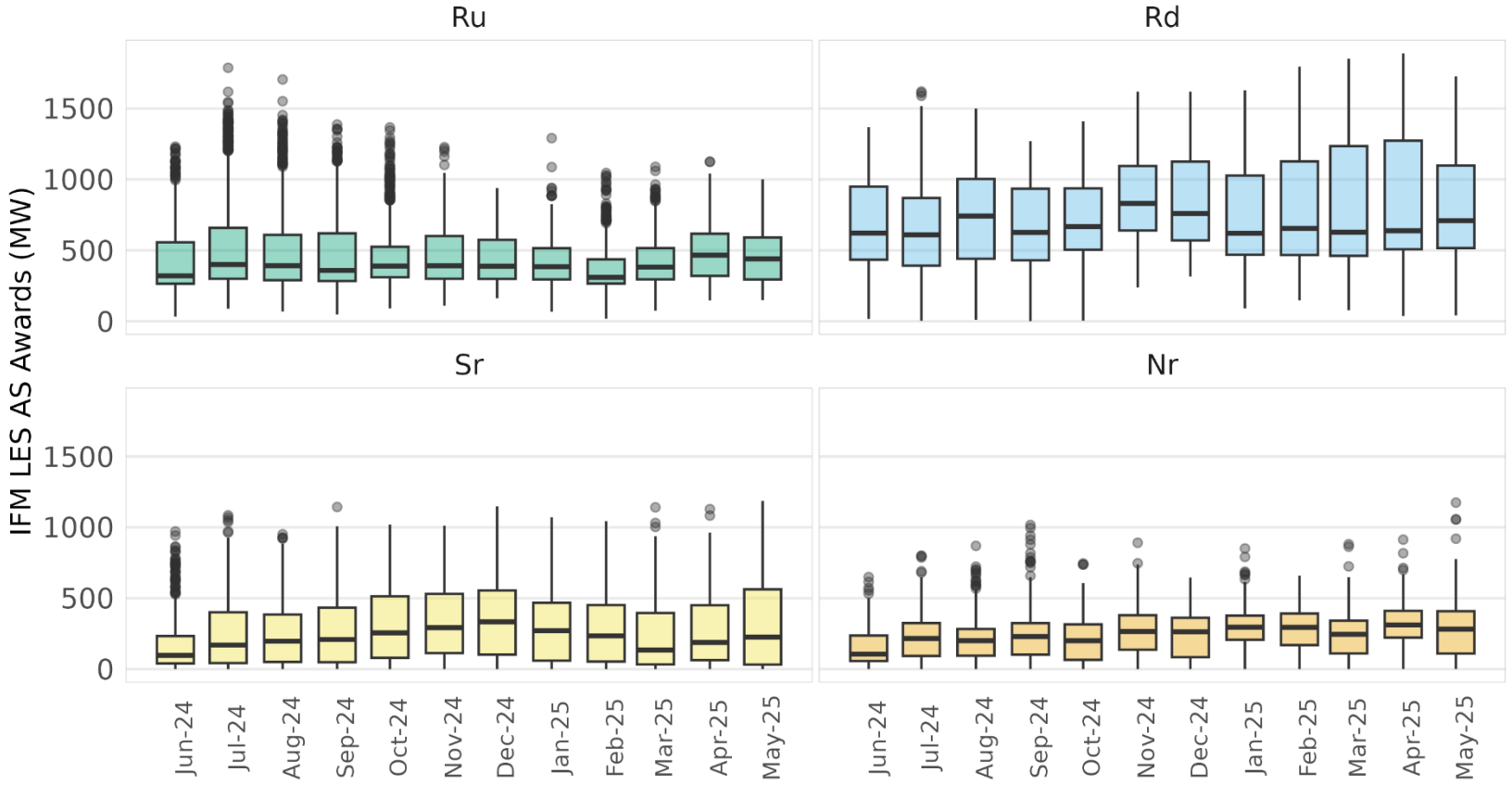
No material change in the hourly profile of the LESR percentage share of the Rd requirement



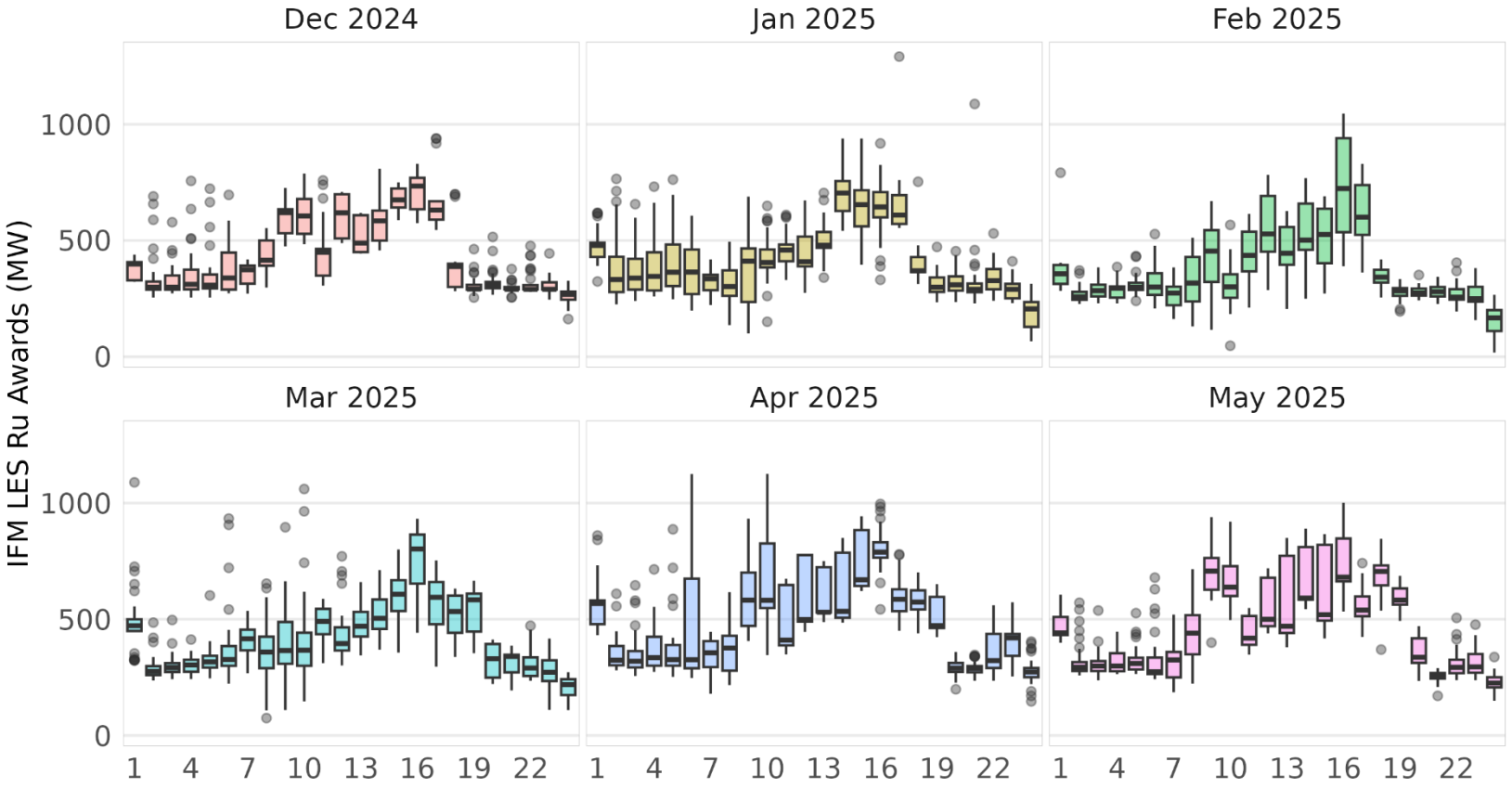
Monthly average IFM AS awards for storage shows no significant change in pattern



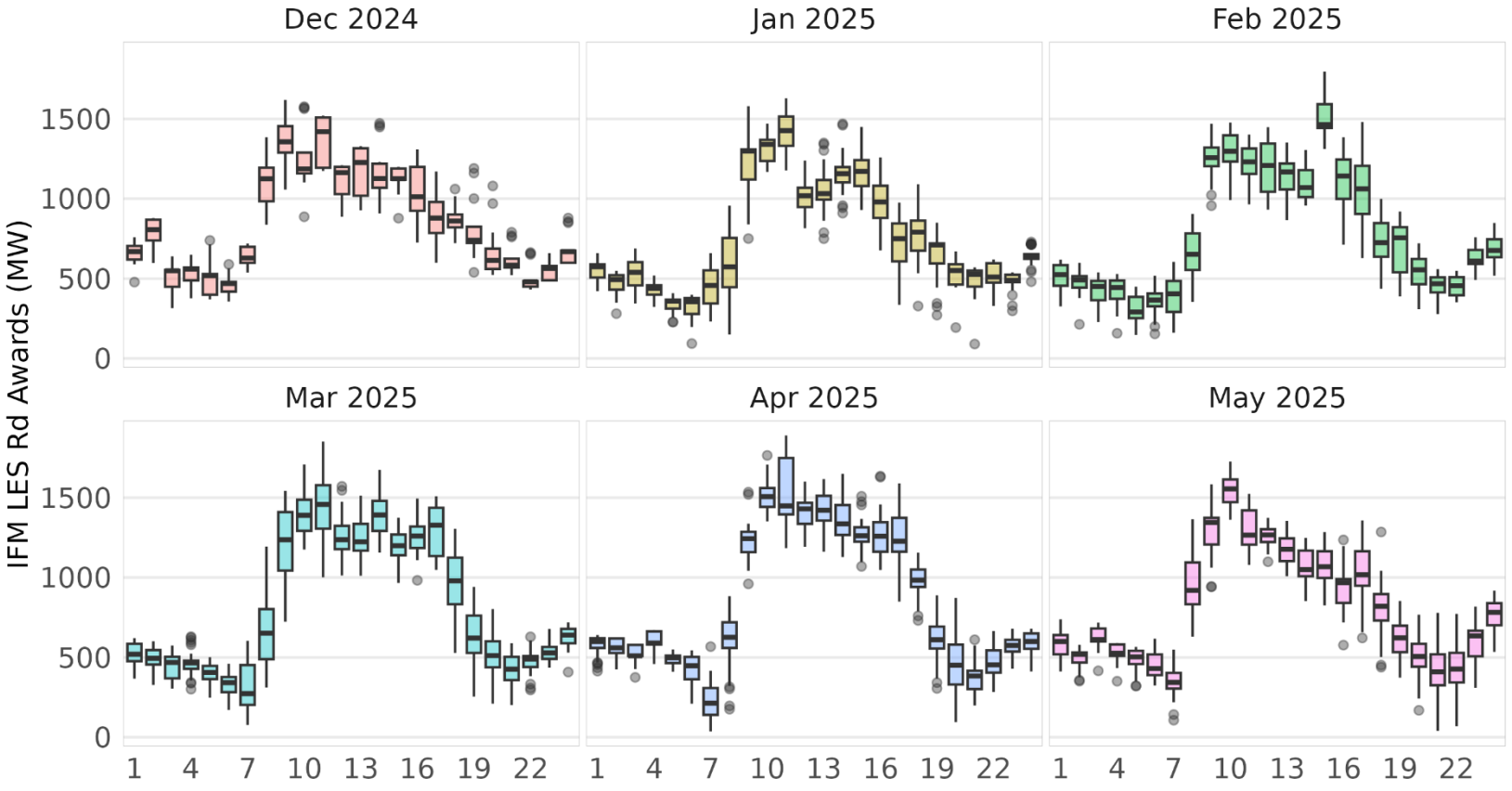
Monthly IFM AS market awards show no significant change in pattern



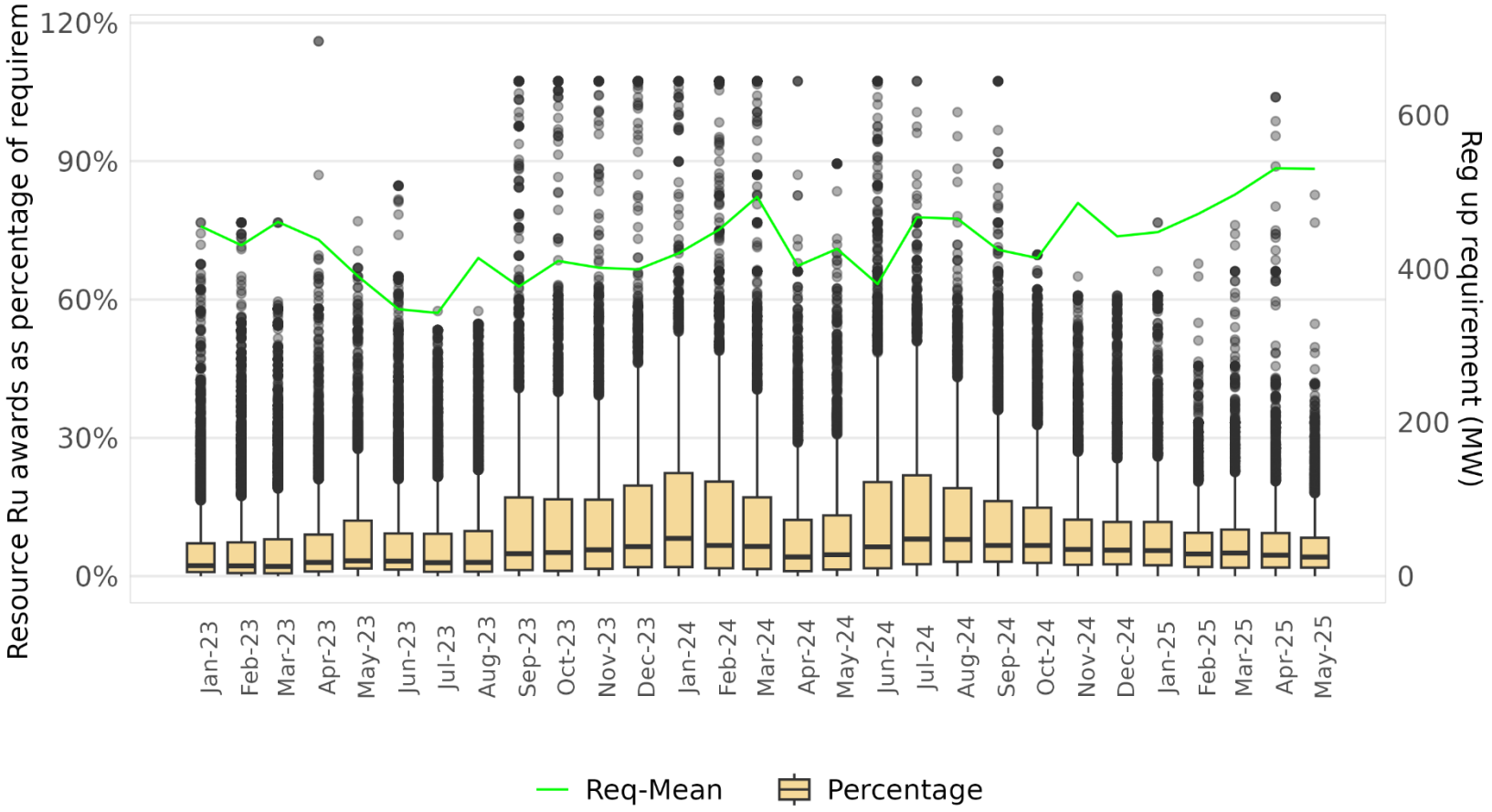
Regulation up awards in the day-ahead market have not seen a material change in trend



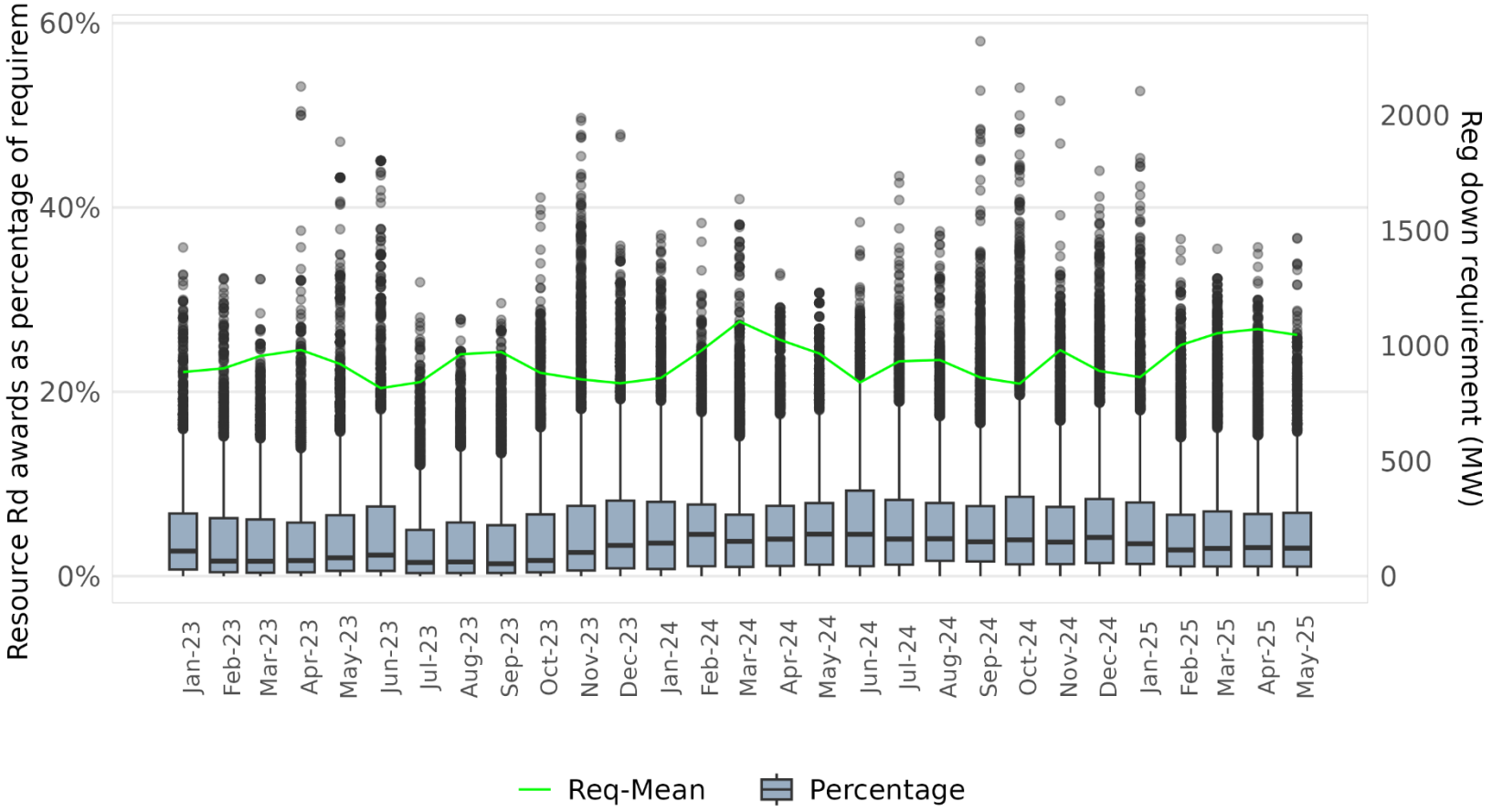
Regulation down awards in the day-ahead market have not seen a material change in trend



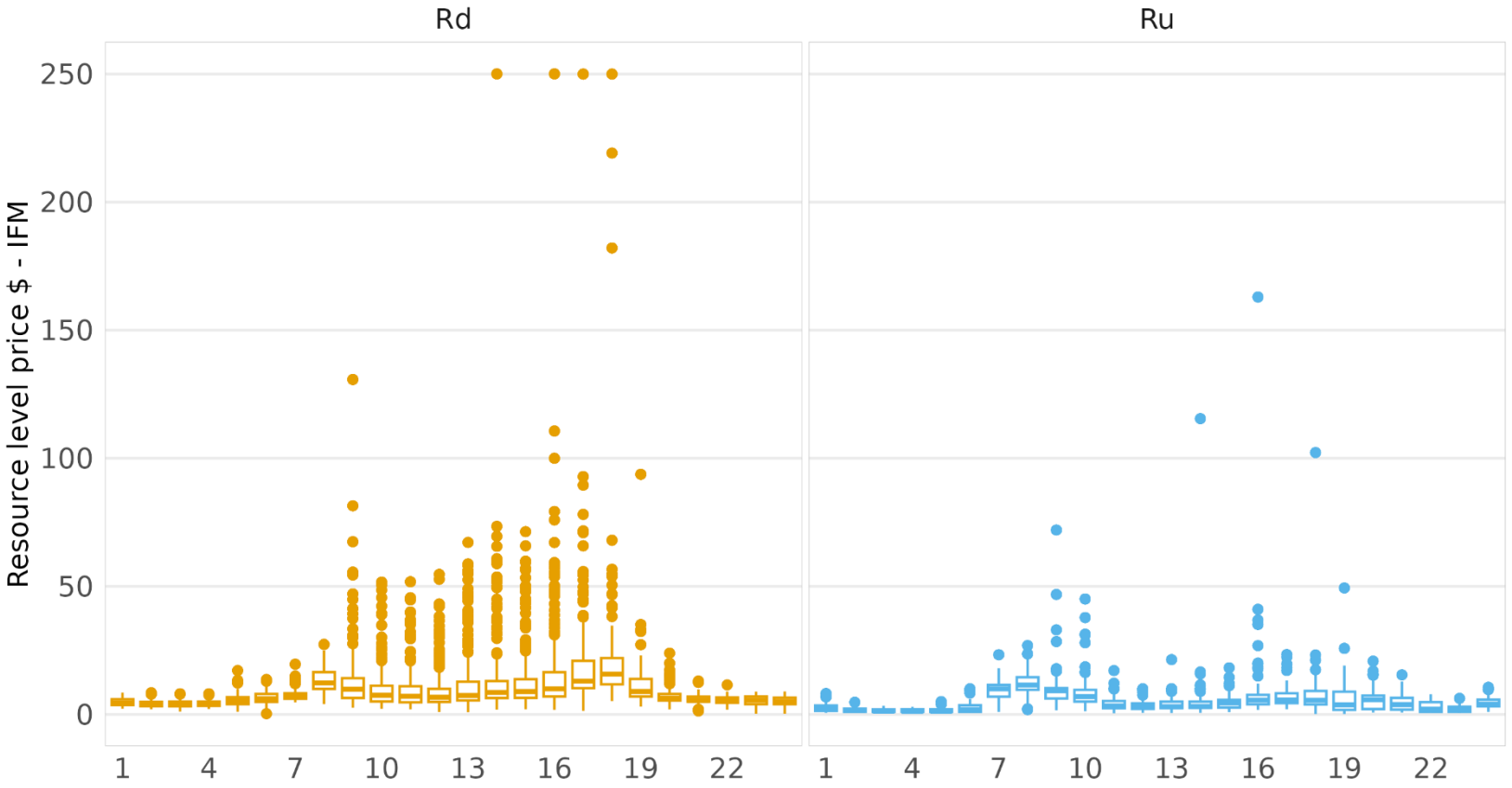
The relative size of Regulation award on individual resources tends to be within typical ranges



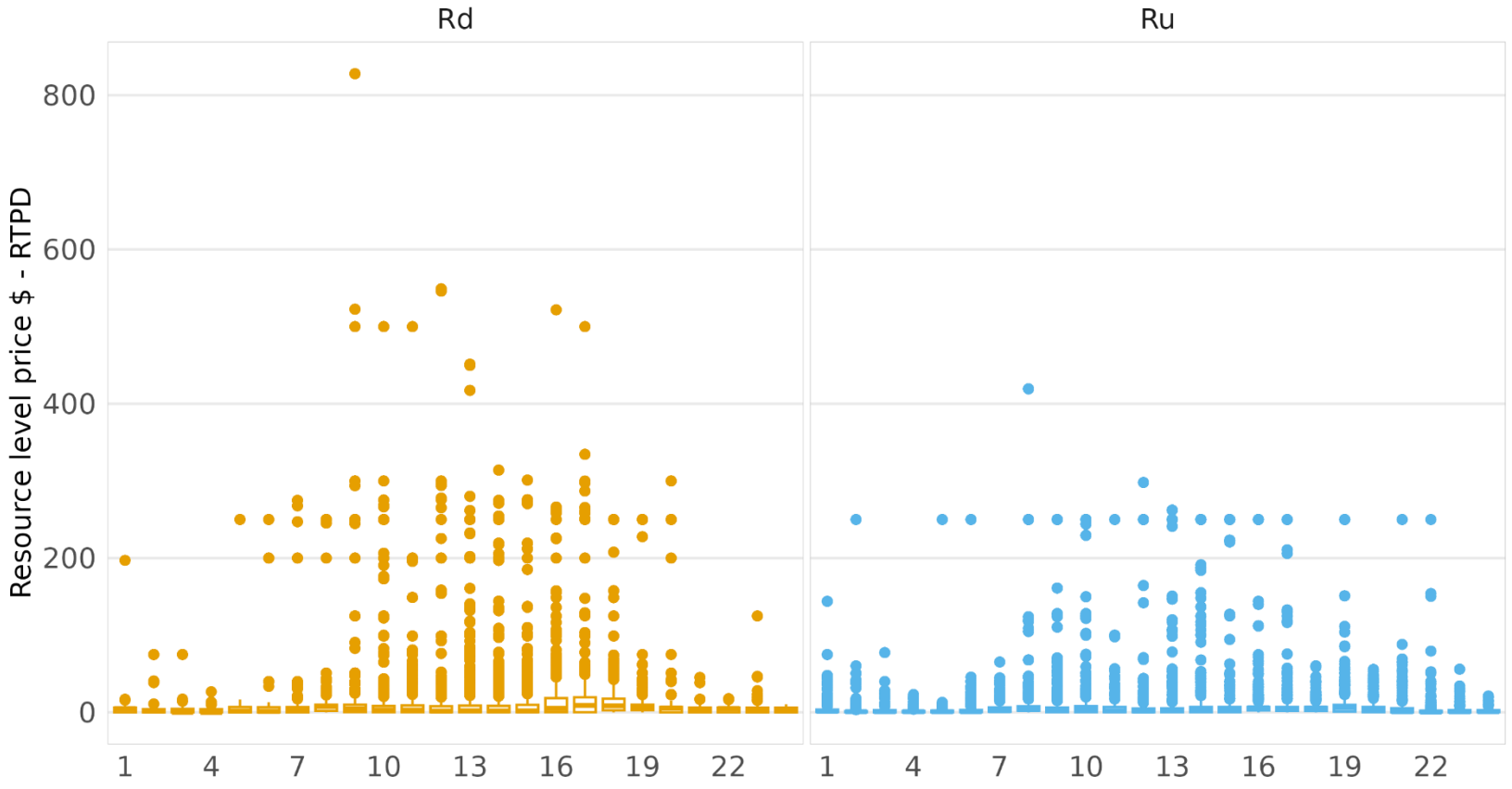
Resource Rd awards as percentage of Rd requirement sees not notable change in pattern with enhancements



IFM Resource level regulation prices have not seen negative since the implementation of the enhancements



Real-time resource level regulation prices have not been negative since the implementation of the enhancements

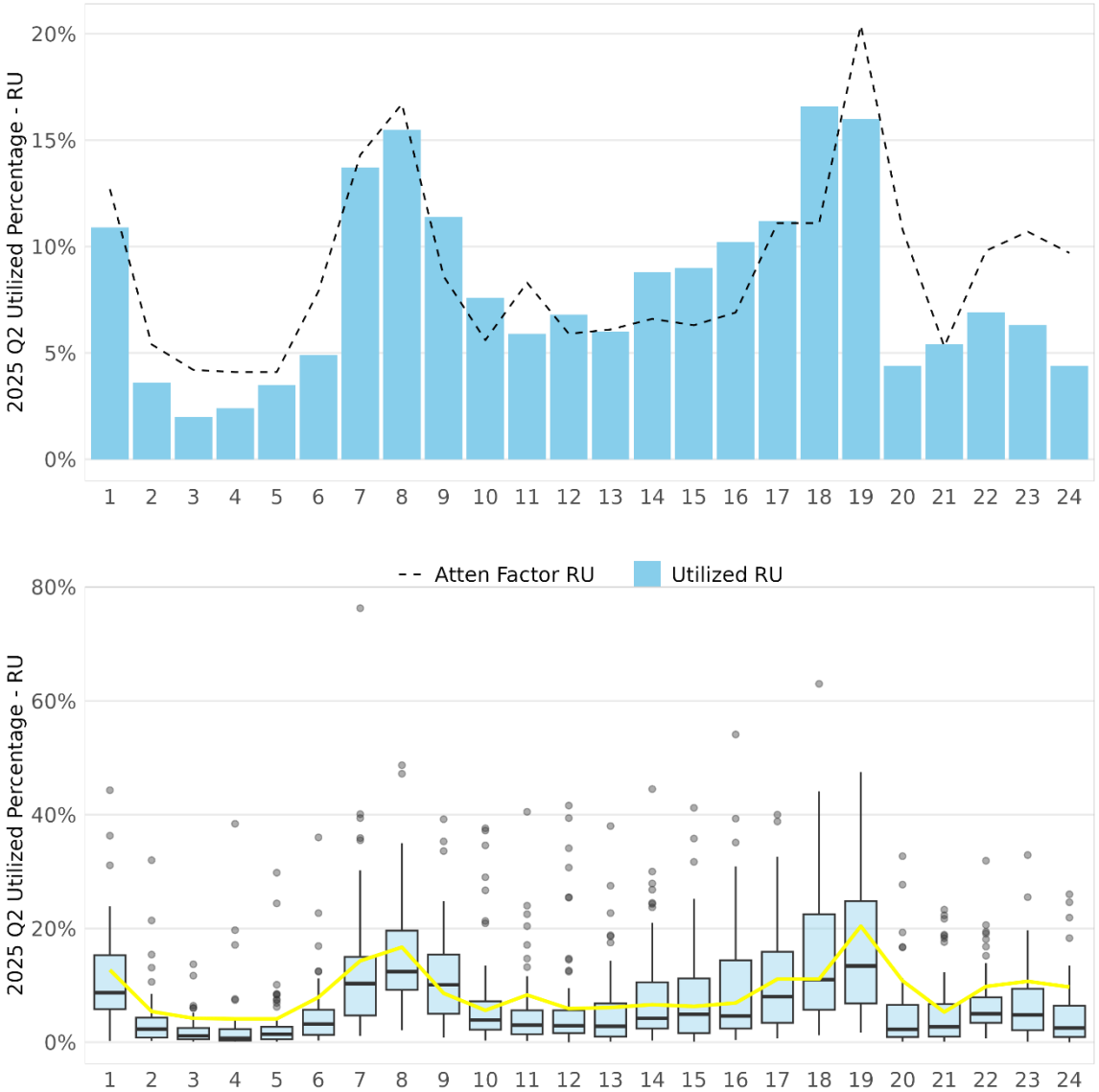


As part of the storage enhancements, the ISO estimates attenuation factors for each calendar season

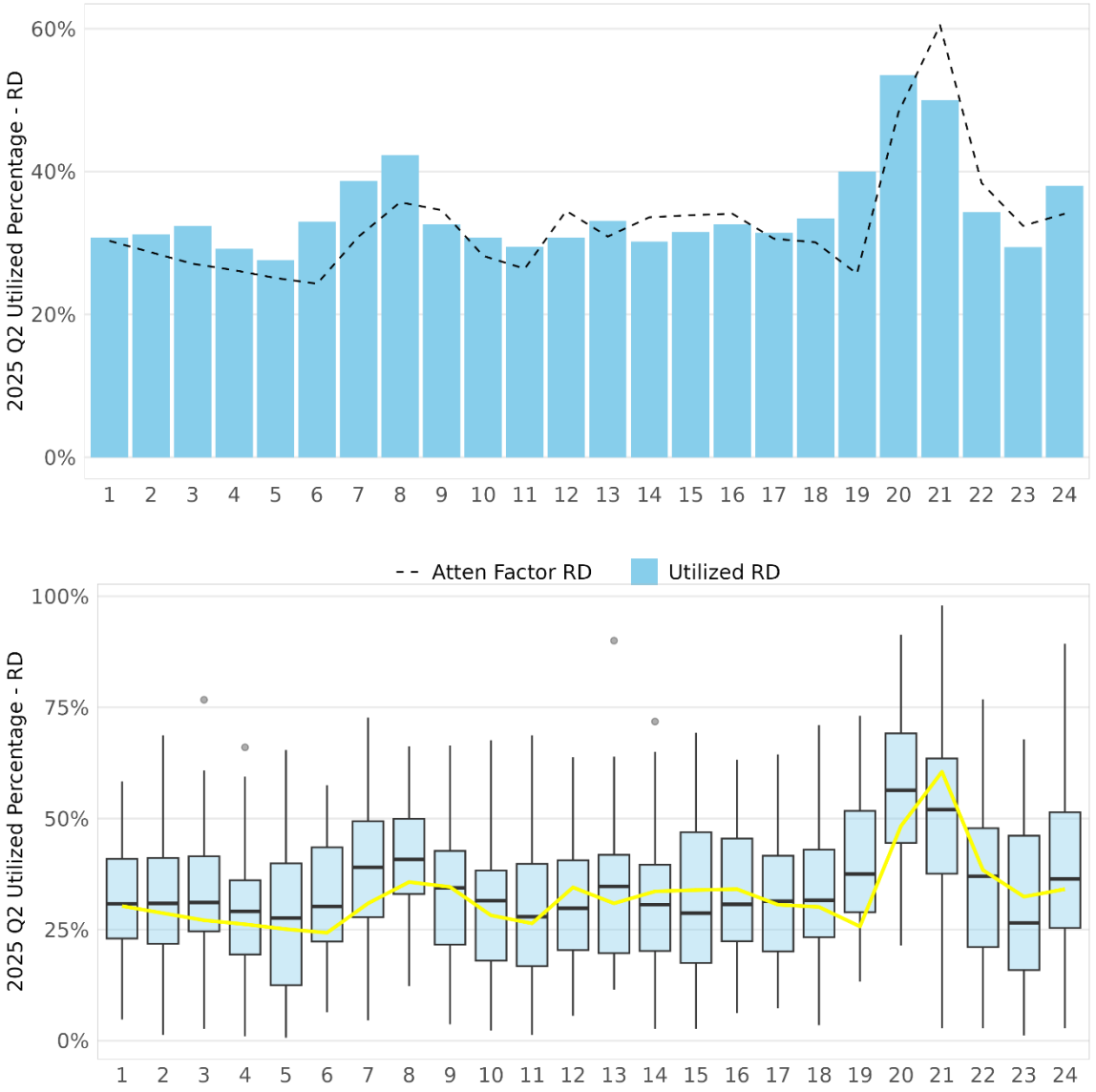
- Estimating the actual utilization of regulation
- Data: the corresponding quarter from the prior year
- Metric:
  a) Data source: resource level AGC setpoint vs. DOP
  b) Reference: RTPD regulation awards
  c) System aggregated percentages

$$Percentage\ utilization\ Ru(Rd) = \frac{Total\ utilized\ Ru(Rd)}{Total\ Ru(Rd) awards}$$

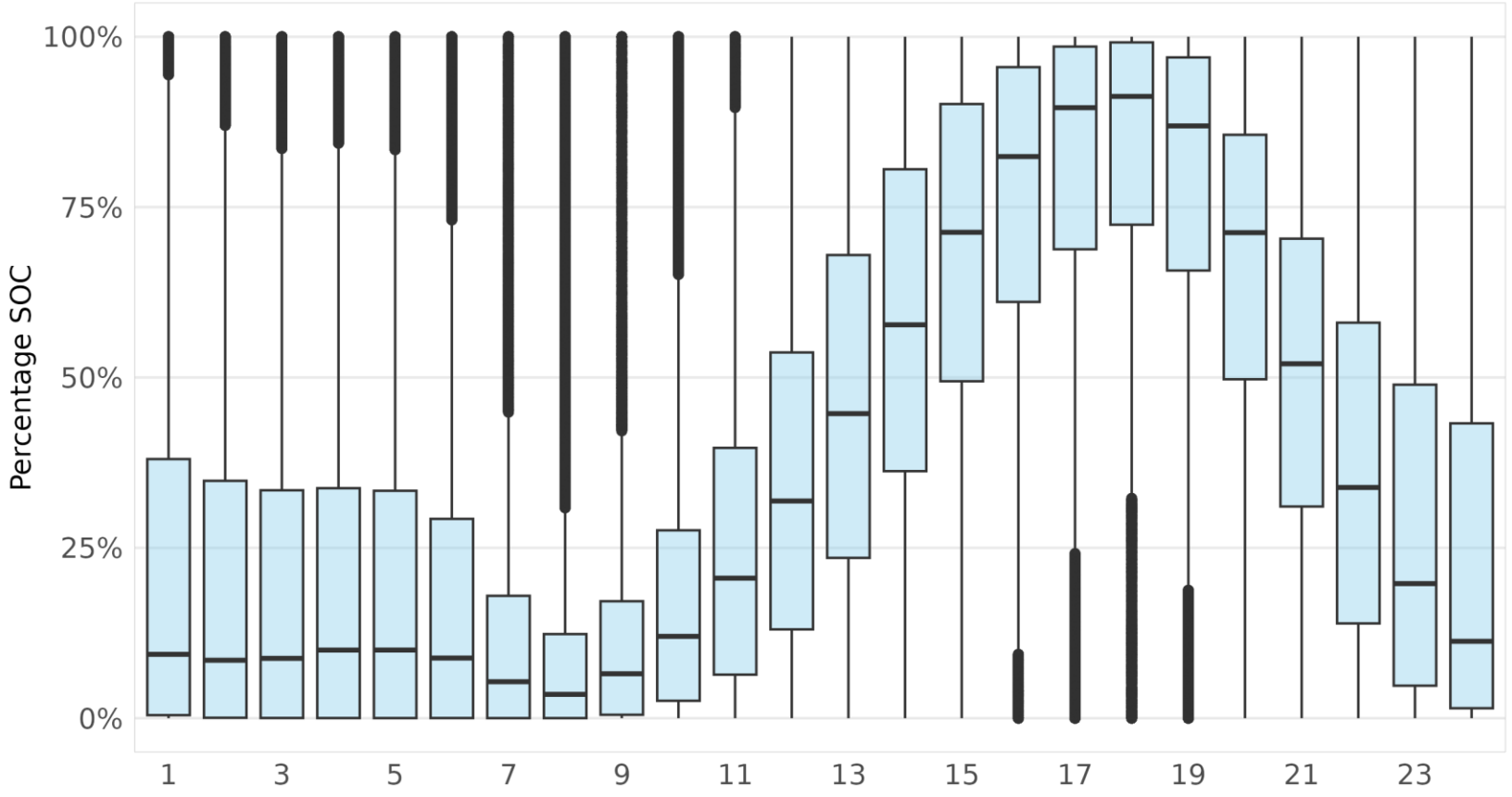
2025 Q2 (Apr.-May) Actual utilization of regulation up remains relatively low



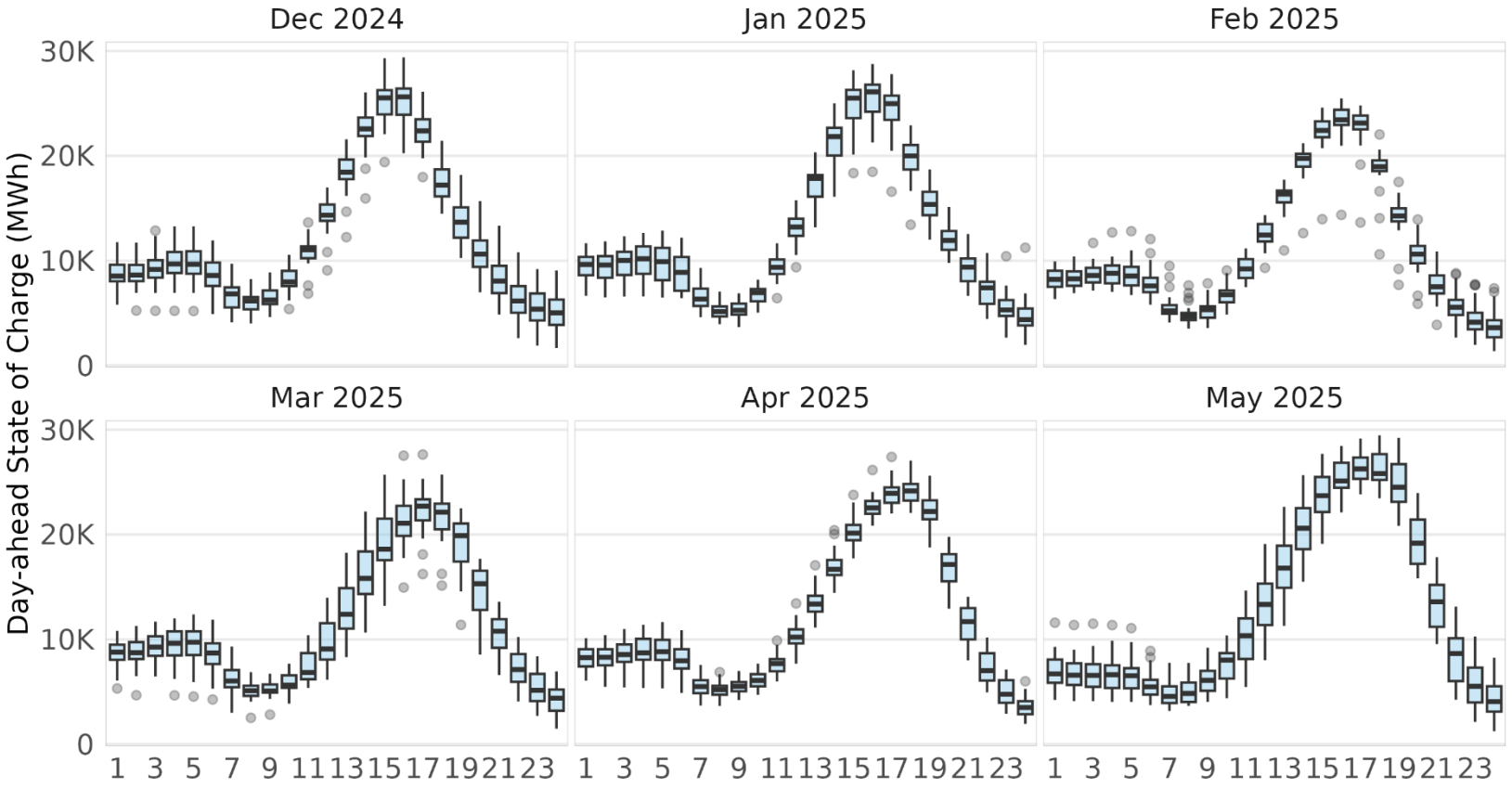
2025 Q2 (Apr.-May) Actual utilization for regulation down continues to be high



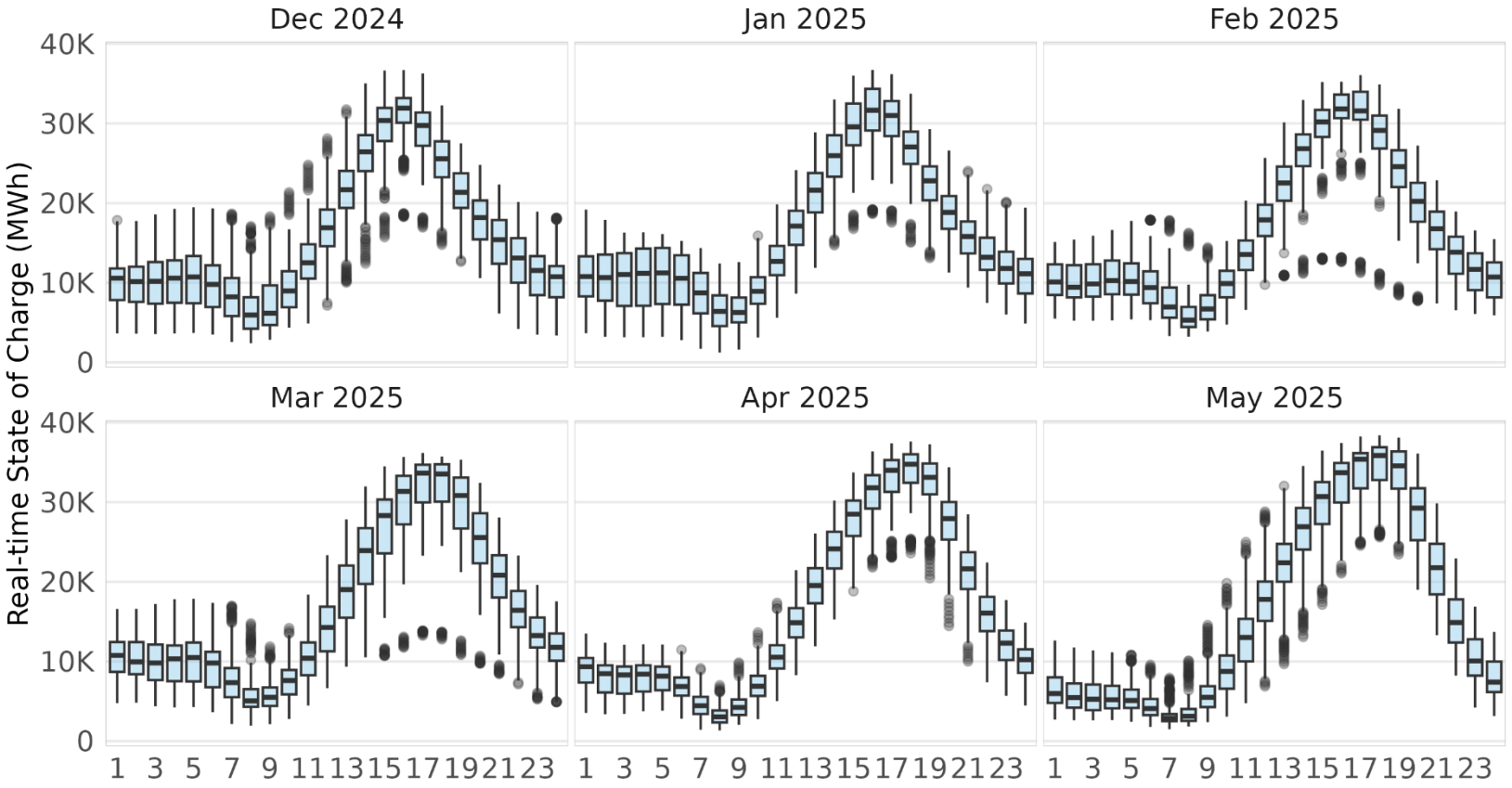
Most of the time storage resources have SOC below full capacity for months from Mar 2025 to May 2025



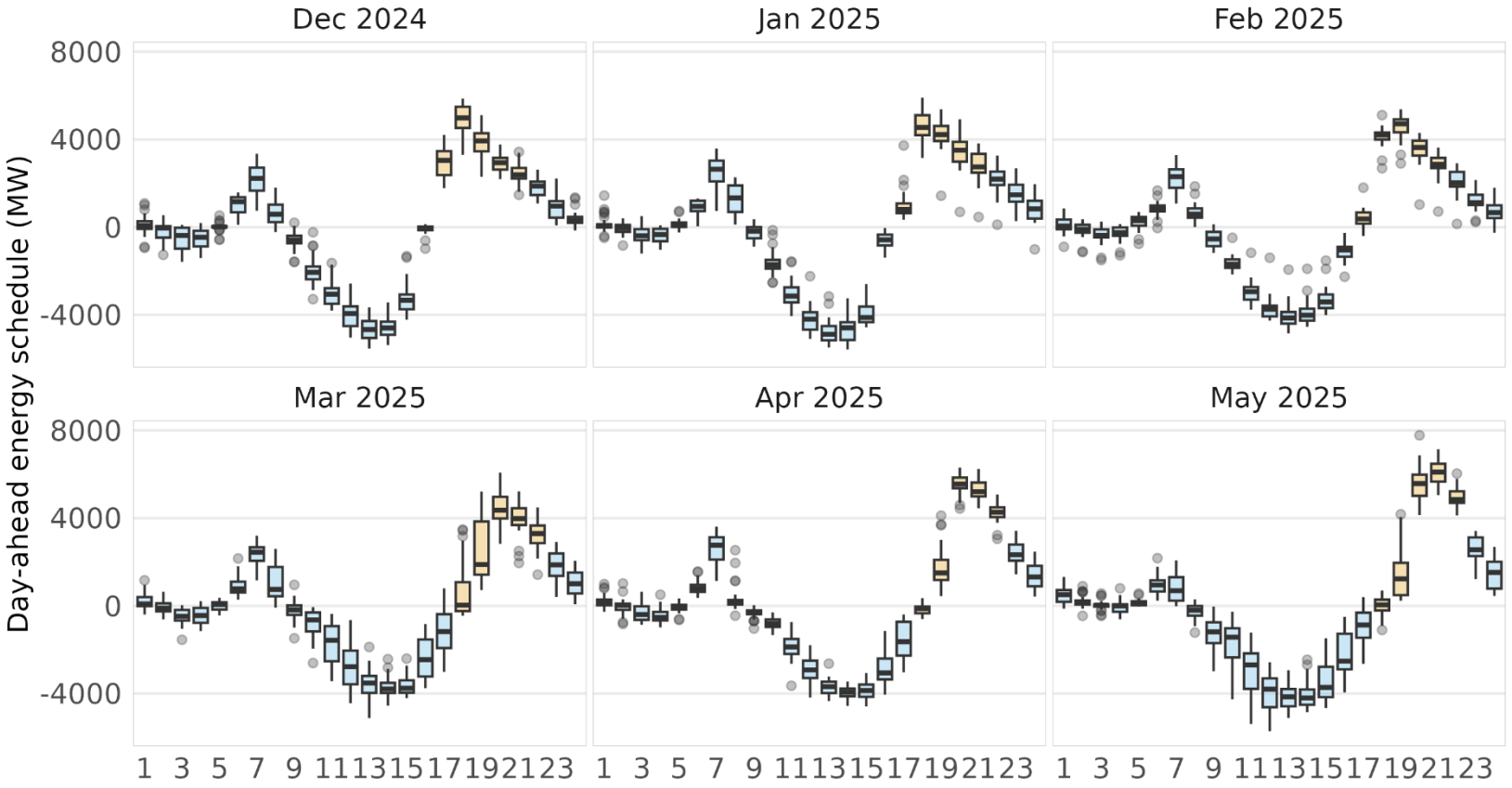
Day-Ahead state of charge for storage resources is typically achieved between hour ending 16 and 17



Real-Time State of charge for storage resources was in line with the day-ahead state of charge



Storage resources were consistently charging during solar hours and discharging during net load peaks



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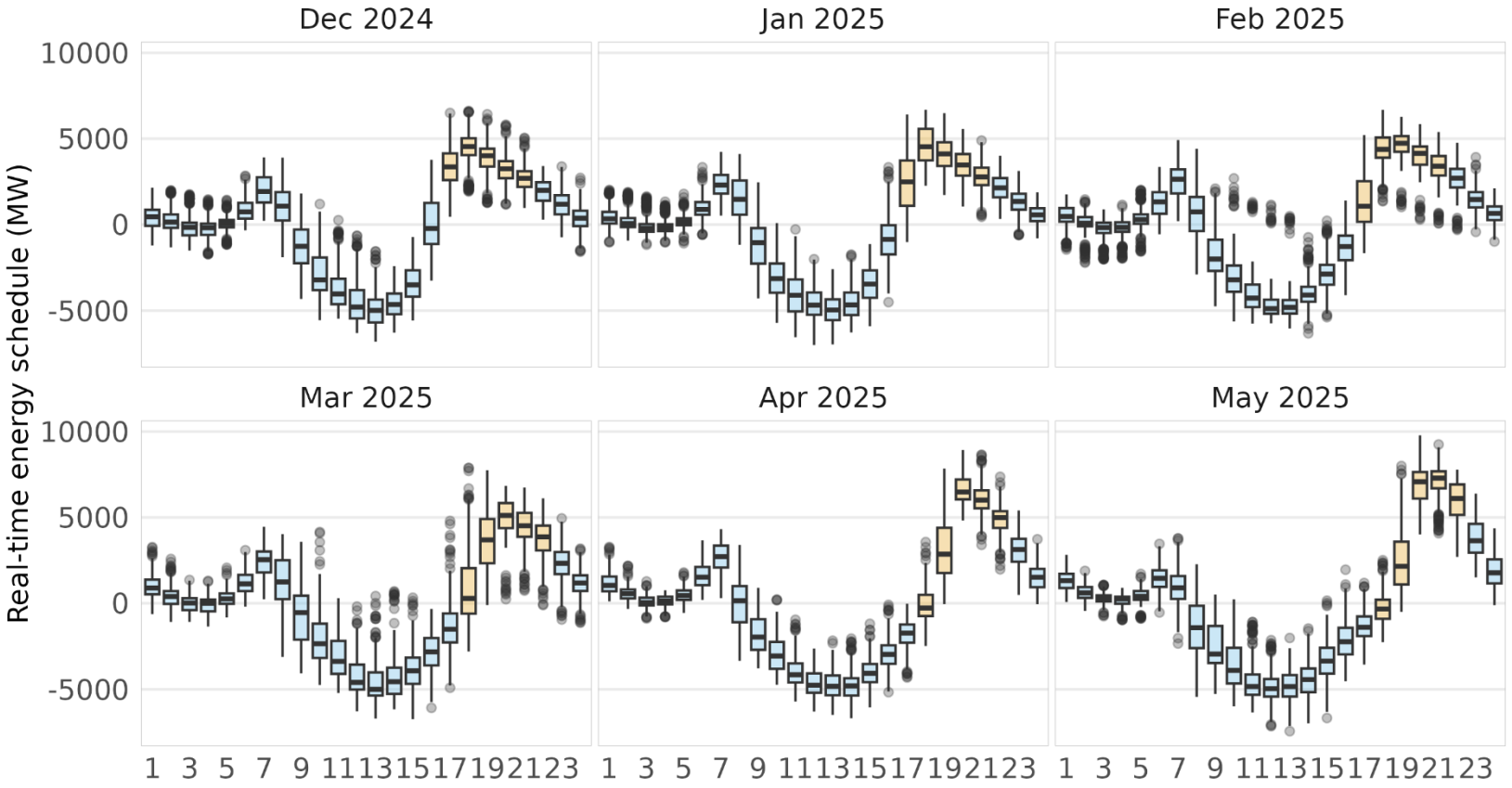
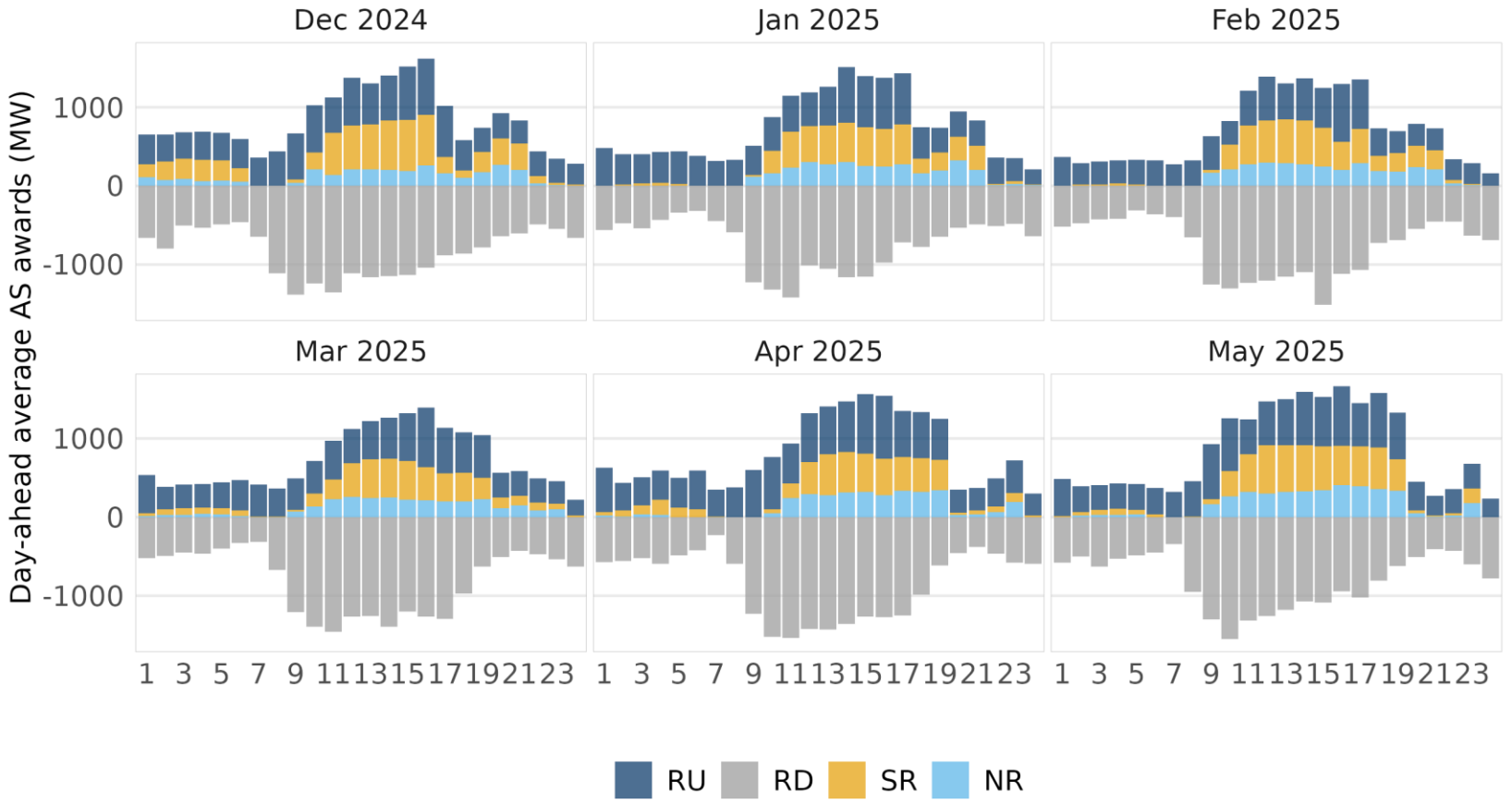
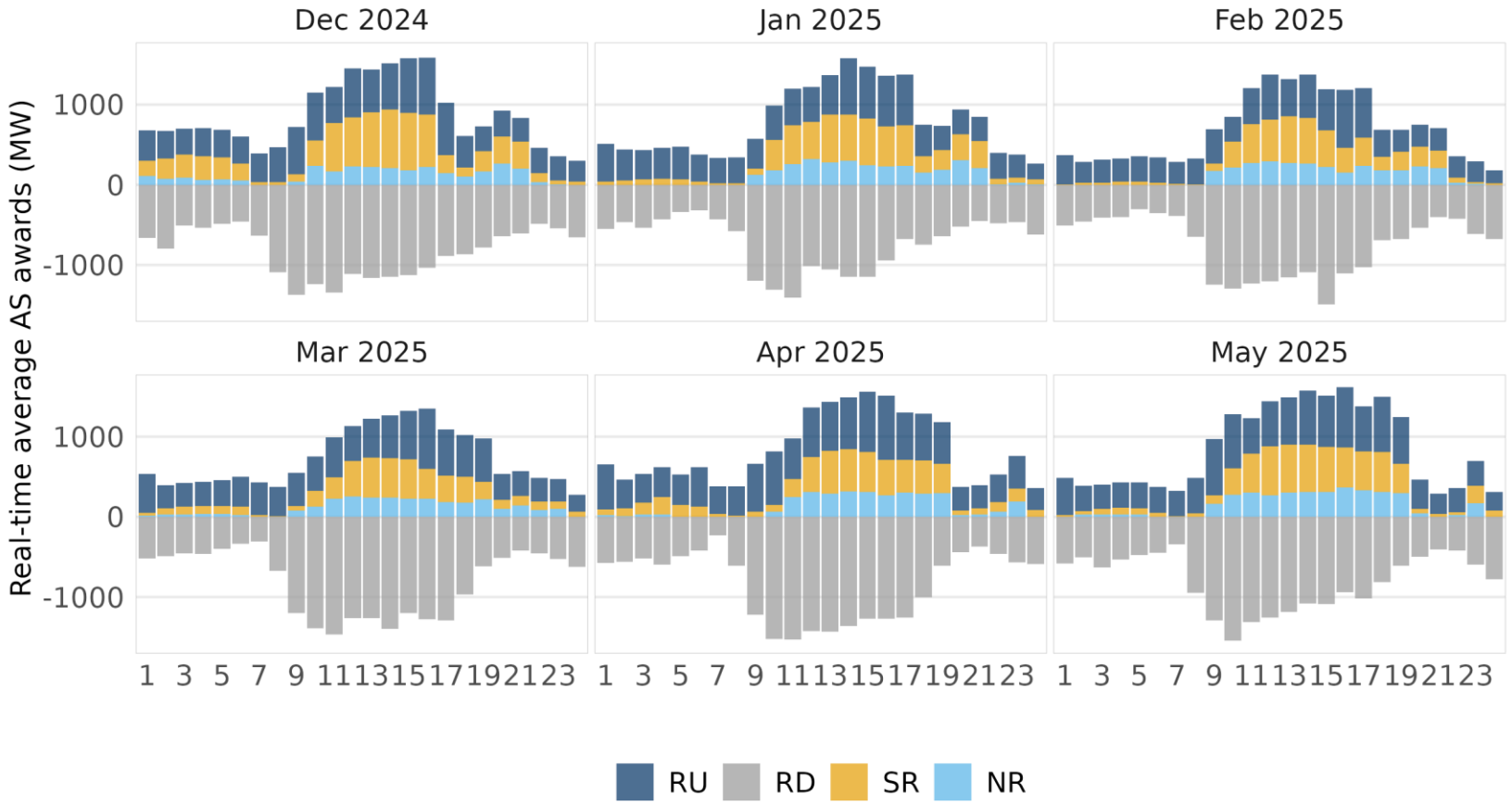


Storage resources procure mostly regulation while in recent months they have also increased the provision of Spinning reserves. Day Ahead

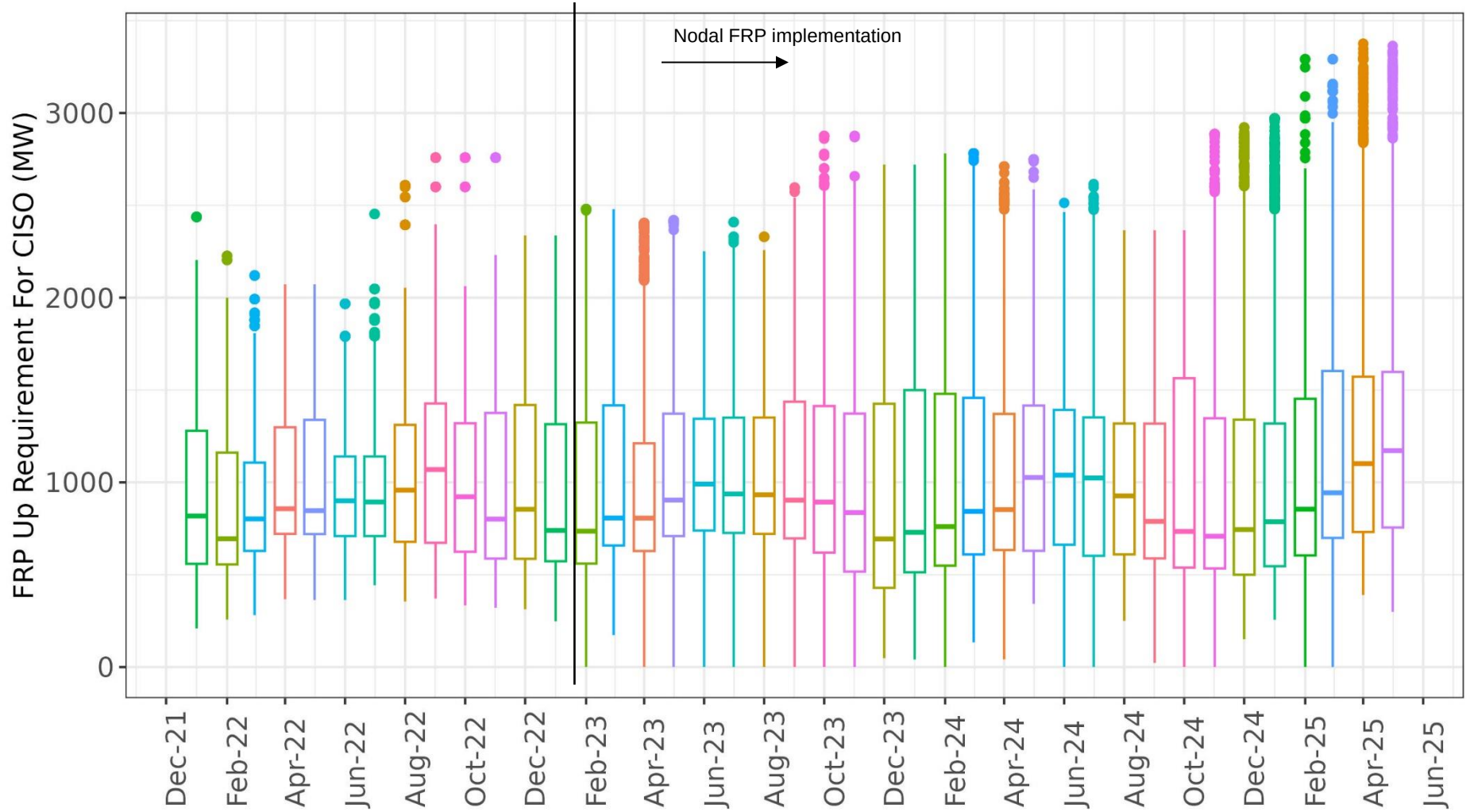


Storage resources procure mostly regulation while in recent months they have also increased the provision of Spinning reserves. Real time

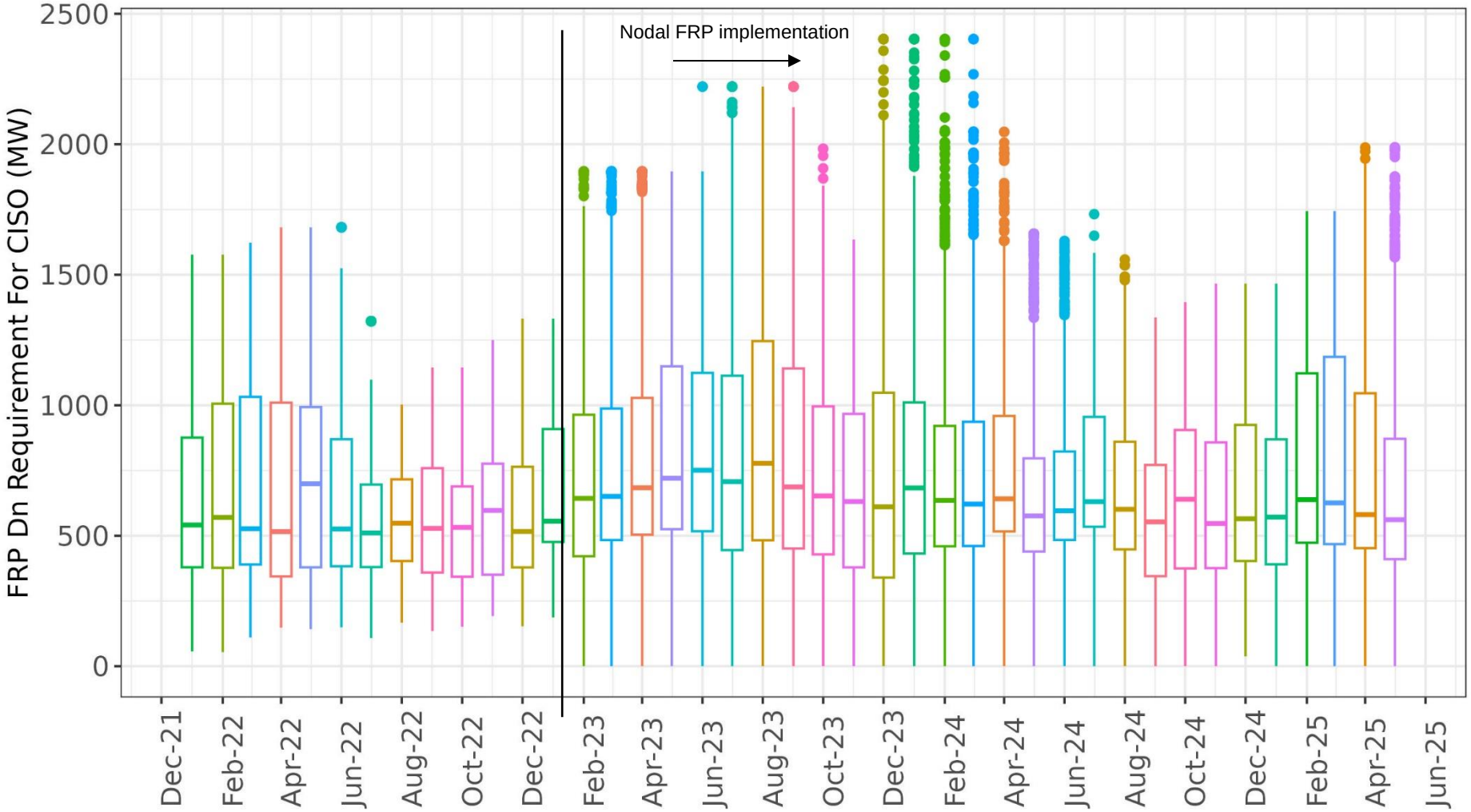


Flexible Ramping Product

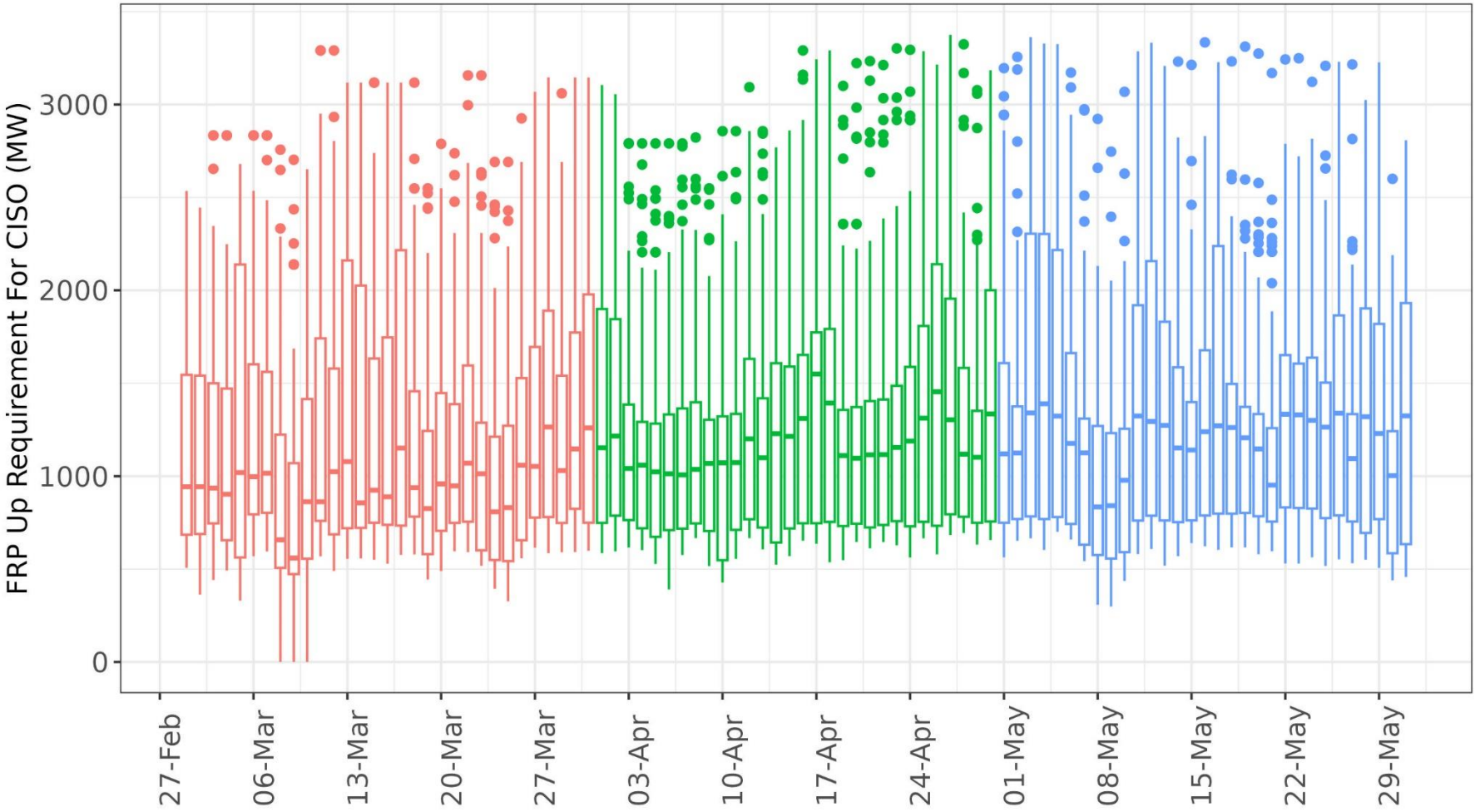
FRP Up Requirement for CAISO area remain within typical ranges



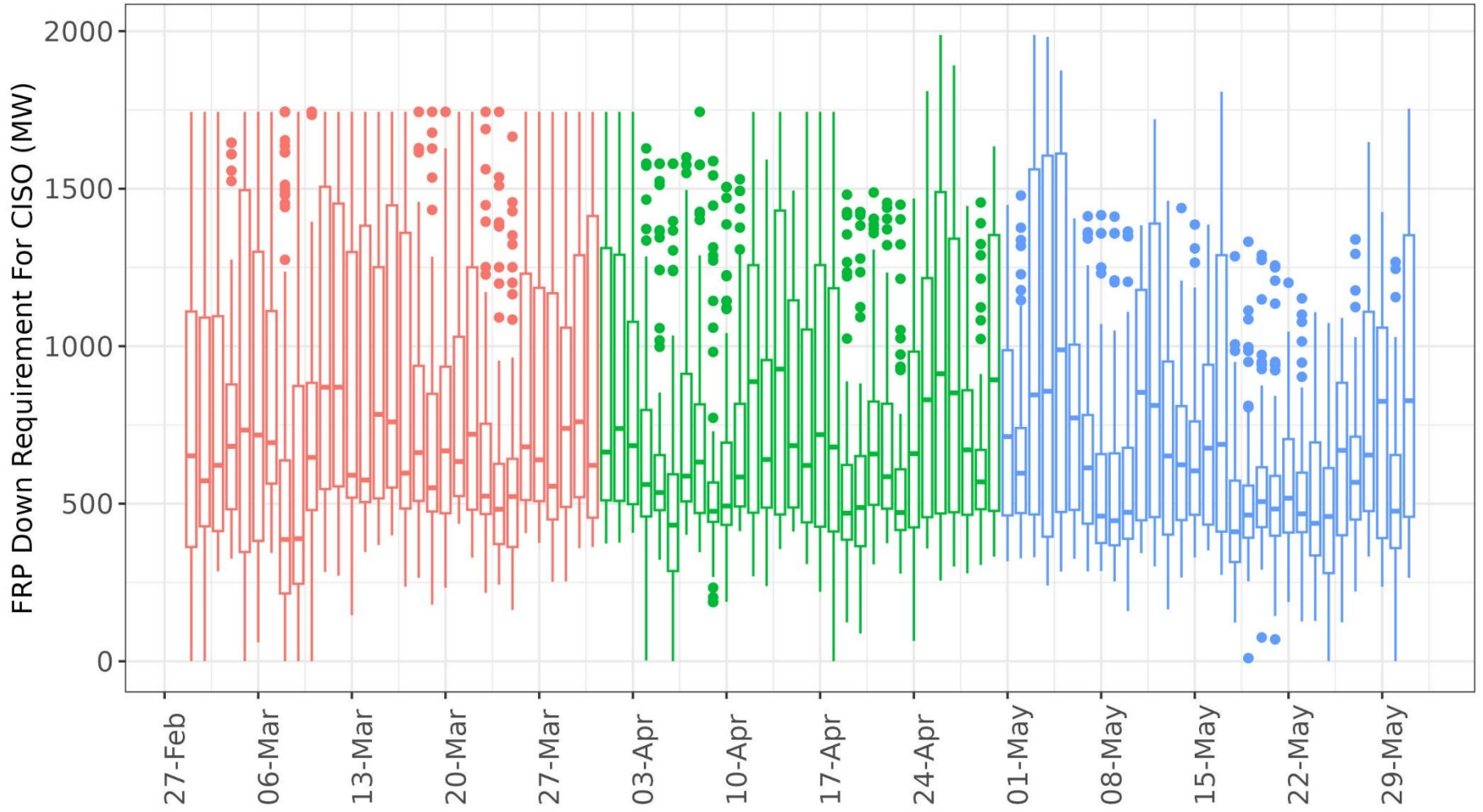
FRP Down Requirement for CAISO area remain within typical ranges



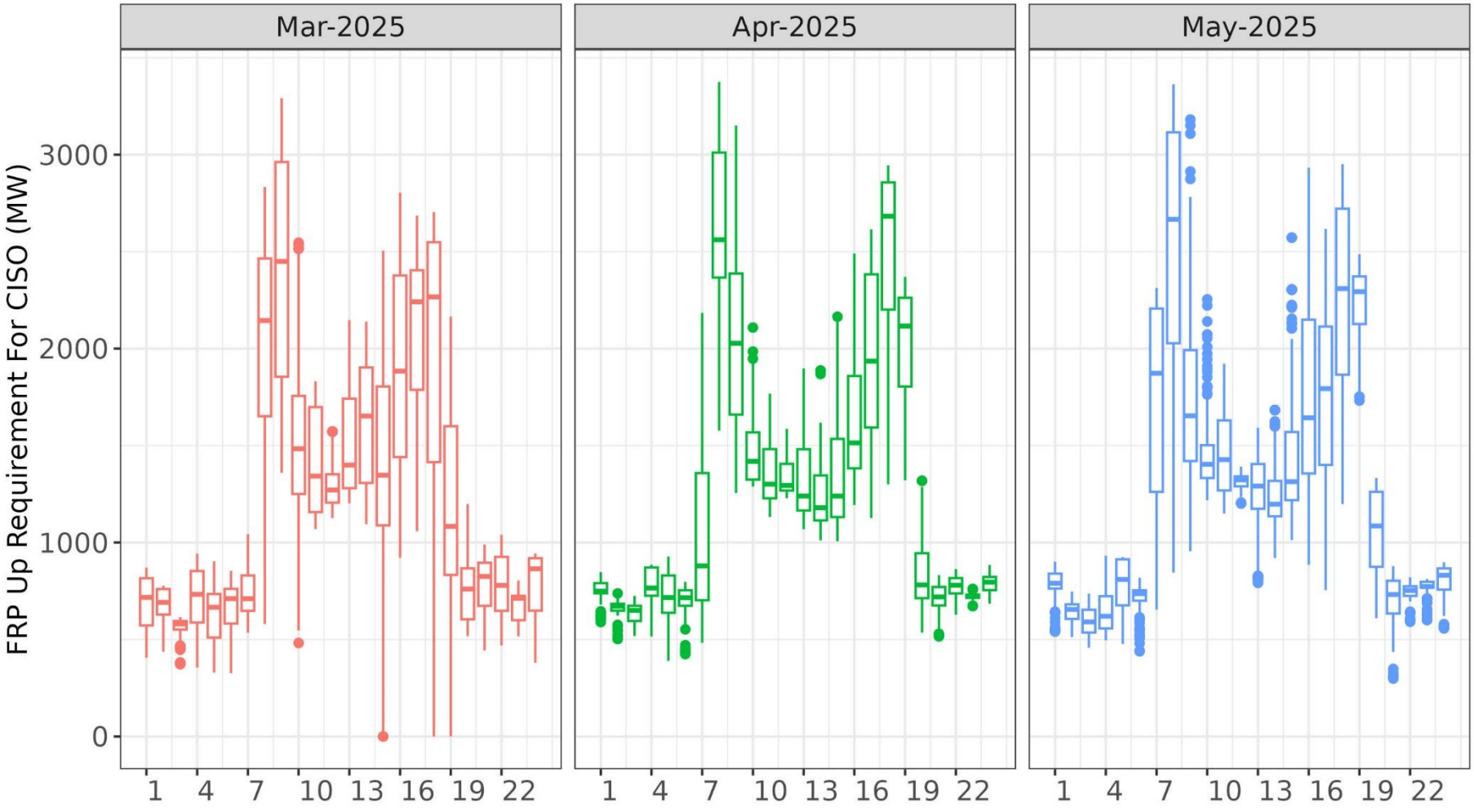
The daily distribution of FRP Up requirement in the last 3 months for CAISO area exhibits a steady trend



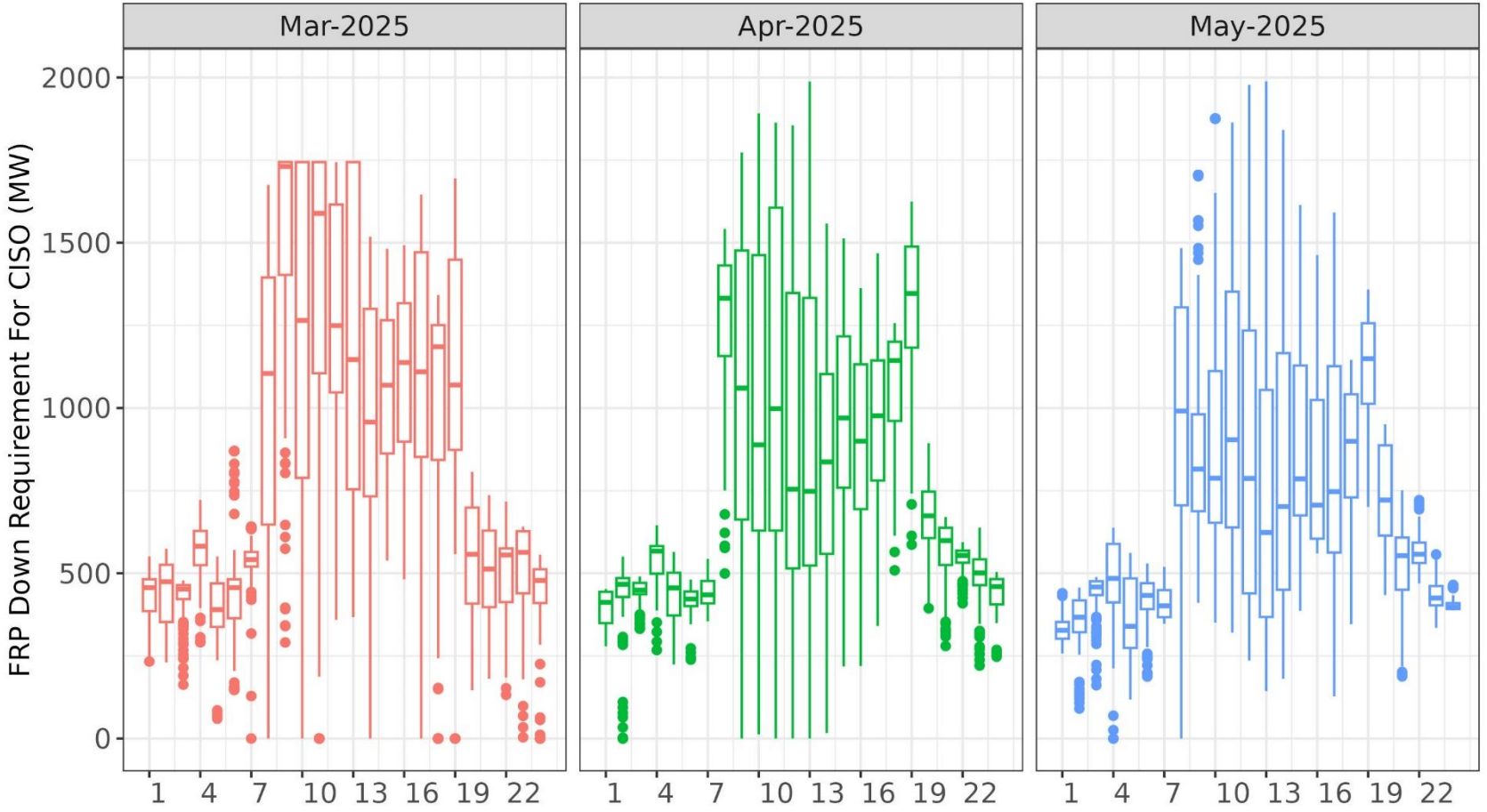
The daily distribution of FRP Down requirement in the last 3 months for CAISO area exhibits a steady trend



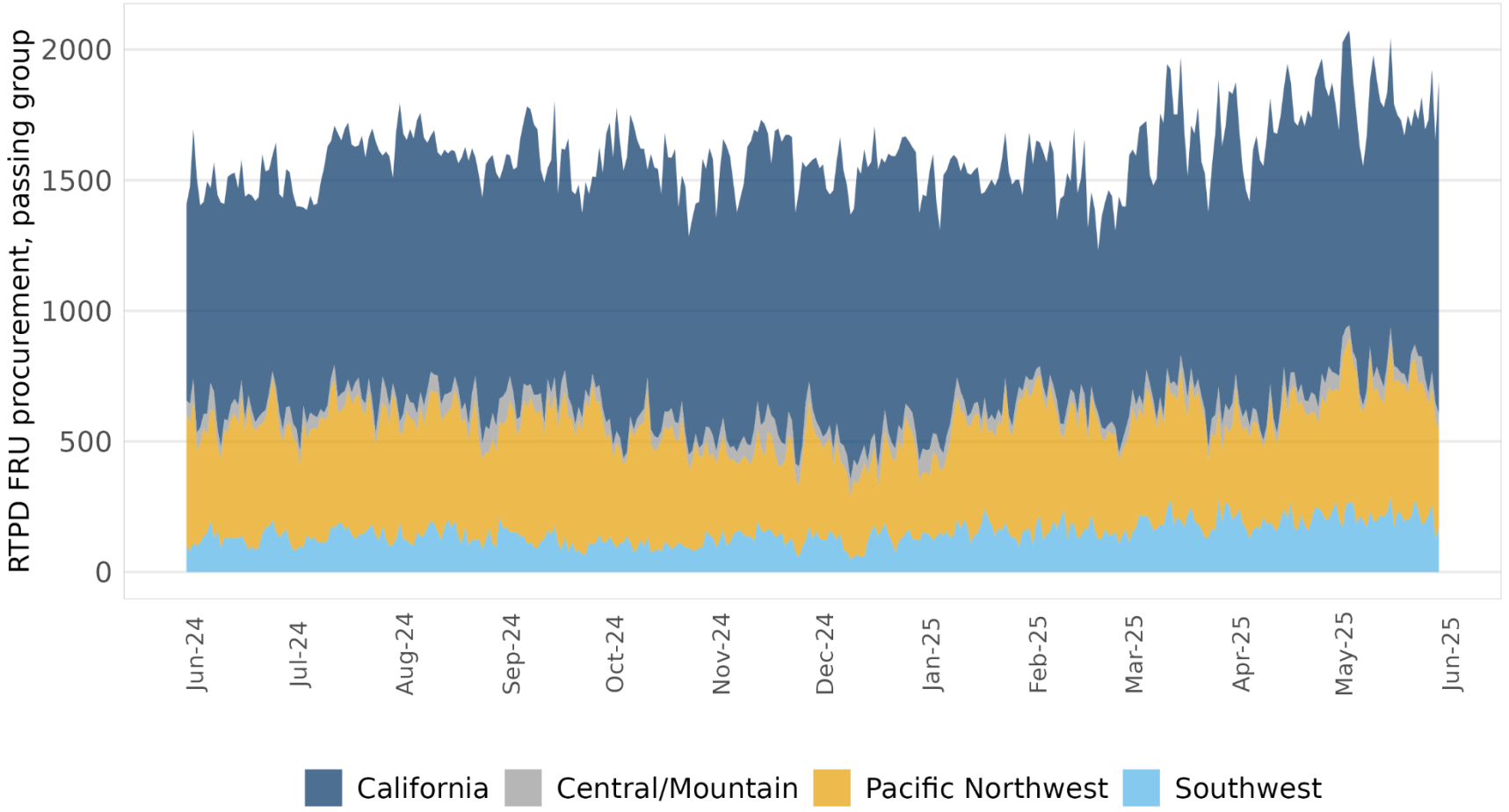
The hourly profile of upward FRP tends to follow a pattern of morning and evening peaks



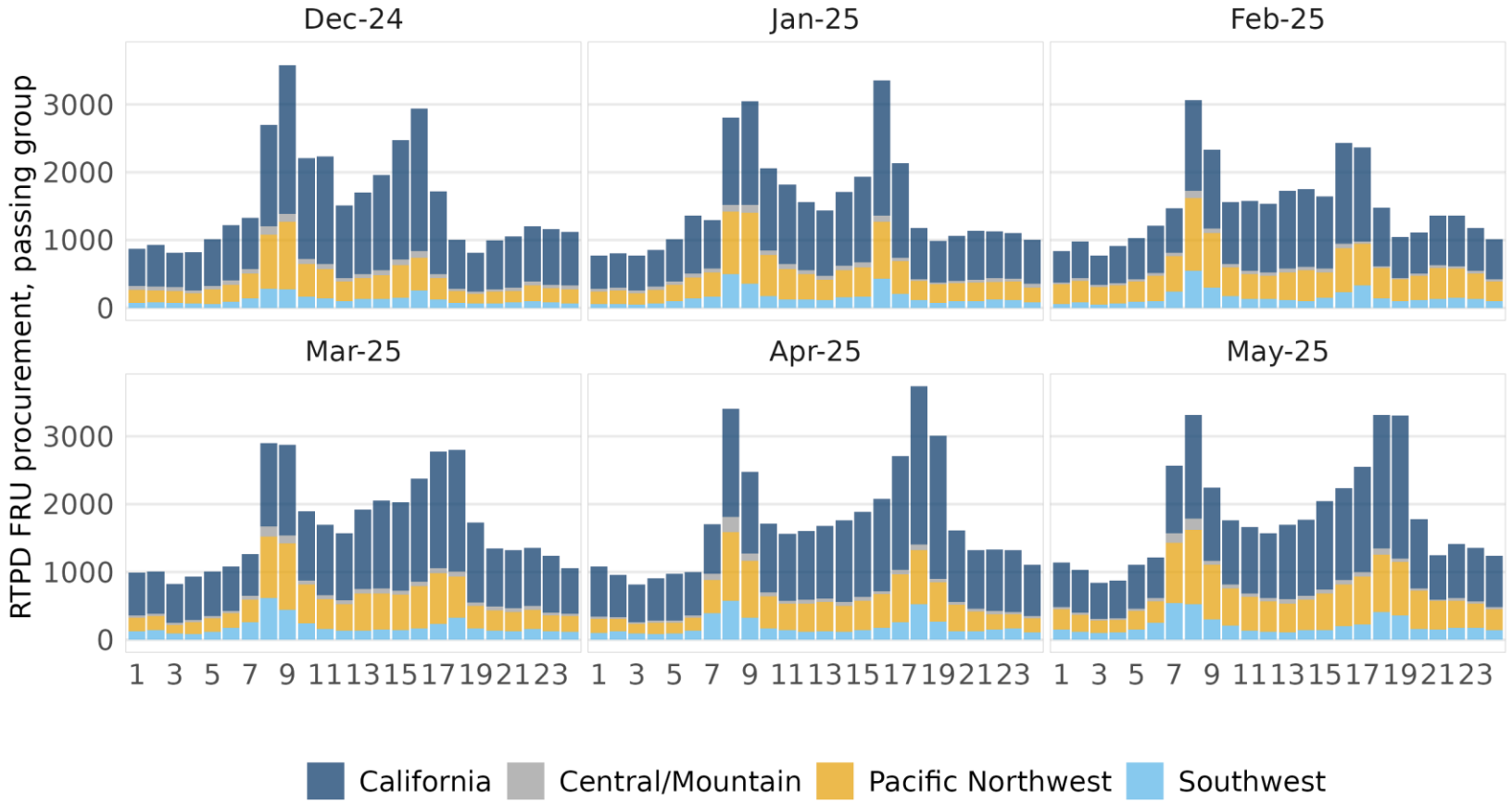
The hourly profile of downward FRP tends to follow a complementary pattern to the upward FRP, with higher values in midday hours



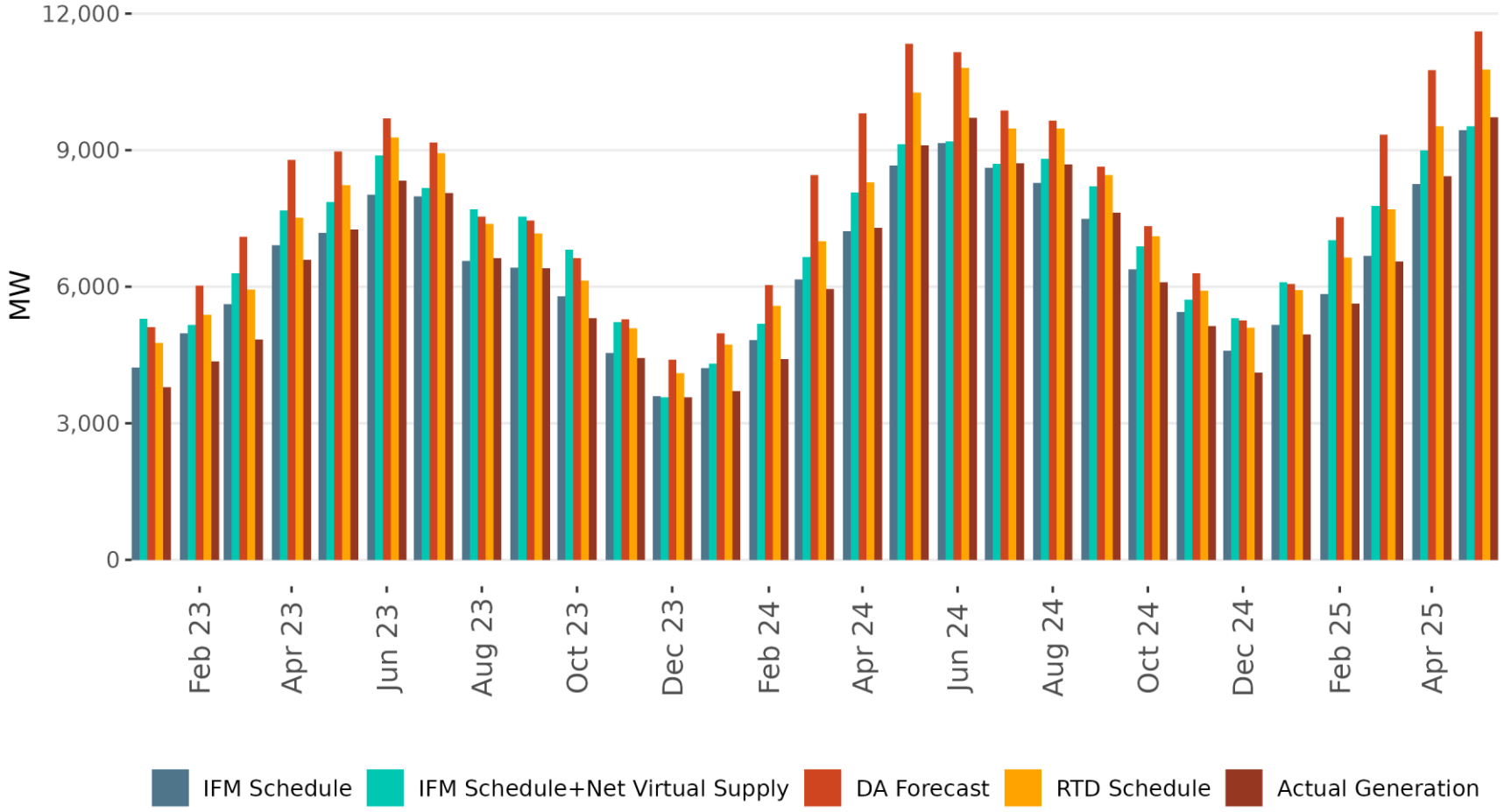
Upward FRP is largely procured from areas in the Pacific Northwest and California



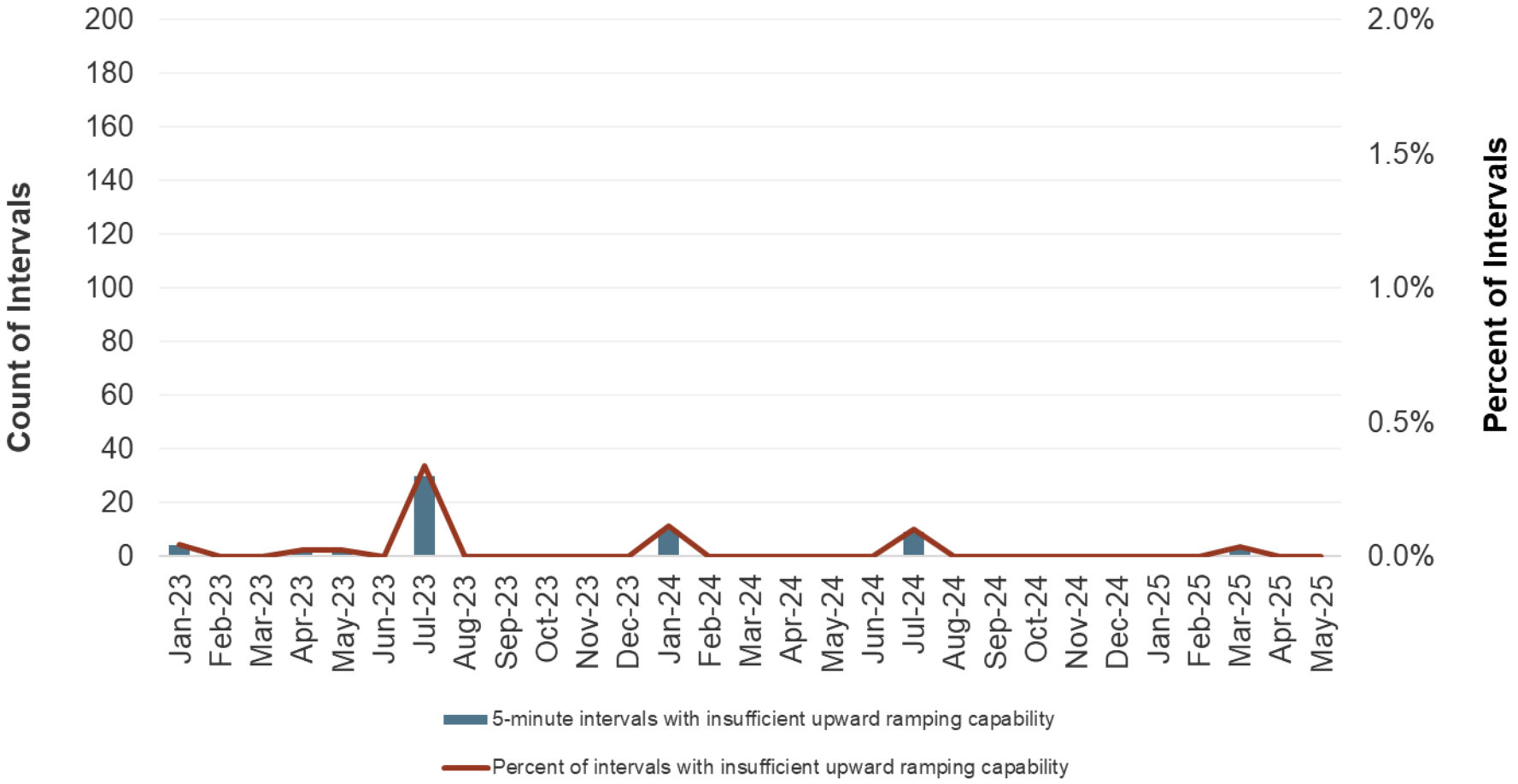
Upward FRP procurement from CAISO area is largely occurring in the peak hours



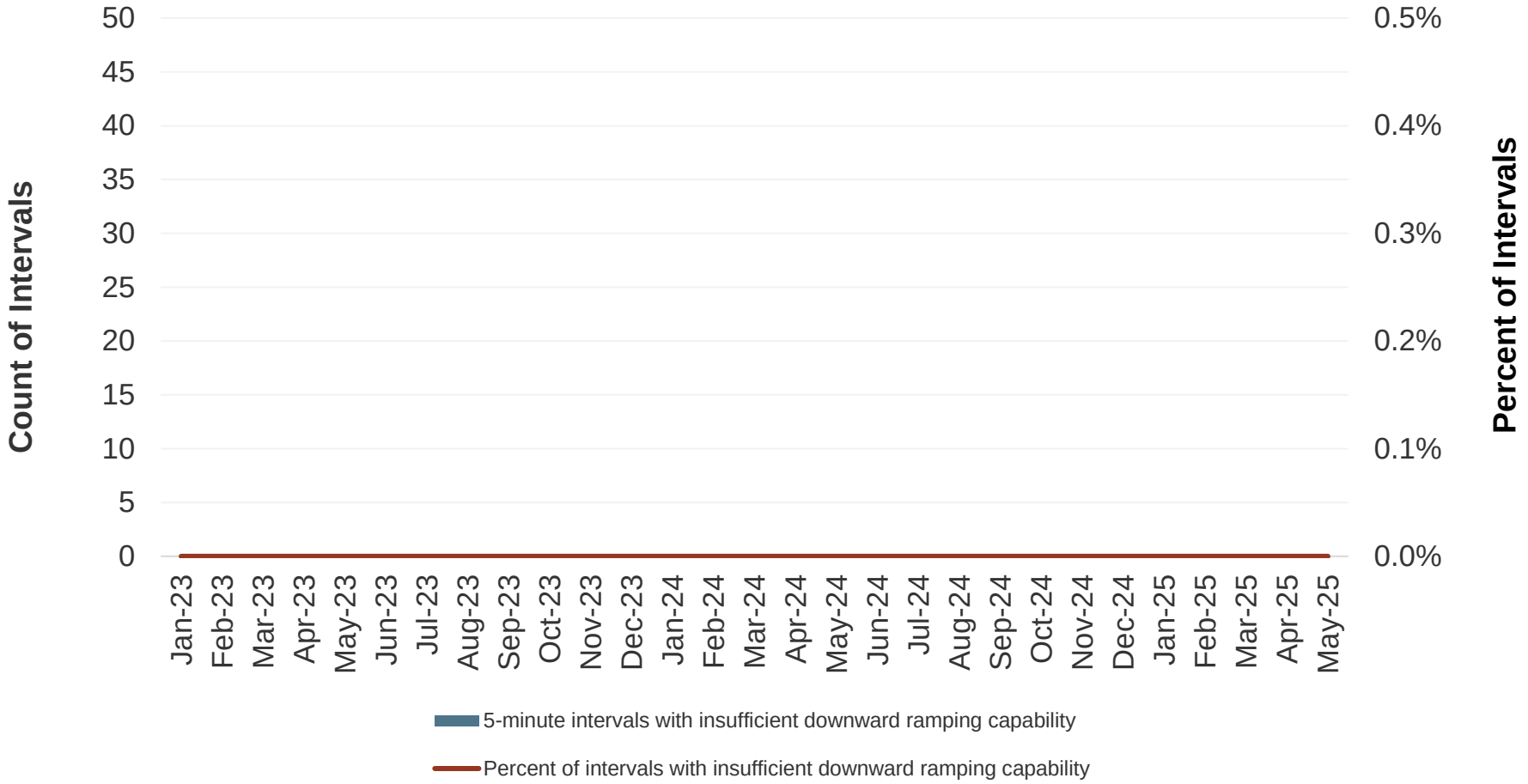
ISO total monthly VERS schedules and forecasts compared to actuals



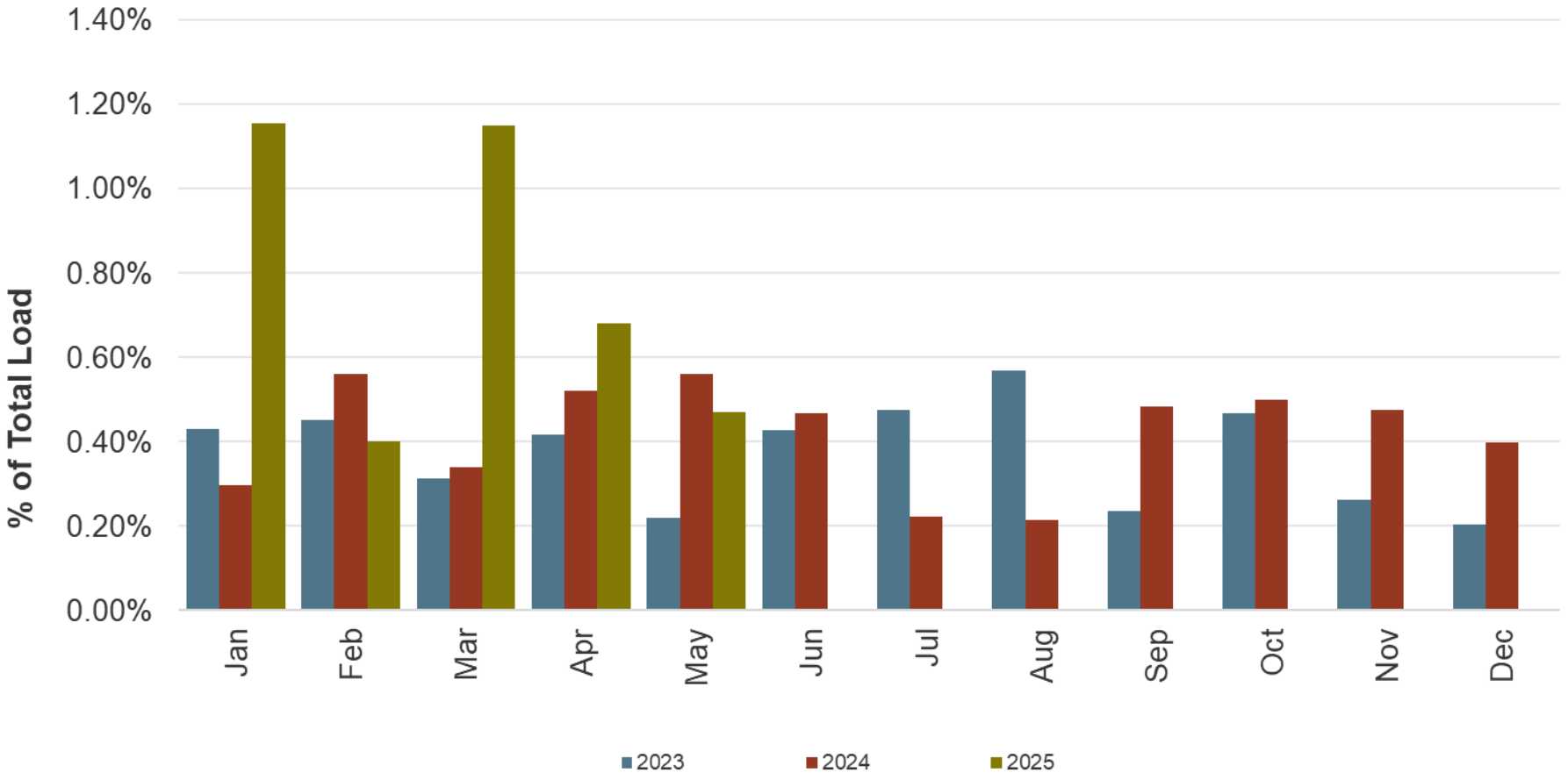
Insufficient upward ramping capacity in ISO real-time stayed at low levels



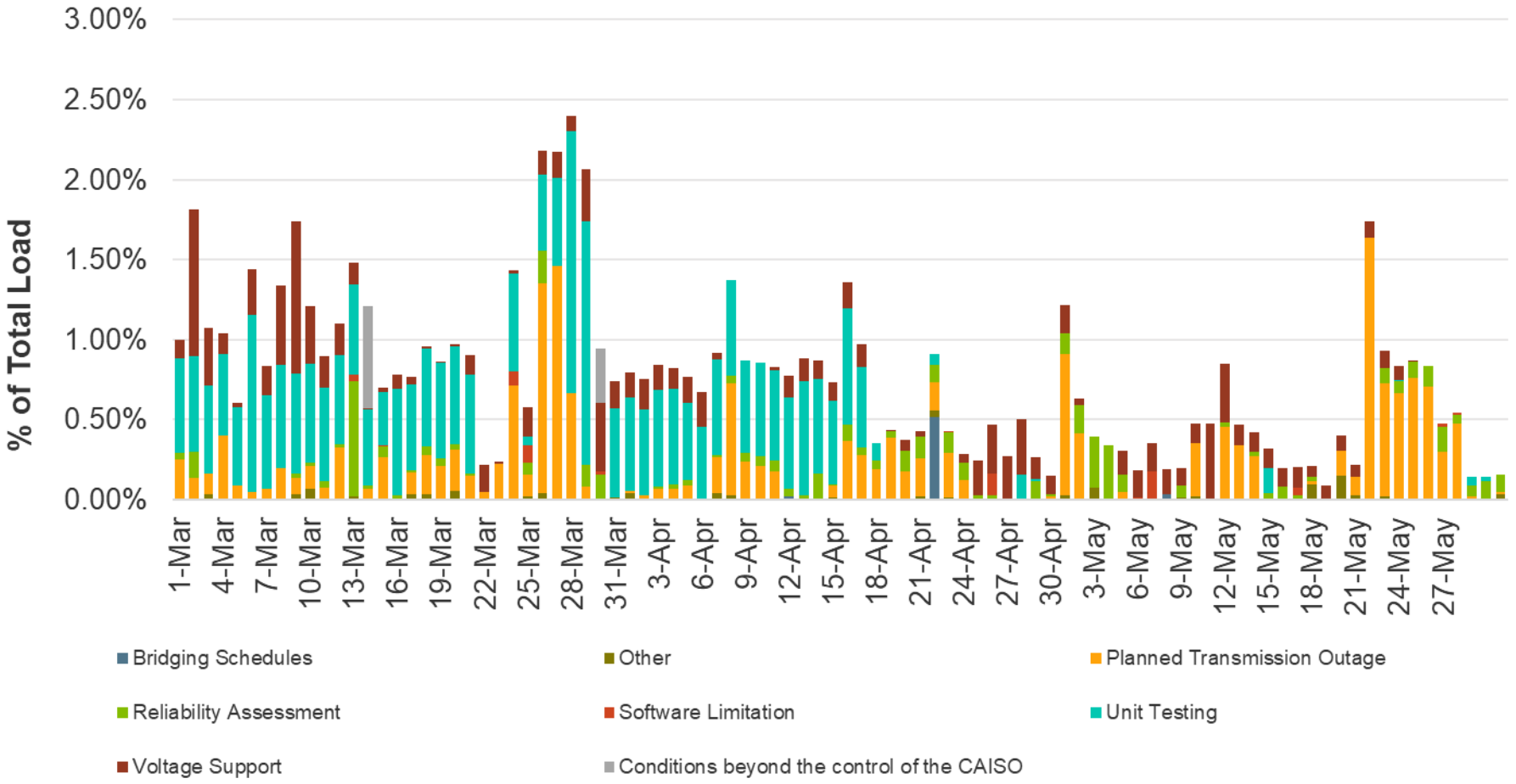
Insufficient downward ramping capacity in real-time remained low



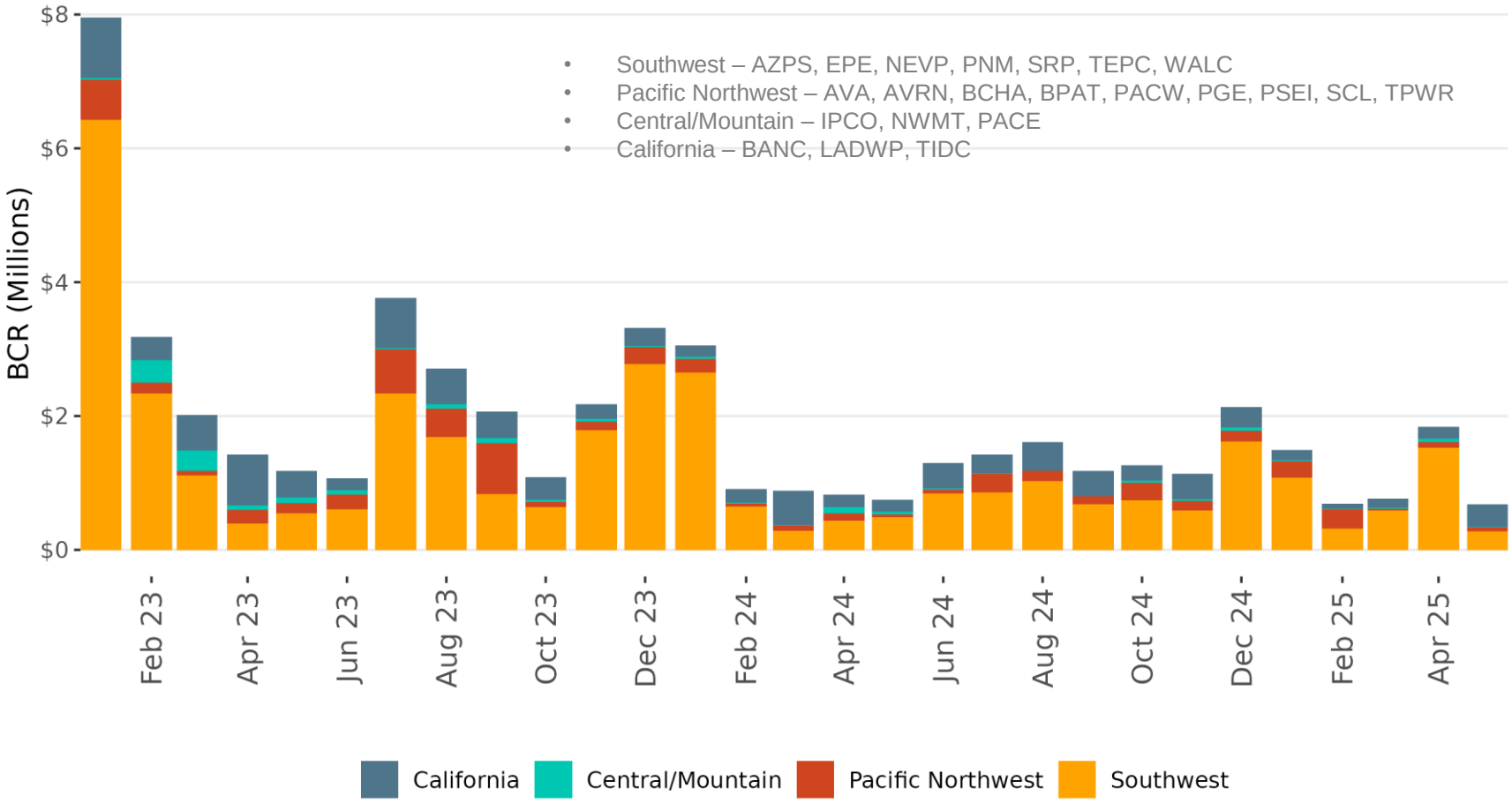
Exceptional dispatch volume in the ISO area was highest in March



Exceptional dispatches volume driven by a variety of reasons



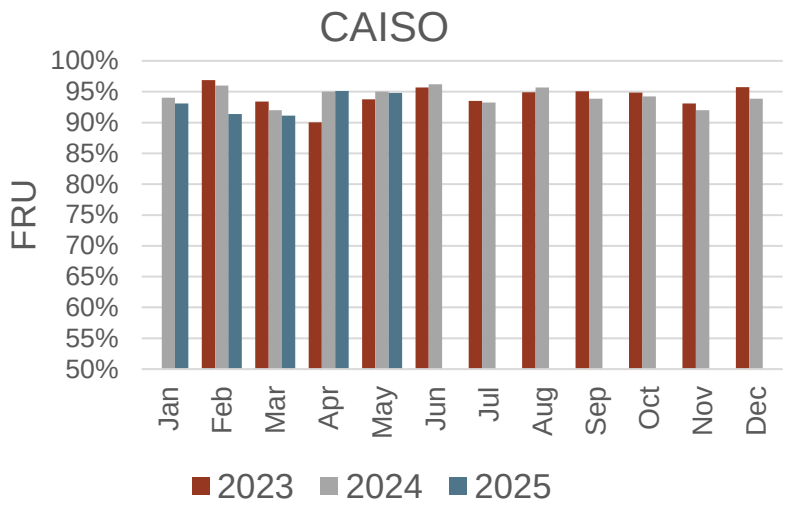
Southwest WEIM entities has accrued about 67 percent of total Bid Cost Recovery to all WEIM entities

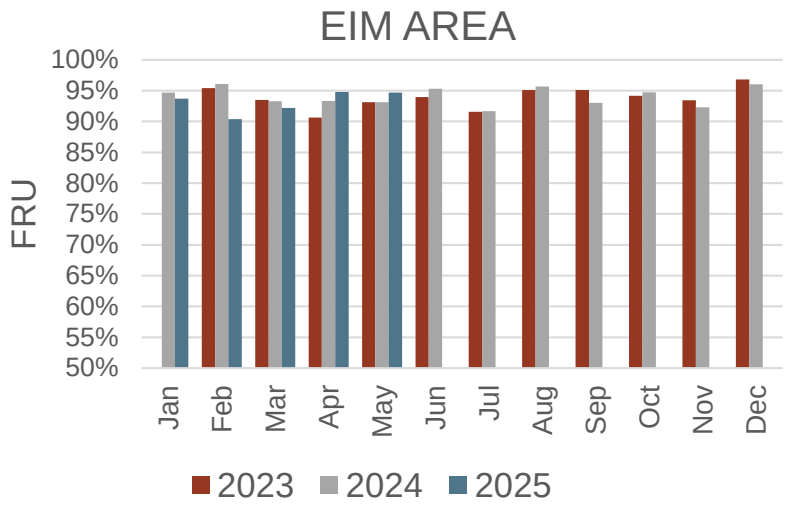


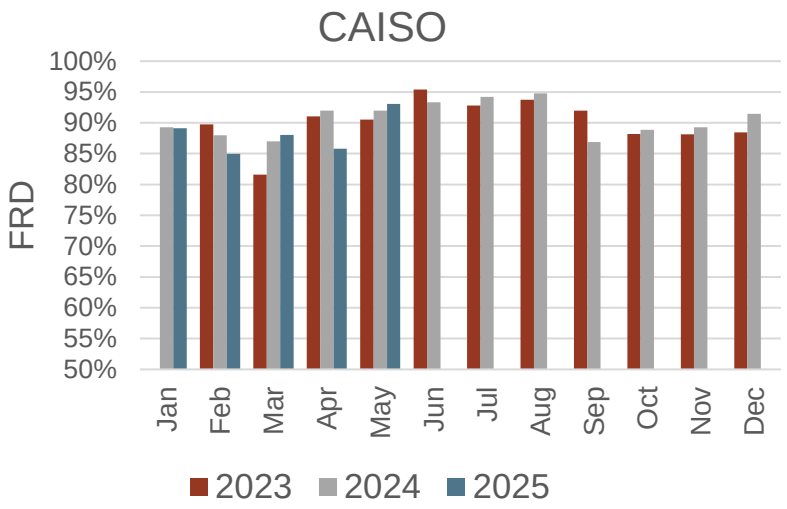
* Does not include CAISO

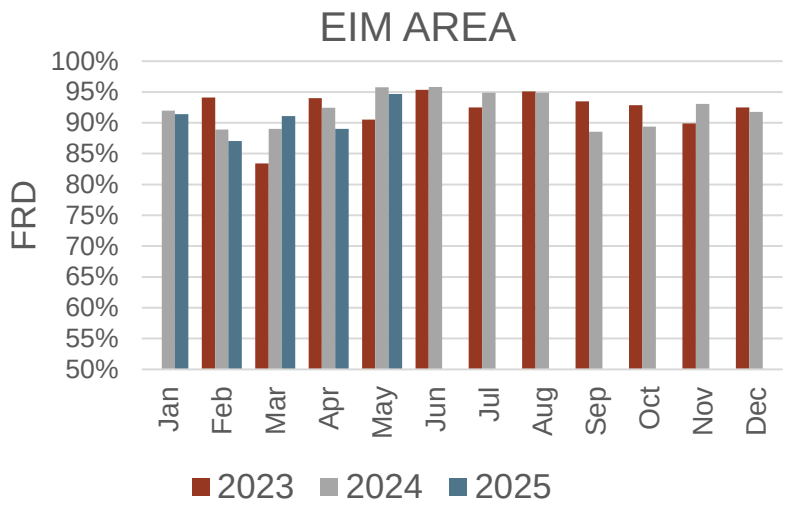
FRP Requirements

FRP Coverage

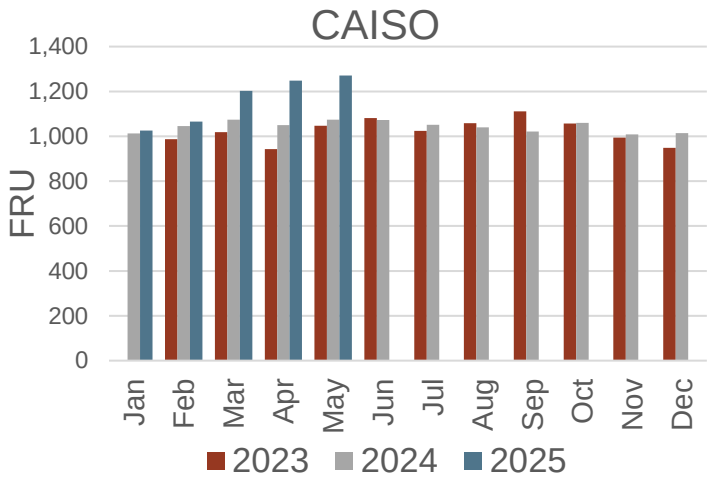


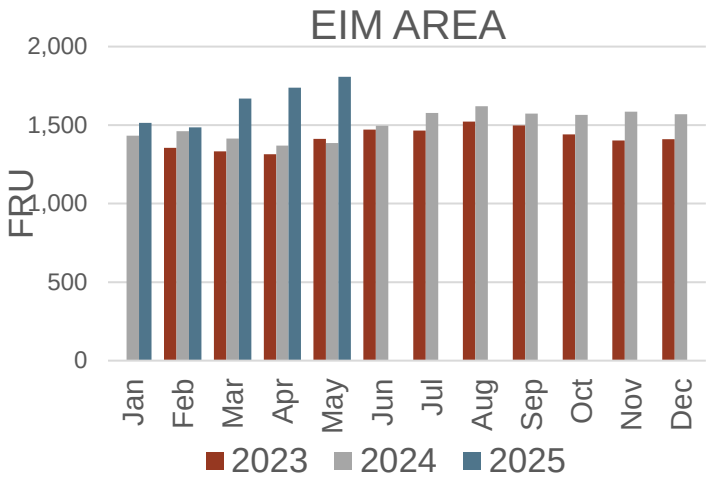


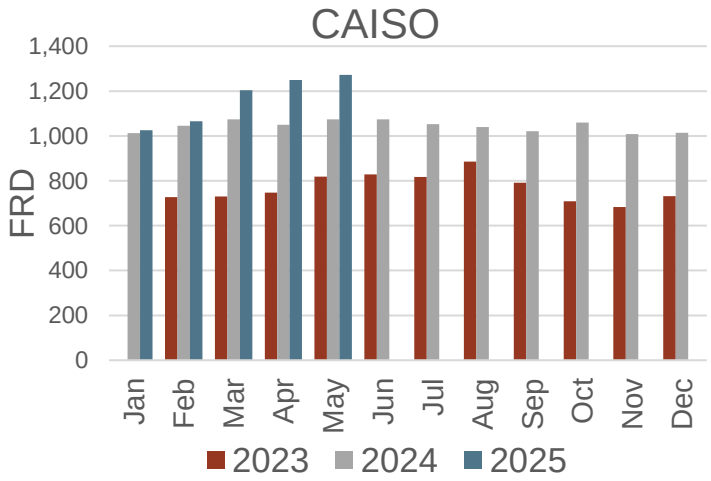


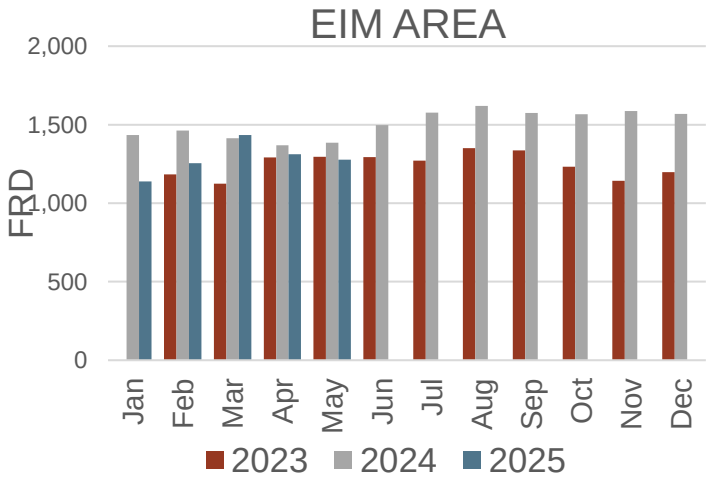


FRP Requirement

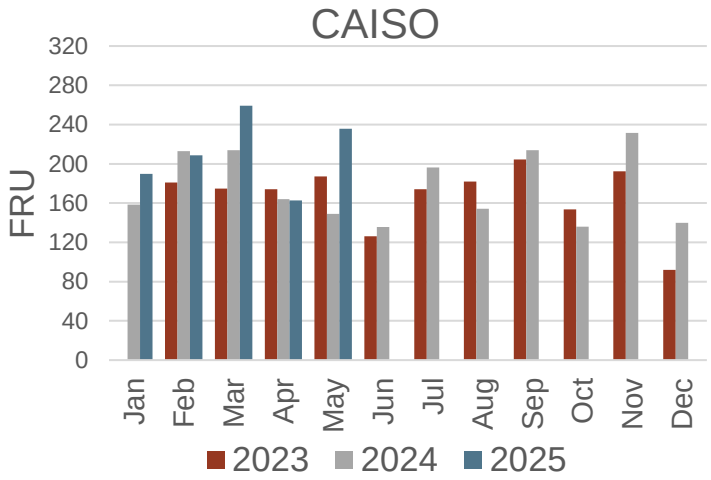


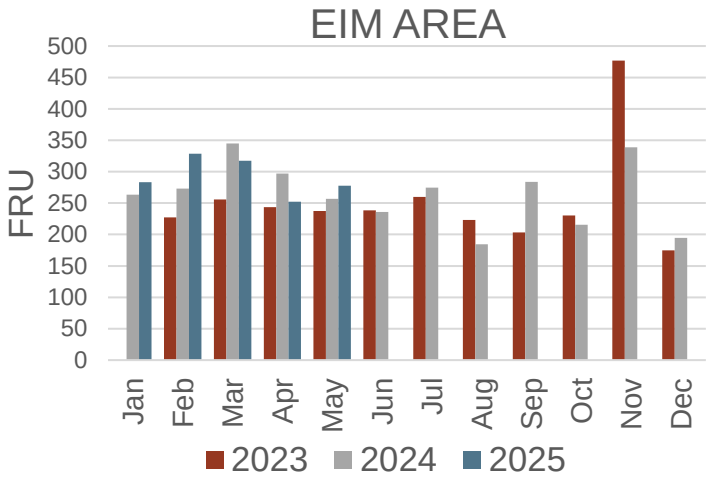


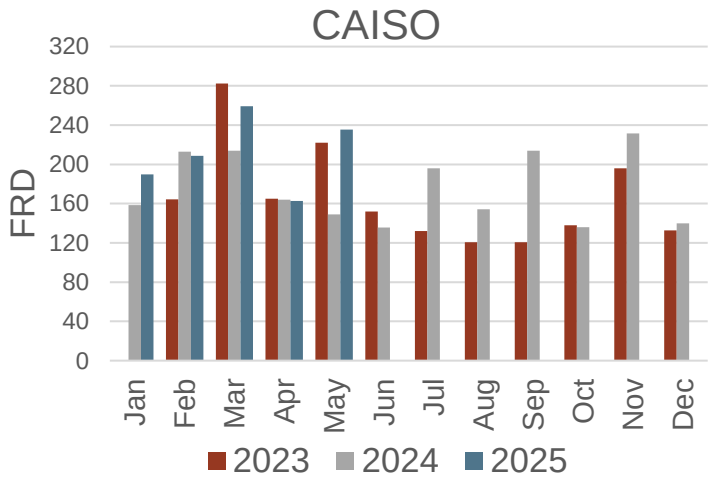


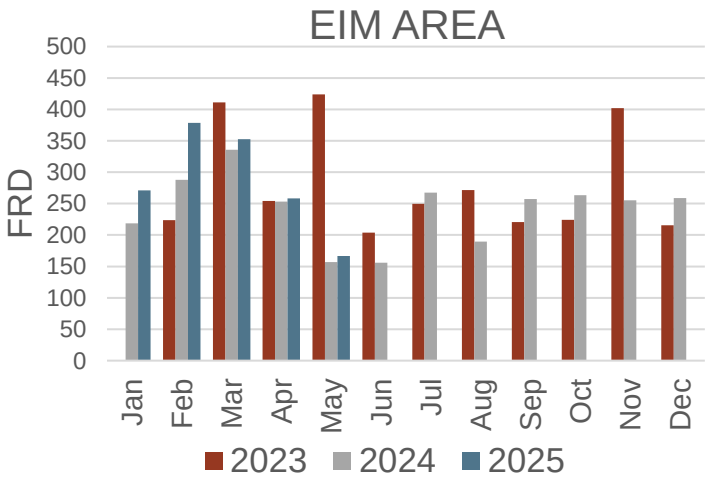


FRP Exceedance



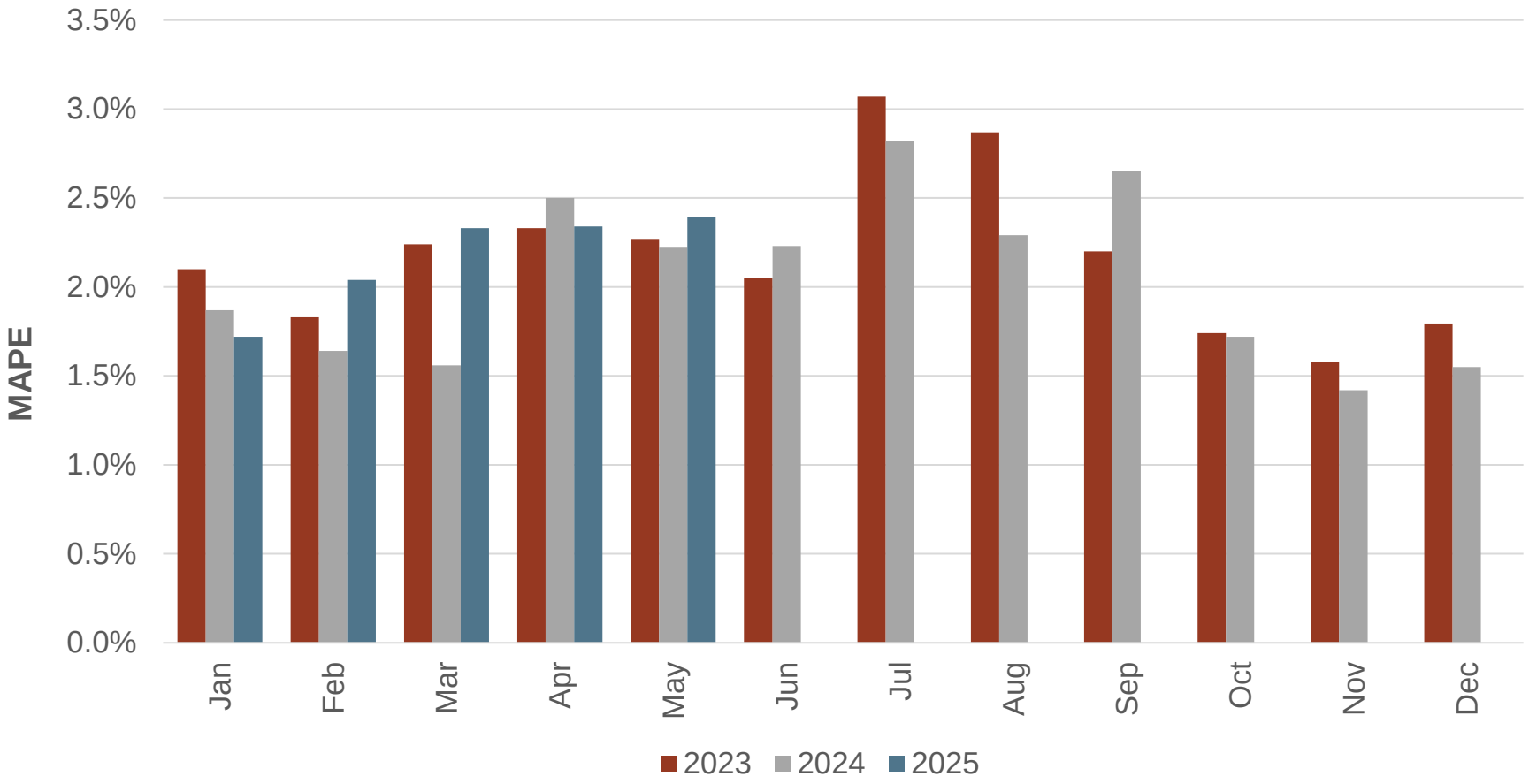






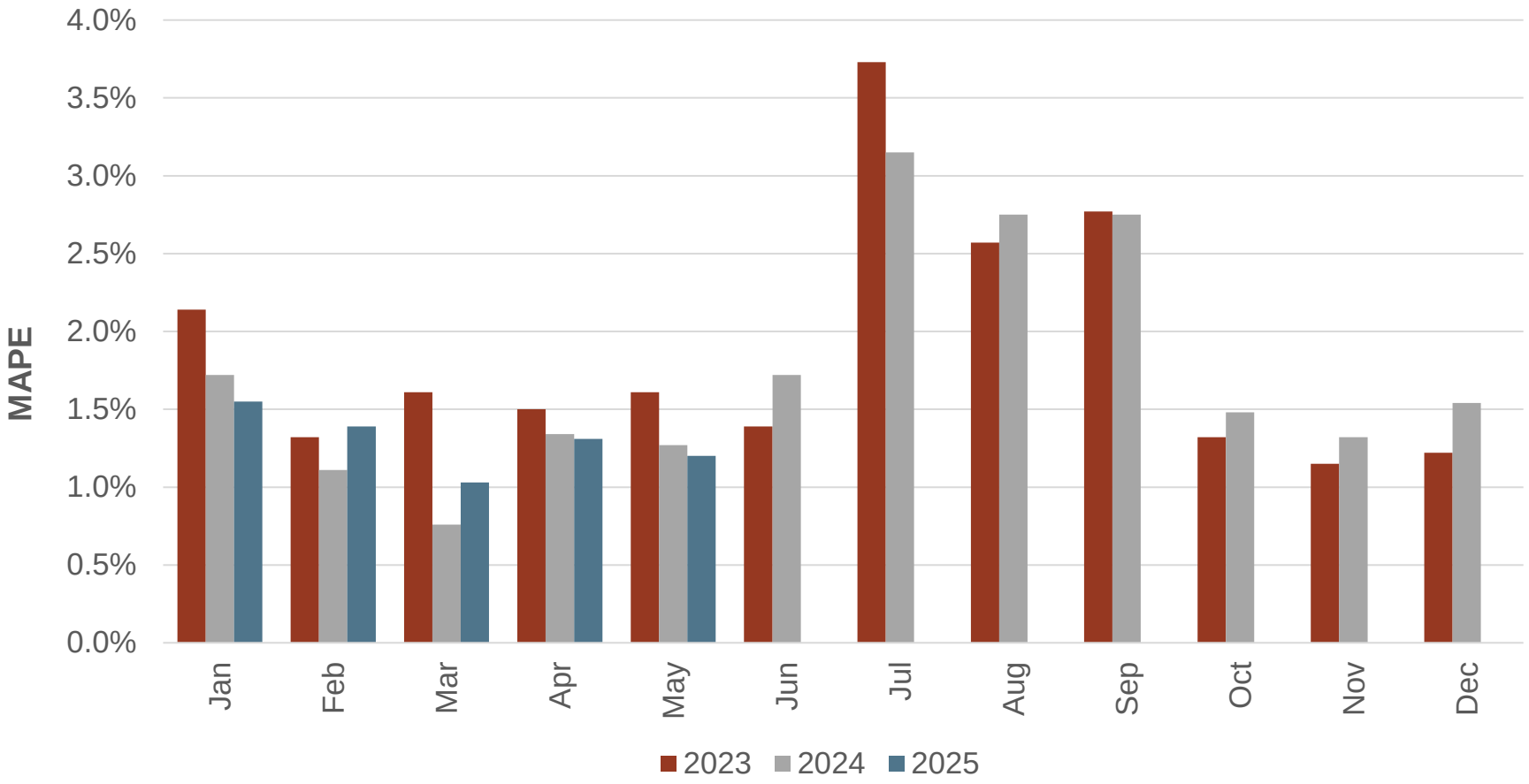
Demand Forecasting

Day-ahead load forecast



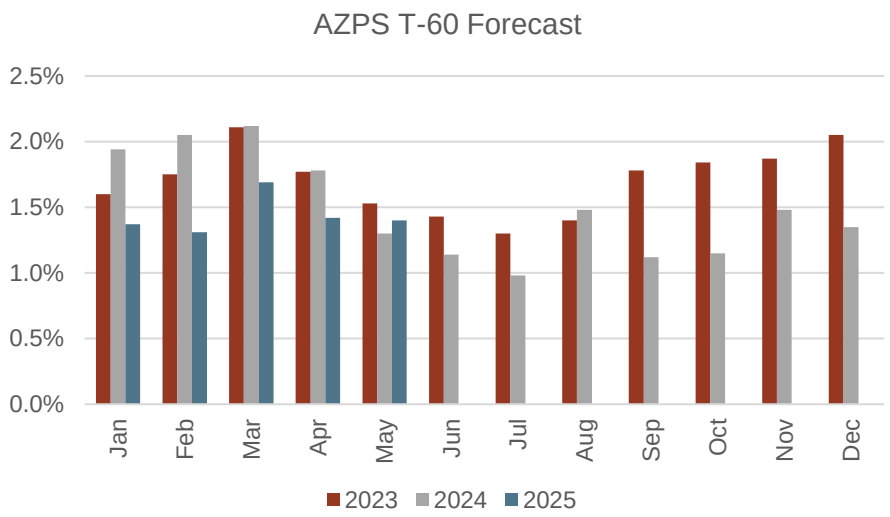
*MAPE = abs(Forecast – Actual)/Actual

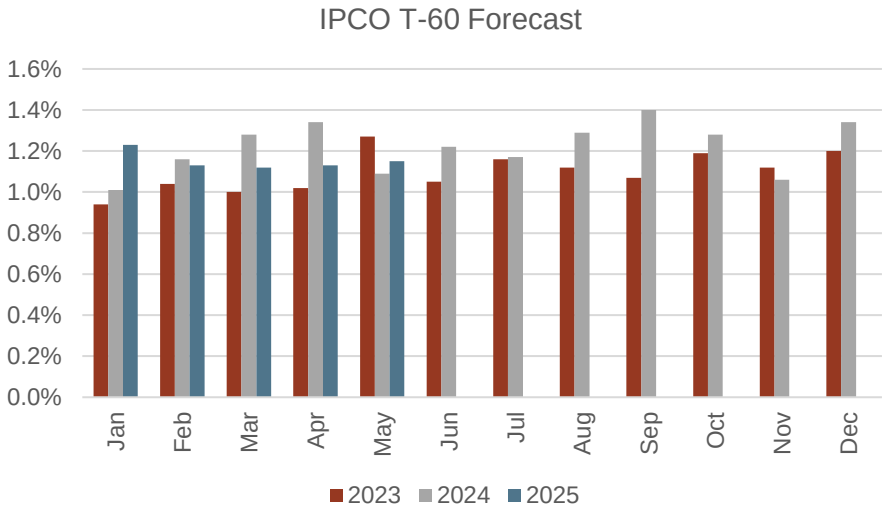
Day-ahead peak forecast

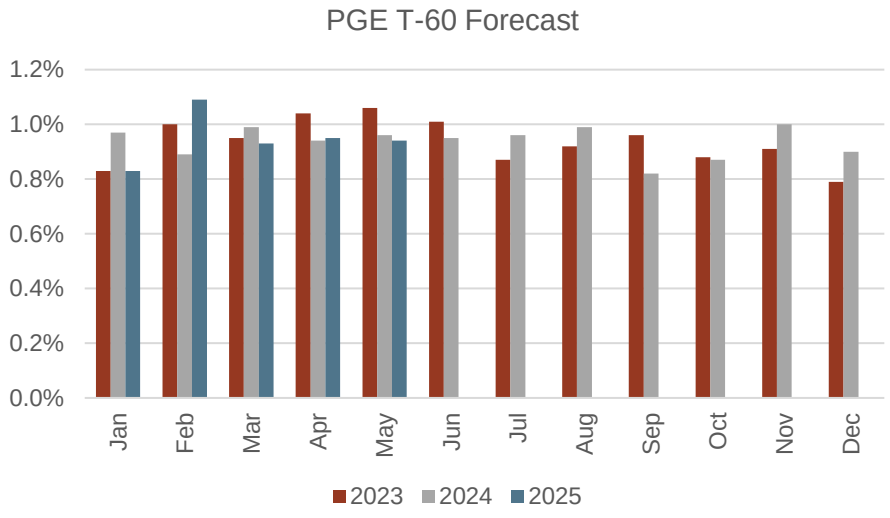


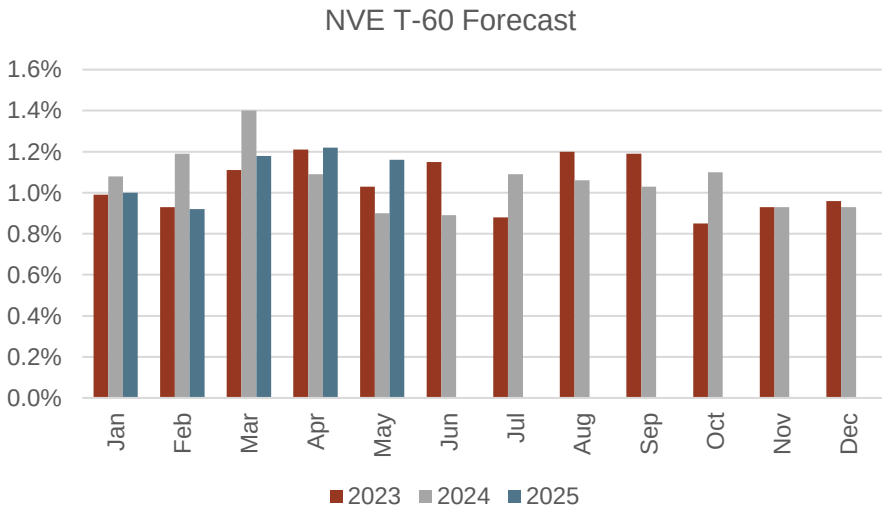
*MAPE = abs(Forecast – Actual)/Actual

EIM T-60 forecast



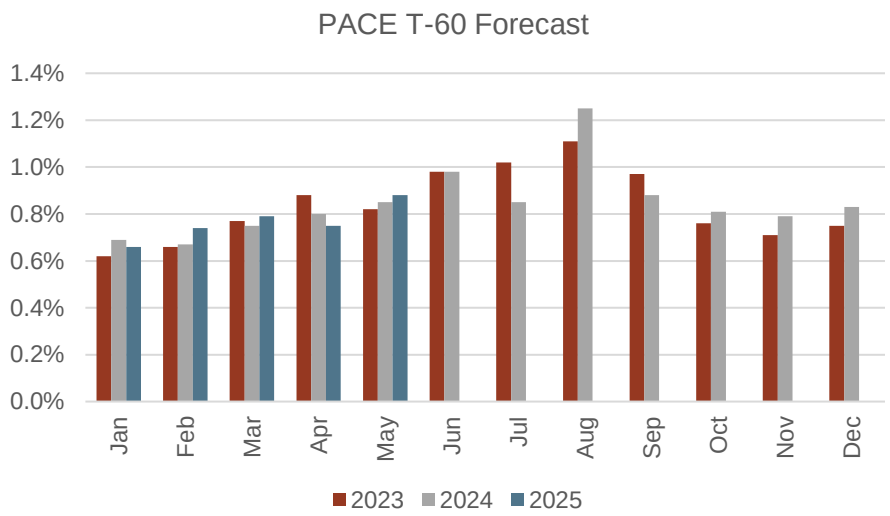


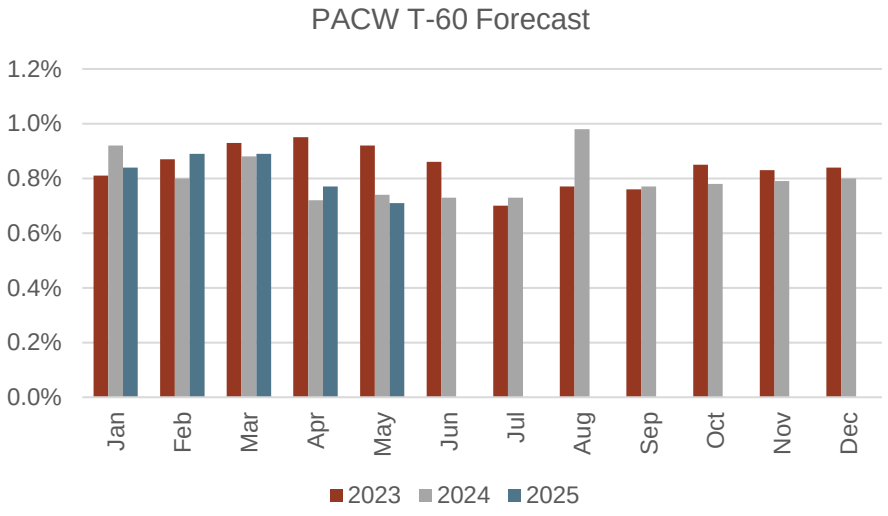


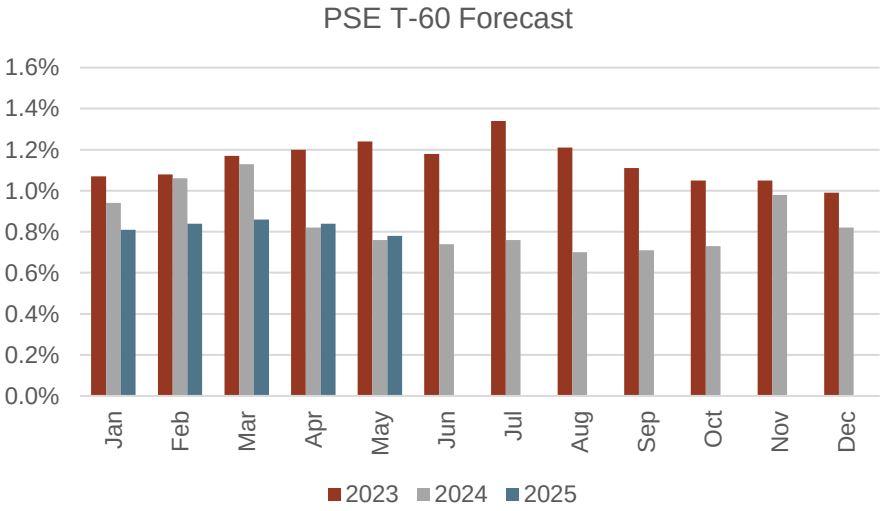


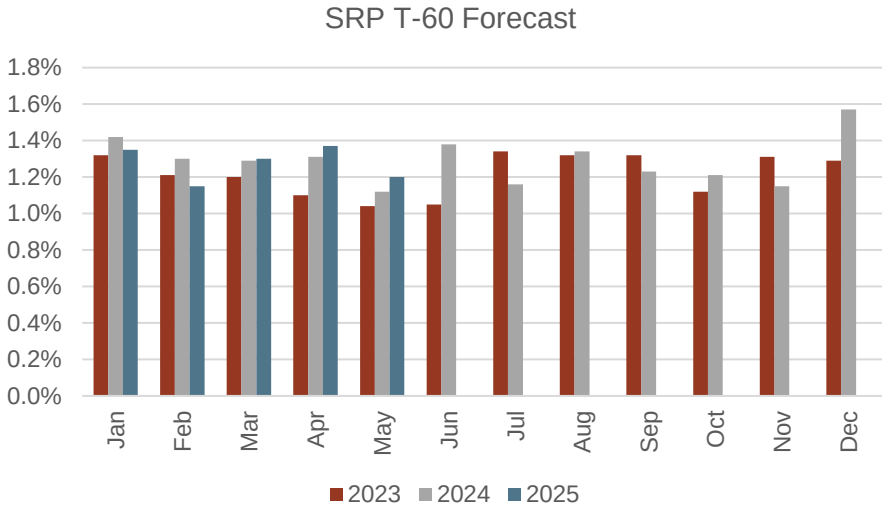
*MAPE = abs(T60 Forecast – Actual)/Actual
Lower is better.

EIM T-60 forecast



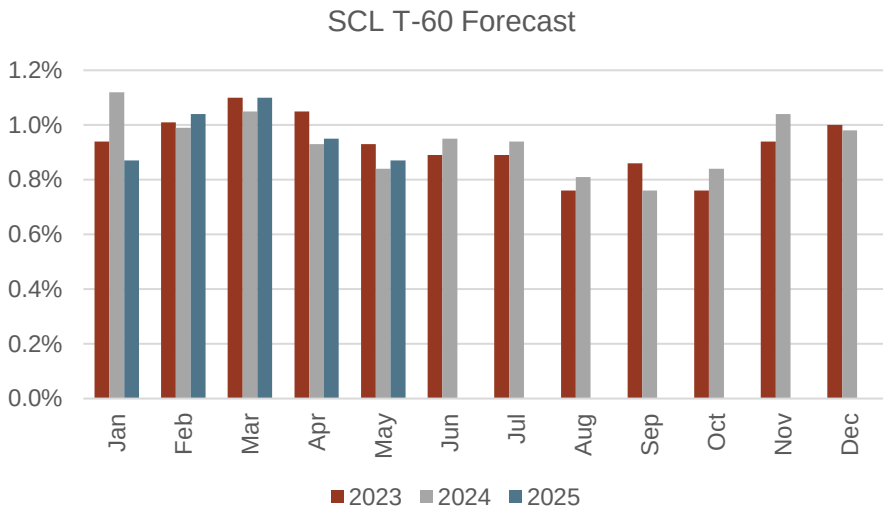


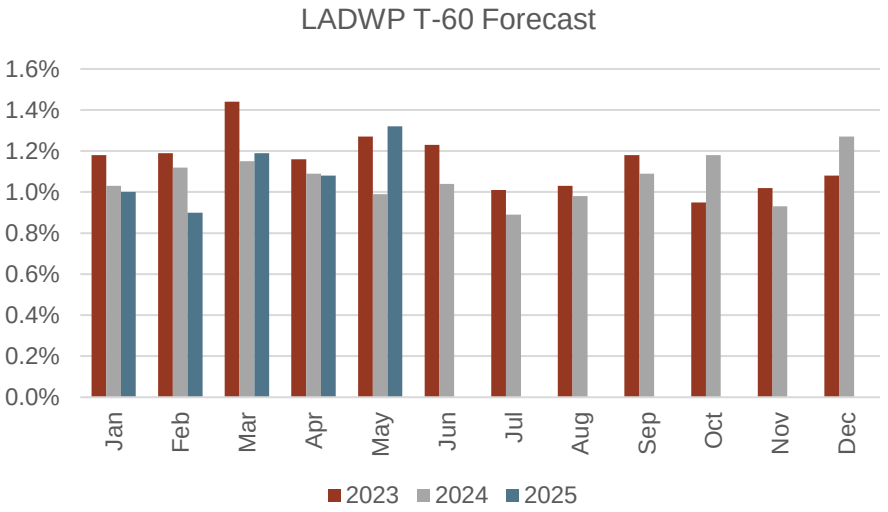


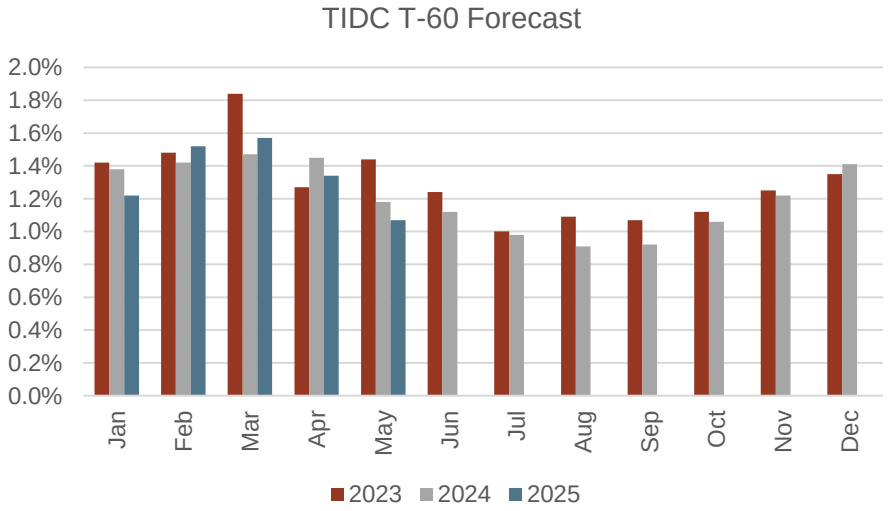


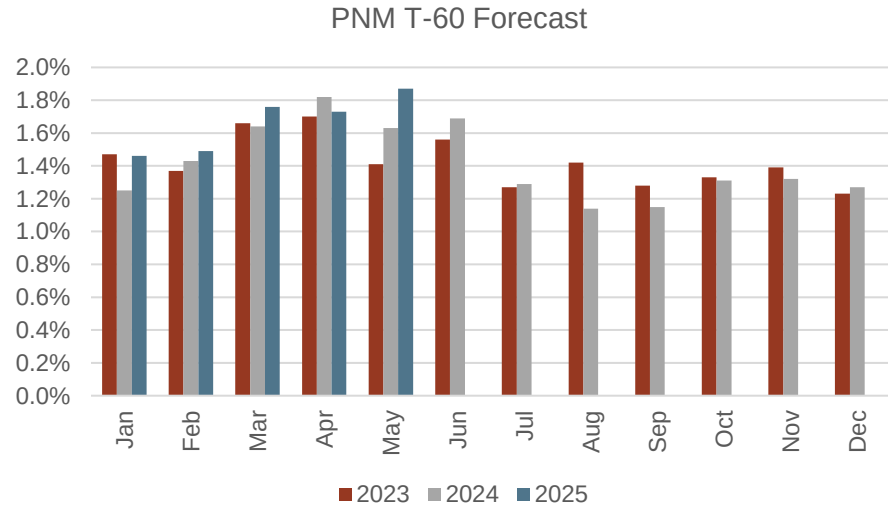
*MAPE = abs(T60 Forecast – Actual)/Actual
Lower is better.

EIM T-60 forecast





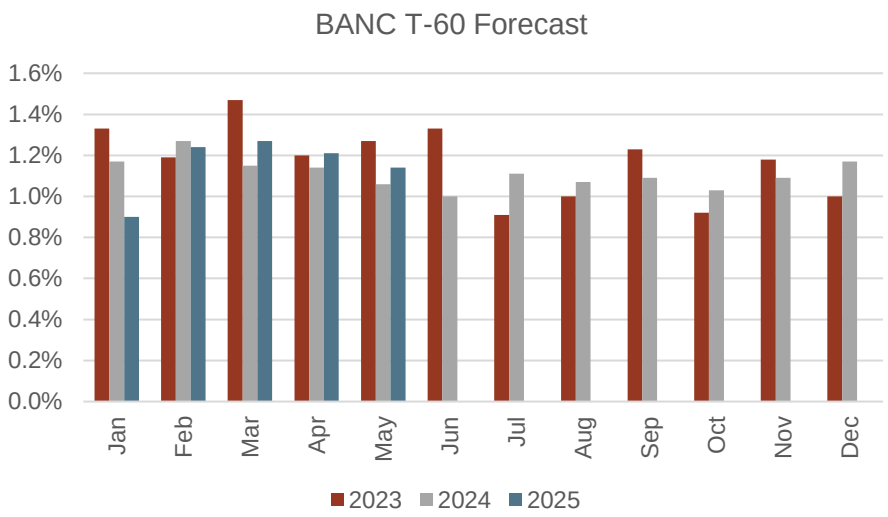


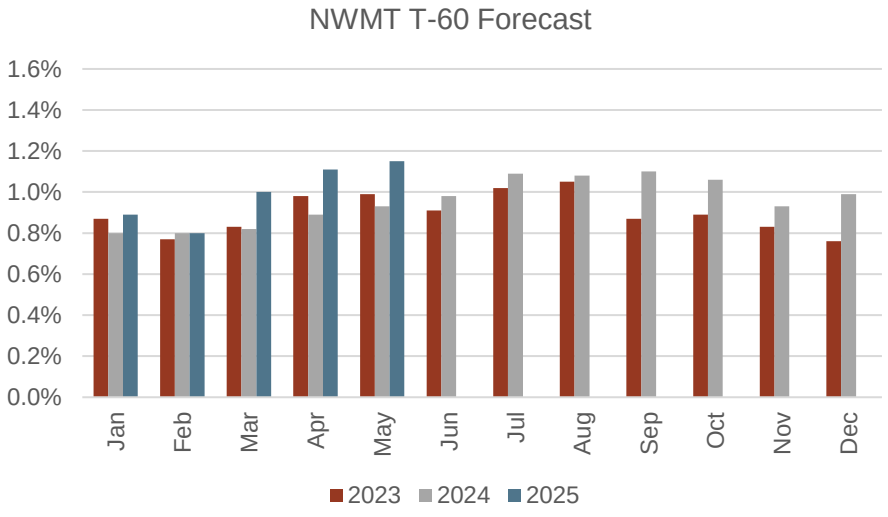


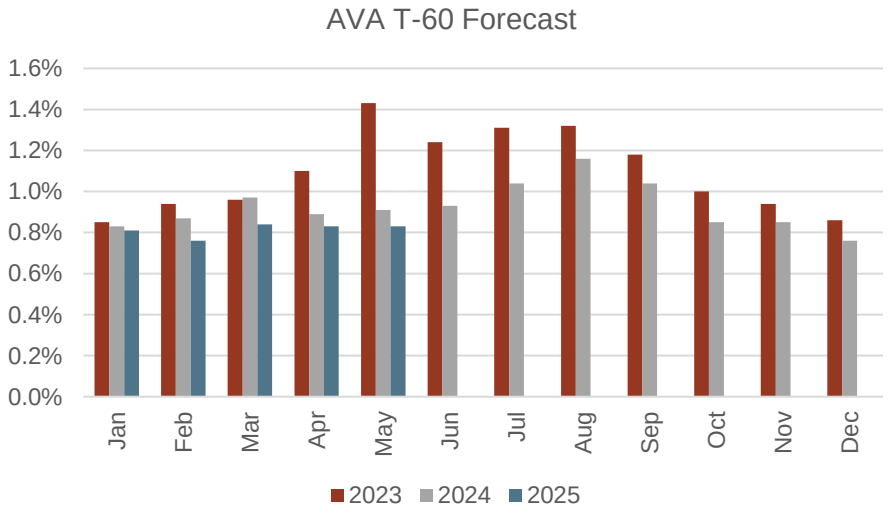
*MAPE = abs(T60 Forecast – Actual)/Actual
Lower is better.

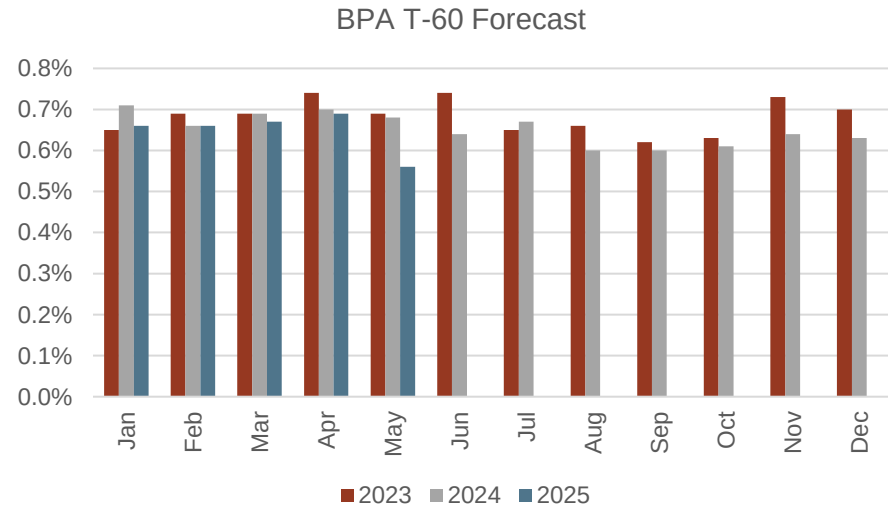
**A reference error impacted reporting of MAPE for LADWP, TIDC, PNM, and BANC from Dec 2024 and forward. That error is corrected as of this June 2025 reporting.

EIM T-60 forecast









*MAPE = abs(T60 Forecast – Actual)/Actual
Lower is better.

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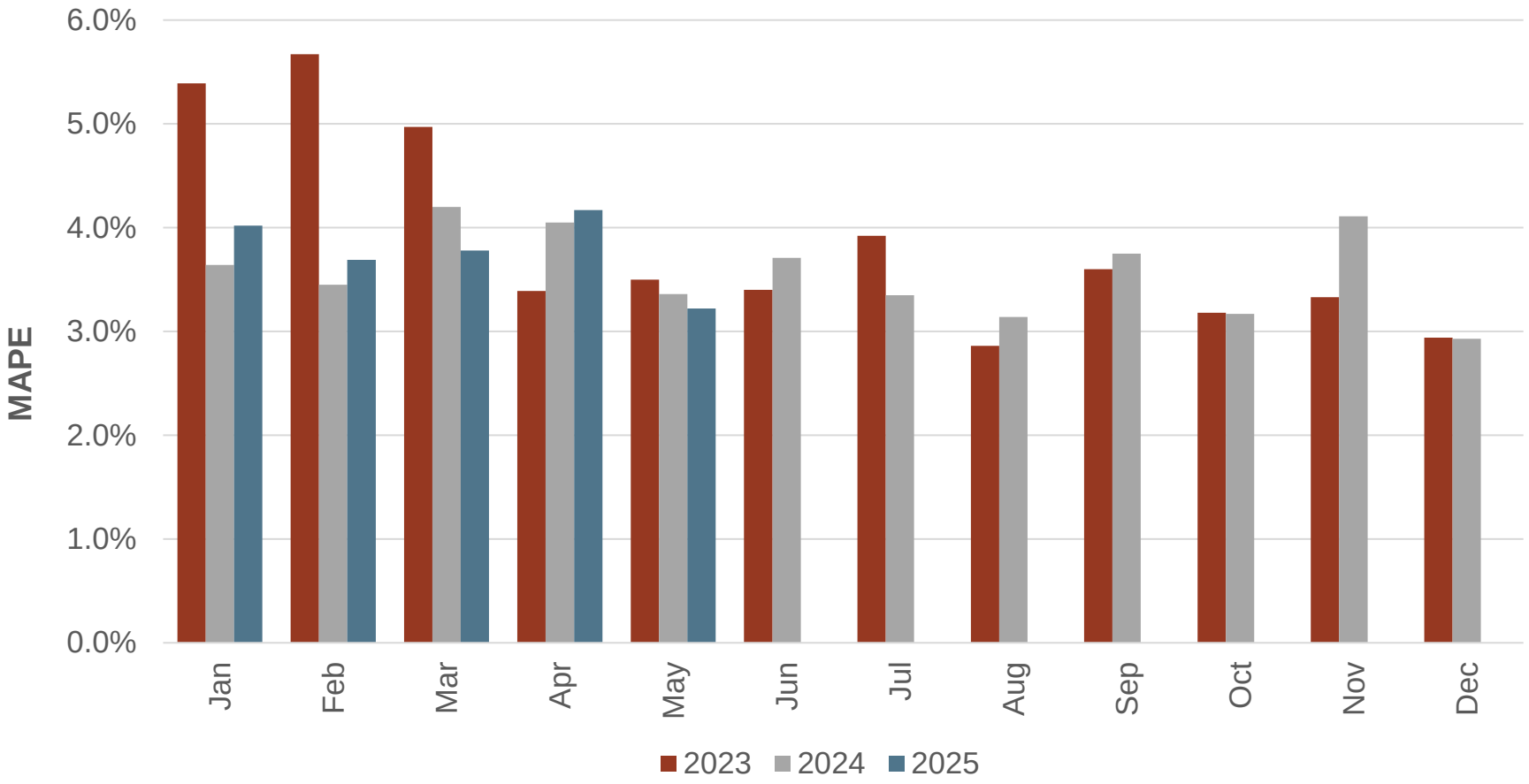
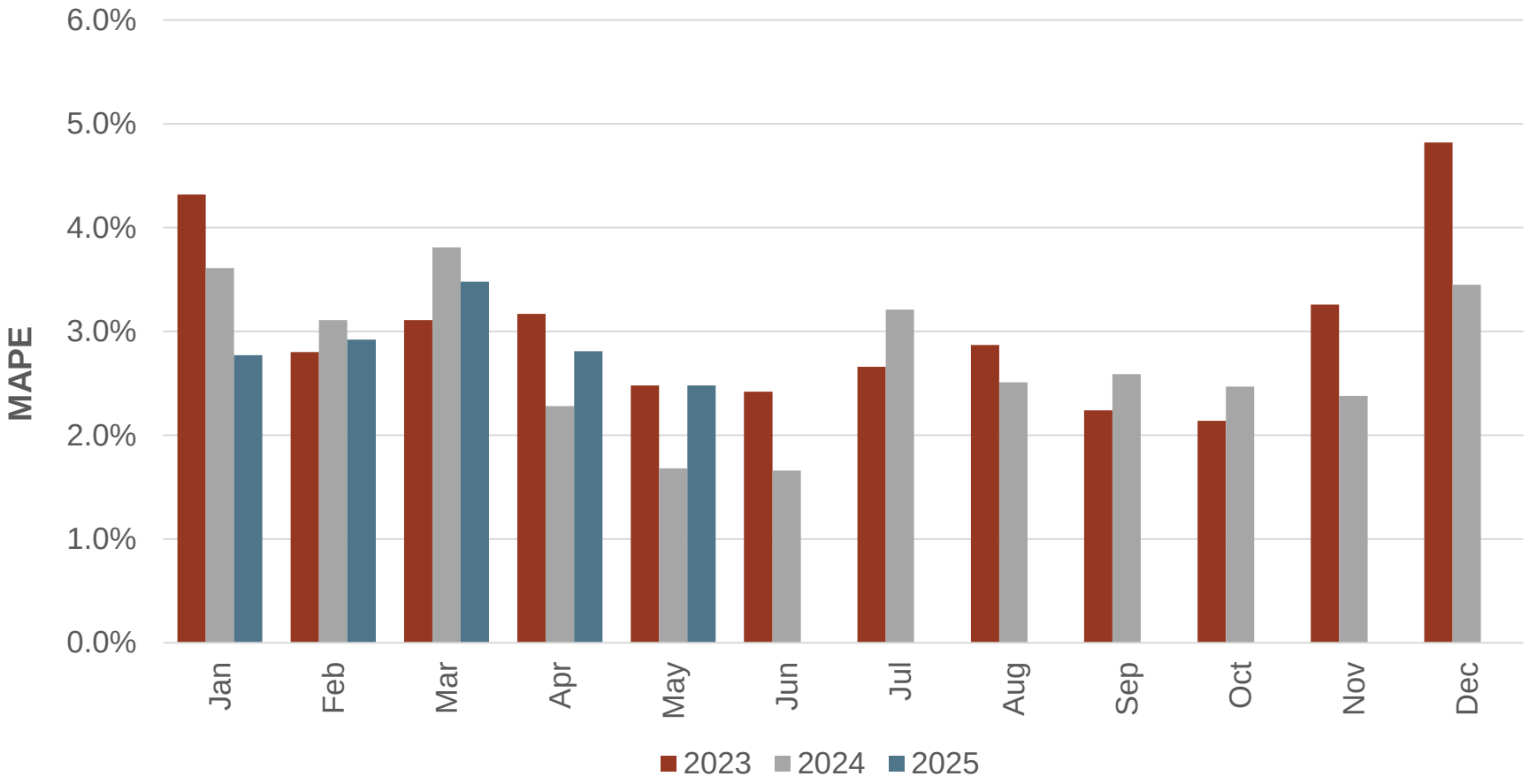
Renewable Forecasting

Day-ahead wind forecast



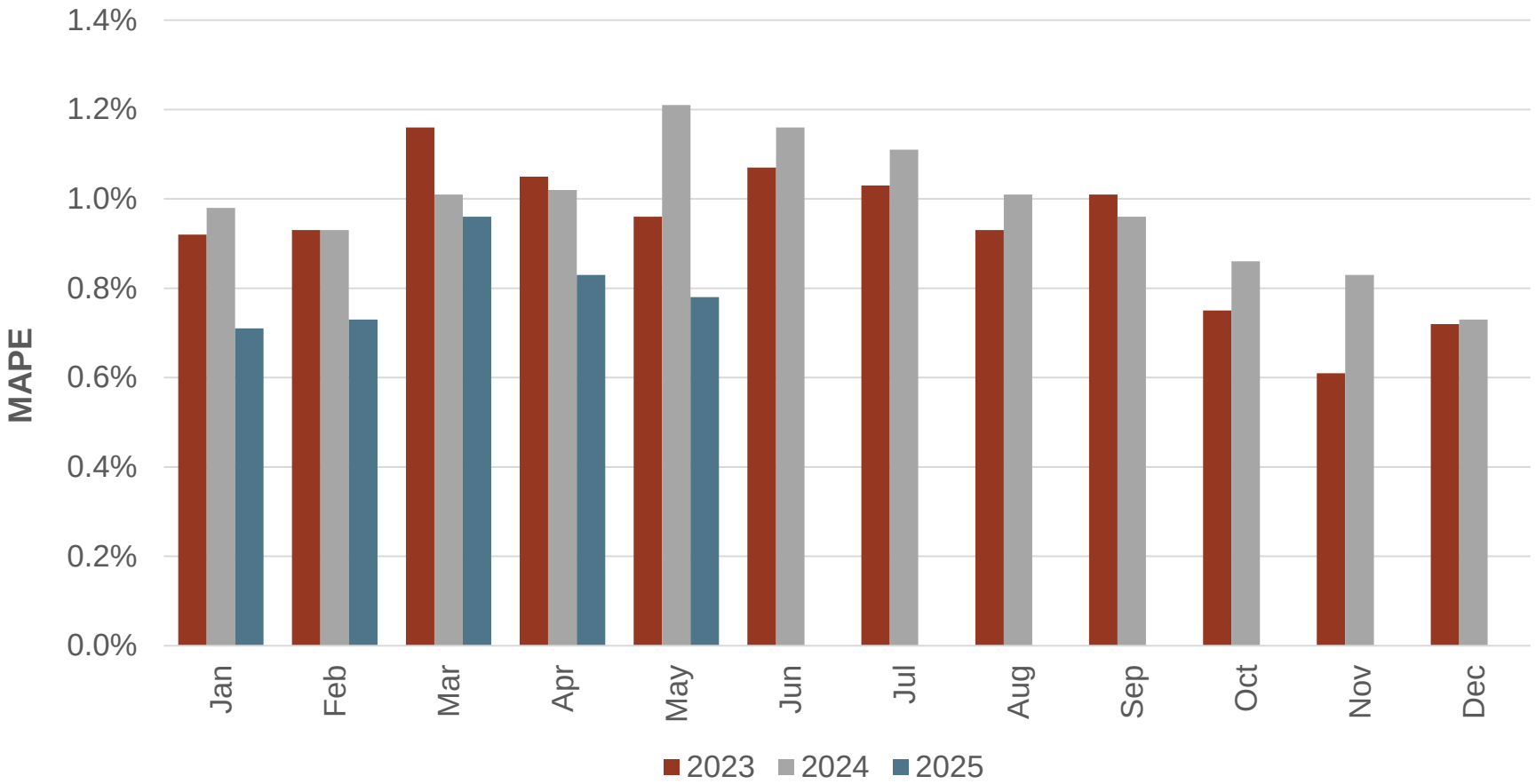
*MAPE = abs(Forecast – Actual)/Actual

Day-ahead solar forecast



*MAPE = abs(Forecast – Actual)/Actual
**MAPE only calculated for intervals where Forecast > 0

Real-time wind forecast



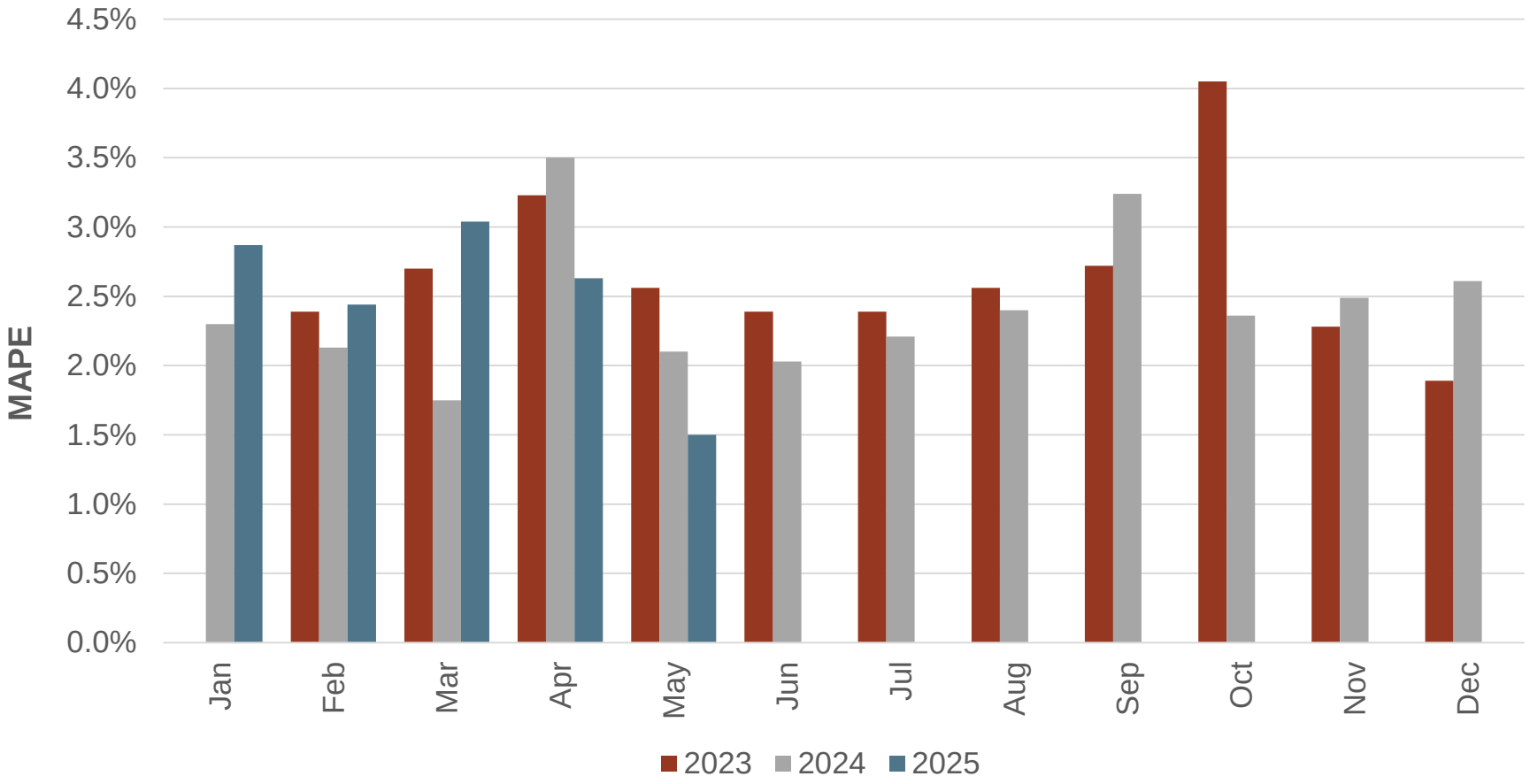
*MAPE = abs(Forecast – Actual)/Actual

Real-time solar forecast

*MAPE = abs(Forecast – Actual)/Actual
**MAPE only calculated for intervals where Forecast > 0

Real Time Solar Hybrid Performance

*Comparison of DOT to MW Production



*MAPE = abs(DOT – Actual)/Capacity

Policy Update

Becky Robinson
Director, Market Policy Development

Assistance energy transfer extension

- Assistance Energy Transfer Extension Decision: July 2025 WEM Governing Body meeting

- Proposal:
  - Remove the December 31, 2025 sunset provision for the assistance energy transfer product to ensure this reliability tool does not expire
  - Specify that we will remove the Assistance Energy Transfer surcharge where it is directly attributable to actions taken in coordination with the Reliability Coordinator

Congestion revenue rights enhancements

- The congestion revenue rights working group has discussed:
  - The current program structure and function for stakeholders
  - ISO's root cause analysis on the 2018 reforms
  - Benchmarking other ISO/RTO's financial transmission right models
  - Potential goals and problem statements to guide future ISO CRR policy changes
- As part of the 2018 reforms designed to resolve observed inefficiencies with the auction, the ISO committed to:
  - Assess the impacts of the proposals
  - Consider more comprehensive changes to the allocation and auction design
- Proposed decisional classification: TBD

Demand and distributed energy market integration

- Working group is exploring development or enhancement of participation models and market rules for DR and DER participation

- Stakeholder problem statement development topics:
  - Performance Evaluation Methodology enhancements
    - Topic completed, problem statements finalized
  - Enhancing demand flexibility market options
    - Topic in progress, problem statements drafted receiving stakeholder review
  - Reliability based demand response
  - Economic demand response
  - Expanding demand side bidding options
  - Distributed energy resource participation

- Six remaining DDEMI working group sessions
  - Policy development phase proposed for Q4 2025

- Proposed decisional classification: TBD

Storage Design & Modeling (SDM)

- Scope of the initiative has been organized into four topic groups:
  - Outage Management, Uplift & Default Energy Bids, State-of-Charge Management, and Mixed-Fuel & Distribution-Level Resources

- The ISO released an Issue Paper & Straw Proposal on Outage Management and a Discussion Paper on Mixed-Fuel & Distribution-Level Resources

- The ISO updated the state-of-charge formula to ensure availability of flexible ramp up from storage resources through a business practice manual modification

- The ISO continues to host monthly stakeholder meetings to discuss the topic groups specified above

- Proposed decisional classification: TBD

EDAM congestion revenue allocation

- Final Proposal published on June 6th
- ISO Board of Governors and WEM Governing Body approved the proposed transitional design at the joint meeting session on June 19th
  - Proposal allocates parallel flow congestion revenues associated with the exercise of eligible transmission rights to the EDAM balancing area where these revenues accrued
- Tariff revisions supporting the proposal are targeted to be filed with FERC on June 26th

Gas resource management initiative

- ISO staff developing a straw proposal informed by stakeholder comments and preferred prioritization; targeting publication in June-July.

- In response to stakeholder feedback the ISO is proposing:
  - Enhancing advisory gas burn information in advance of the extended day-ahead market
  - Exploring exceptional circumstance cost recovery
  - ISO coordination with gas pipelines during restrictive operating conditions

- Some of these changes would be process enhancements, whereas others may require tariff changes.

- Proposed decisional classification: Joint authority

Greenhouse gas coordination working group

- Working group has been focused on accounting for state policies without a price on carbon emissions
- Designing policy on an out-of-market “accounting and reporting” approach
- A sub-group and the working group are developing the report format
- Straw proposal published in Q2
- Tariff authority may be needed to outline the funding approach
- Proposed decisional classification: Joint authority

Price formation enhancements initiative

- Internally developing straw proposal for scarcity pricing and market power mitigation at the balancing area level; publication targeting Q2 2025
- Incorporating suggestions from May 2 Market Surveillance Committee on market power mitigation
- Proposed decisional classification: Joint authority

Resource adequacy policy development

The working group has produced several straw proposals and has more in development.

Track 1: Modeling & Default Standards

- Loss of load expectation modeling
- Updating ISO default planning reserve margin and default counting rules
- Unforced Capacity in collaboration with the CPUC and other local regulatory authorities
- Accounting for ambient derates due to temperature for resource adequacy resources

Track 2: Outage and Substitution & Availability and Performance Incentives

- Updating the ISO's outage and substitution processes
- Reforming availability and performance incentives

Track 3: Visibility and Backstop Reform

- Increase the ISO's visibility into available backstop capacity
- Increase transparency to stakeholders on backstop decision making
- Update the current backstop product
- Create longer-term solutions for the ISO Balancing Authority Area around curing deficiencies and assigning costs related to the EDAM resource sufficiency evaluation

Policy initiatives catalog & roadmap

- Revised 2025 Roadmap
  - Published May 2025
  - Presented at May Joint WEM Governing Body and ISO Board of Governor meeting
  - Goal: update schedules for existing policy initiatives to accommodate stakeholder bandwidth
- 2025 Catalog published June 13
- Next step: 2026-2028 Roadmap development
  - Draft & final Roadmaps to be published Q4

2025 Policy Calendar

2025					
		Q1	Q2	Q3	Q4
Congestion Revenue Rights		Scoping working groups		Policy development	
Demand and Distributed Energy Market Integration		Scoping working groups			Policy Development
EDAM Congestion Revenue Allocation			Policy Development & Decision	Implementation	
					Working groups
Gas Resource Management		Proposal working groups	Straw proposal	Policy development	Decision
Greenhouse Gas Coordination					
	Topic 1: WEIM/EDAM GHG design	Scoping working groups		Postponed	
	Topic 2: Non-priced approaches for GHG reduction	Policy development	Straw proposal	Policy development	Decision
	Topic 3: Additional GHG-related metrics	Addressed & closed out			

2025 Policy Calendar (cont.)

2025					
		Q1	Q2	Q3	Q4
Price Formation Enhancements					
	Scarcity pricing & market power mitigation	**Proposal working groups**	**Straw proposal**	**Policy development**	
	Fast start pricing	**Postponed**			
Resource Adequacy Modeling and Program Design					
	Track 1: Modeling, Defaults, and Accreditation	**Policy development**			**Decision (Default Counting Rules/PRM)**
	Track 2: Outage & substitution and availability and incentive mechanisms	**Policy development**			
	Track 3a: RA status visibility	**Policy development**			
	Track 3b: Backstop reform and long-term EDAM RSE solutions		**Postponed**		**Policy development**
Storage Design and Modeling		**Scoping working groups Issue papers & straw proposals**		**Policy development**	
WEIM Resource Sufficiency Evaluation Enhancements		**Postponed**			
WEIM Assistance Energy Transfer			**Policy development**	**Decision**	

Policy initiative process

Stakeholder meetings, working groups and workshops may occur throughout the process

This represents the typical process, and often stages run in parallel.

**Discussion papers and working groups will be incorporated into the process as needed.*

BPM change management: Definitions and Acronyms BPM Declassified as BPM

- The California ISO announces the declassification of the Definitions and Acronyms Business Practice Manual (BPM) with updated link on how to find ISO definitions and acronyms.

  The Definitions and Acronyms BPM previously served as a consolidated reference for all definitions and acronyms in the ISO Tariff and other BPMs.

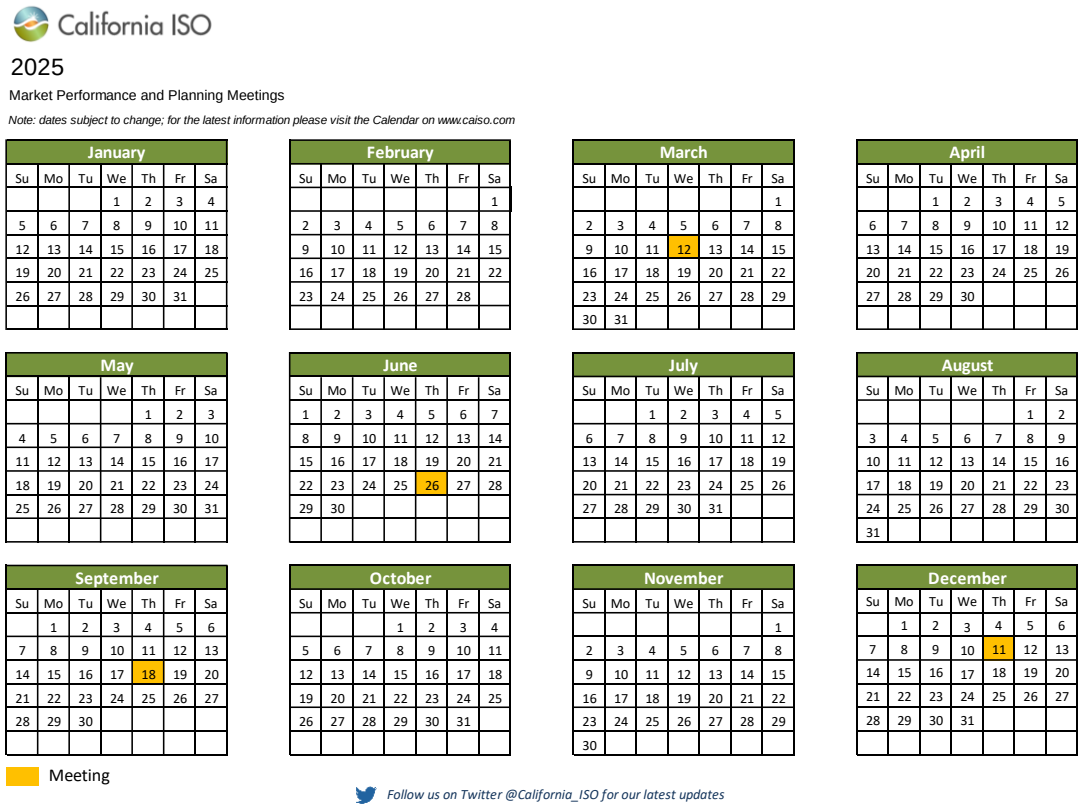
  A link to the ISO glossary is now available in the BPM Library, where you can find the most current definitions and acronyms formerly included in the Definitions and Acronyms BPM. Definitions and acronyms will also remain accessible within the individual BPMs.

  For more information about the BPM Change Management process, please visit the BPM webpage on the ISO website.
- Glossary | California ISO

Next Forum

Upcoming MPPF meeting

The next MPPF is tentatively scheduled for Sep 18, 2025. https://www.caiso.com/meetings-events/topics/market-performance-and-planning-forum



California ISO

2025

Market Performance and Planning Meetings

Note: dates subject to change; for the latest information please visit the Calendar on www.caiso.com

January

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February

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23	24	25	26	27	28	

March

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23	24	25	26	27	28	29
30	31					

April

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27	28	29	30			

May

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18	19	20	21	22	23	24
25	26	27	28	29	30	31

June

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22	23	24	25	26	27	28
29	30					

July

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20	21	22	23	24	25	26
27	28	29	30	31		

August

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24	25	26	27	28	29	30
31						

September

Su	Mo	Tu	We	Th	Fr	Sa
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21	22	23	24	25	26	27
28	29	30				

October

Su	Mo	Tu	We	Th	Fr	Sa
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19	20	21	22	23	24	25
26	27	28	29	30	31	

November

Su	Mo	Tu	We	Th	Fr	Sa
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23	24	25	26	27	28	29
30						

December

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Meeting

Follow us on Twitter @California_ISO for our latest updates

This Week at the ISO – 06/23/25

Stakeholder Meetings

All public stakeholder meetings are also listed on the ISO calendar:

All public stakeholder meetings are also listed on the ISO calendar:

Tuesday, June 24th – Extended Day-Ahead Market Congestion Revenue Allocation - Draft Tariff Language

- 9:00am - 12:00pm PT (link)

- Tuesday, June 24th – Interconnection Customer User Group
  - 1:00pm - 2:00pm PT (link)
- Wednesday, June 25th – Ancillary Services Focus Group 3
  - 9:00am - 12:00pm PT (link)
- Wednesday, June 25th – 2023-2024 Transmission Planning Process Phase 3 - Competitive Solicitation.
  - 1:00pm - 2:30pm PT (link)
- Thursday, June 26th – Market Performance and Planning Forum Q2 meeting on 6/26/25
  - 9:00am - 2:00pm PT (link)
- Thursday, June 26th –Summary of Cluster 15 Intake Scoring Results
  - 2:00pm – 4:00pm PT (link)

Comment Submission Deadlines

- Wednesday, June 25th – Resource Adequacy Modeling and Program Design Track 1

This Week at the ISO continued

Trainings

The ISO encourages market participants to review the new training page on the Market Participant Portal. In addition to the Training Center, this new training page provides Scheduling Coordinators with a centralized location for accessing computer-based training videos (to learn more, please view the High-Level Overview video).

- None scheduled this week

Market Simulations

Please refer to our Release Schedule for the most recent updates of initiatives scheduled for MAP- and Production- stage market sims.

Business Practice Manual (BPM) Updates

The status of all PRRs and updated BPMs in the BPM Library are published on the BPM Change Management Website.

- Tuesday, June 24th – BPM Change Management Proposed Revision Request Review
  - 11:00am – 12:00pm PT (link)

Important Publications & Announcements (week of 6/16 – 6/20)

Notice of new market participant as of 6/16/25

Demand and Distributed Energy Market Integration: Updated working group schedule and discussion paper posted

Rescheduled: Summary of Cluster 15 Intake Scoring Results call moved to 6/26/25

Business Practice Manual Change Management call on 6/24/25

Notice of new market participant as of 6/18/25

Congestion Revenue Rights (CRR) modeling and settlement in the Extended Day-Ahead Market (EDAM); comments due 7/3/25

Ancillary Service Focus Group call on 6/25/25

Market Performance and Planning Forum Q2 meeting on 6/26/25

Maintenance Scheduled for California ISO Websites and Reporting Services

Energy Matters blog provides timely insights into ISO grid and market operations as well as other industry-related news.

https://www.caiso.com/about/news/energy-matters-blog

Story | Western Energy Markets

A new way of allocating congestion revenues for EDAM

By ISO Staff

06/19/2025

Story | Operations

Strengthening reliability through year-round gas-electric coordination

By Shawn Grant

06/04/2025

Story | Summer Conditions

Flex Alerts can play an important role during extreme conditions

By ISO Staff

05/29/2025

Subscribe to Energy Matters blog monthly summary

For reference

Visit user group webpage for more information: https://www.caiso.com/meetings-events/topics/market-performance-and-planning-forum

If you have any questions, please contact isostakeholderaffairs@caiso.com