

Q2 2025 Report on Market Issues and Performance

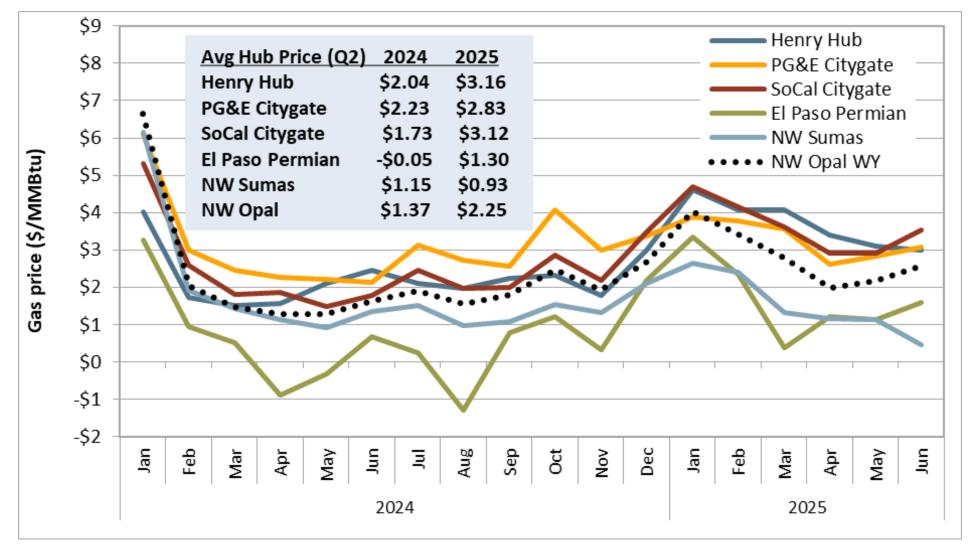
Ryan Kurlinski Senior Manager, Monitoring and Reporting **Department of Market Monitoring**

October 9, 2025

https://www.caiso.com/documents/2025-second-quarter-report-on-market-issues-andperformance.pdf

Gas prices up at most hubs but down in Northwest compared to Q2 2024

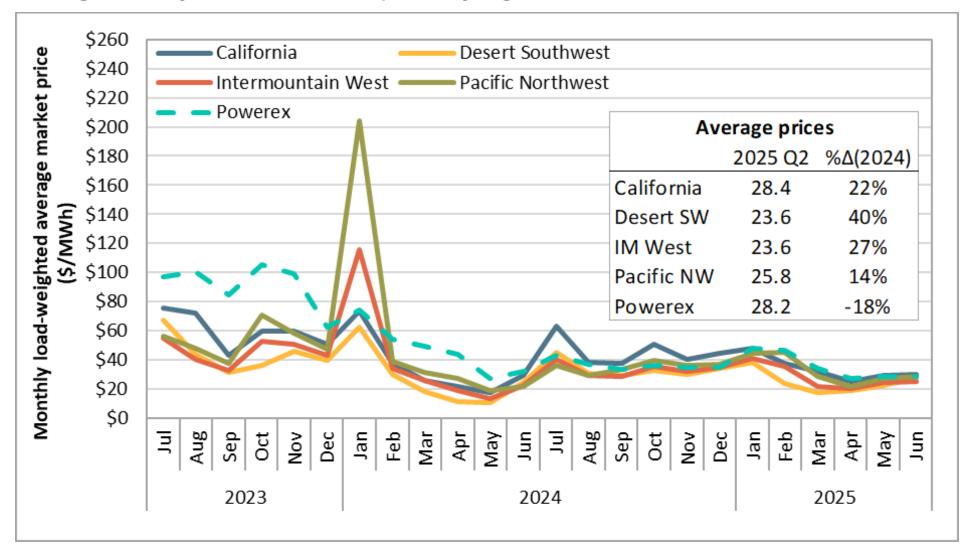
Average monthly natural gas prices by hub





Electricity prices in West up 12% compared to Q2 2024

Weighted average monthly 15-minute market prices by region

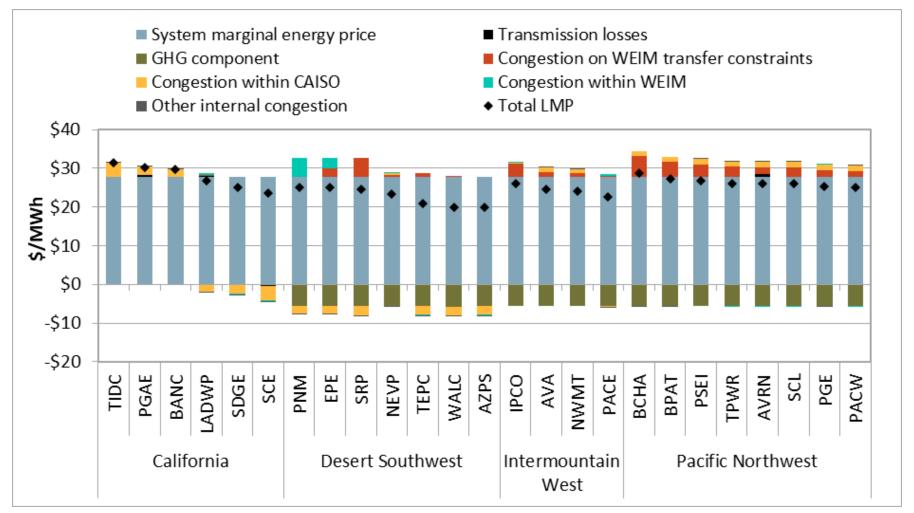






Average price separation driven largely by south-to-north congestion and greenhouse gas costs in California

Average 15-minute market prices by component (April – June 2025)

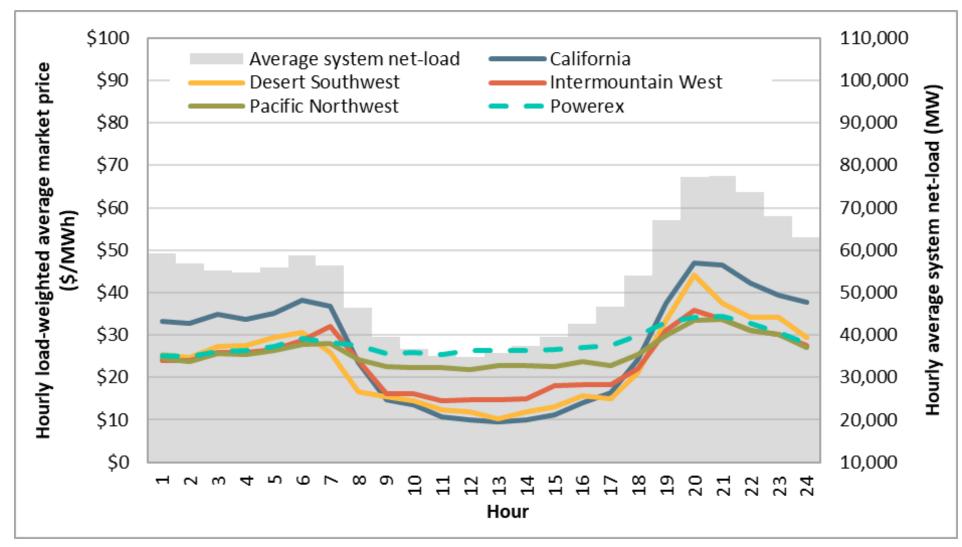






Higher prices in Northwest for solar hours, California for non-solar hours

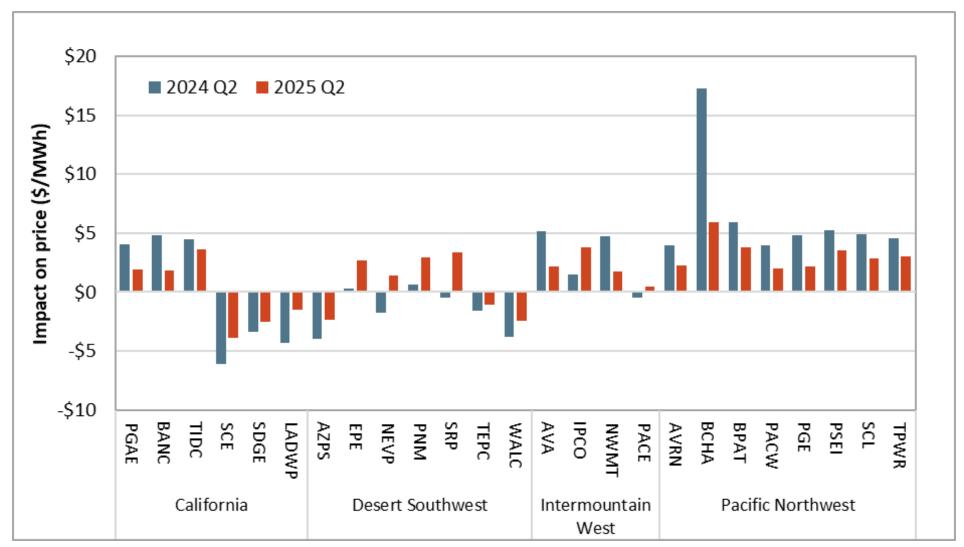
Weighted average hourly 15-minute market prices by region (April – June 2025)





Impact of congestion on price separation lower in Q2 2025 than Q2 2024

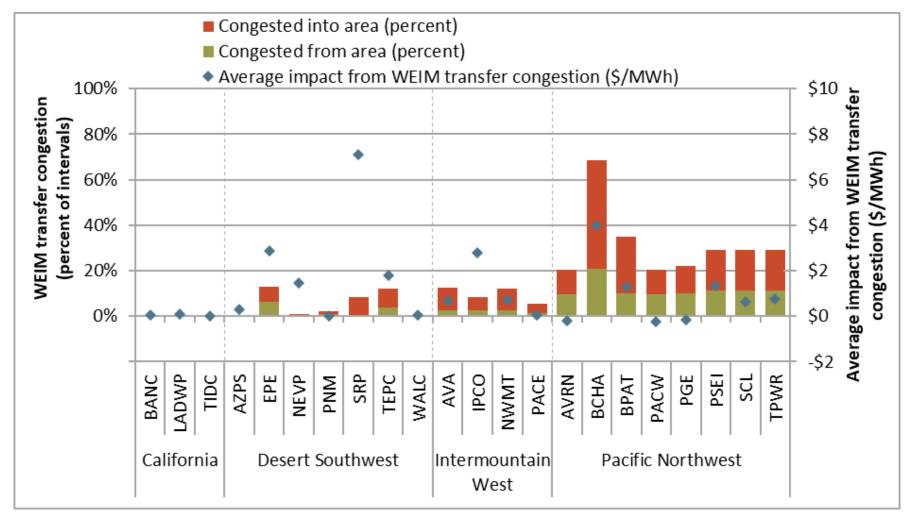
Average impact of total congestion on real-time market price (2024–2025)





Transfer congestion into or out of most Pacific Northwest areas in over 20% of 5-minute intervals

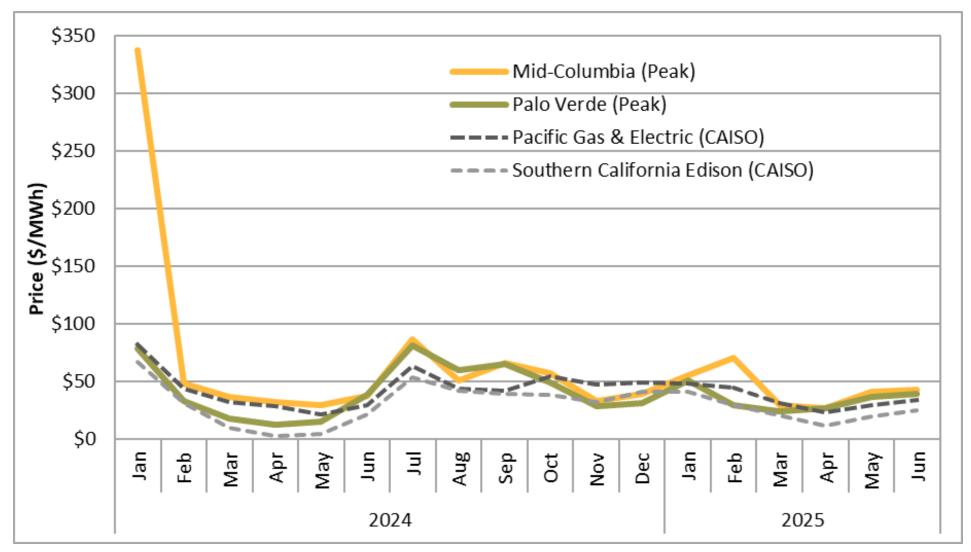
Frequency and impact of WEIM transfer congestion in the 5-minute market (Q2 2025)





Mid-Columbia and Palo Verde bilateral prices converged

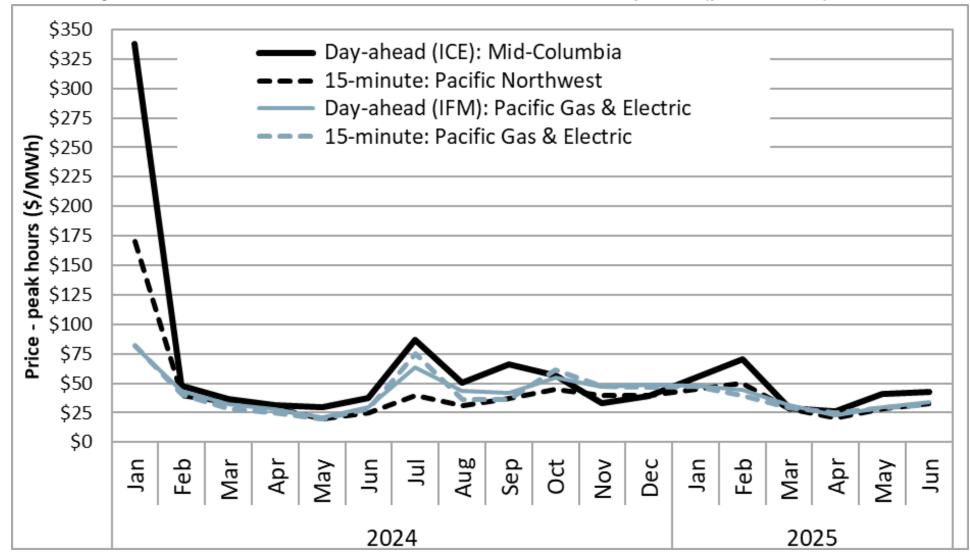
Monthly average day-ahead ISO and bilateral prices (peak hours)





Bilateral day-ahead prices at Mid-C higher than ISO market prices

Mid-C bilateral day-ahead ICE vs. Pacific Northwest 15-minute market prices (peak hours)

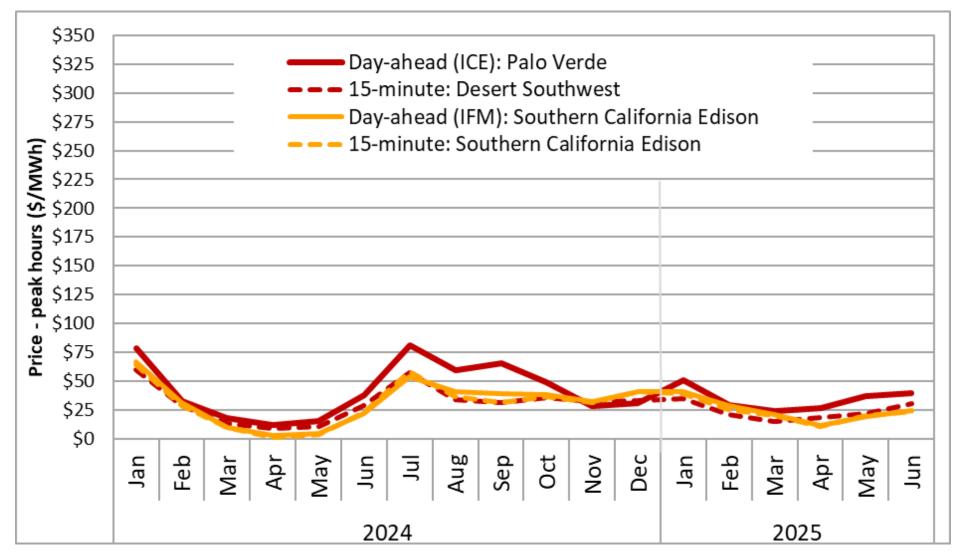






Bilateral day-ahead prices at Palo Verde higher than ISO market prices

Palo Verde bilateral day-ahead ICE vs. Desert Southwest 15-minute market prices (peak hours)

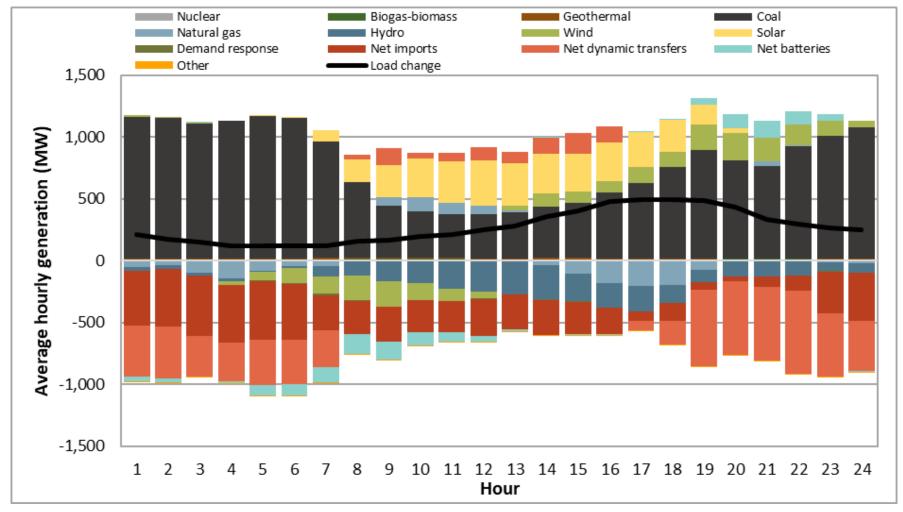






Change in average hourly generation by fuel type in the Intermountain West Region

Q2 2025 vs. Q2 2024

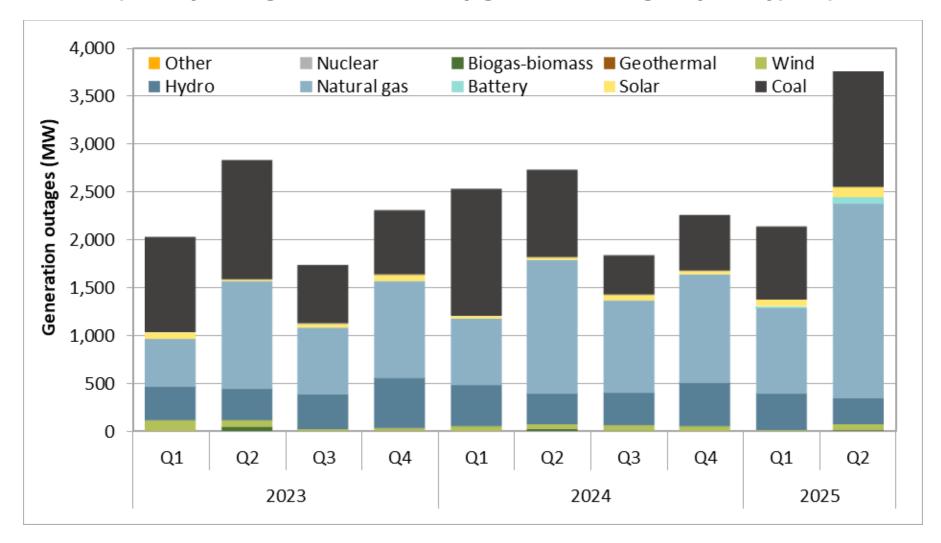




WEIM

Intermountain West coal production up despite more coal unit outages

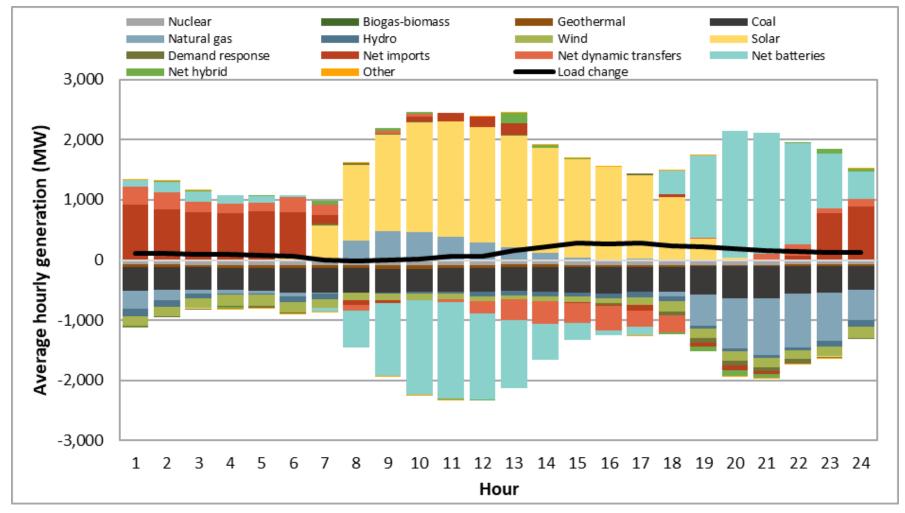
Intermountain West quarterly average of maximum daily generation outages by fuel type – peak hours





Change in average hourly generation by fuel type in the Desert Southwest Region

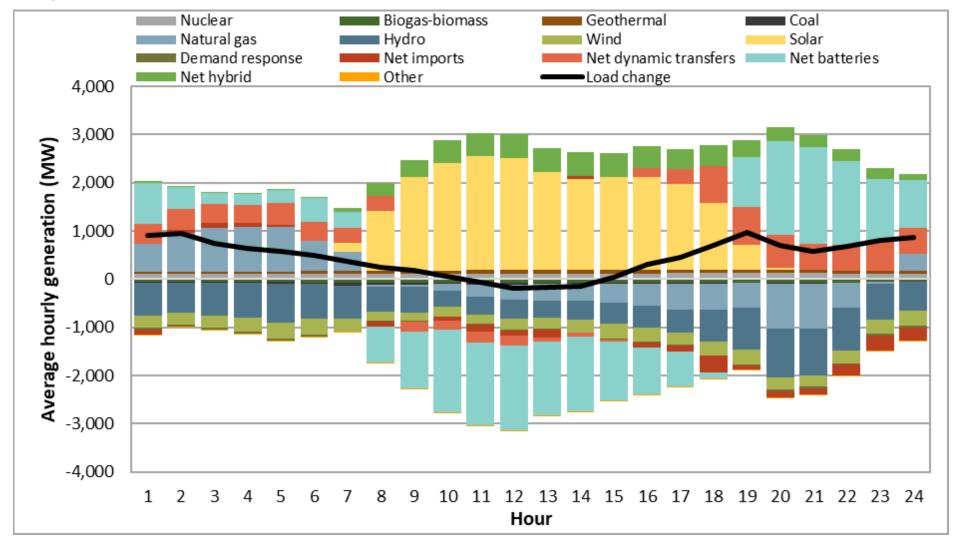
Q2 2025 vs. Q2 2024





Change in average hourly generation by fuel type in the California Region

Q2 2025 vs. Q2 2024

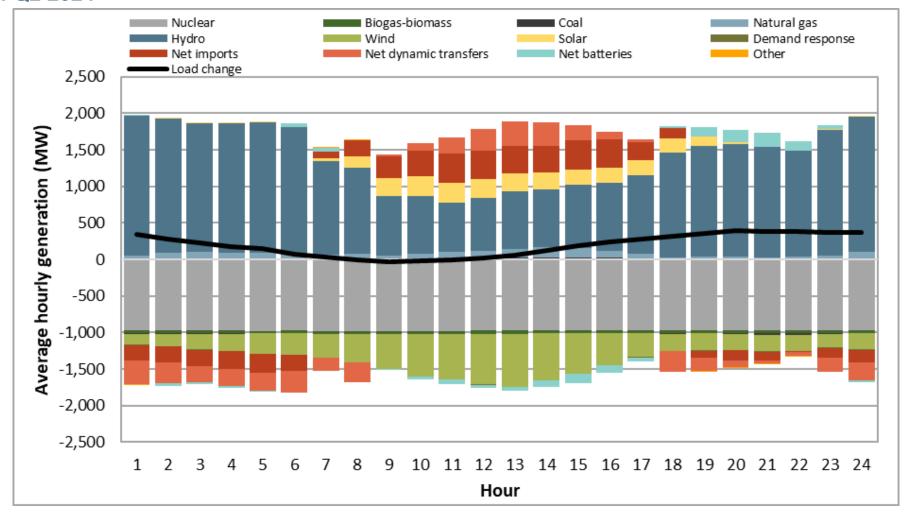






Change in average hourly generation by fuel type in the Pacific Northwest region

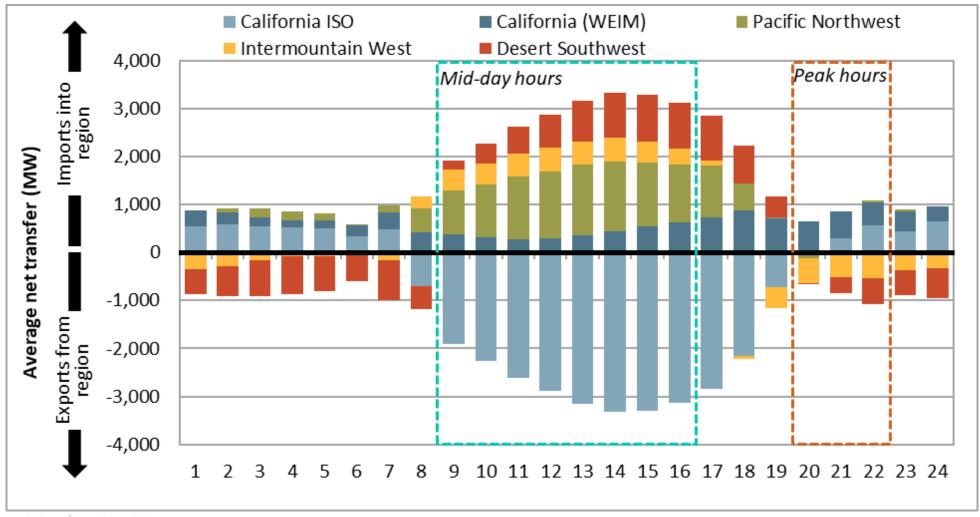
Q2 2025 vs. Q2 2024





WEIM transfers from CAISO in mid-day hours and from Intermountain West and Desert Southwest in non-solar hours

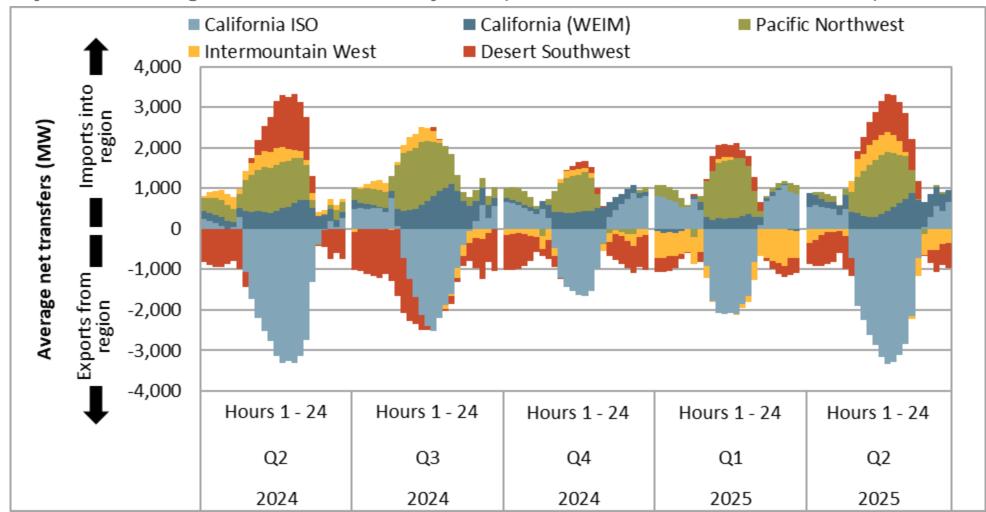
Average dynamic inter-regional WEIM transfers by hour (5-minute market, April – June 2025)





Transfers out of Intermountain West during non-solar hours down compared to Q1 2025

Average dynamic inter-regional WEIM transfers by hour (5-minute market, Q2 2024 – Q2 2025)

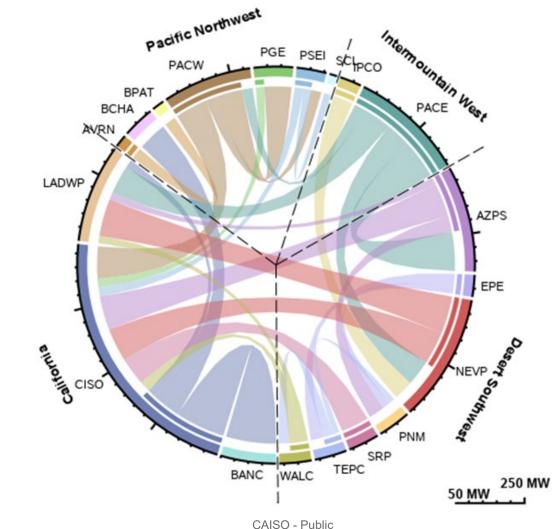




WEIM

PacWest, PacEast, Idaho Power, and most Desert Southwest areas were net exporters of WEIM transfers during peak hours

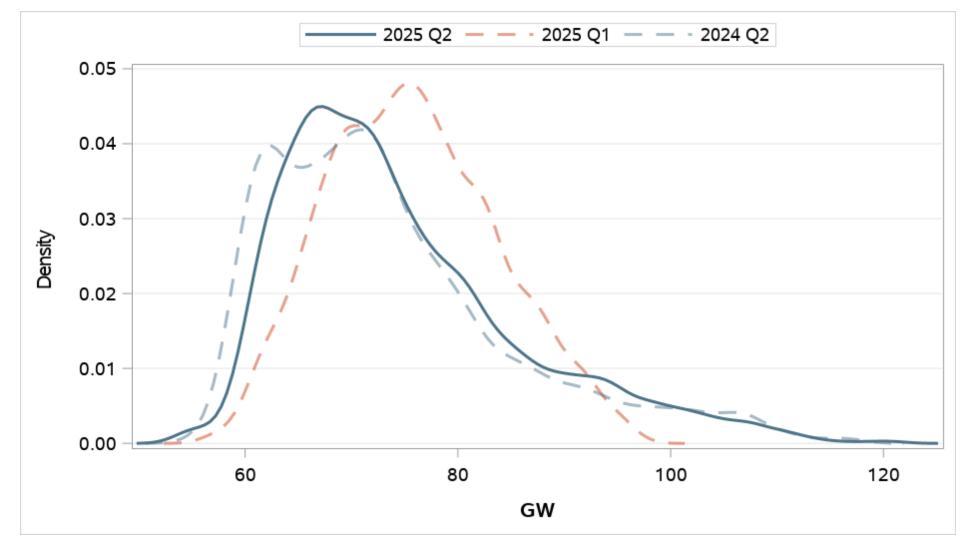
Average dynamic WEIM transfers (5-minute market, peak hours 20-22, Q2 2025)





Less low load and more medium load intervals in Q2 2025 than Q2 2024

Quarterly 5-minute market system load distribution

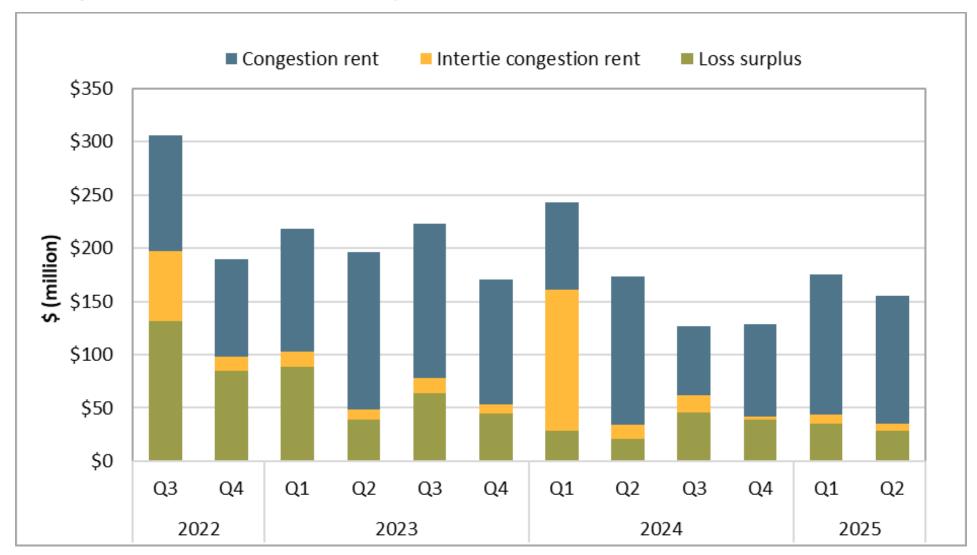






Day-ahead congestion rent down 16%

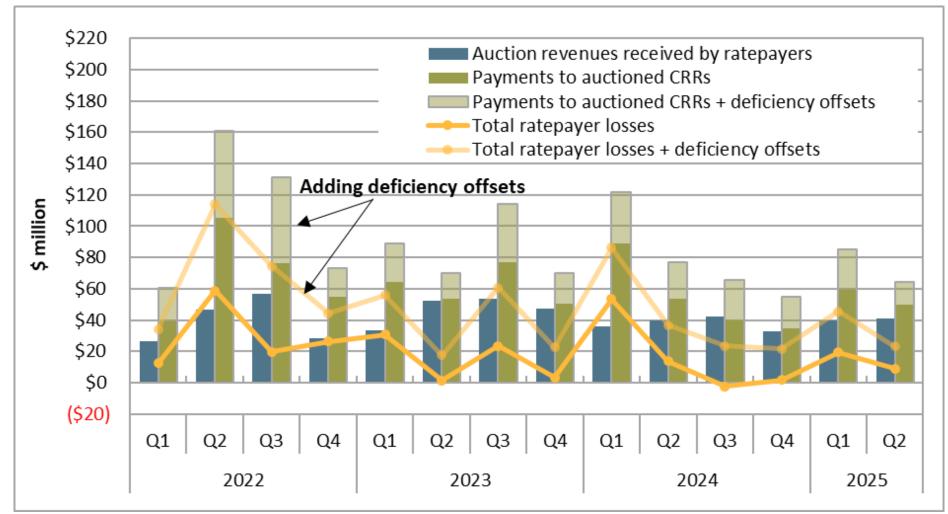
Day-ahead congestion rent and loss surplus by quarter (2022–2025)





Transmission ratepayers lost about \$9.1 million from auctioned CRRs in Q2 2025

Auction revenues and payments to non-load serving entities





Assistance energy transfers increased WEIM transfers for 5 of the 9 entities that opted in

Resource sufficiency evaluation failures during assistance energy transfer opt-in (April – June 2025)

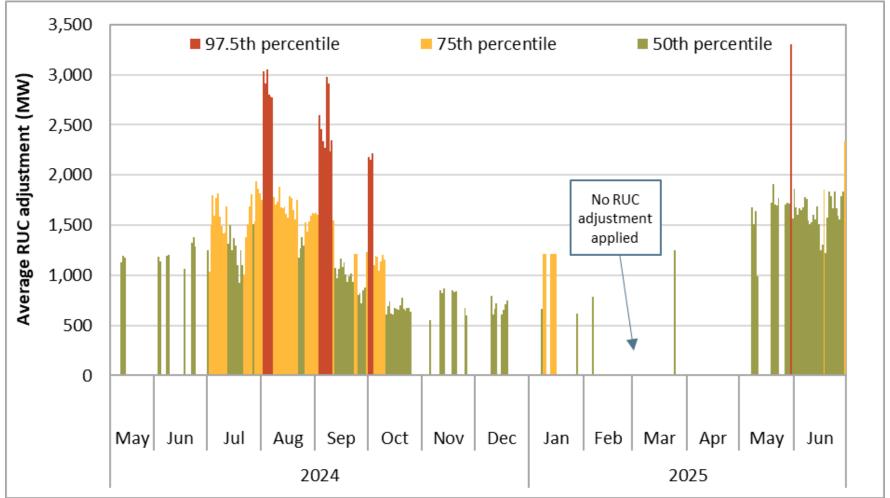
Balancing area	RSE failures under AET (15-min. intervals)	Total WEIM imports added (MWh)	Total cost of assistance energy transfers (\$)	Total cost per added WEIM imports (\$/MWh)
Avangrid	4	17	\$5,935	\$348
Balancing Authority of N. California	0	N/A	N/A	N/A
Idaho Power	0	N/A	N/A	N/A
NorthWestern Energy	1	0	\$1,053	N/A
NV Energy	2	65	\$17,192	\$264
PacifiCorp East	1	0	\$0	N/A
PacifiCorp West	14	30	\$23,483	\$776
PSC of New Mexico	1	9	\$9,560	\$1,037
WAPA Desert Southwest	5	22	\$11,072	\$509



WEIM

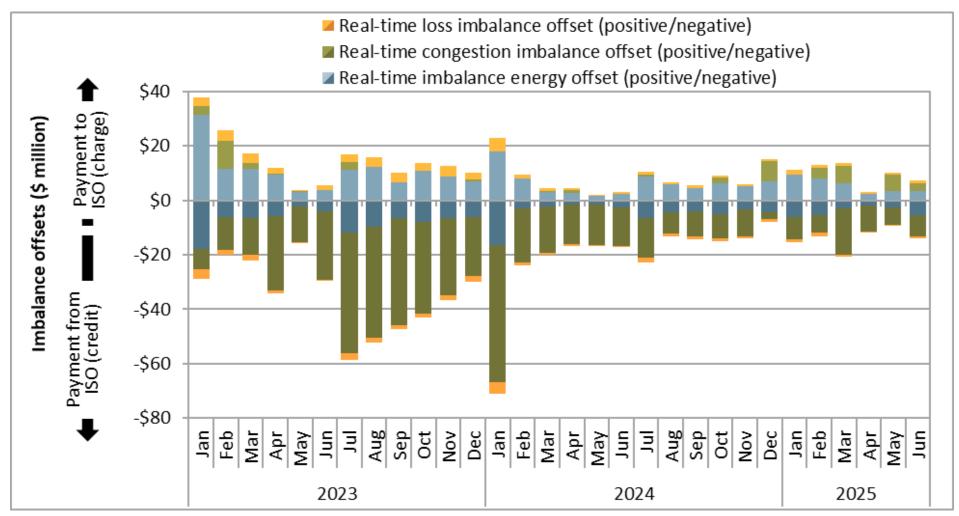
CAISO RUC adjustment targeted covering 97.5th percentile of uncertainty on 1 day in Q2 2025

Average residual unit commitment adjustment by day (peak morning and evening hours, May 7, 2024 – June 30, 2025)



Real-time imbalance offset for balancing areas only in real-time markets was \$15 million credit

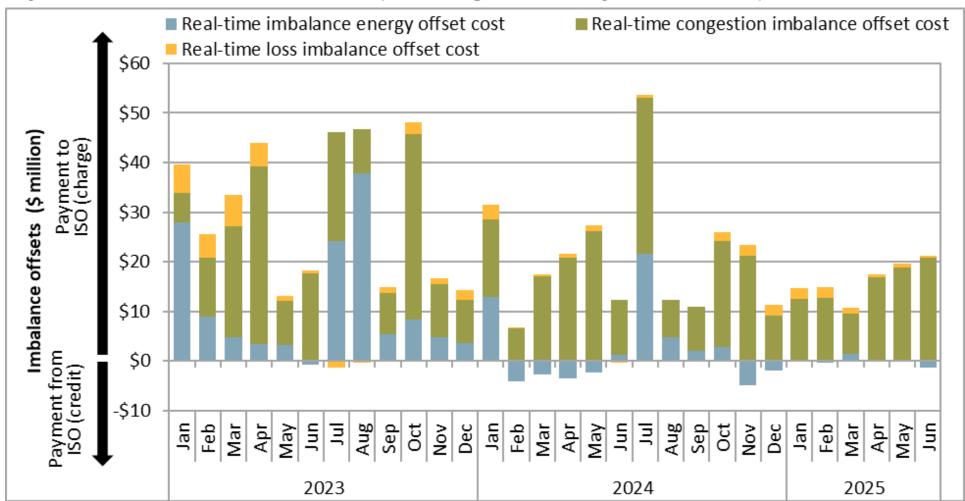
Monthly real-time imbalance offset costs (balancing areas only in WEIM)





Real-time imbalance offset for balancing area in day-ahead market was \$57 million charge

Monthly real-time imbalance offset costs (balancing areas in day-ahead market)





WEIM

For more information

- Q2 2025 report on market issues and performance
 - https://www.caiso.com/documents/2025-second-quarter-report-on-marketissues-and-performance.pdf
- Department of Market Monitoring webpage
 - http://https://www.caiso.com/market-operations/market-monitoring
- CAISO Tariff, Appendix P
 - http://www.caiso.com/Documents/AppendixP CAISODepartmentOfMarketMonito ring asof Apr1 2017.pdf
- Email questions to:
 - Ryan Kurlinski, <u>rkurlinski@caiso.com</u>
 - DMM, <u>DMM@caiso.com</u>

