



Markets Report

Members Committee
January 22, 2026

- PJM Wholesale Cost is now being calculated exclusively by Monitoring Analytics. ([Slide 4](#))
- Slides pertaining to weather conditions, in addition to slides showing average fuel prices, generation on-line fuel mixes, and System Marginal Prices have been combined into a **Market Conditions** section. ([Slides 6-19](#))
- In December, temperatures were below a typical level. The sum of Heating and Cooling Degree Days was above the historic average. ([Slides 7-8](#))
- Energy use was well above its historic average for December. ([Slides 7-8](#))
- In December, uplift exceeded \$2.25M on 7 days. ([Slide 24](#))

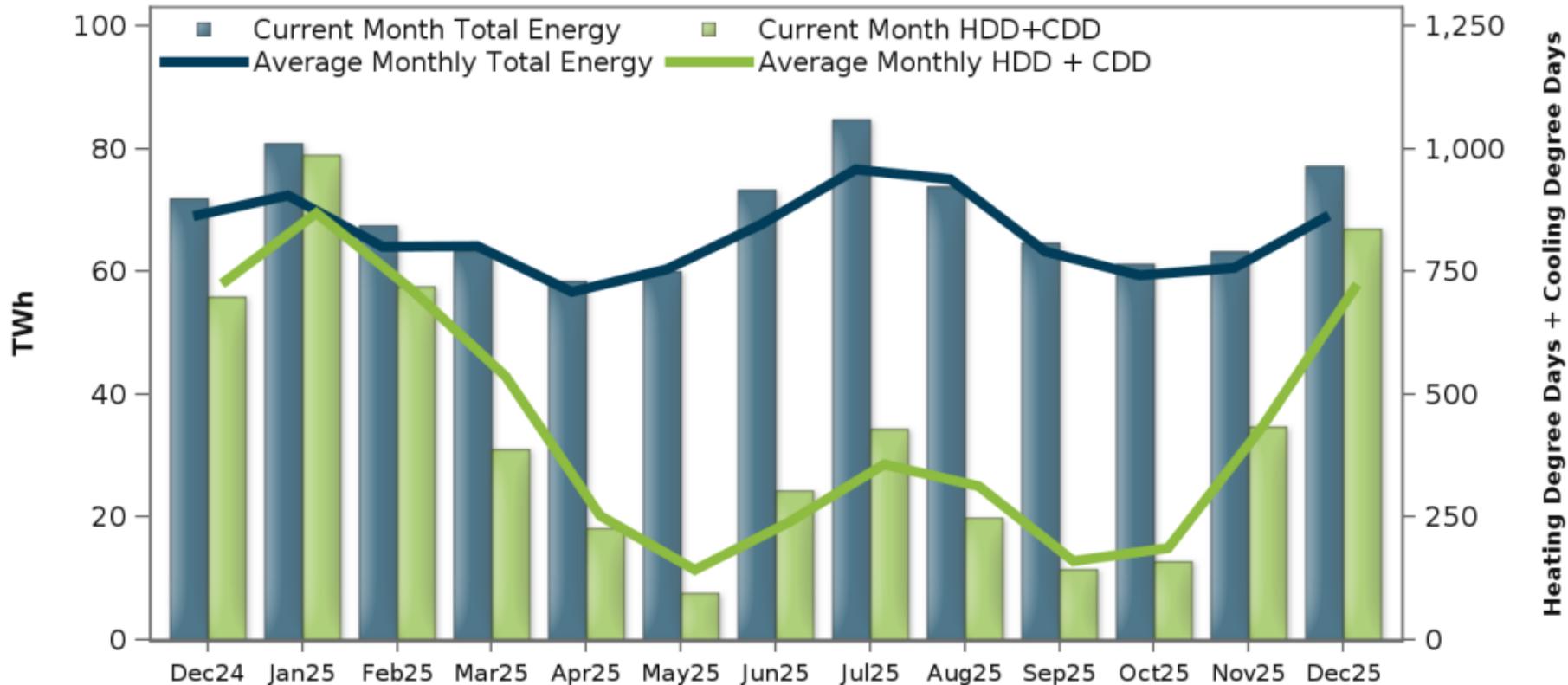
- Load-weighted average LMP for 2025 is \$50.75/MWh: ([Slides 33-34](#))
 - December 2025 was \$55.30/MWh, which is higher than December 2024 (\$35.00/MWh) and December 2023 (\$28.00/MWh).
- There were no 5-minute intervals that experienced shortage pricing in December. ([Slide 32](#), Report Appendix)
- FTR revenue adequacy for the month of December is 99% and the 2024-2025 Planning Year is funded at 100%. ([Slides 50-53](#))
- Congestion values in 2025 were higher than those seen in 2024. ([Slide 51](#))
- Regulation and Synchronized Reserve market costs have generally tracked with energy prices over time. ([Slides 67-69](#))

- PJM Wholesale Cost is now being calculated and published exclusively by Monitoring Analytics (IMM).
- Annual and quarterly updates can be found in the IMM's State of the Market Reports:
 - https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2024.shtml
- Monthly updates can be found in Excel format on the IMM's website:
 - https://www.monitoringanalytics.com/data/pjm_price.shtml
- Year-to-Date updates will be presented by the IMM at the monthly MC Webinar.
- PJM will continue to monitor the IMM's Wholesale Cost calculation.

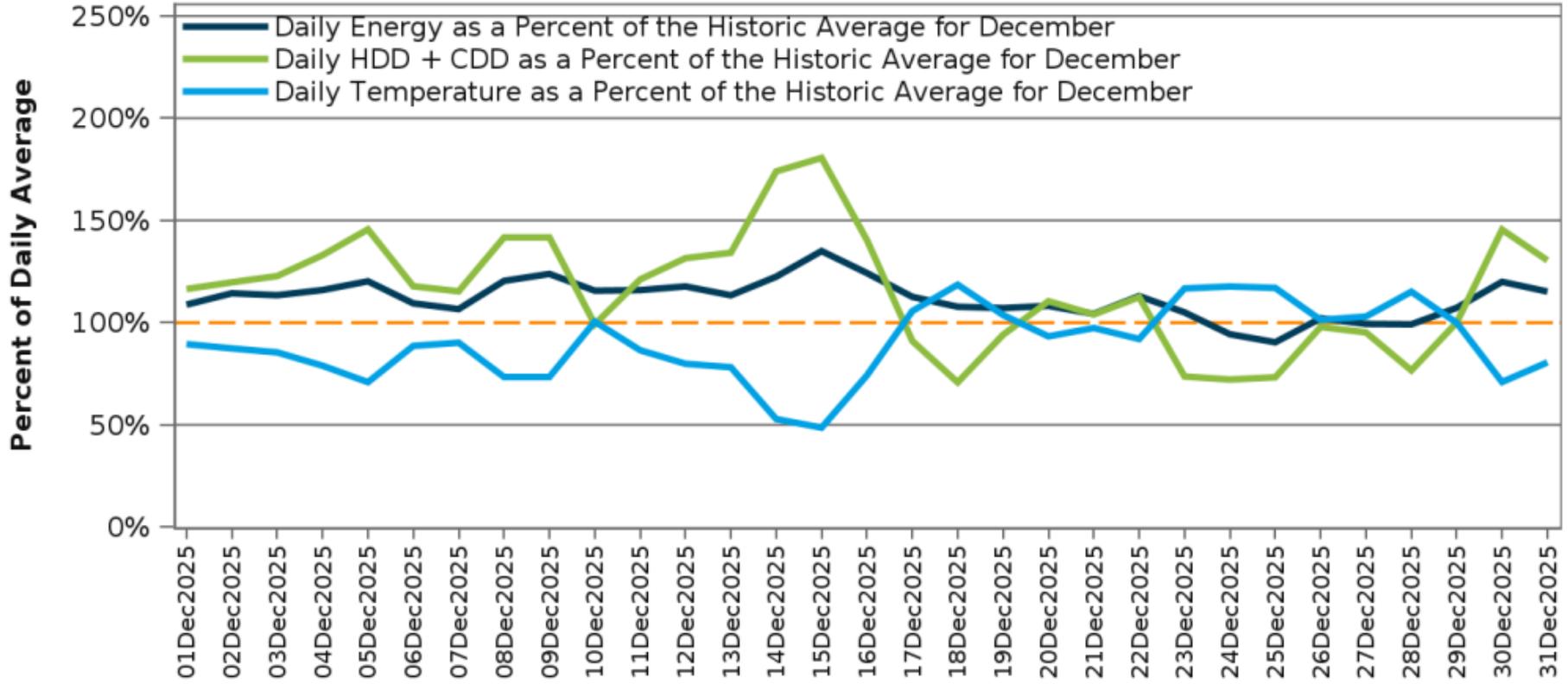
Market Conditions

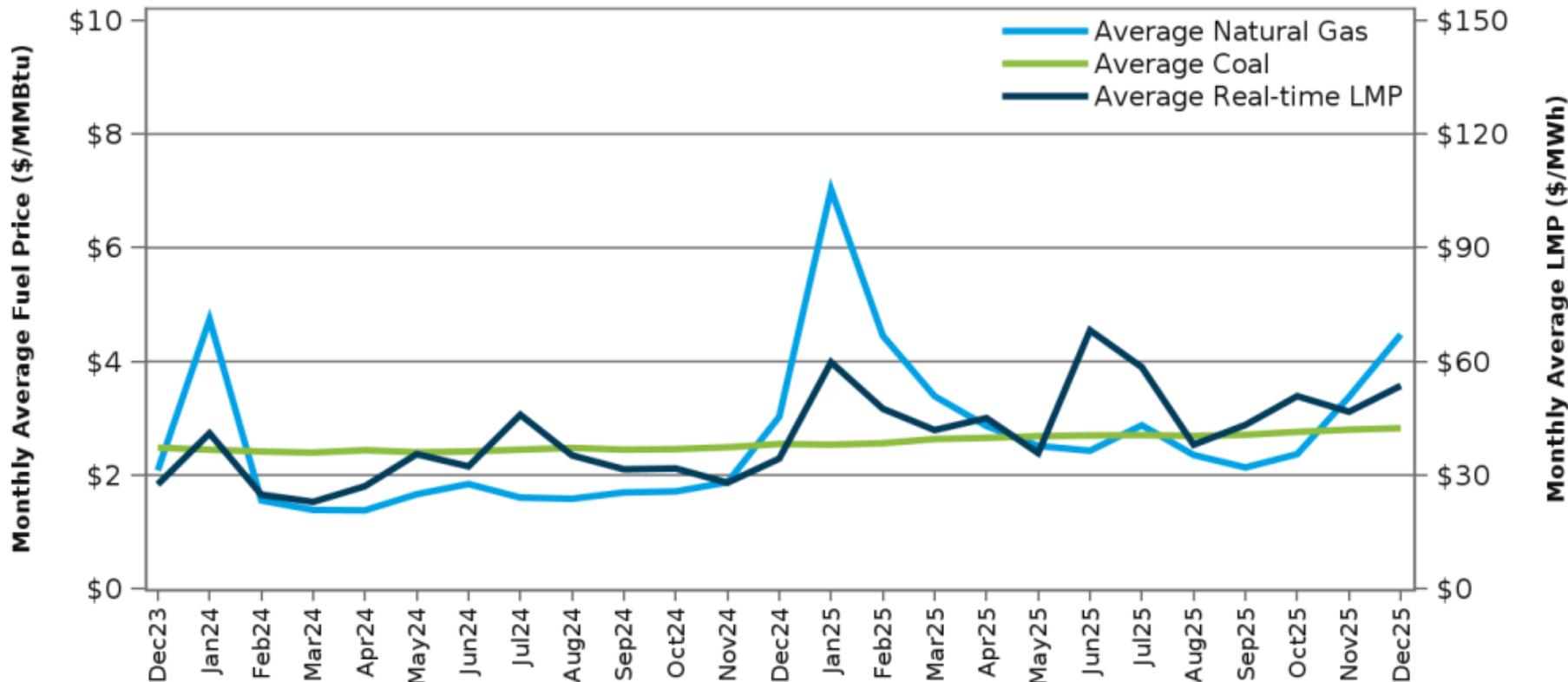
- The weather parameter shown in the following slide is a monthly sum of daily Heating Degree Days (HDD) and Cooling Degree Days (CDD).
- Degree days represent a deviation from a baseline temperature, in this case 60 degrees for HDD and 65 degrees for CDD. As temperatures get more extreme, colder or hotter, either HDDs or CDDs, respectively, will increase.
- Typically, winter months will only record HDDs, while summer months will only record CDDs. Shoulder months may have both HDDs and CDDs.
- Degree Days are calculated using a daily load weighting that weights values from stations in each TO zone according to the zonal contribution to the RTO peak on that day.
- Average values use data from 1998 to the most recent complete year, in this case, 2024. Averages include load data for all of TO zones in the current RTO footprint.

Historic Average Weather and Energy versus Current Month

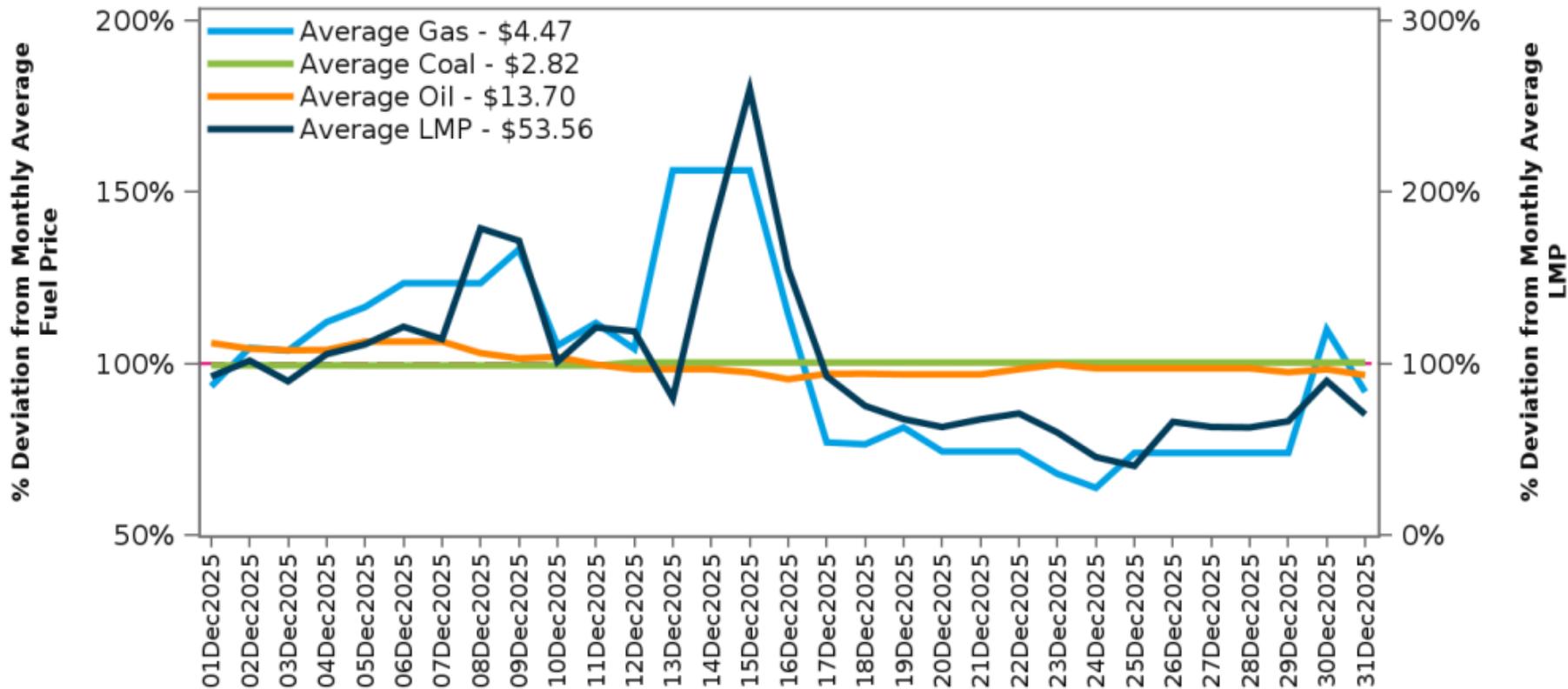


Historic Average Weather and Energy versus Current Month - Daily





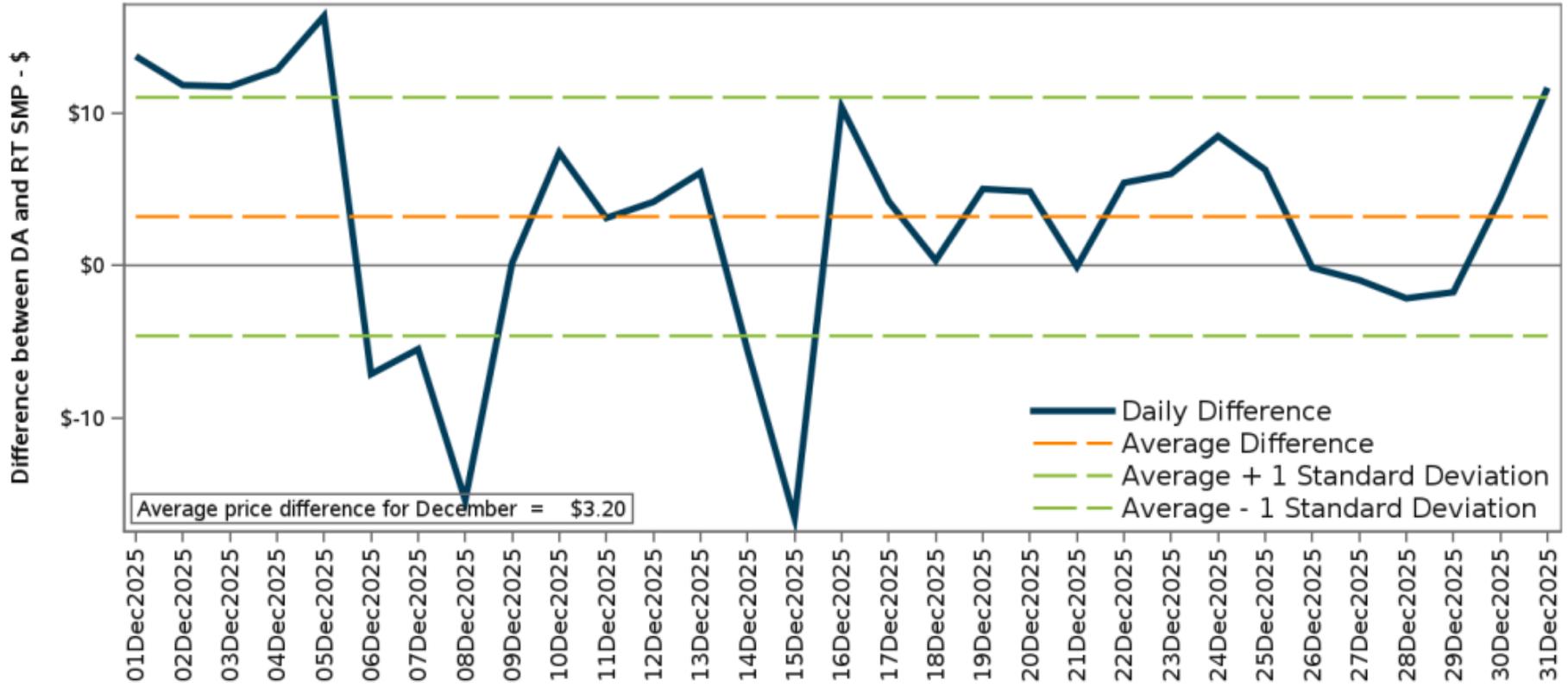
Fuel Price Source: S&P Global Platts



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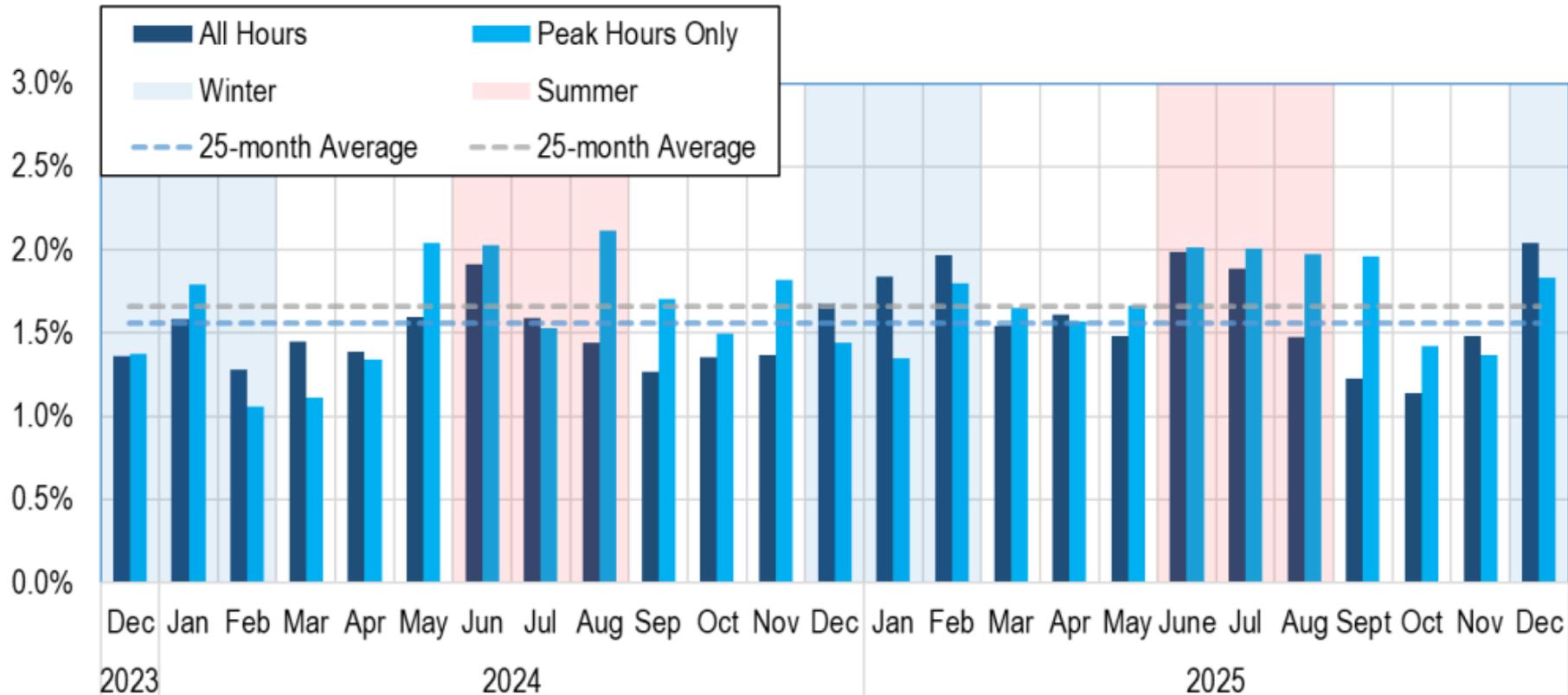


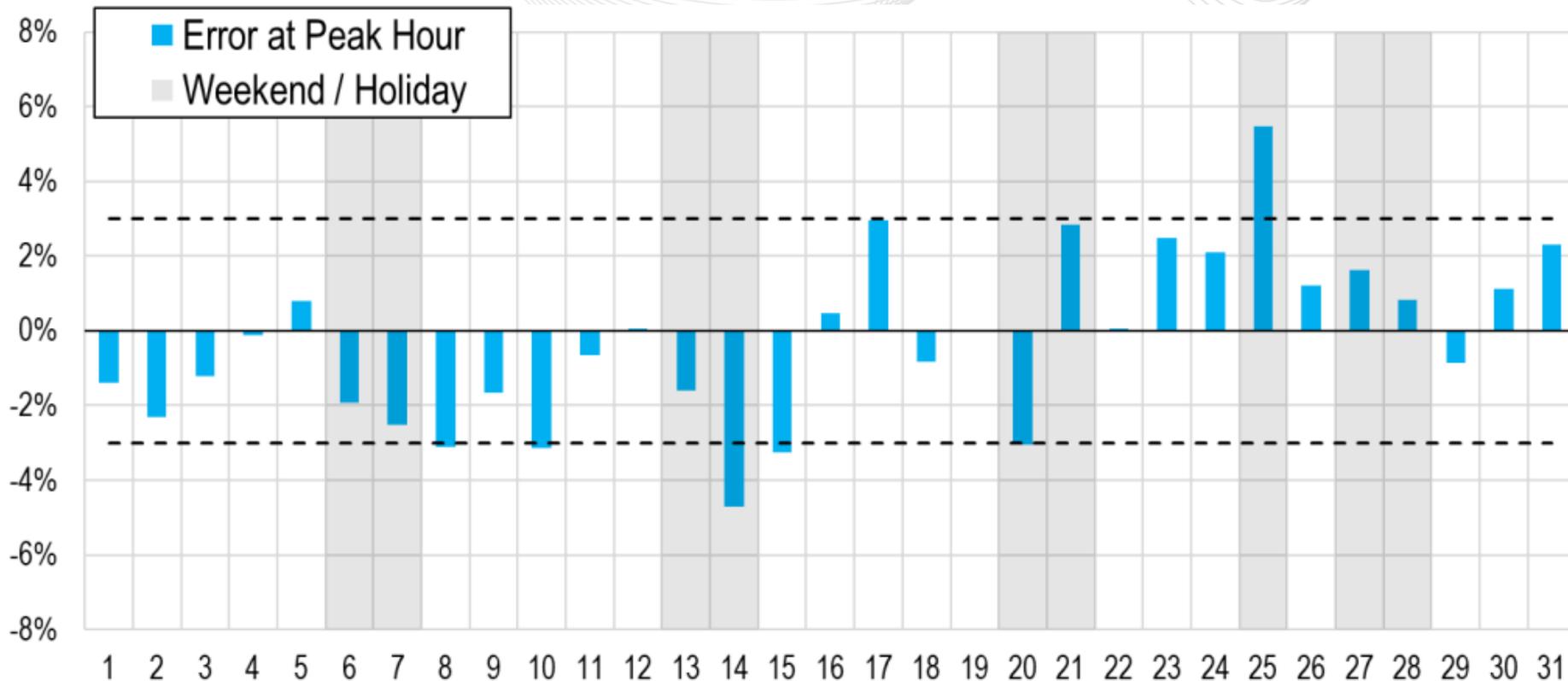
Daily Difference Between Day-Ahead and Real-Time System Marginal Prices



Positive values represent days when the DA daily average price was higher than RT. Negative values represent days when the DA price was lower.

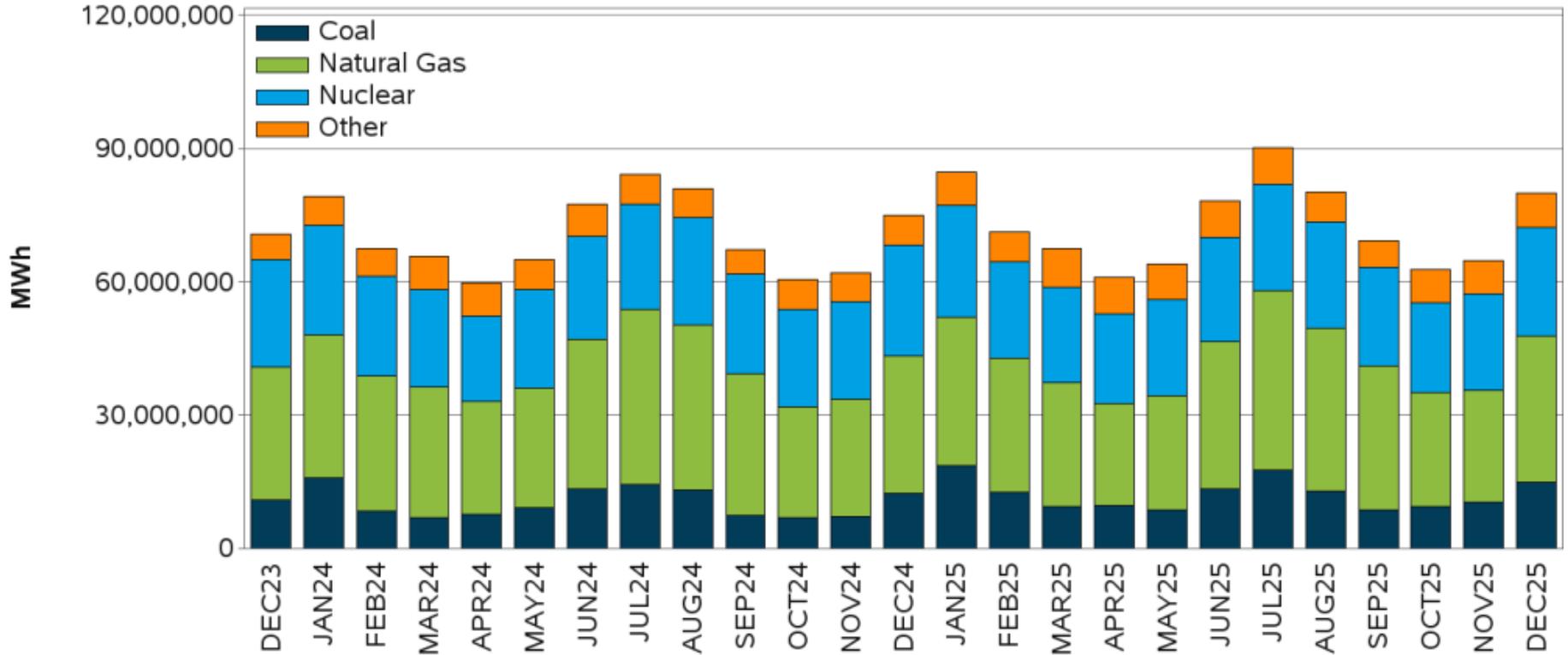
Load Forecast Error - Monthly Absolute Error, 10:00 Forecast



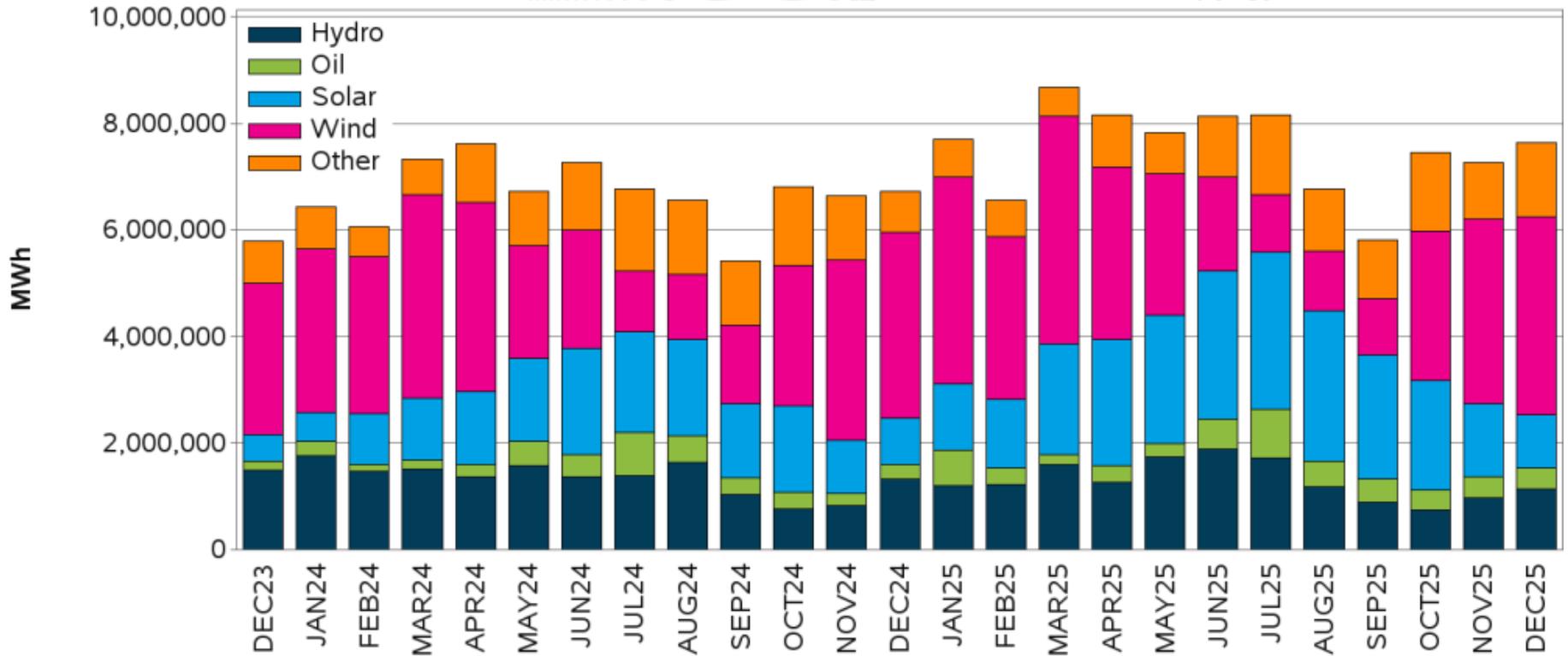


- PJM prepares a day-ahead load forecast at 10:00 am for use by our members.
- This forecast is not used to clear the day-ahead market and is not utilized for the reliability tools that run subsequent to the day-ahead market.

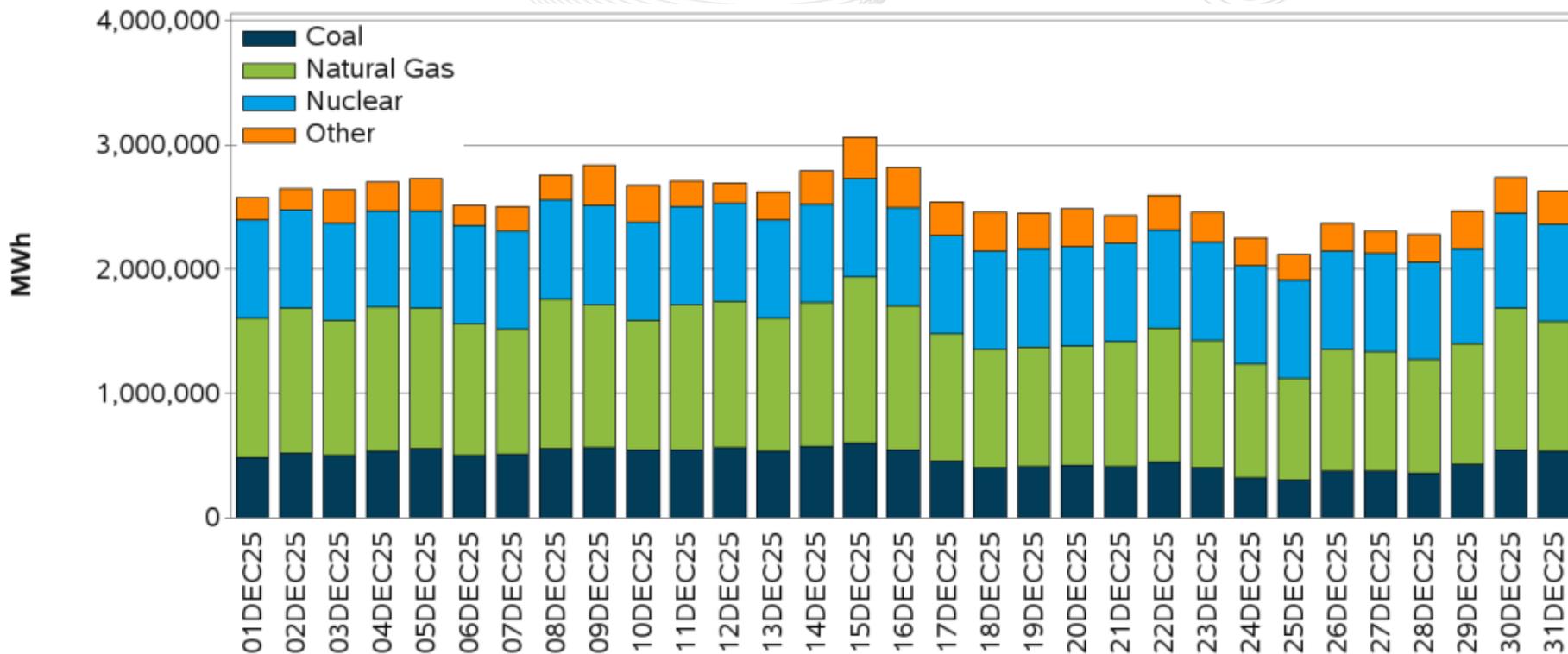
Missed day:	Reason
12/8/2025	Cloud coverage came in greater than forecast, leading to higher loads.
12/10/2025	Lots of precipitation entered the footprint, leading to higher loads.
12/14/2025	Temperatures came in much cooler, leading to high loads
12/15/2025	Temperatures came in much cooler, leading to high loads
12/20/2025	Weather came in cooler and windier, leading to high loads
12/25/2025	Load came in much lower than anticipated due to the effects from Christmas Day.



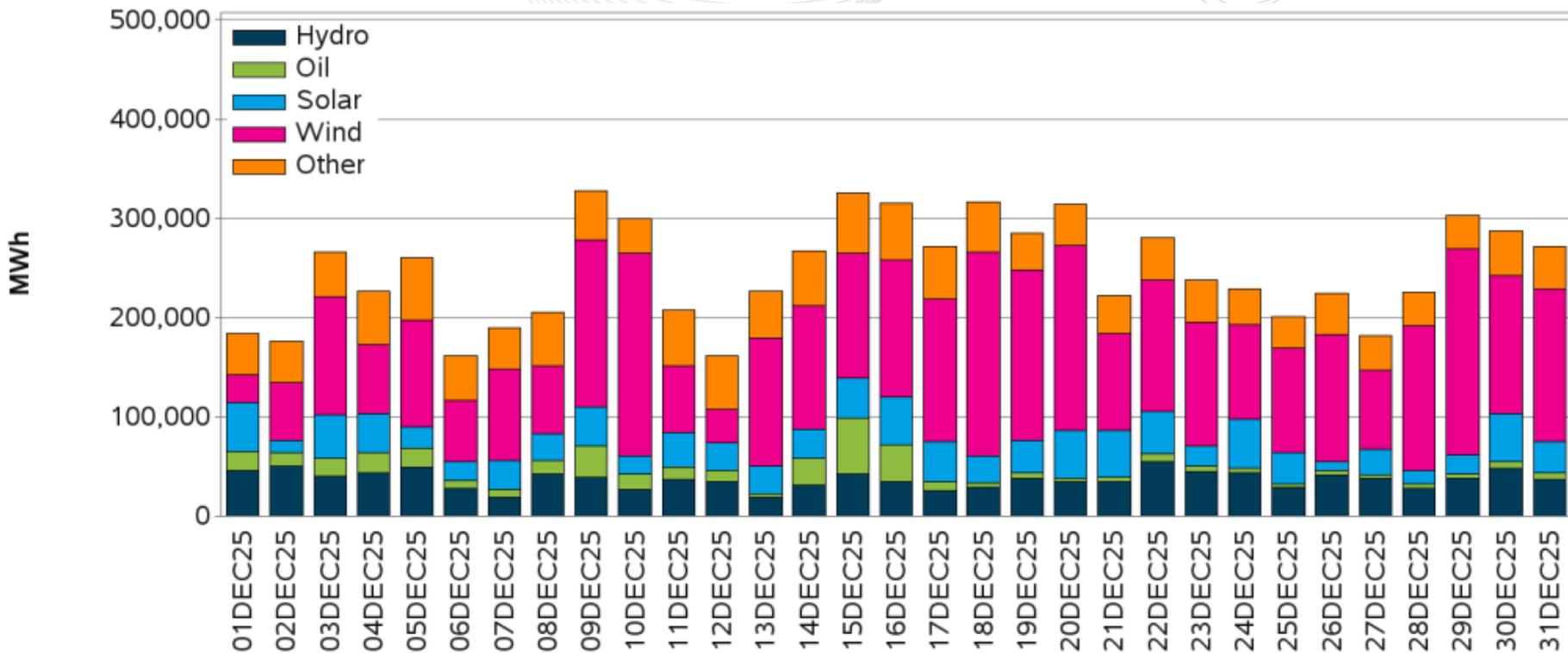
*Other includes Hydro, Oil, Solar, Wind, and Other



'Other' includes Flywheels, Multiple Fuels, Storage, and Other Renewables

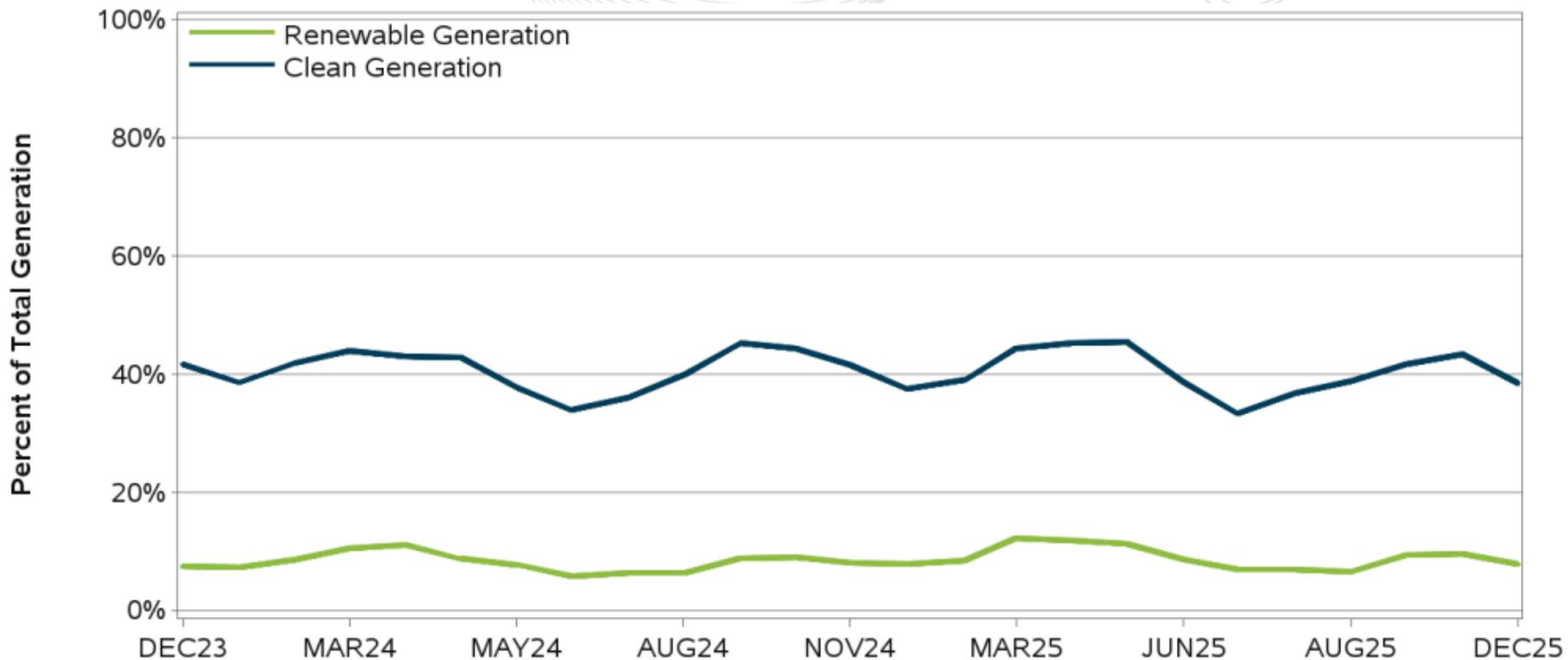


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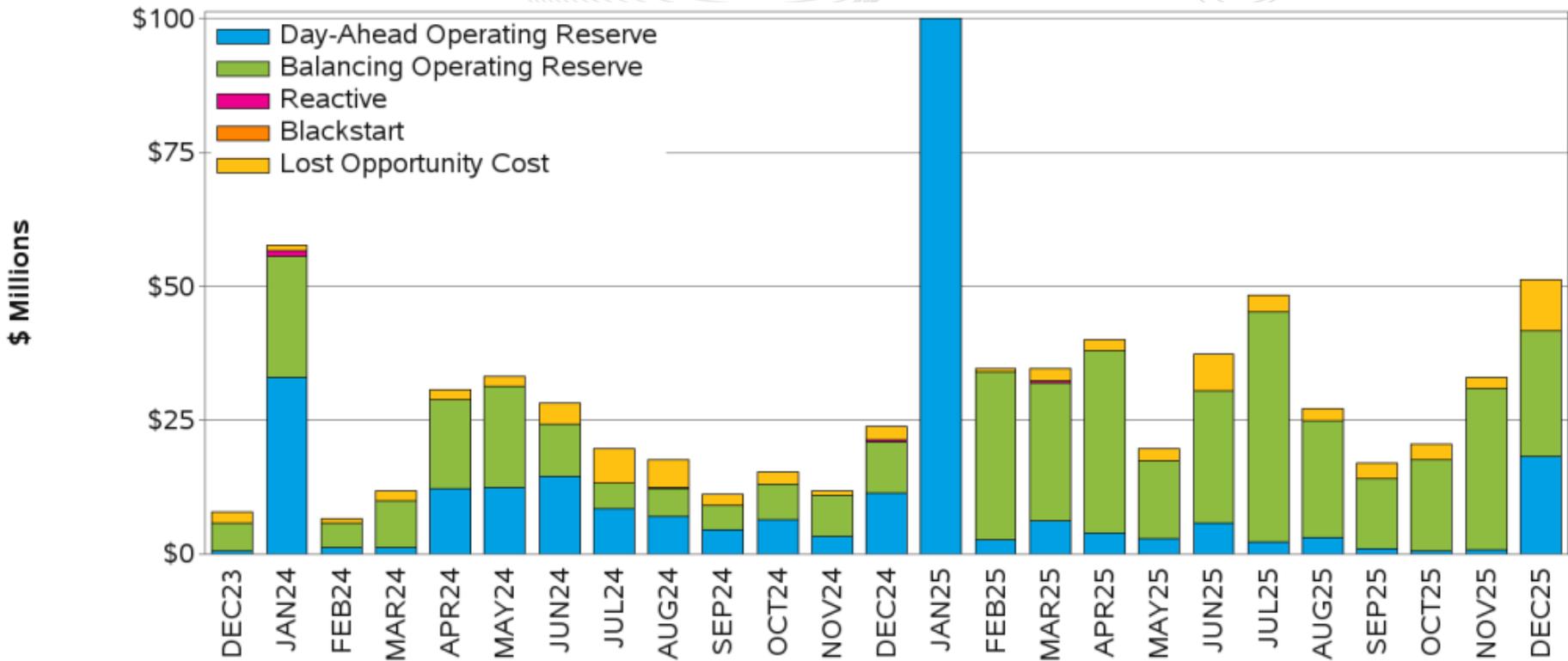
'Other' includes Flywheels, Multiple Fuels, Storage, and Other Renewables

Percent of Renewable and Clean Generation

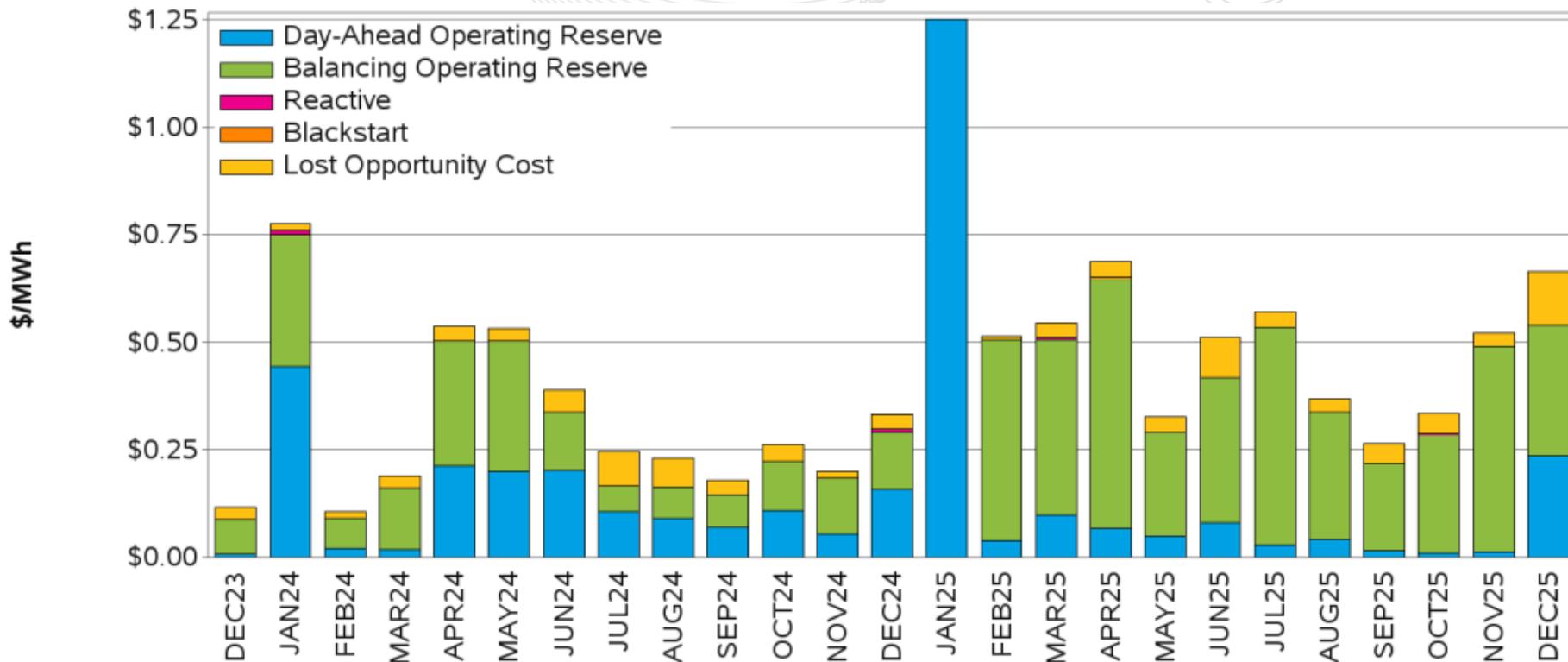


'Renewable' includes Wind, Solar, Hydro, and Other Renewables. 'Clean' includes Renewable and Nuclear.

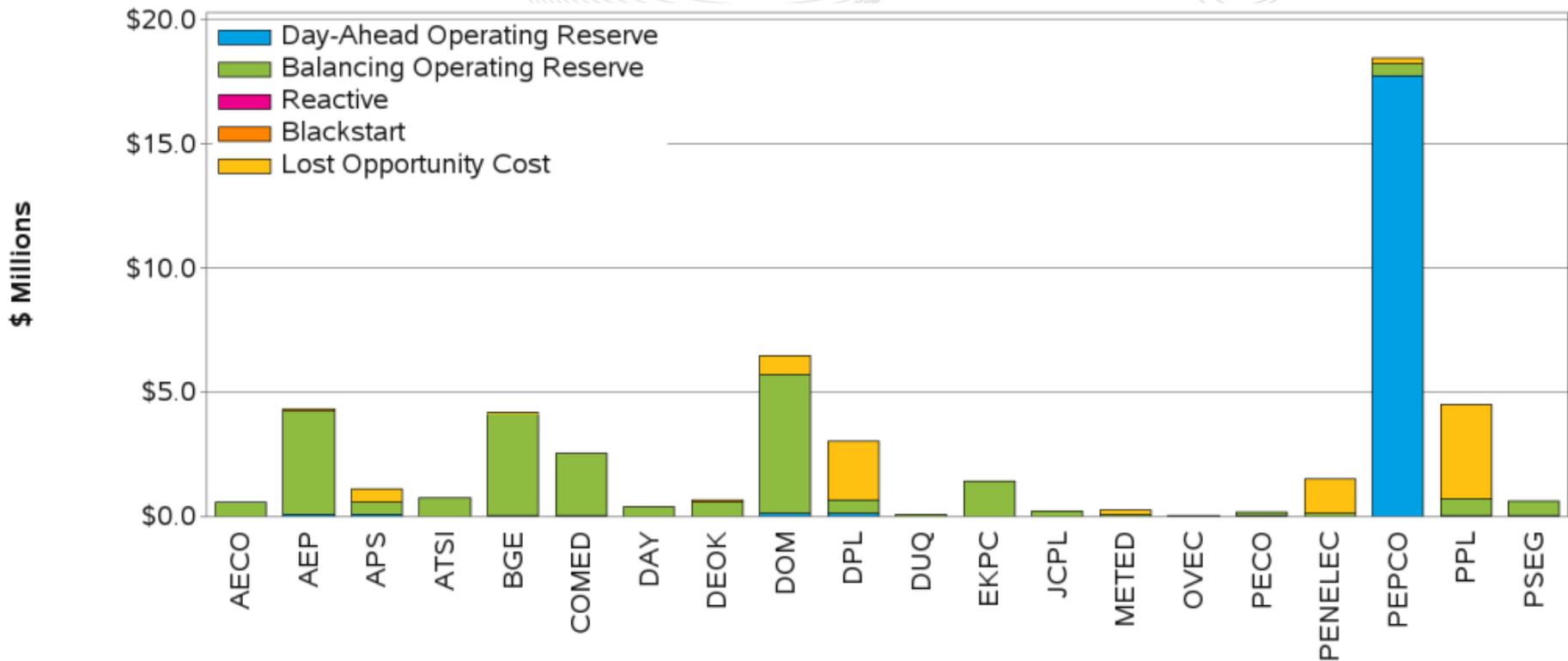
Operating Reserve (Uplift)

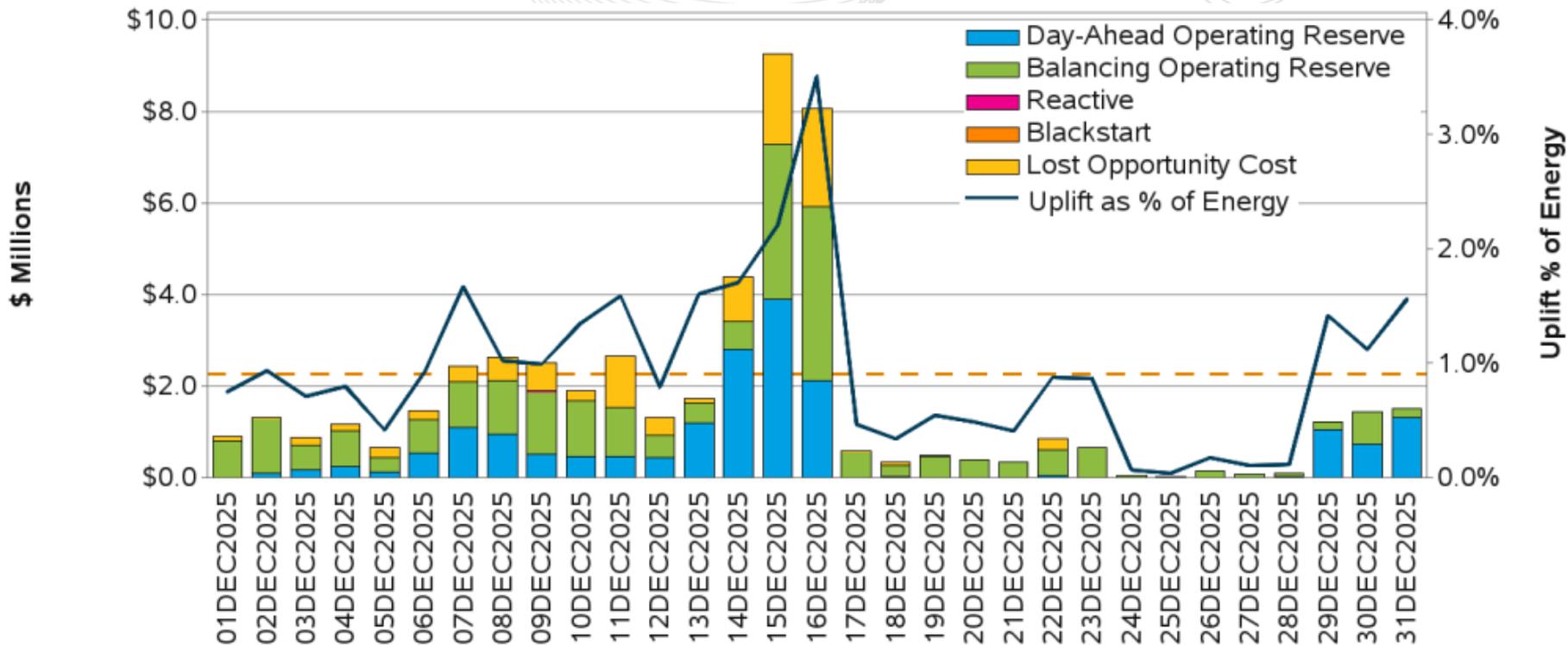


*Uplift for January 2025 totaled nearly \$400M. Please see previous reports or the report appendix for the breakout of costs.

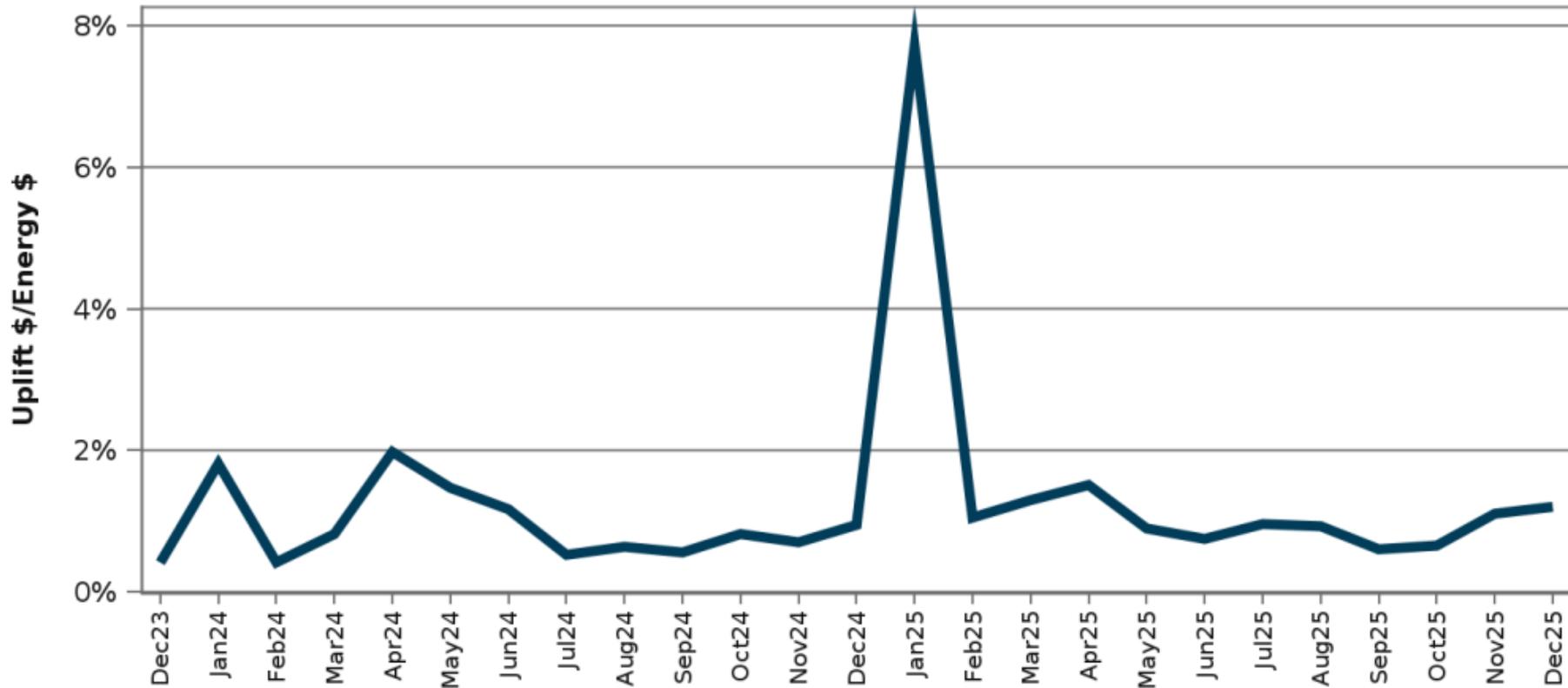


*Uplift for January 2025 totaled nearly \$5/MWh. Please see previous reports or the report appendix for the breakout of costs.



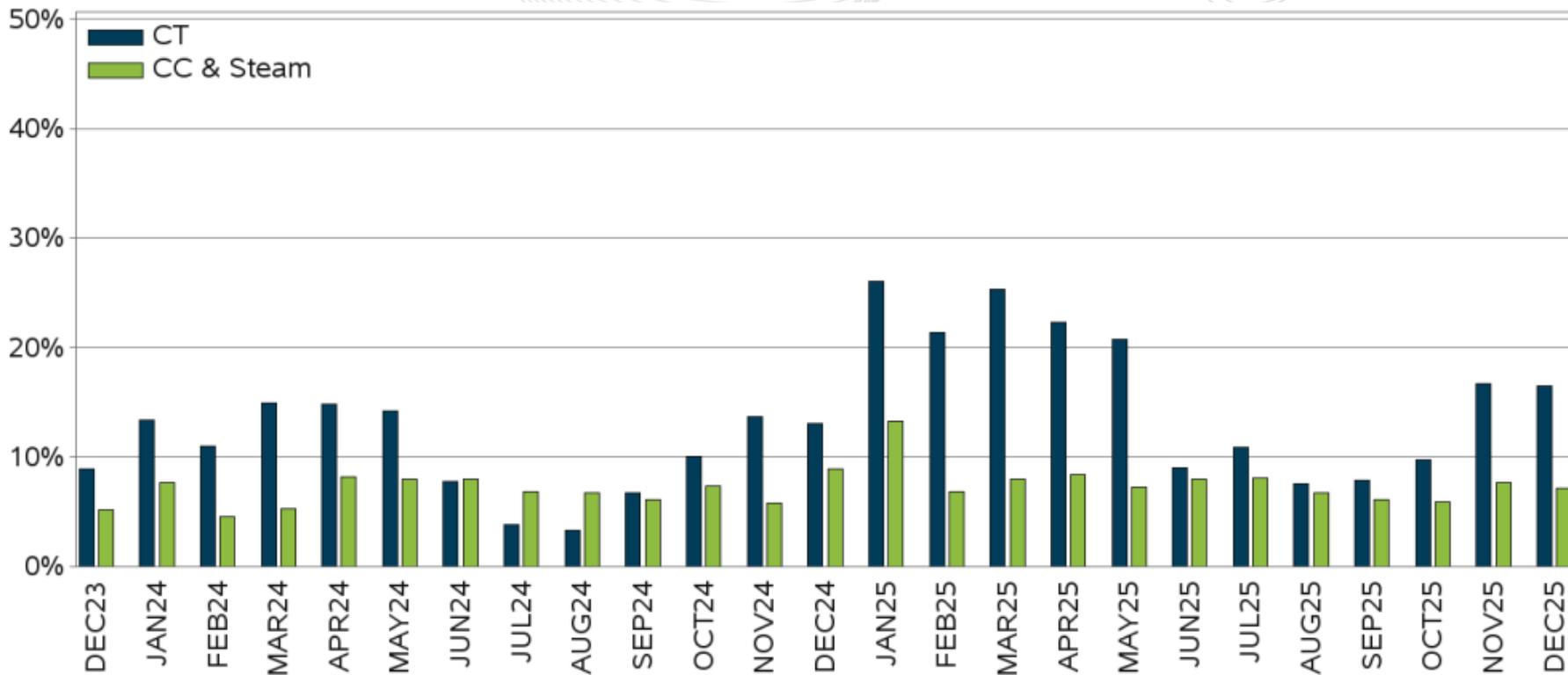


Monthly Uplift as a Percent of Energy Costs

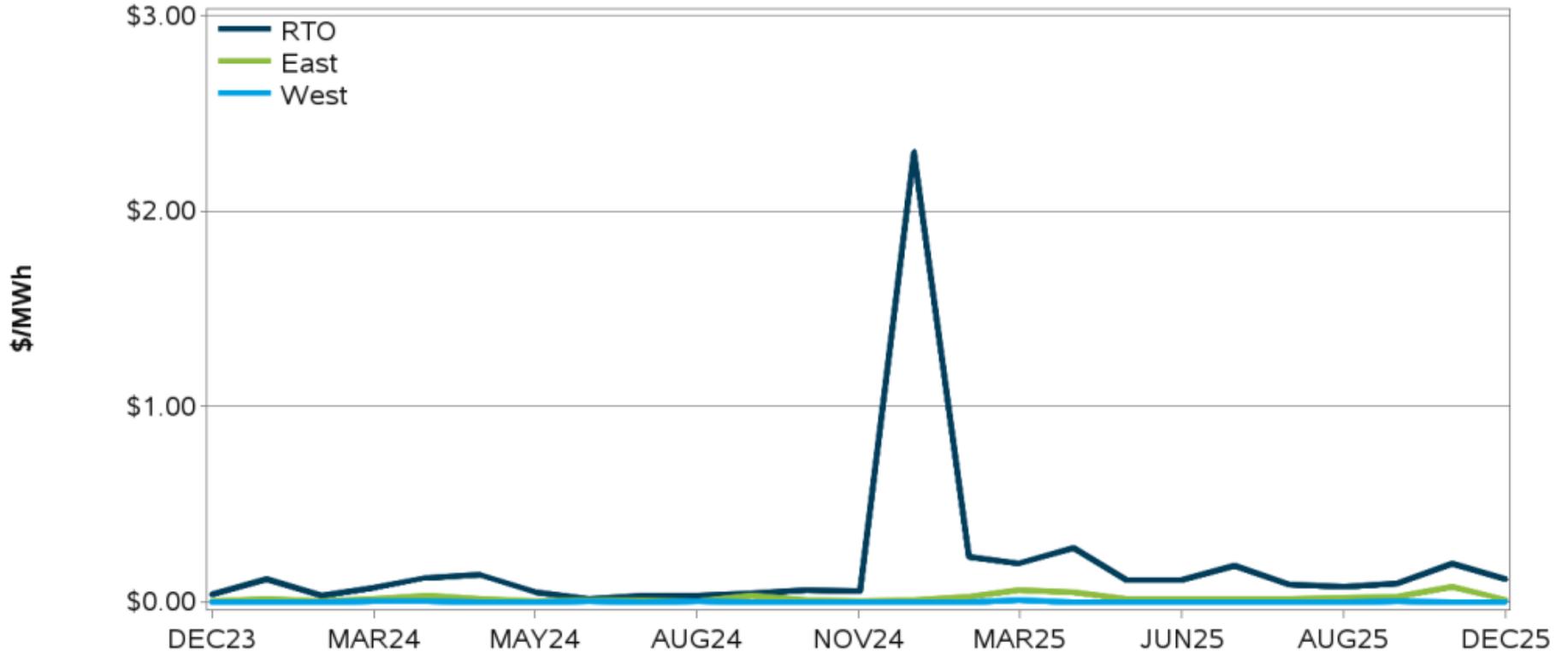


- In December, uplift exceeded \$2.25M on 7 days -
- Contributing factors to uplift were cold temperatures and transmission constraint control.
- More information on Uplift can be found on the PJM website at [Drivers of Uplift](#)

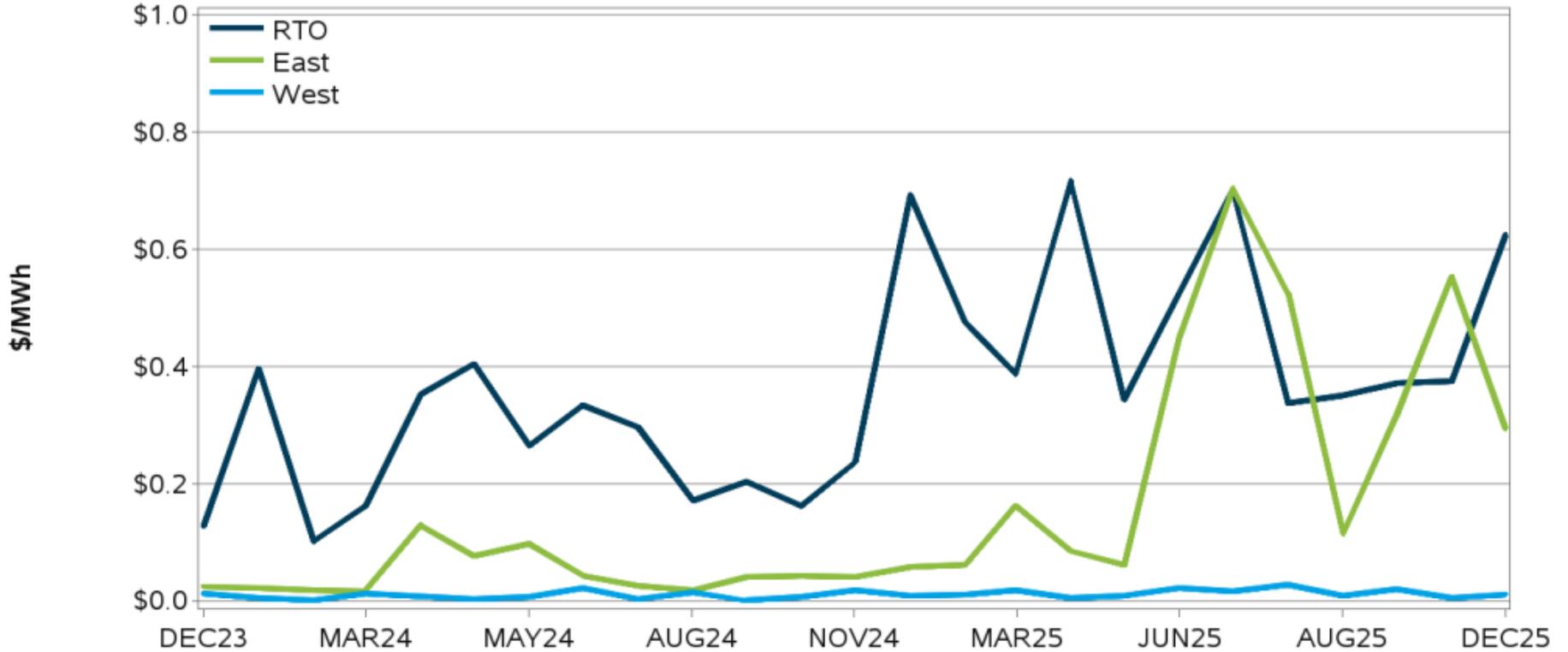
Percent of Total CT, CC and Steam Hours with LMP < Offer



- Beginning in December 2008, the daily Balancing Operating Reserves (BOR) rate was replaced with six different BOR rates: RTO BOR for Reliability Rate, RTO BOR for Deviations Rate, East BOR for Reliability Rate, East BOR for Deviations Rate, West BOR for Reliability Rate, West BOR for Deviations Rate.
- Reliability rates are charged to all real-time load and exports, whereas deviation rates, as before, are charged only to real-time deviations. RTO rates are charged to the whole footprint, whereas East and West rate adders are charged based on location.

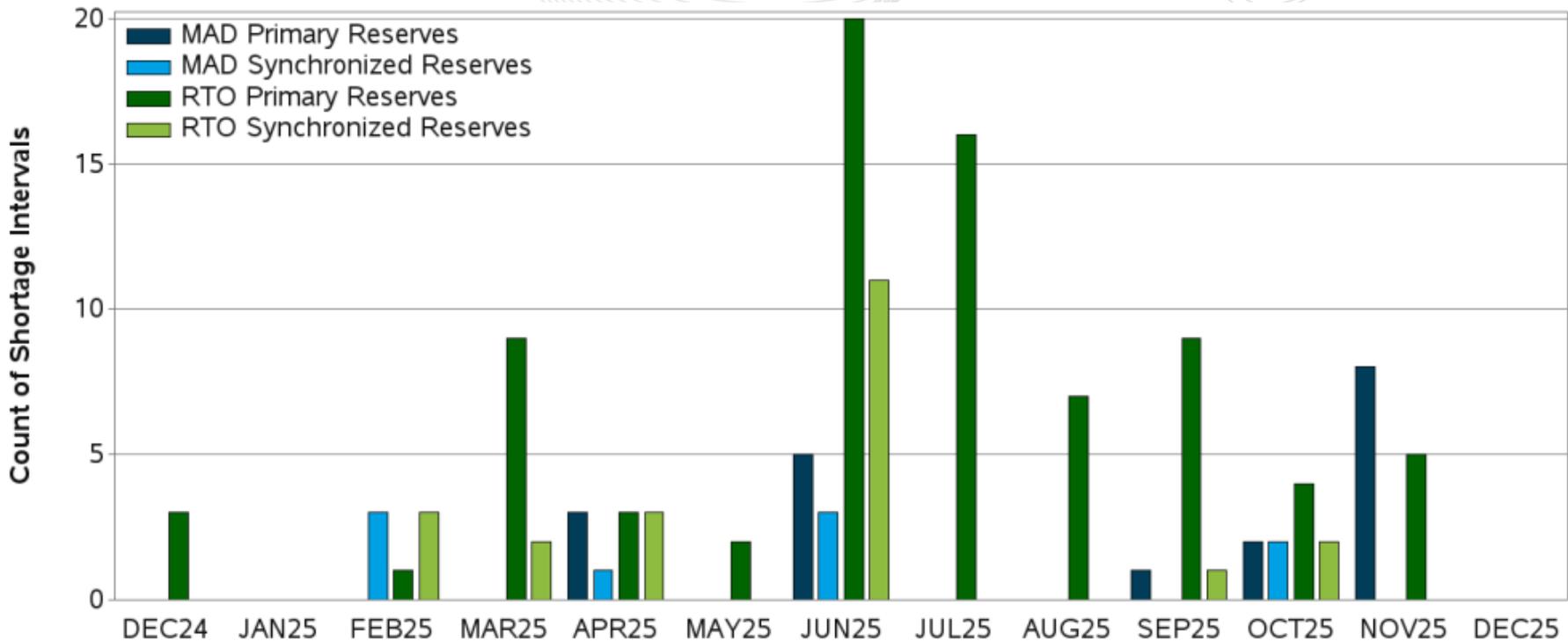


Deviations Balancing Operating Reserve Rates



Energy Market

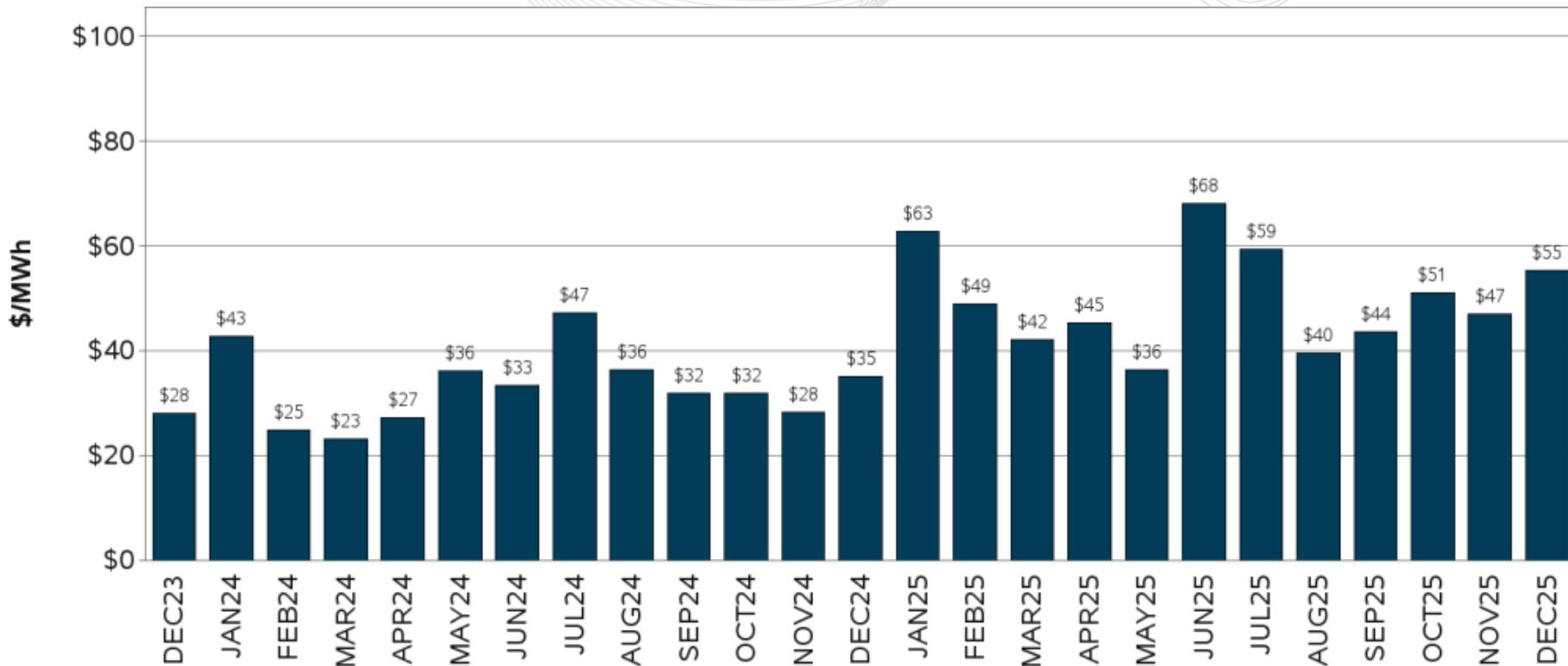
LMP Summary



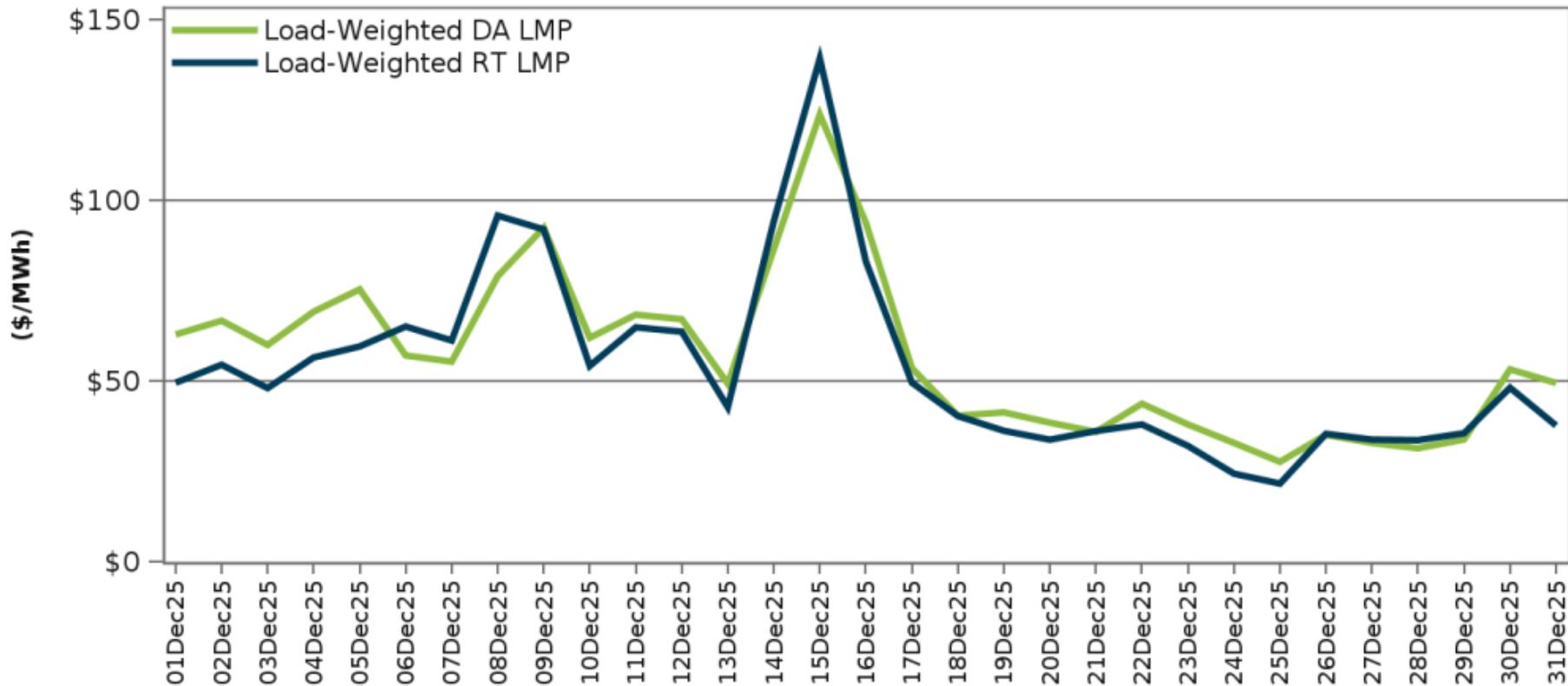
[Information on constraints and shadow prices can be found here](#)

There were nearly 80 intervals that experienced shortage pricing for RTO Primary Reserves in January 2025.

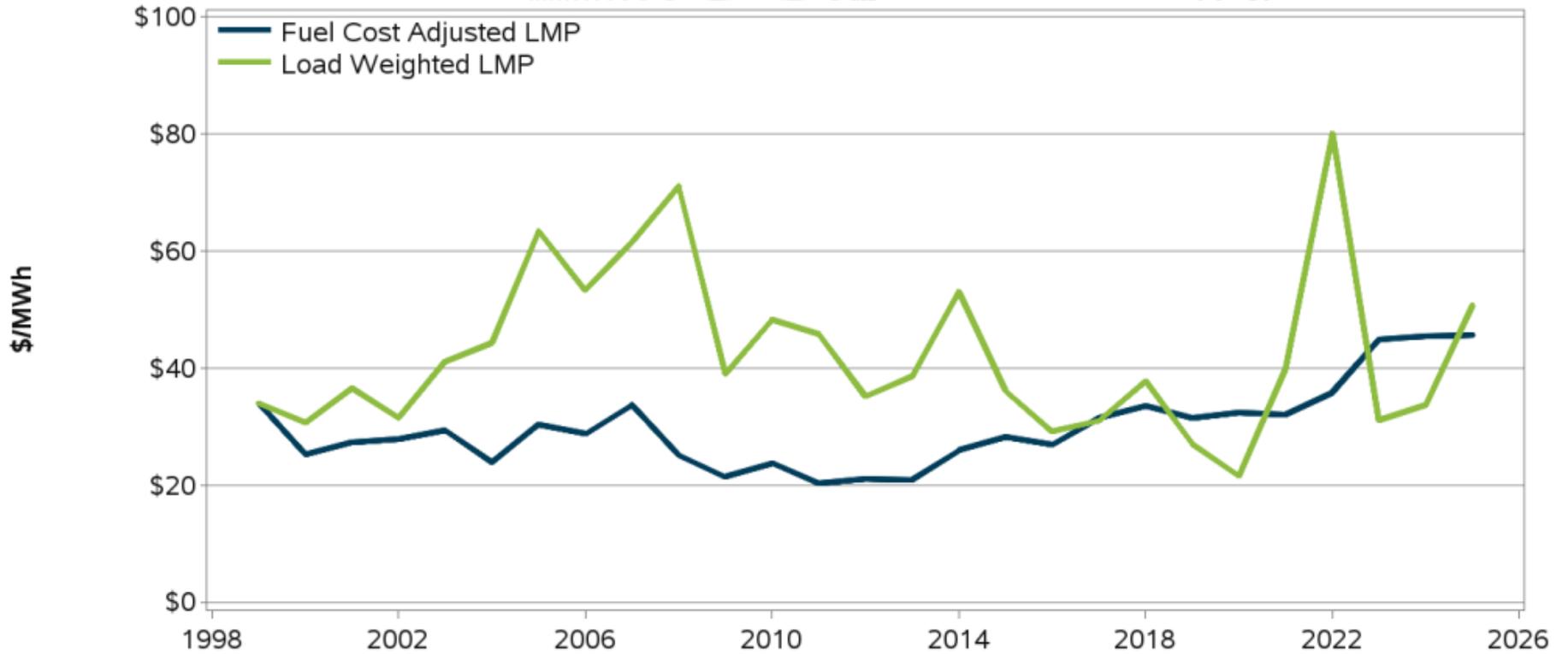
Monthly Load-Weighted Average Real-time LMP

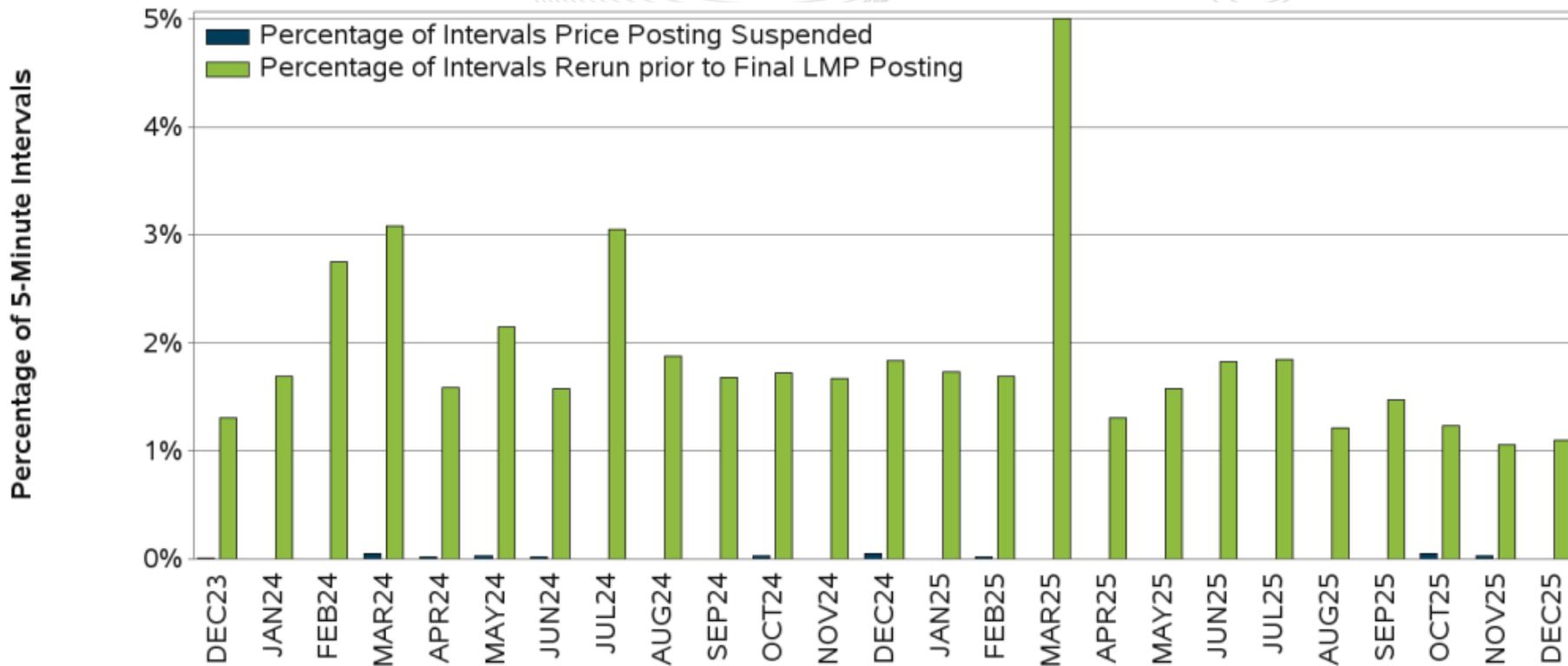


Daily Load-Weighted Average DA & RT LMP



Fuel Cost Adjusted LMP (Referenced to 1999 Fuel Prices)

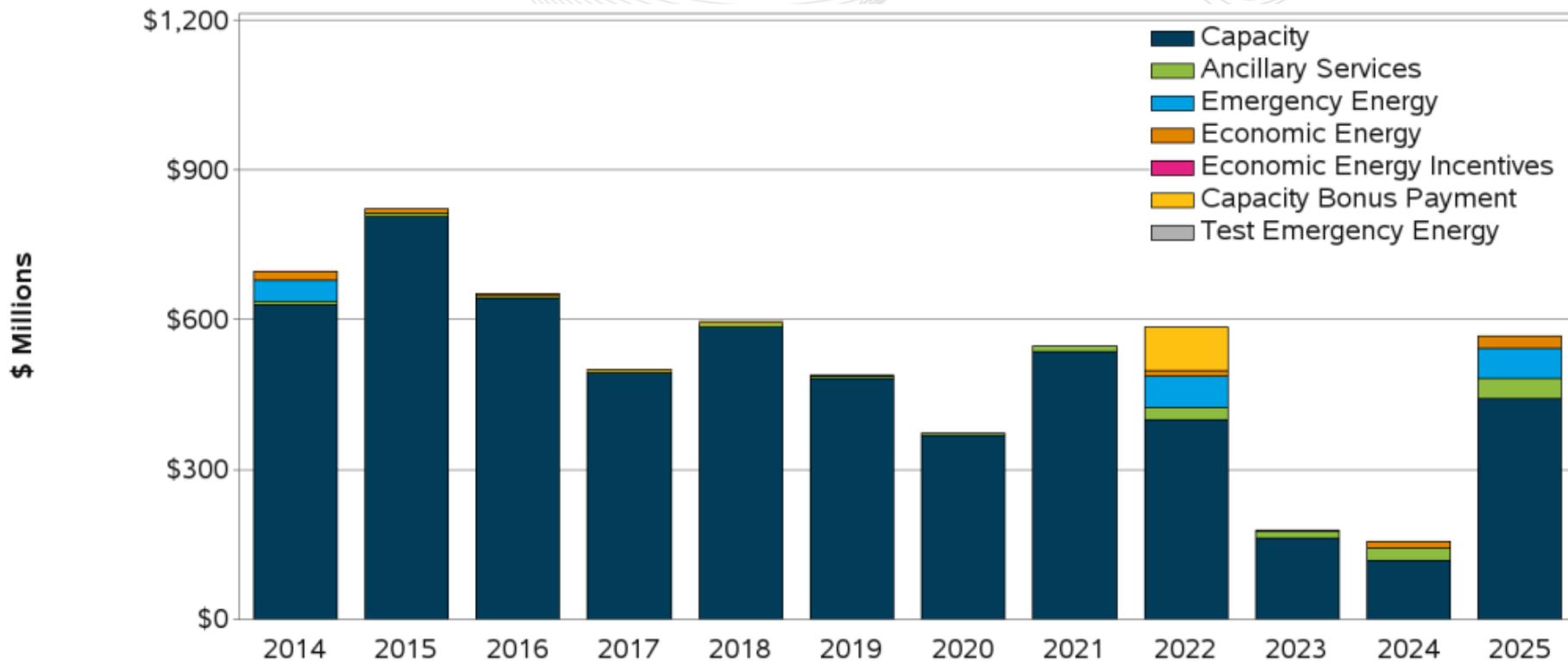


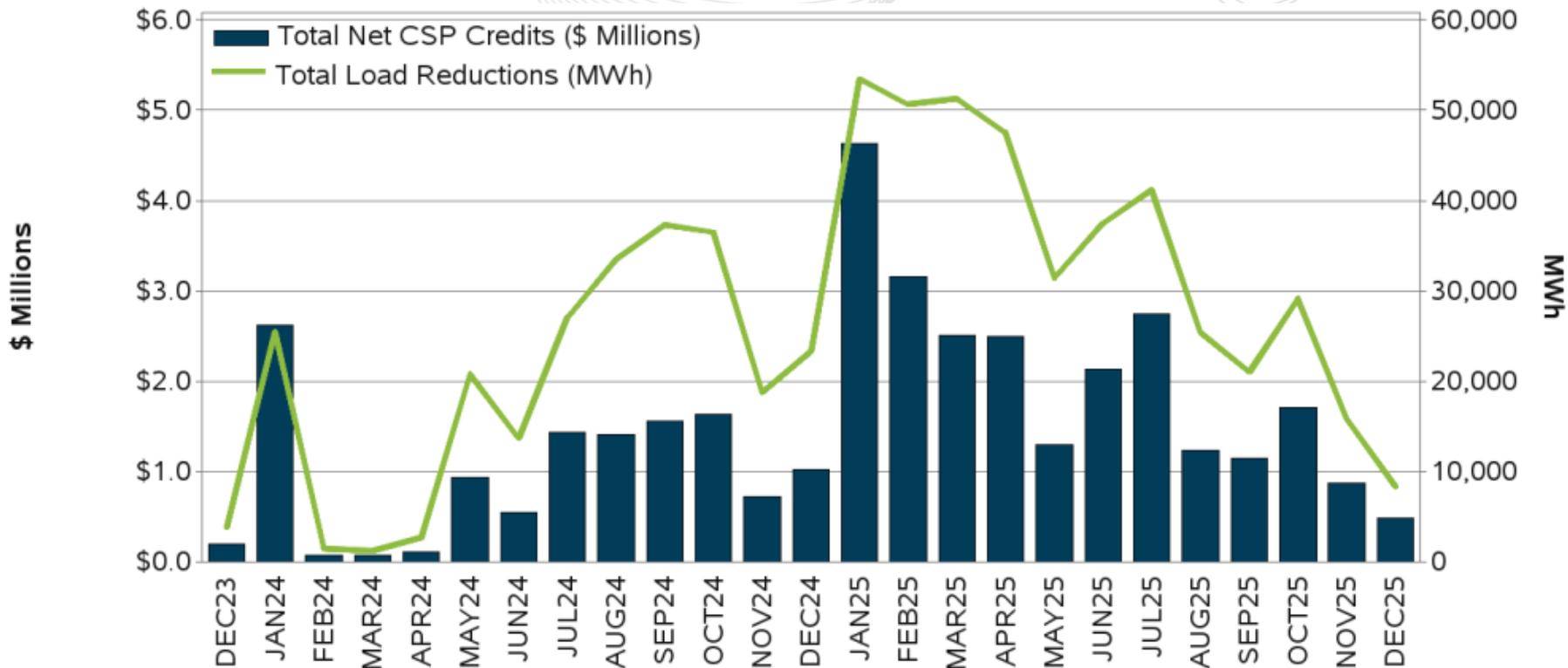


Energy Market

Demand Response Summary

Demand Side Response Estimated Revenue

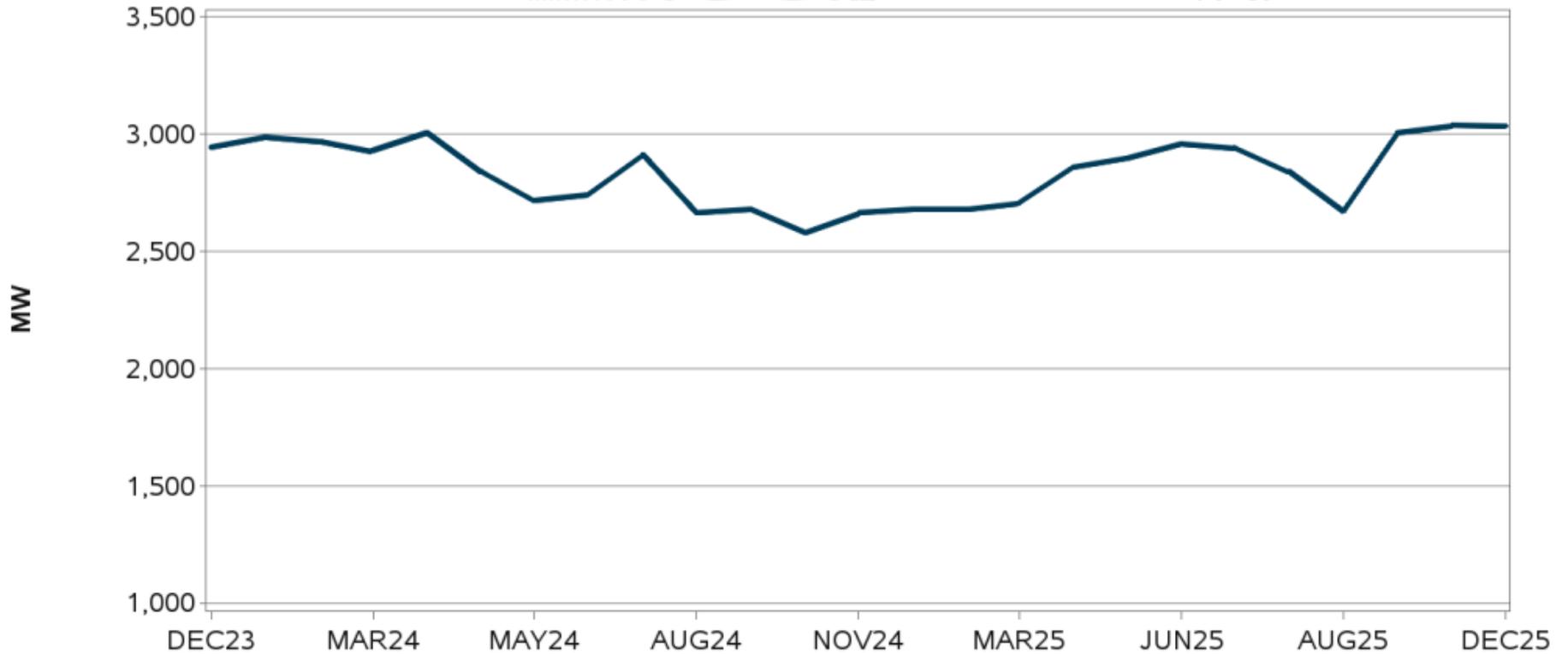




*Data for the last few months are subject to significant change due to the settlement window.



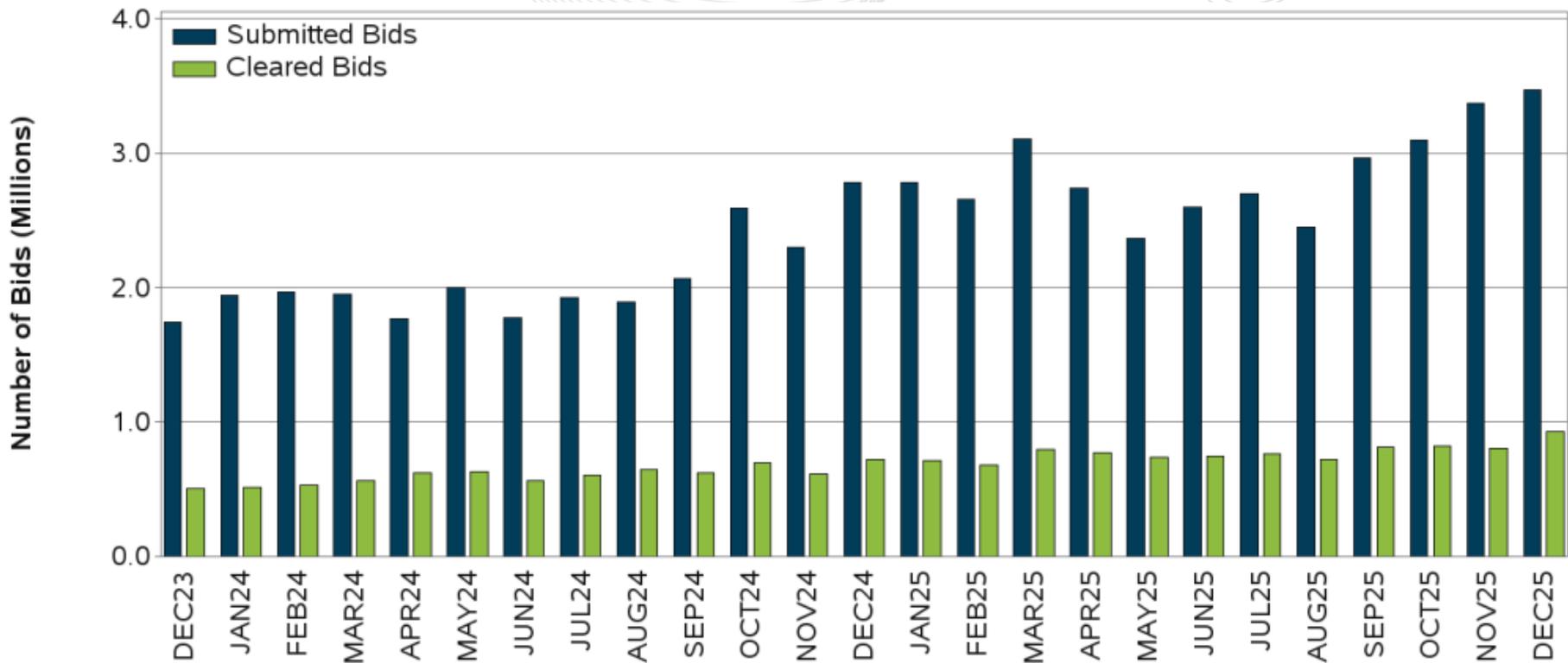
Total Registered MW in PJM's Economic Demand Response

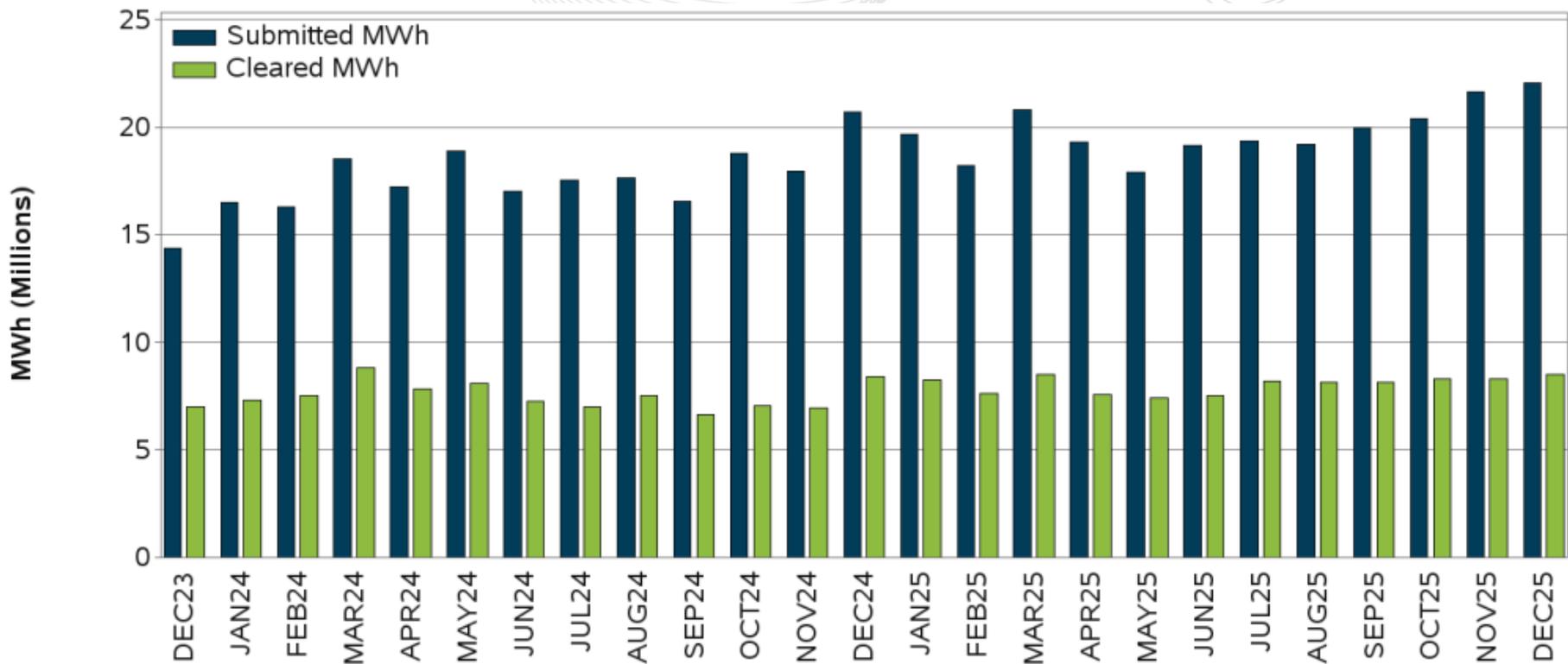


Energy Market

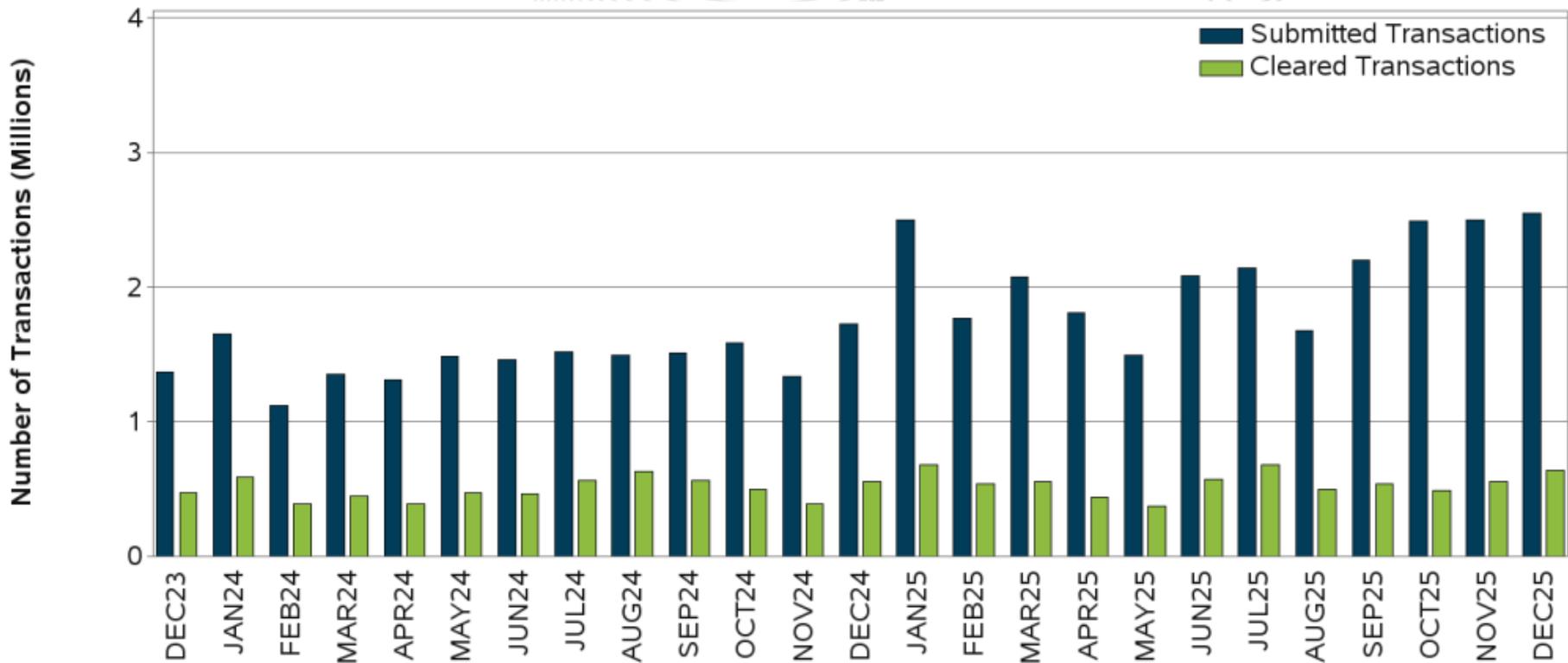
Virtual Activity Summary

- The following six charts depict trends in submitted and cleared virtual and up-to-congestion transactions, in terms of number and volume, into the PJM Energy Market. The first two of these charts show the submitted and cleared increment and decrement bids (virtual transactions or virtuals) and they are the same as what was previously being presented in this report. The two charts after them display the trends in submitted and cleared up-to-congestion transactions into the PJM Energy Market. The last two of these six charts combine the virtual and up-to-congestion transactions and show the sum of these two categories.
- To clarify what a bid or transaction is, please consider the following example: An offer (increment, decrement or up-to-congestion) of 10 MW, valid for eight hours for a given day, is captured in the charts as eight submitted bids/transactions and 80 submitted MWh. If this offer fully clears for three of the hours it was submitted for, it shows in the charts as three cleared bids/transactions and 30 cleared MWh.

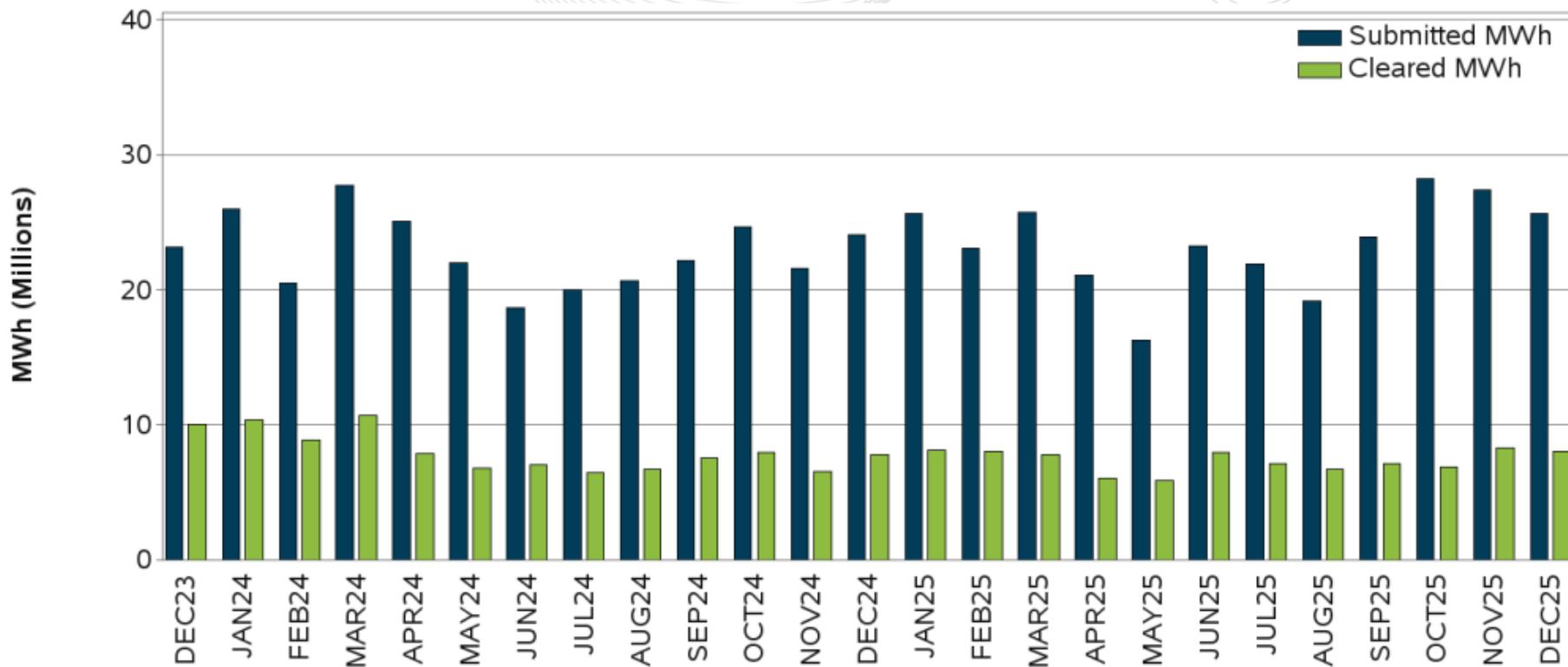




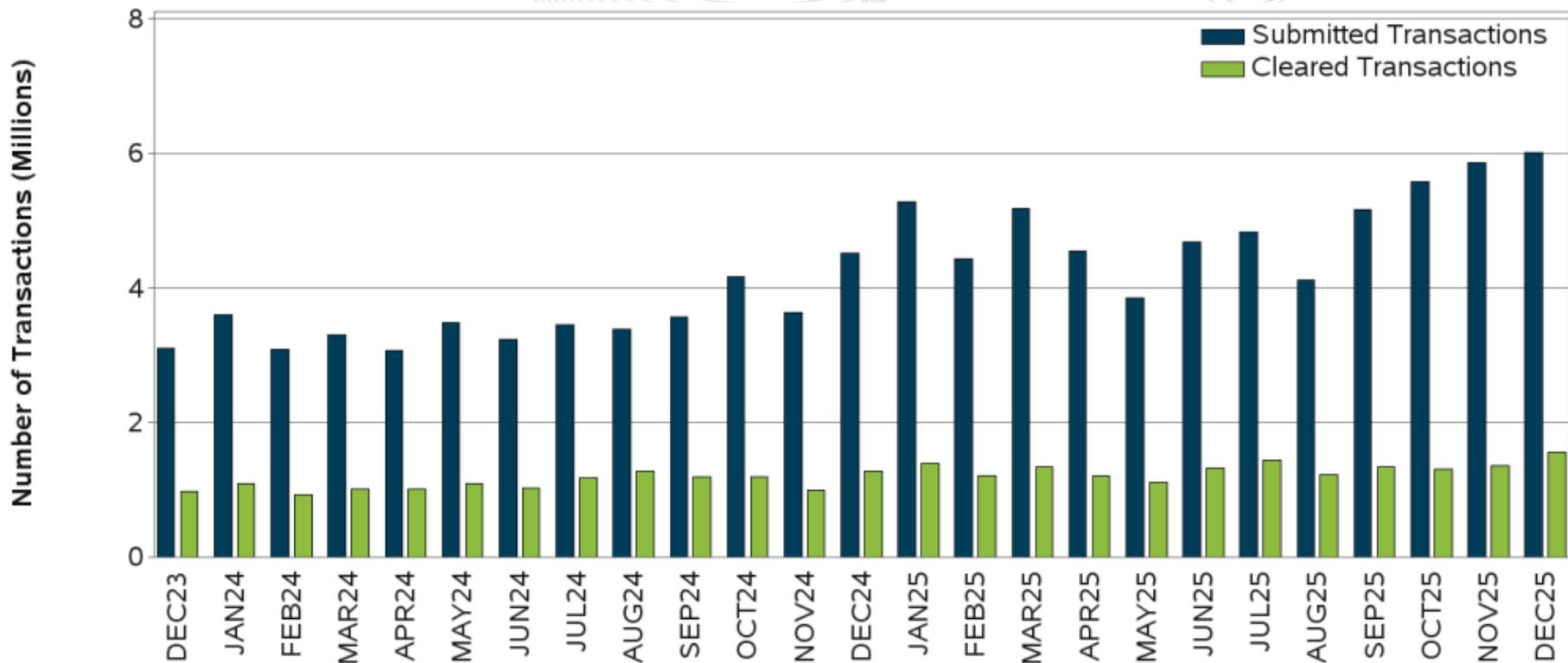
Up-To-Congestion Transactions - Total Number



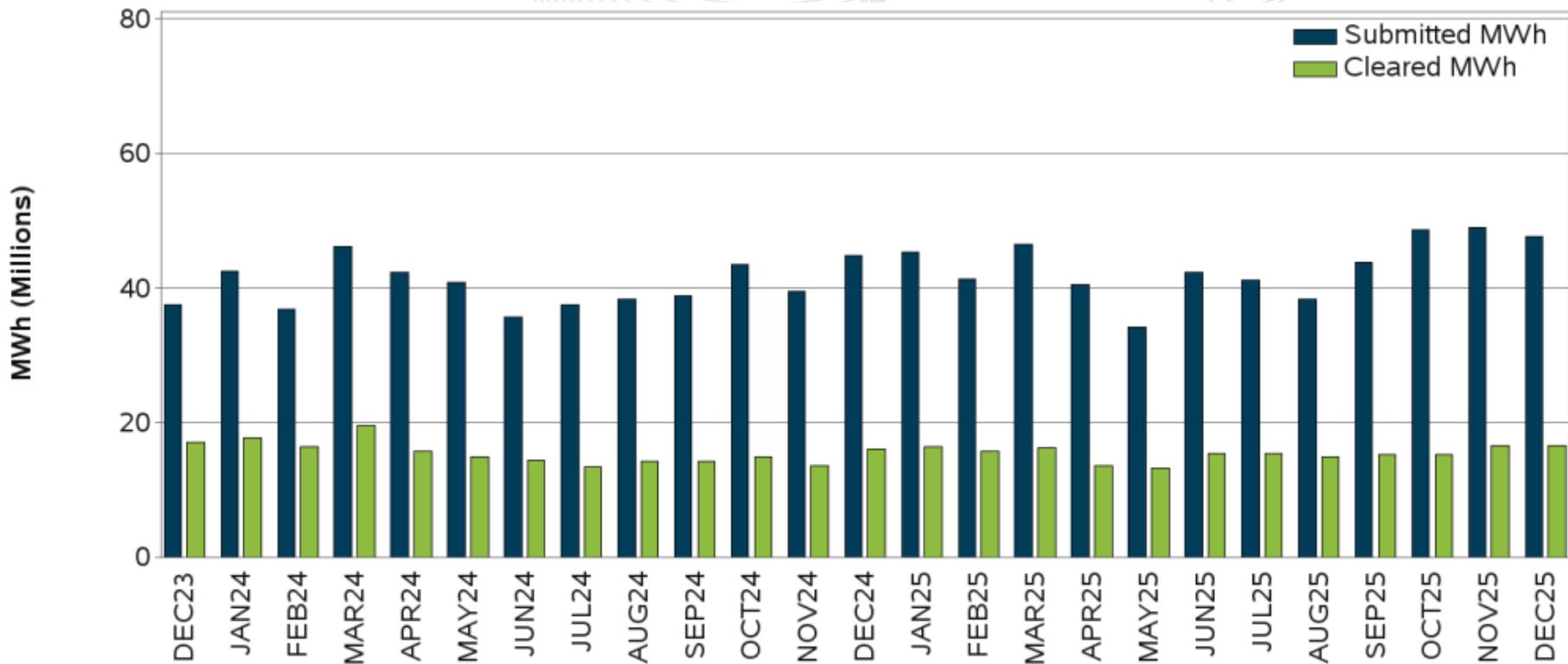
Up-To-Congestion Transactions - Total Volume



INCs, DECAs and Up-To-Congestion Transactions - Total Number



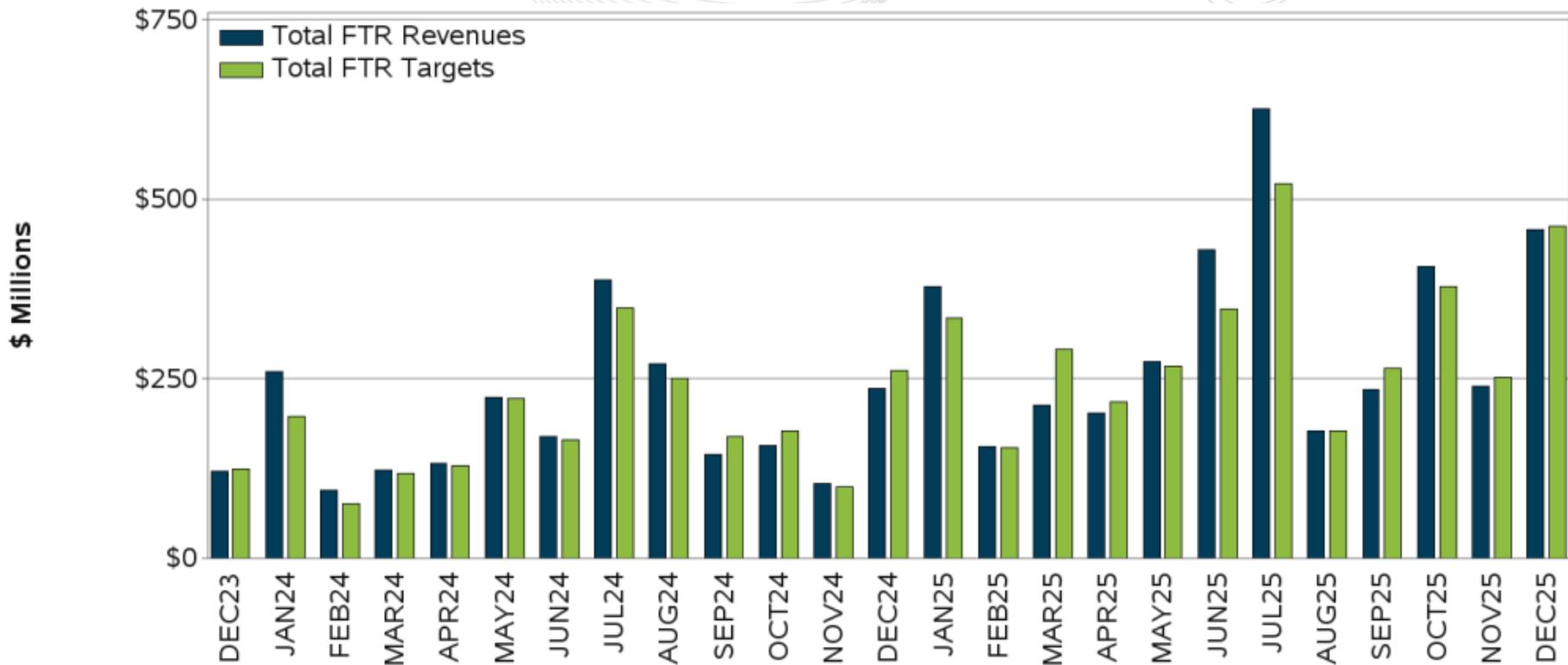
INCs, DEC and Up-To-Congestion Transactions - Total Volume

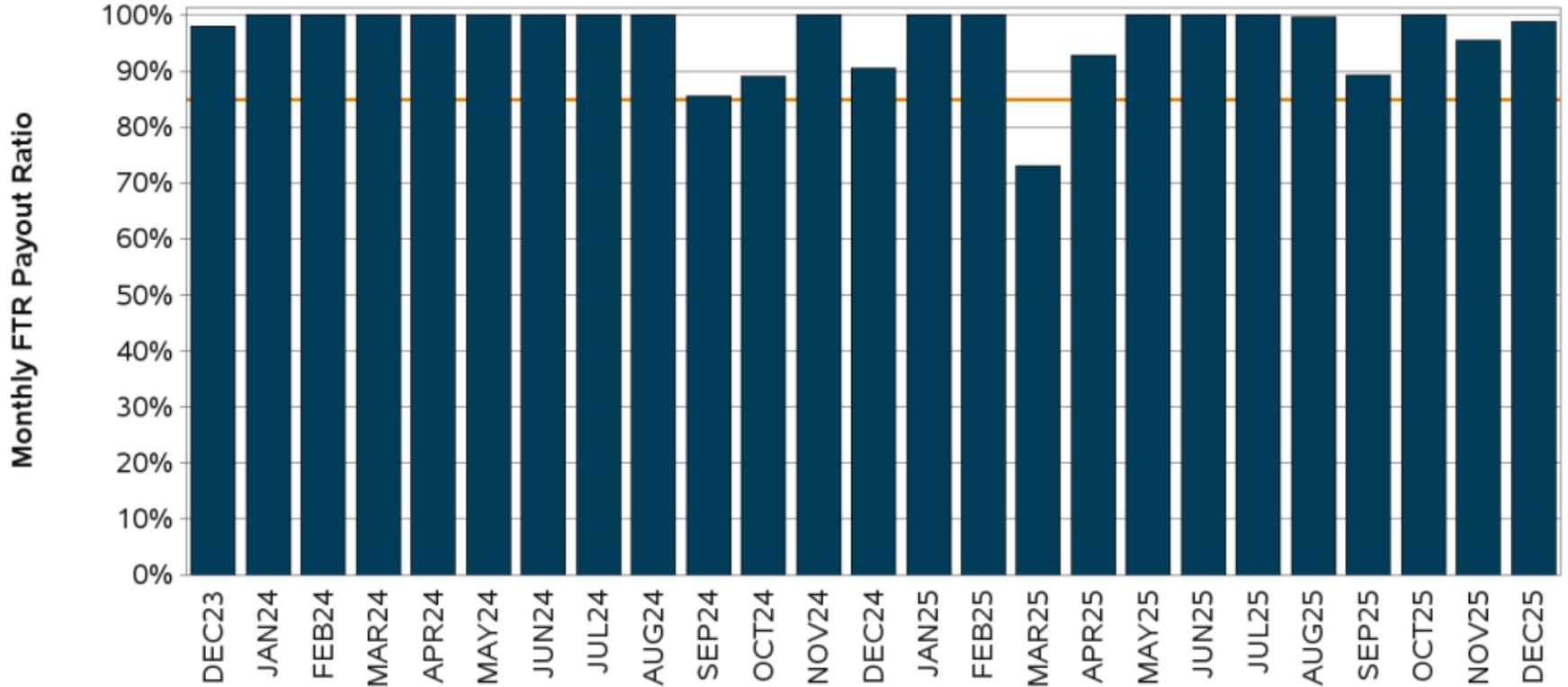


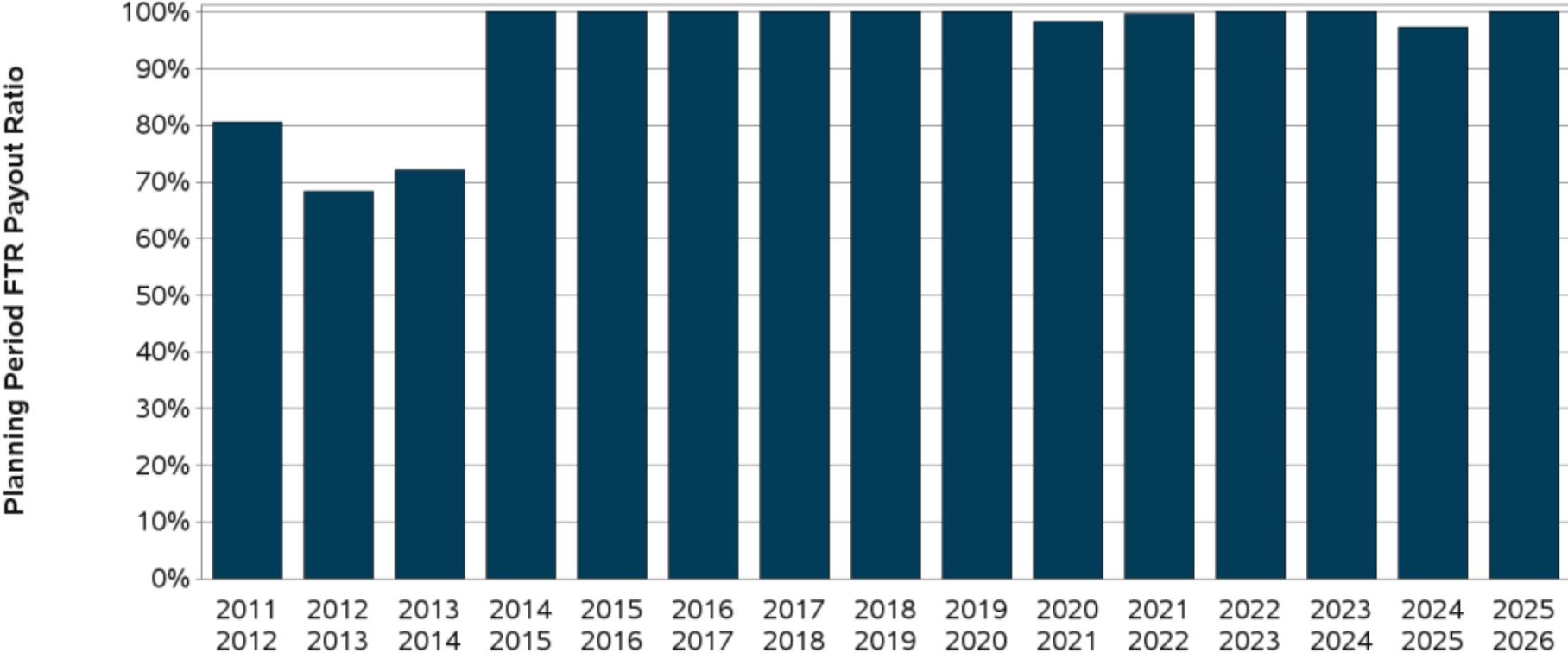
Energy Market

Congestion and FTR Summary

Period	Surplus / Underfunding	Payout Ratio
December 2025	\$-5,796,392	99%
2025	\$155,010,073	100%
2025/2026	\$199,080,152	100%

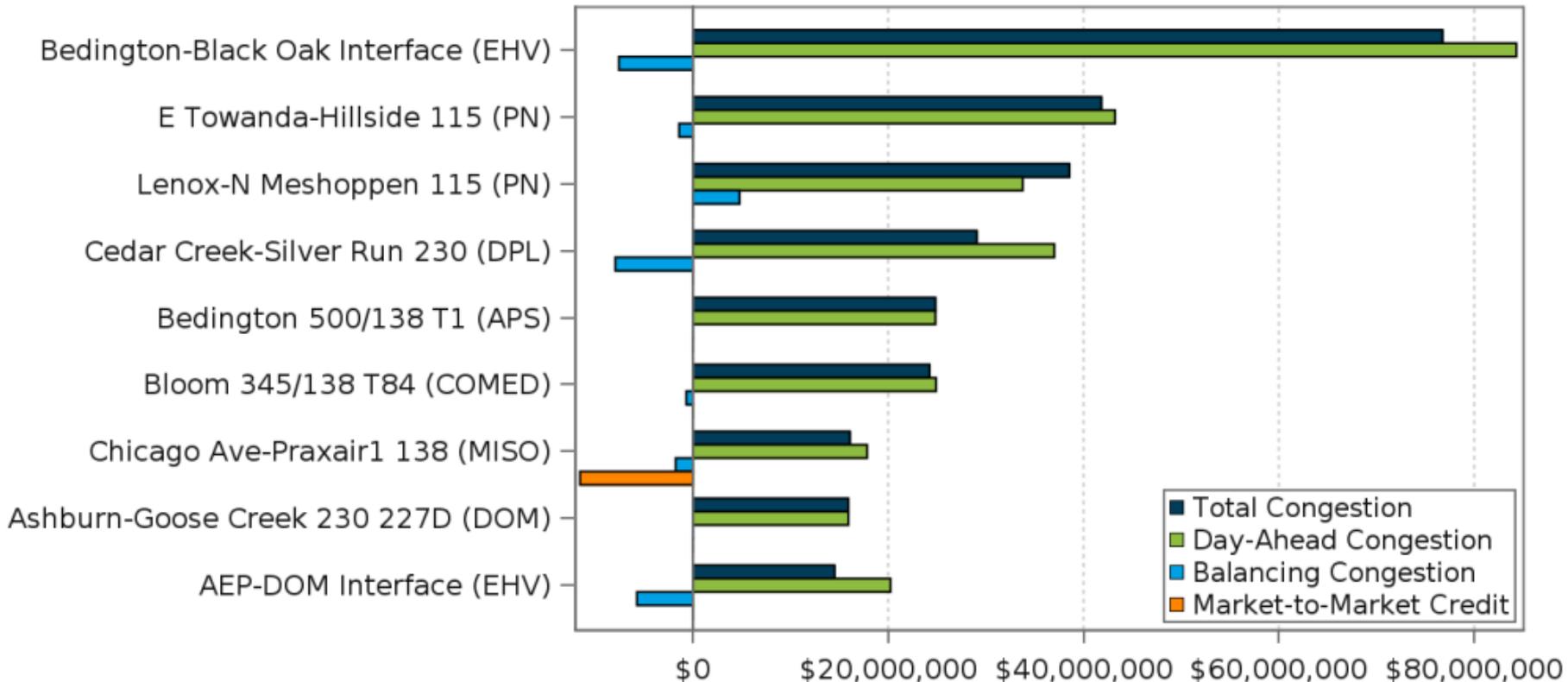






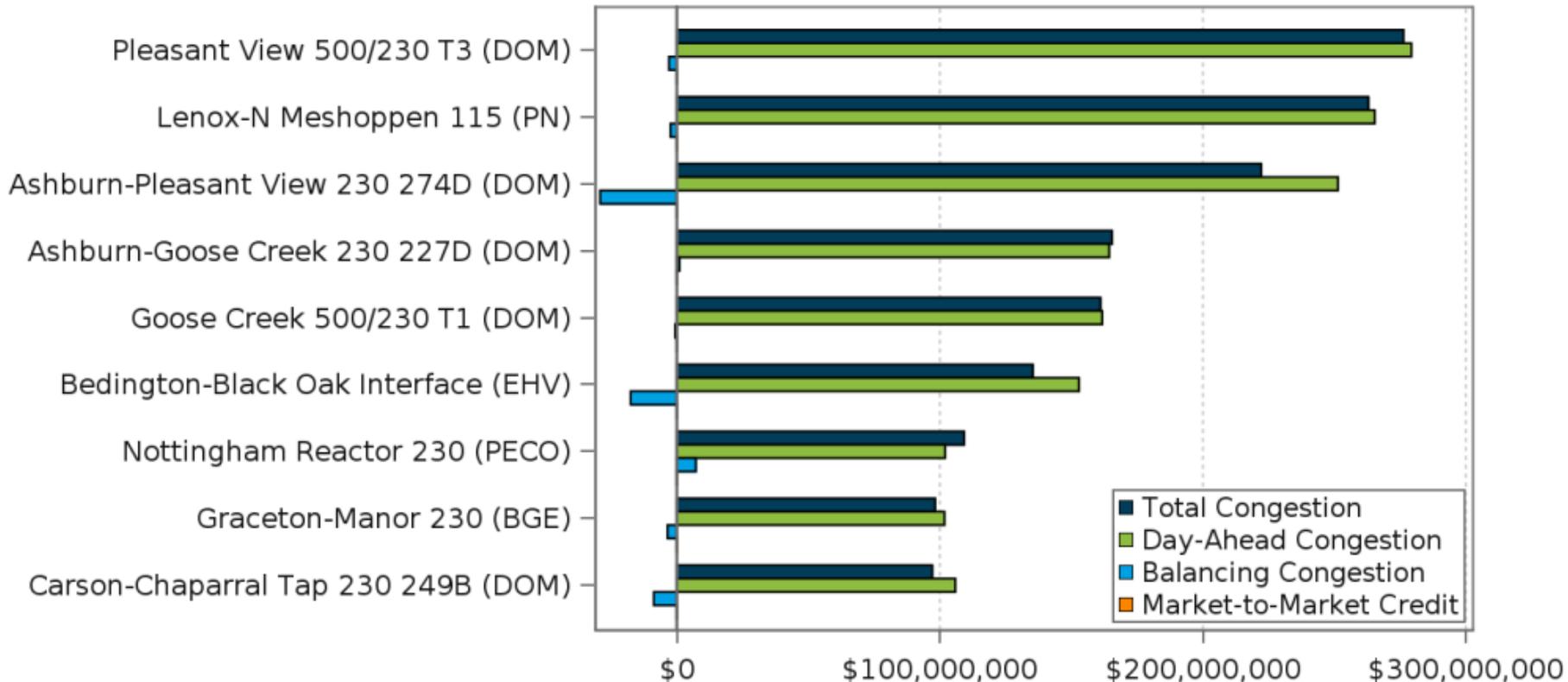


Ten Most Heavily Congested Transmission Facilities - Overall, December



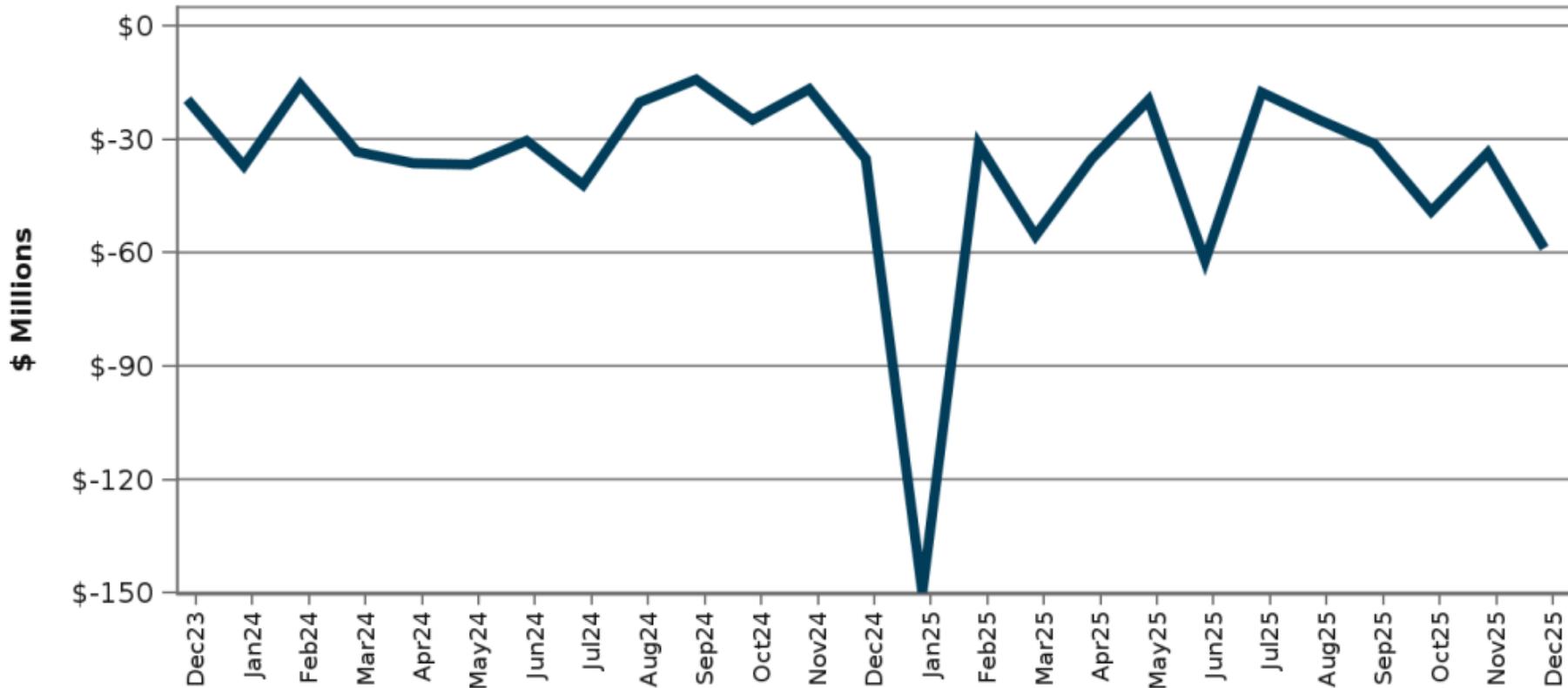
The ten most heavily congested facilities account for 79% of total congestion for December.

Ten Most Heavily Congested Transmission Facilities - Overall, 2025



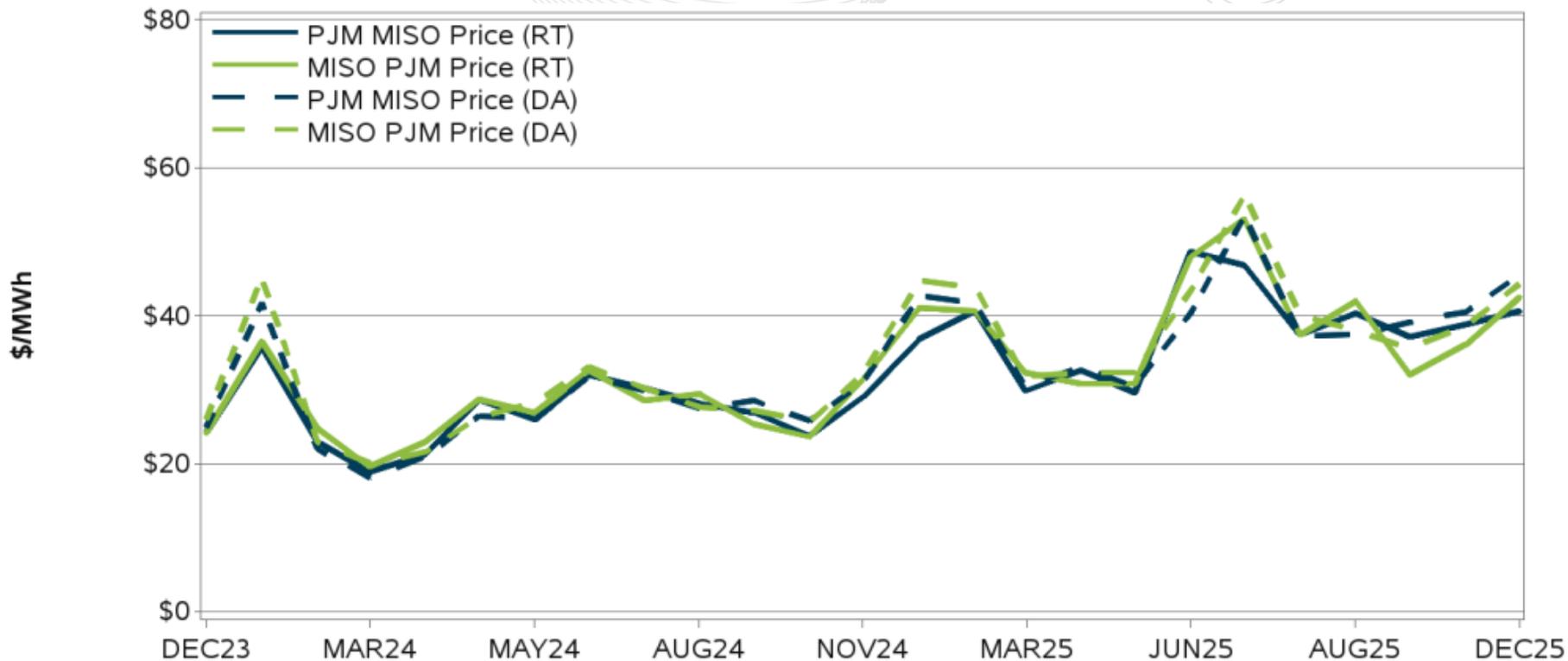
The ten most heavily congested facilities account for 49% of total congestion for 2025.

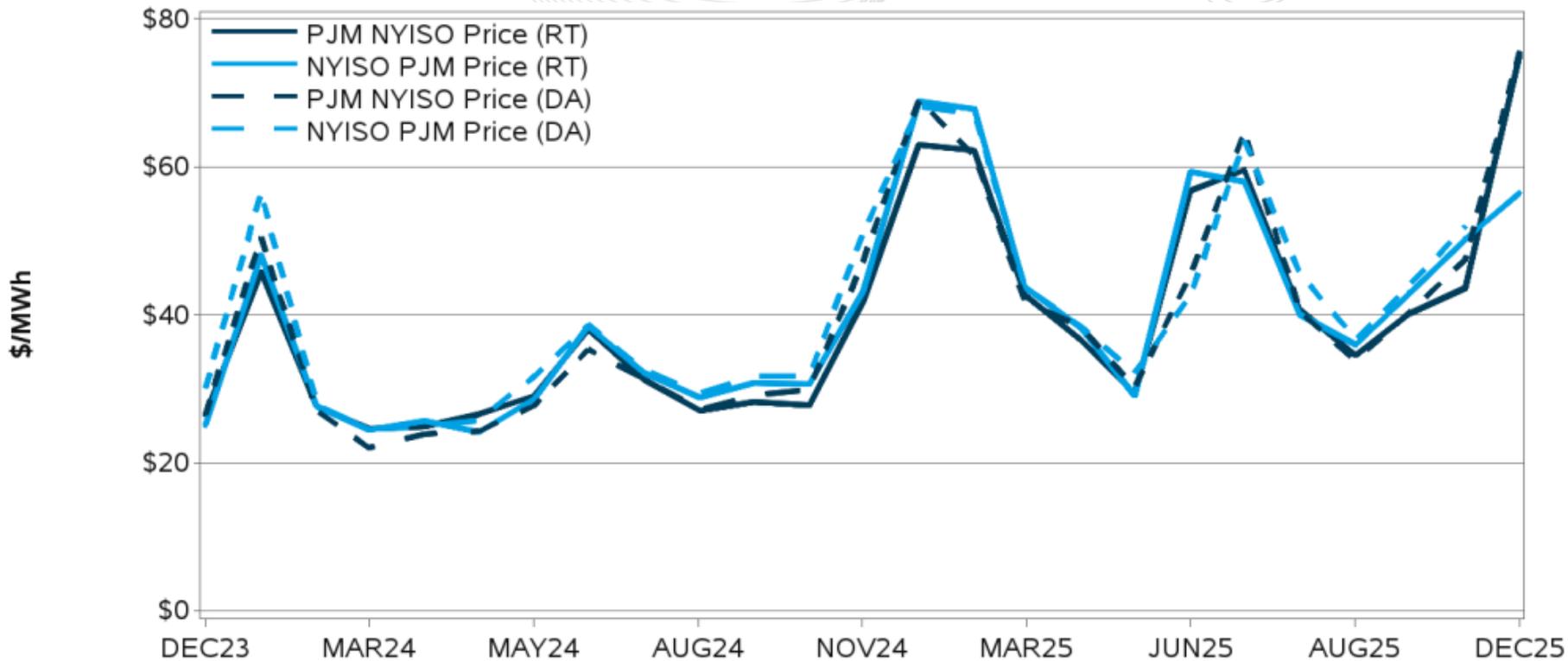
Balancing Congestion Charge Revenues (BLI 2215)



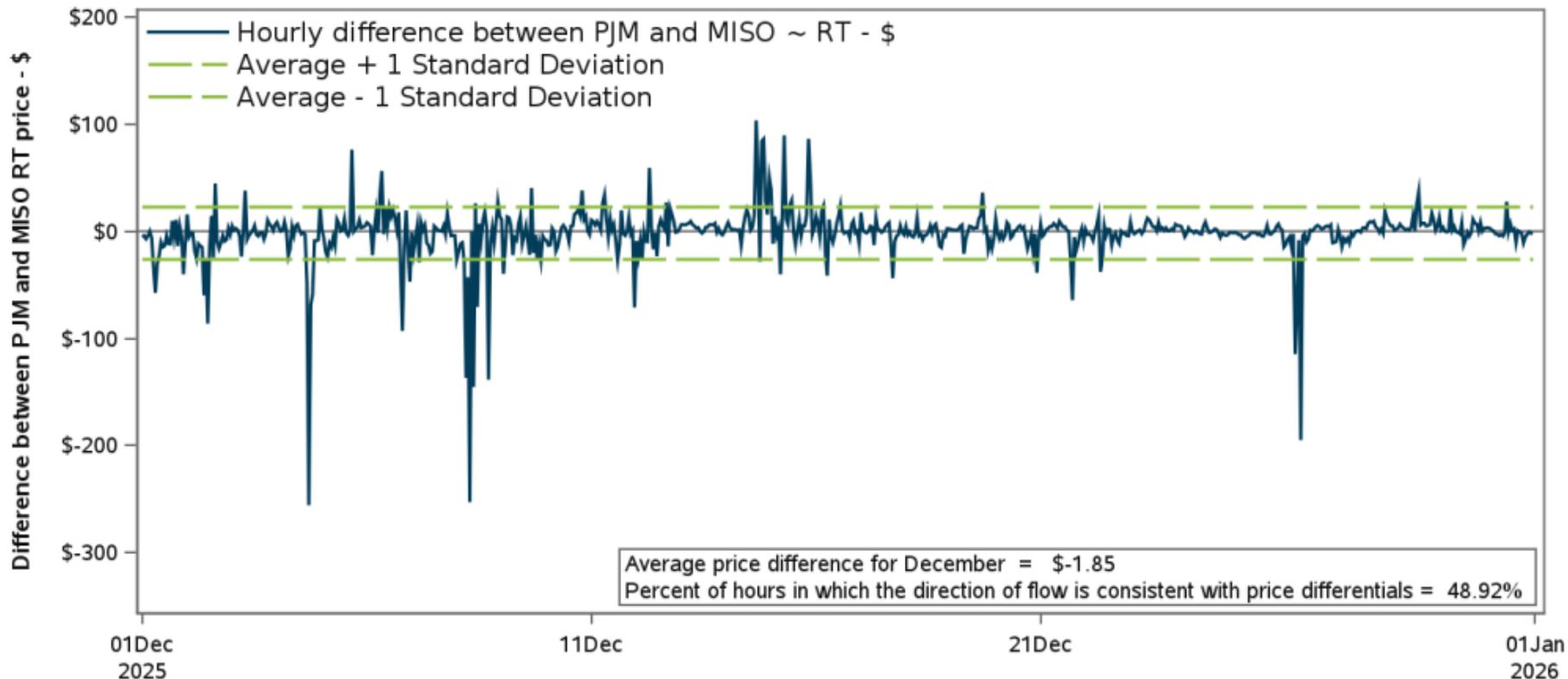
Energy Market

Interchange/Seams Summary



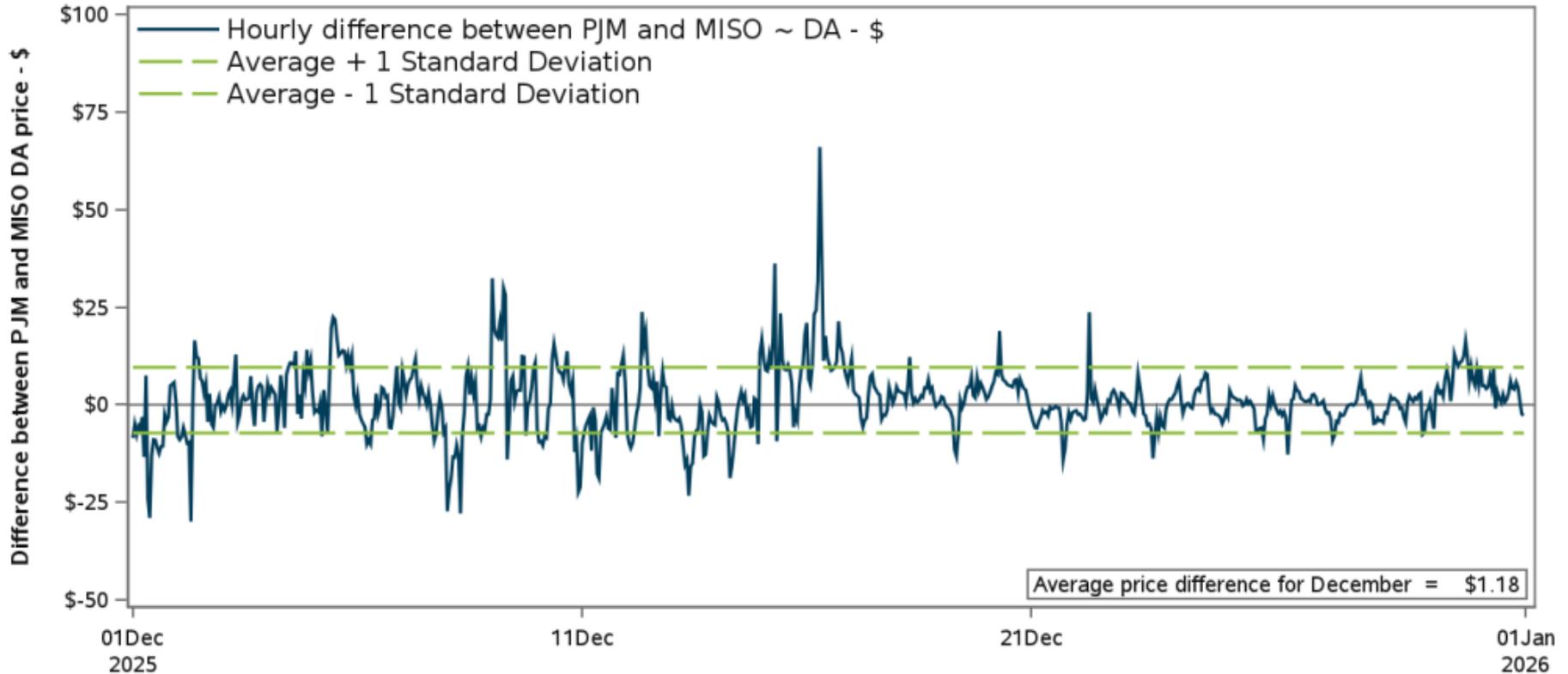


Hourly Difference Between PJM and MISO Real-Time Prices



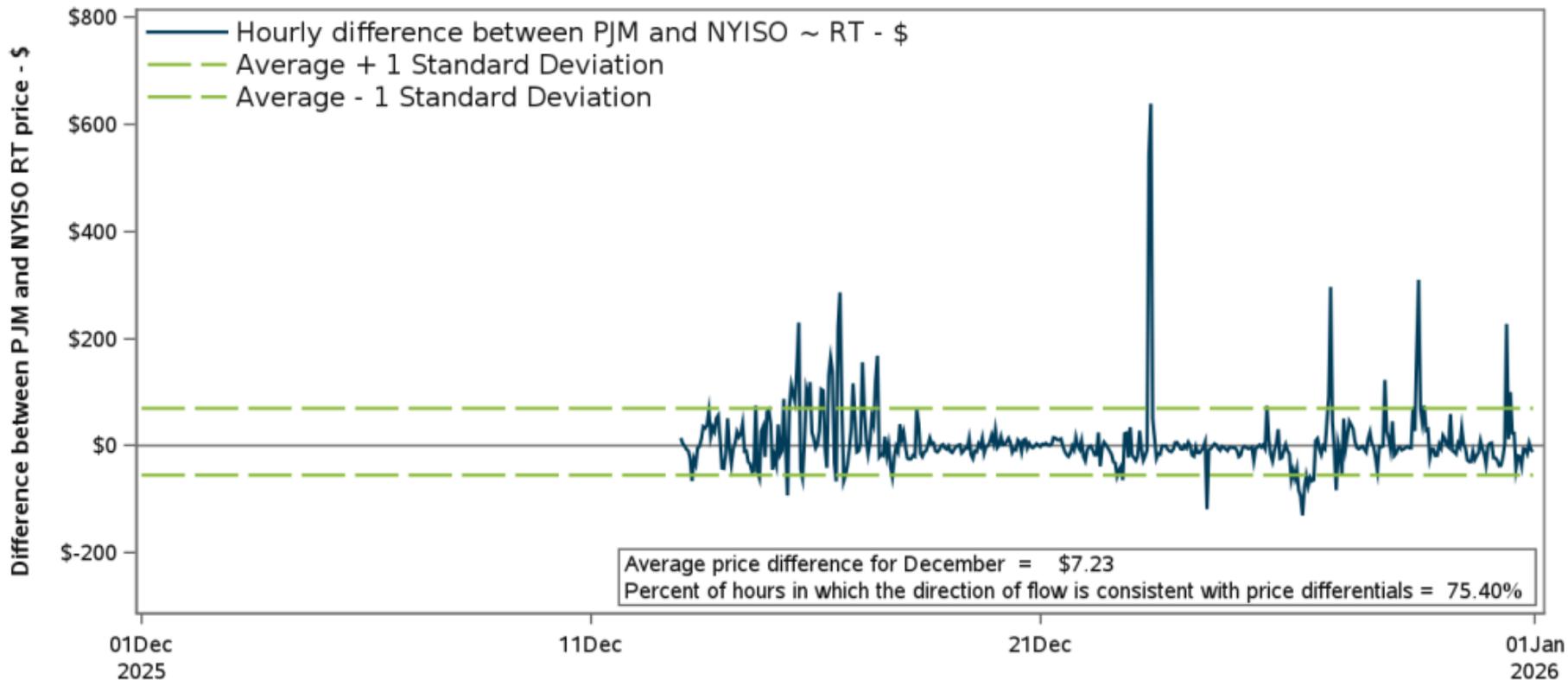
Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

Hourly Difference Between PJM and MISO Day-Ahead Prices



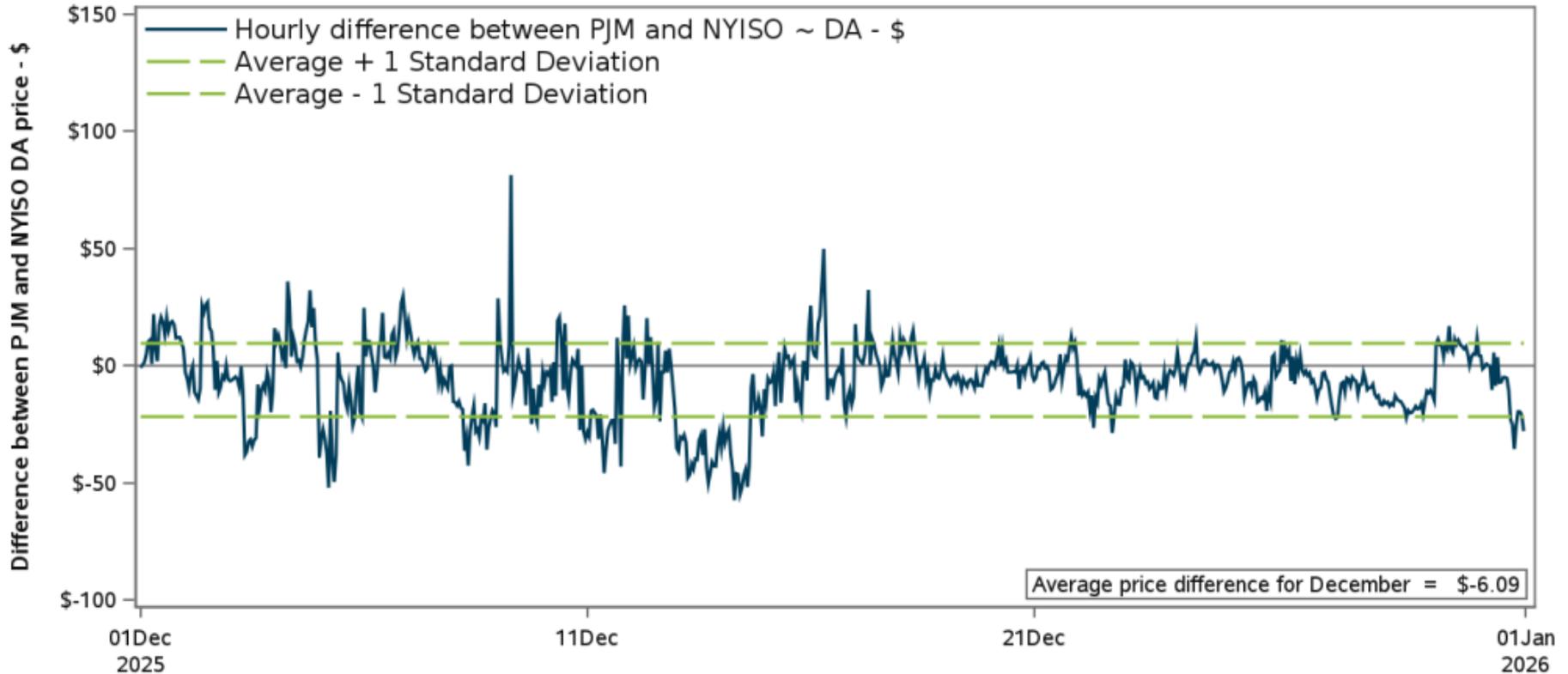
Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

Hourly Difference Between PJM and NYISO Real-Time Prices

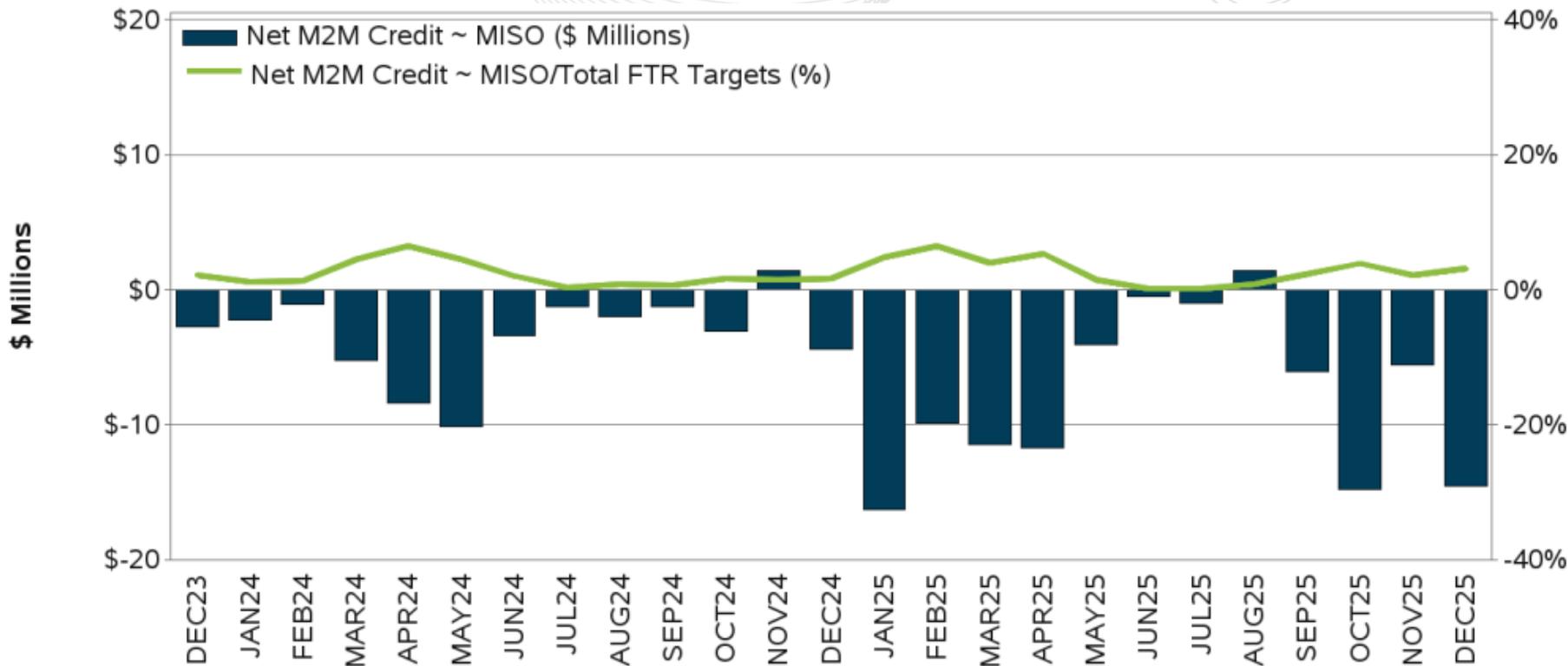


Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

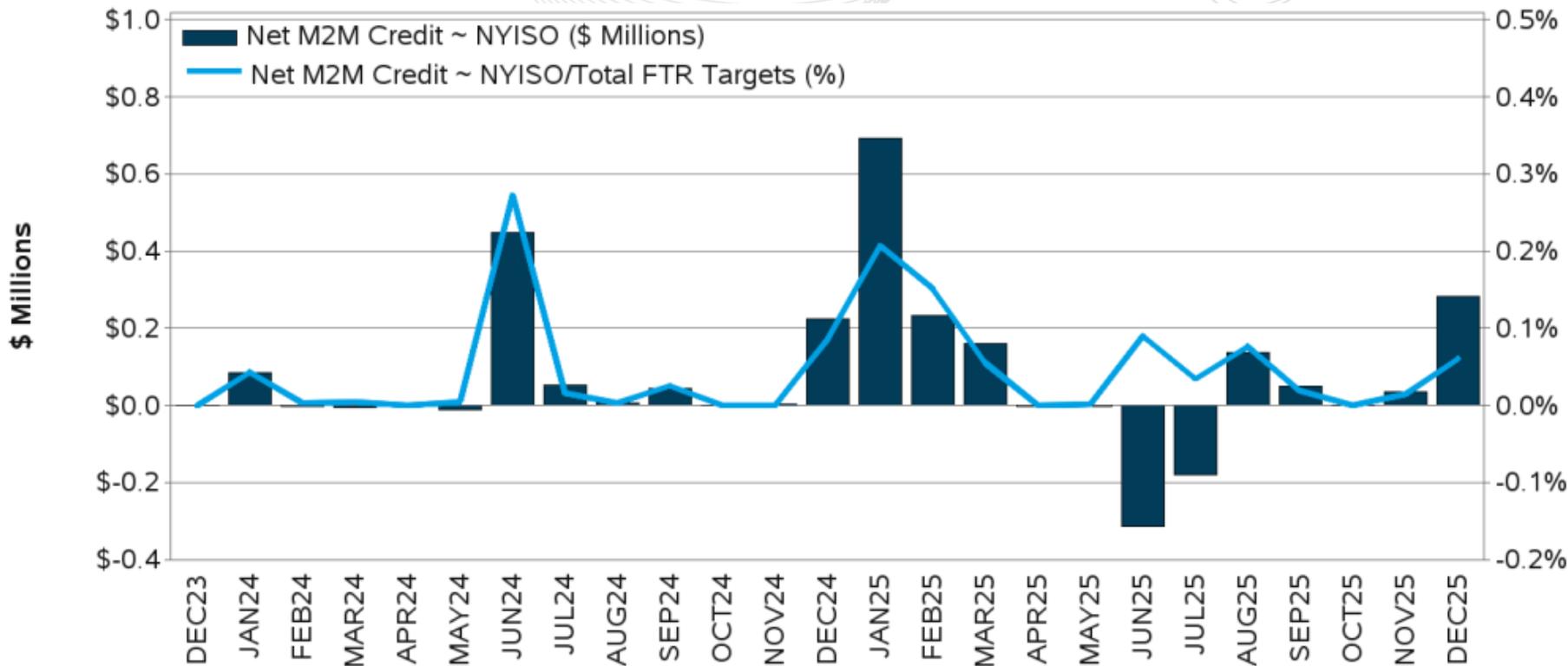
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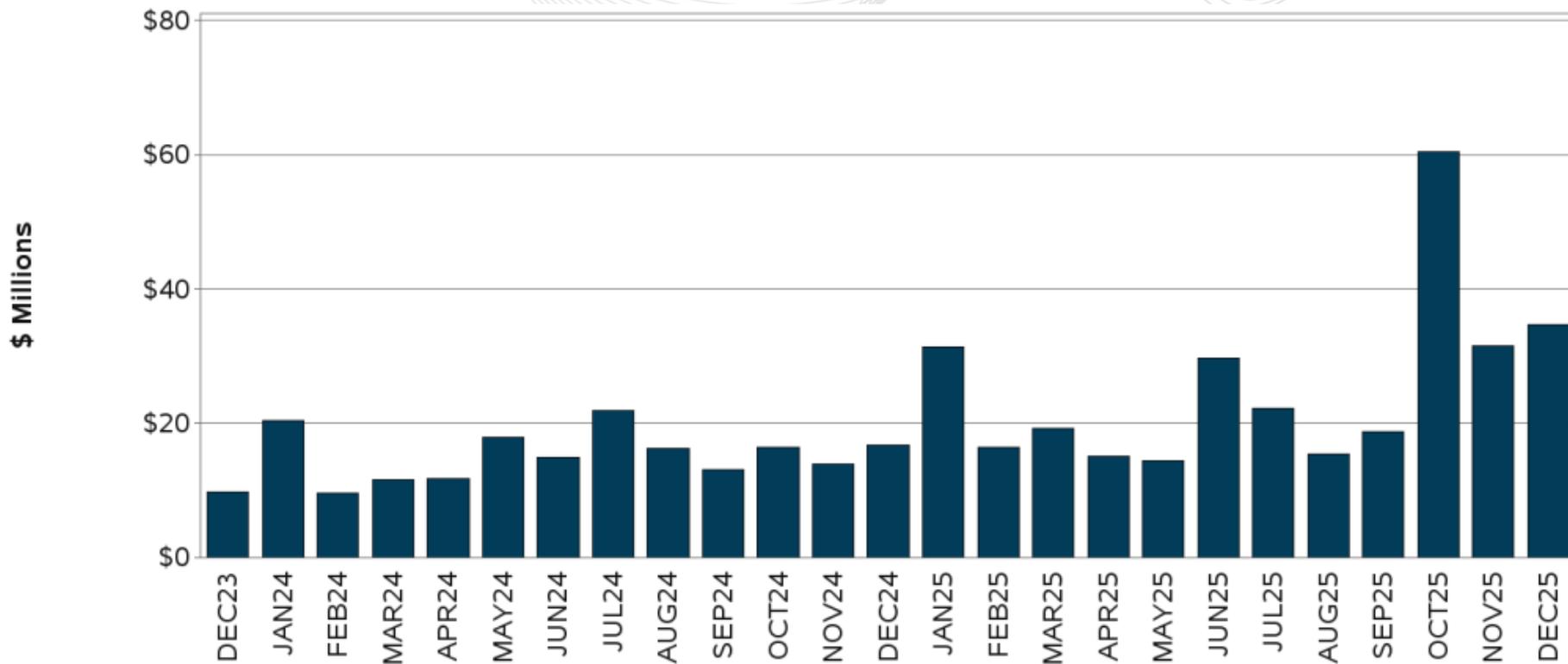


Negative M2M Credit represents PJM payment to MISO

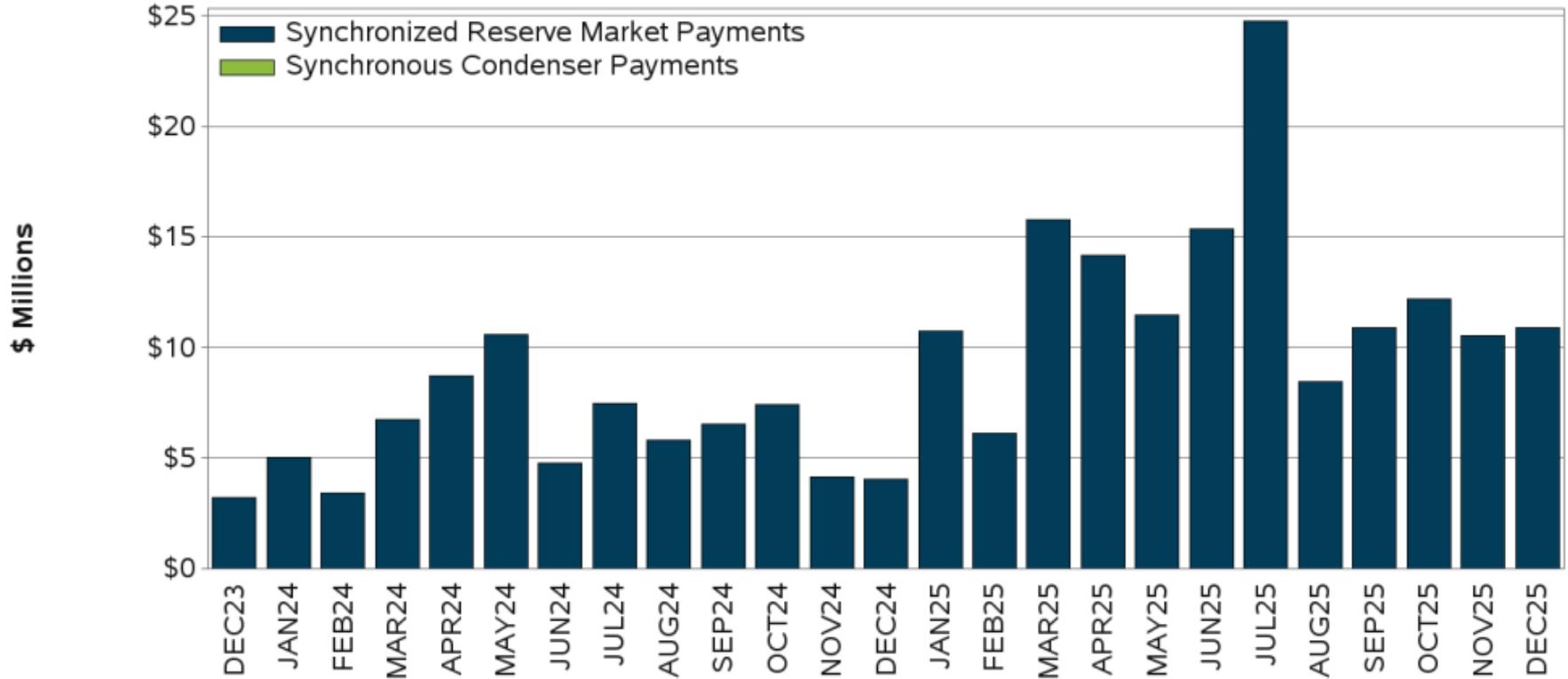


Negative M2M Credit represents PJM payment to NYISO

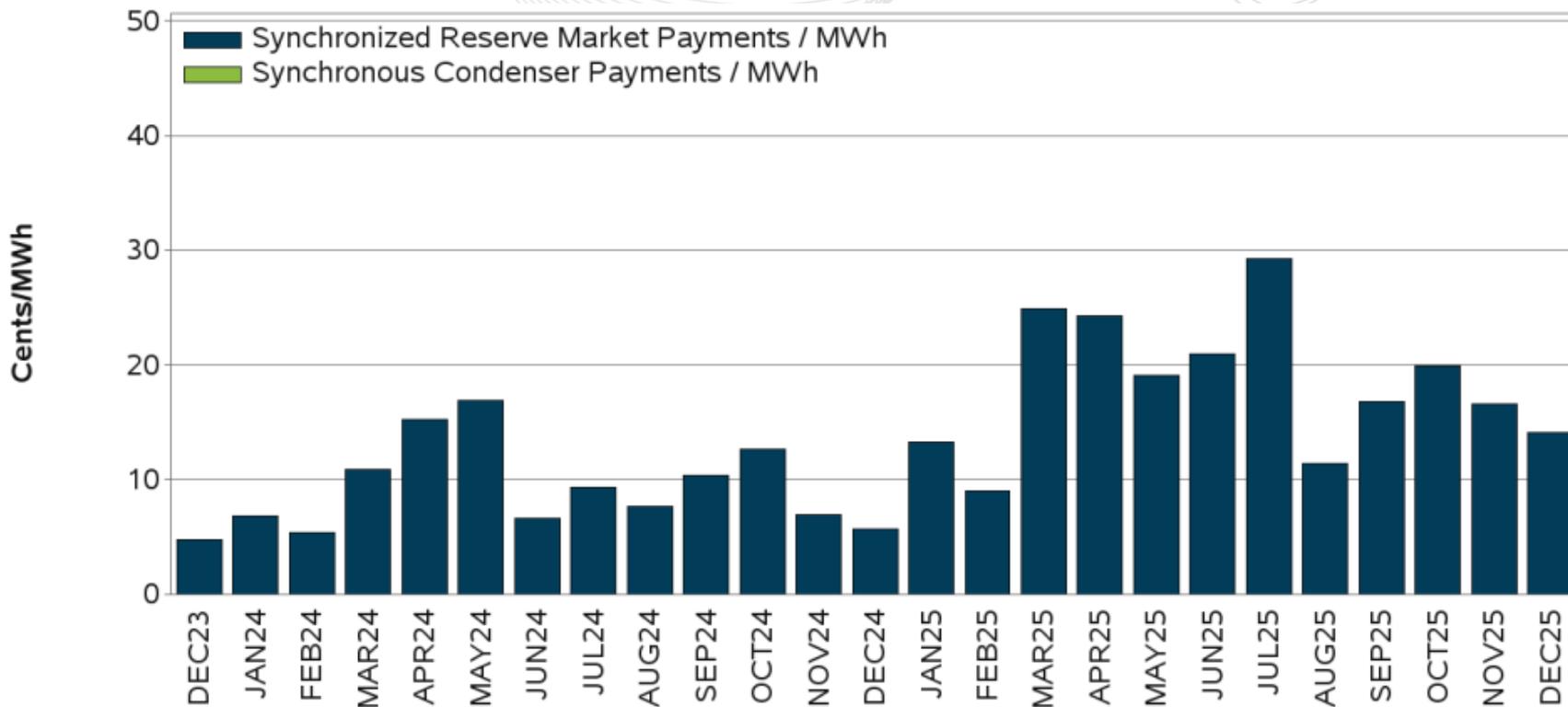
Ancillary Service Market Summary

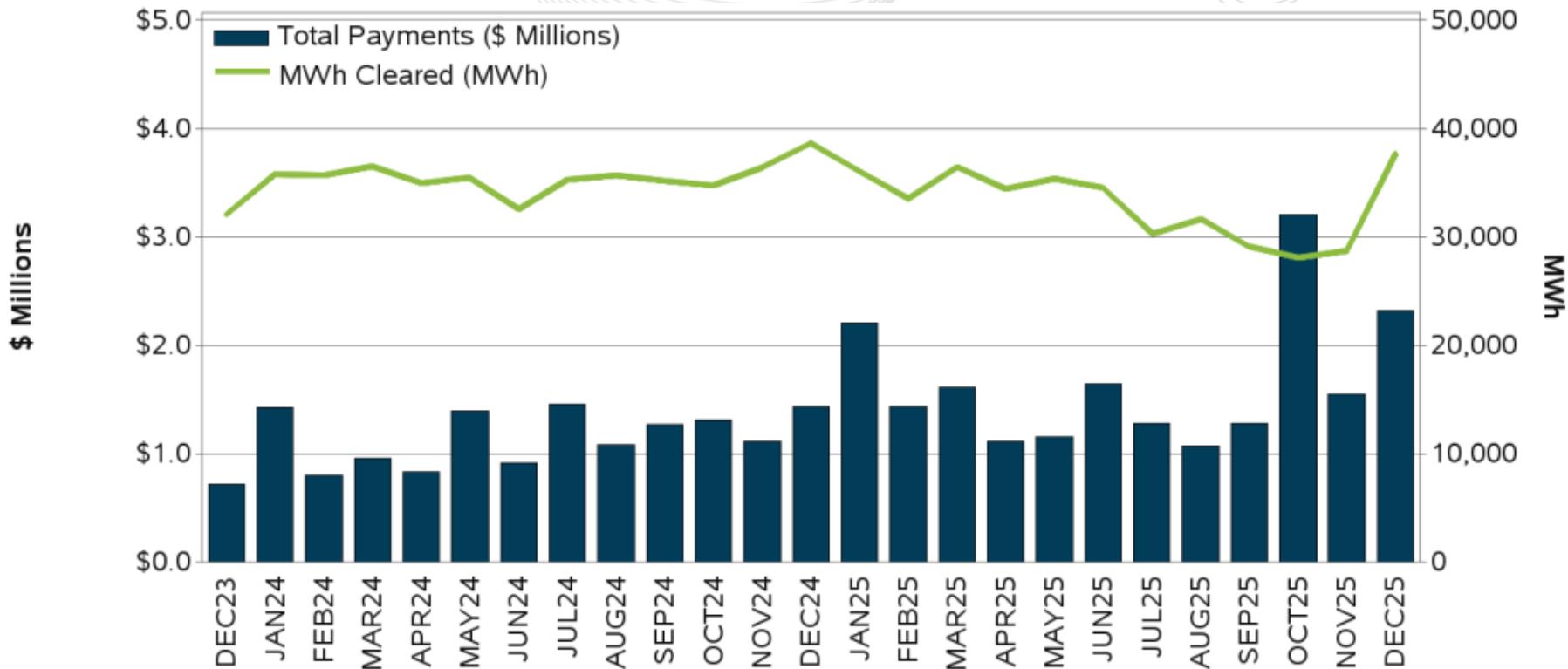


Synchronized Reserve and Synchronous Condenser Costs

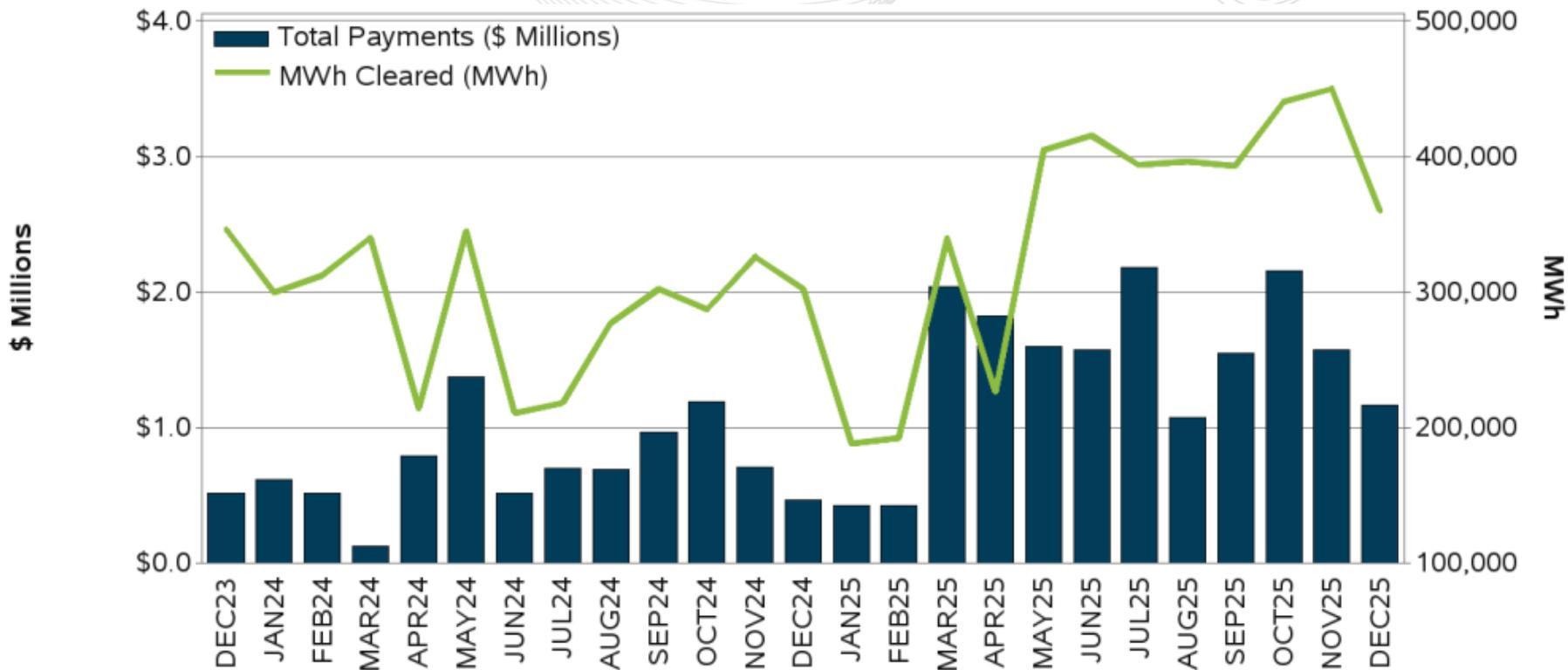


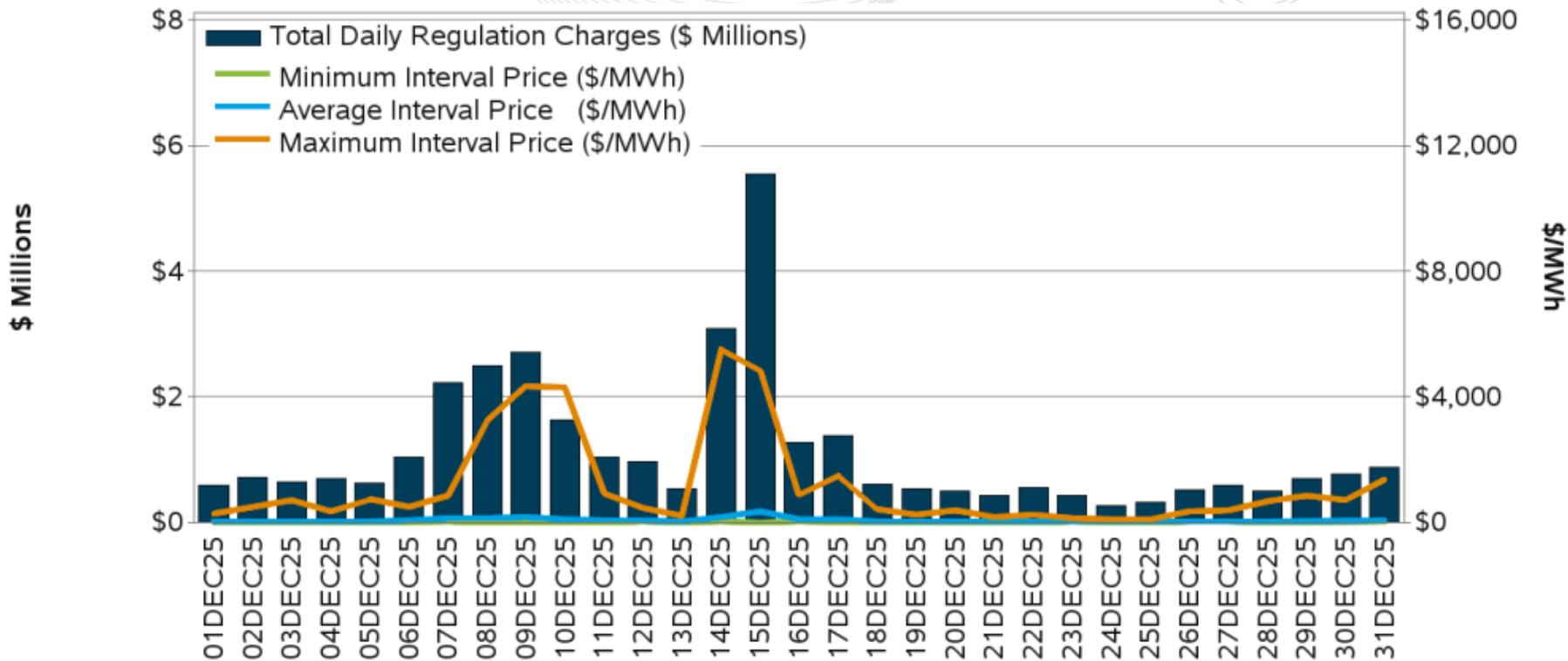
pjm Load-Adjusted Synchronized Reserve and Synchronous Condenser Costs



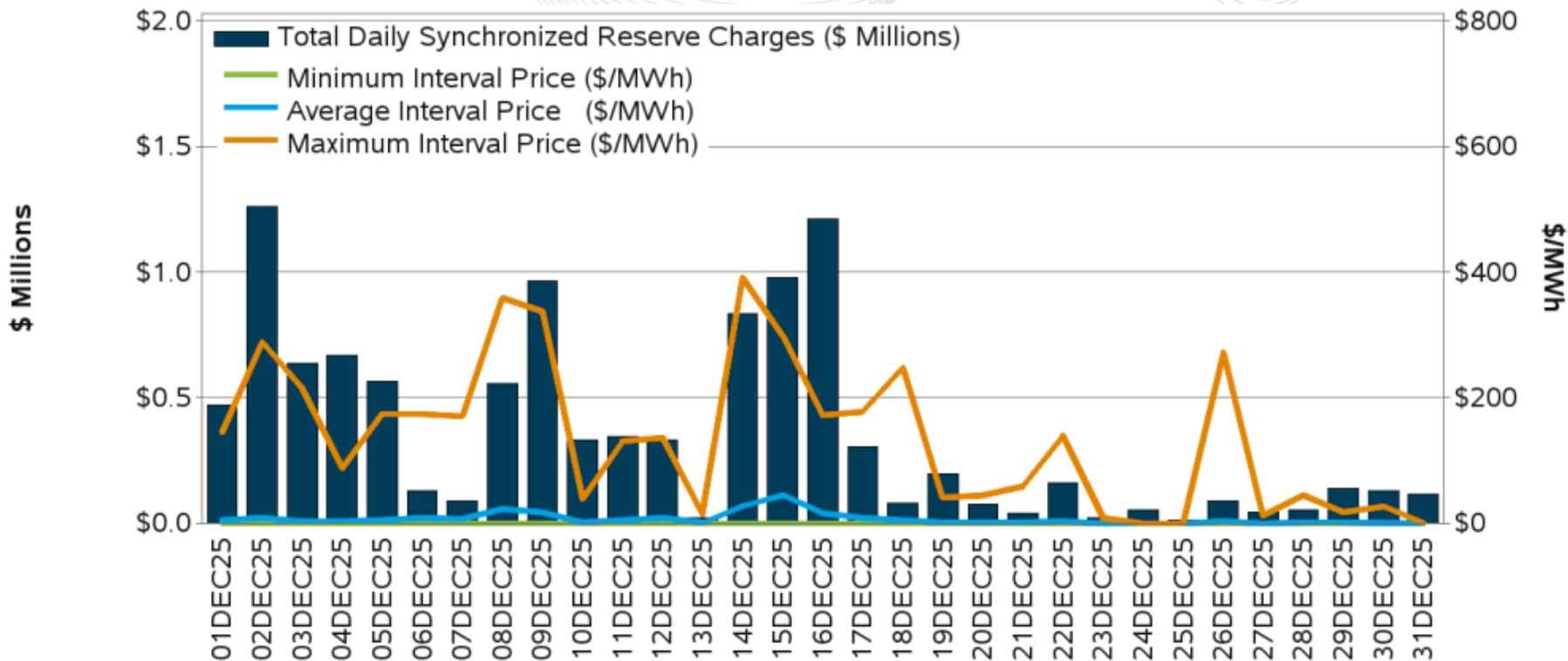


DR Participation in PJM Synchronized Reserve Markets





Synchronized Reserve Market Daily Prices and Charges



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Jennifer.Freeman@pjm.com



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**PROTECT THE
POWER GRID**

**THINK BEFORE
YOU CLICK!**



**BE ALERT TO
MALICIOUS PHISHING
EMAILS**



**Report suspicious email activity to PJM.
Call (610) 666-2244 or email it_ops_ctr_shift@pjm.com**