

System Operations Report

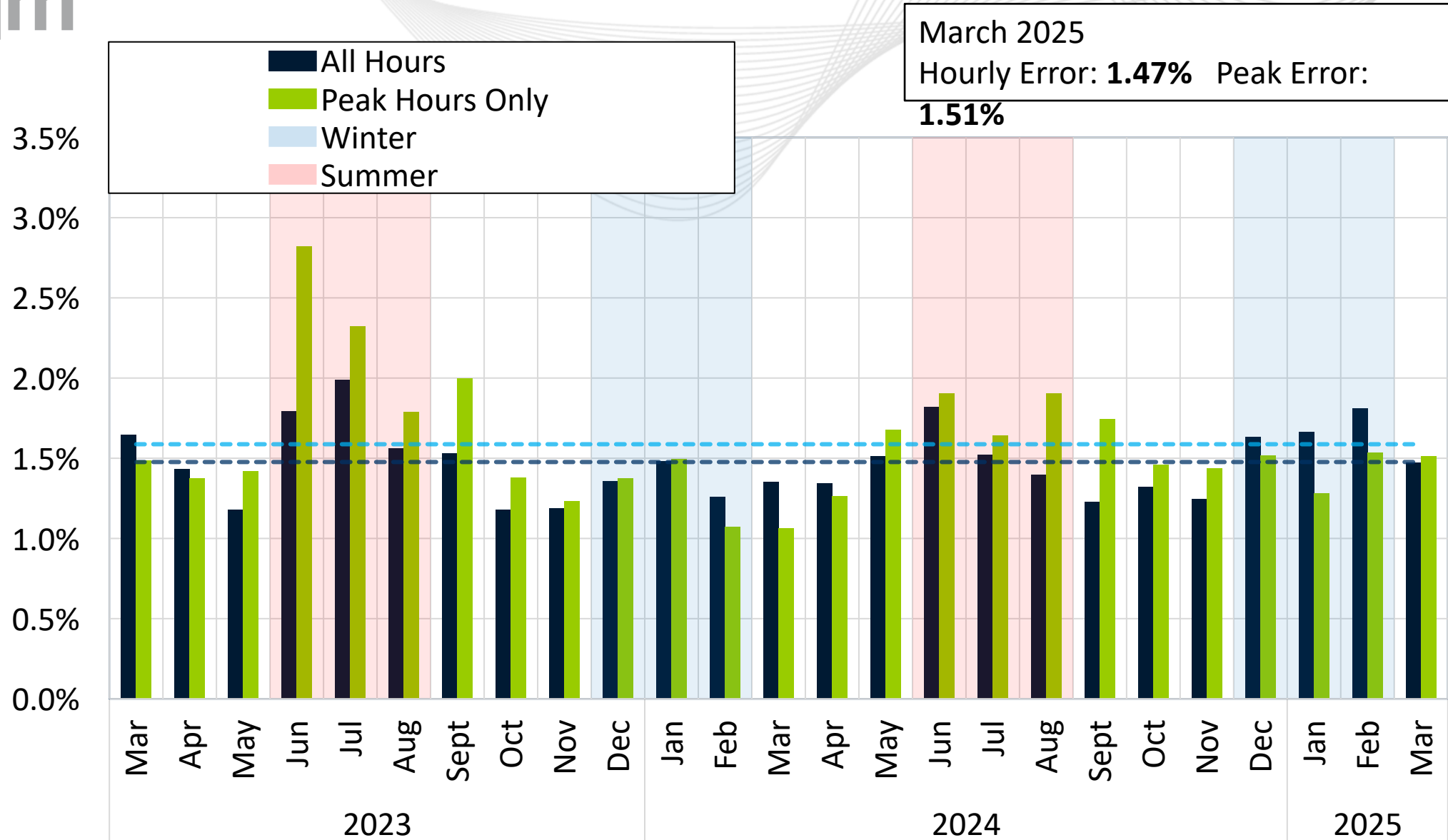
Michael Stewart, Sr. Engineer II –
Markets Coordination

David Kimmel, Sr. Engineer II –
Performance Compliance

Members Committee

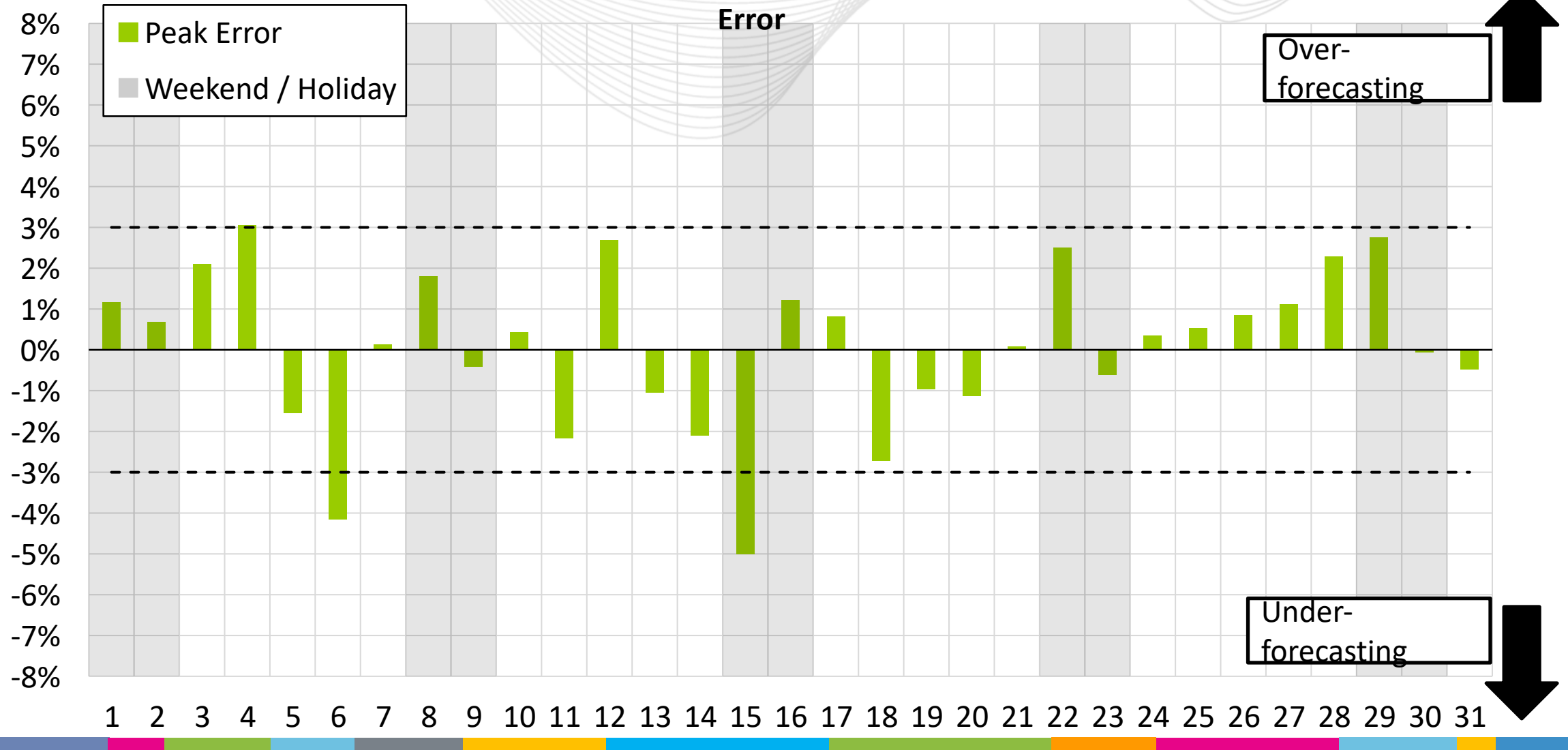
April 23, 2025

Average Load Forecast Error



Daily Peak Forecast Error (March)

18:00 Day Ahead Forecast

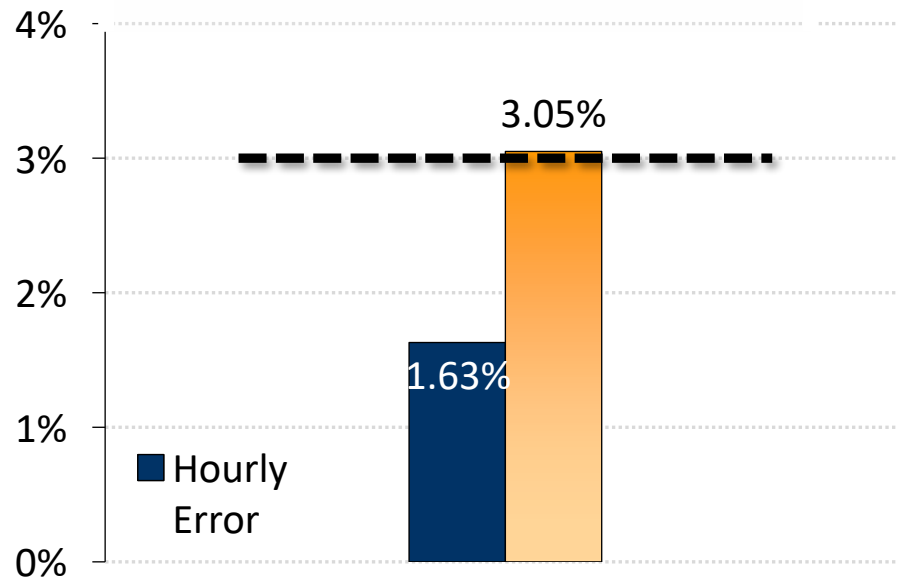


Days Exceeding 3% Forecast Error at Peak Hour

Over-forecasting

Mar. 4

Temperatures came in 4-7°F warmer than forecast across many regions, leading to lower loads and over-forecasting



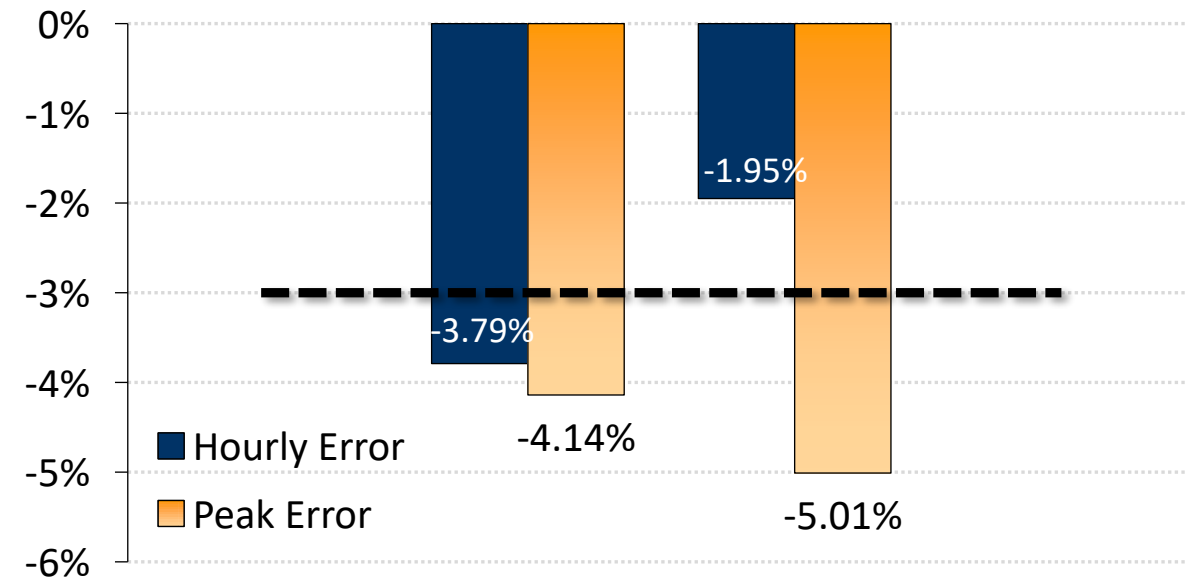
Under-forecasting

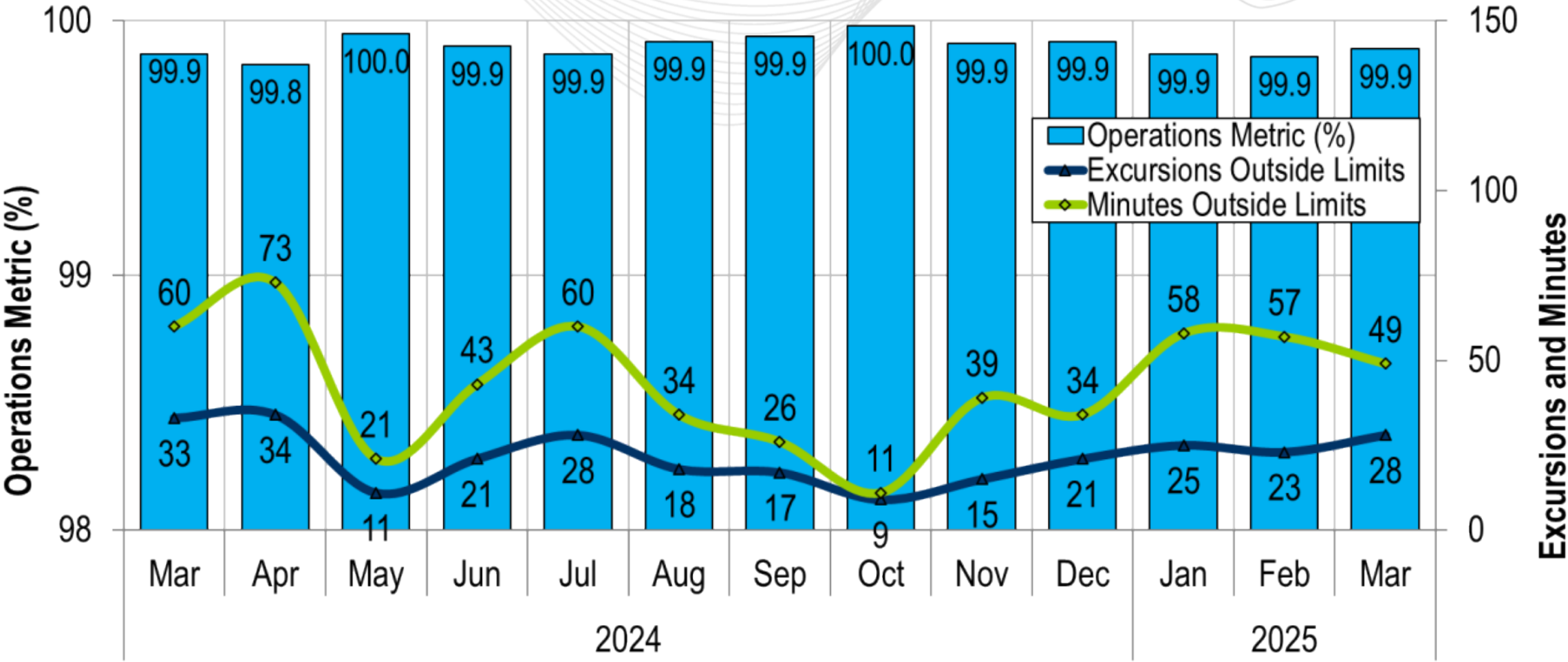
Mar. 6

A period of mild temperatures ended with colder conditions, leading to higher load response and under-forecasting.

Mar. 15

Temperatures in the east came in ~10°F cooler than forecast, leading to higher loads and under-forecasting.



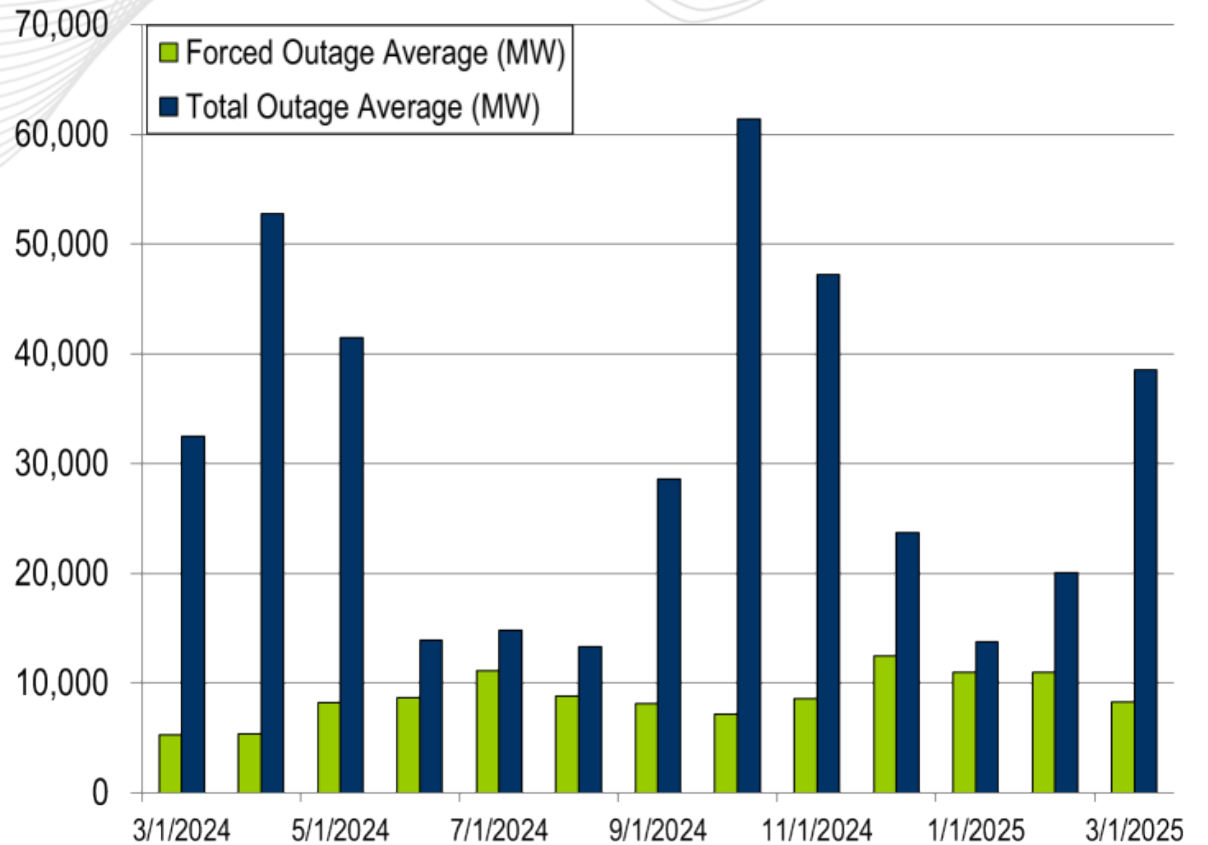
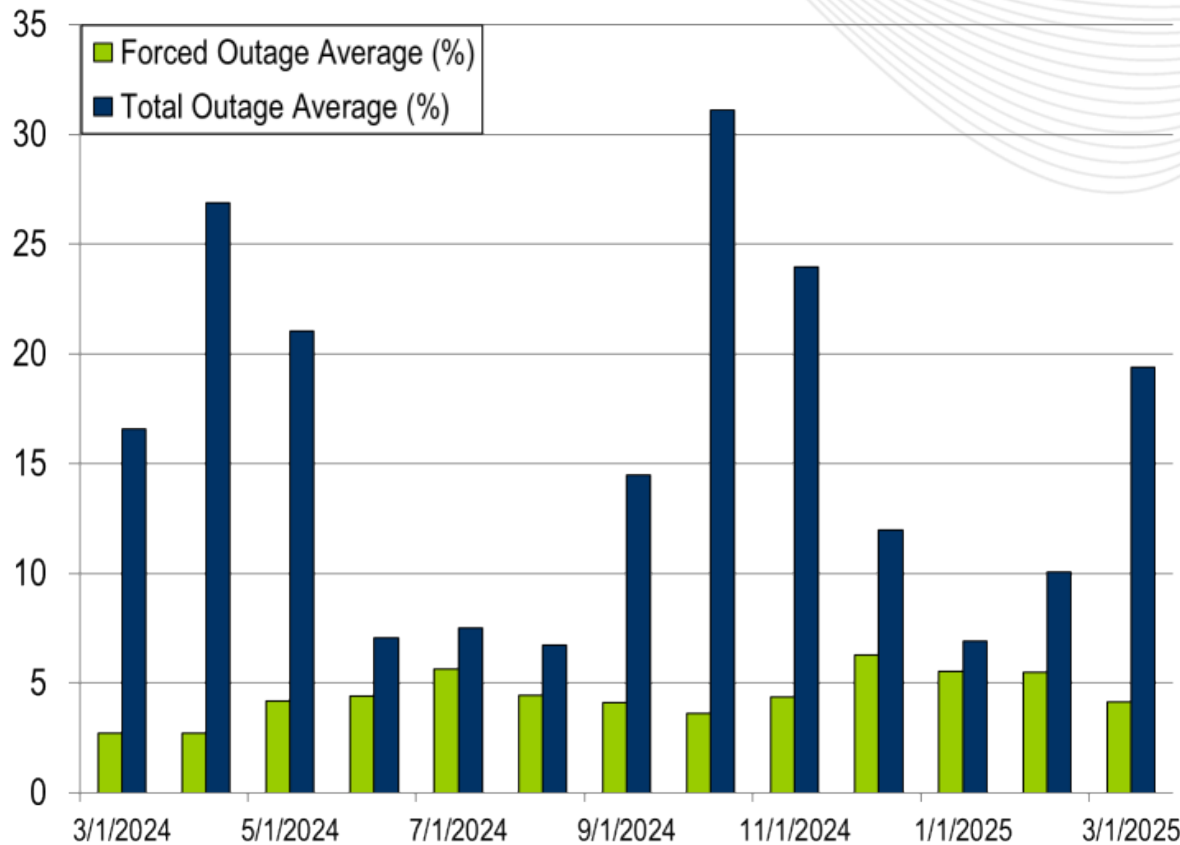


PJM’s BAAL performance has exceeded the goal of 99% for each month in 2024 and 2025.

- The following Emergency Procedures occurred:
 - 3 Shared Reserve events
 - 1 High System Voltage Action
 - 7 Post Contingency Local Load Relief Warnings

- 6 Shortage Cases Approved
- The approved Shortage Cases occurred on:
 - 03/15/2025:
 - 2 shortage cases approved
 - Factors: line tripping
 - 03/19/2025:
 - 4 shortage cases approved
 - Factors: load increase and reduced available reserve

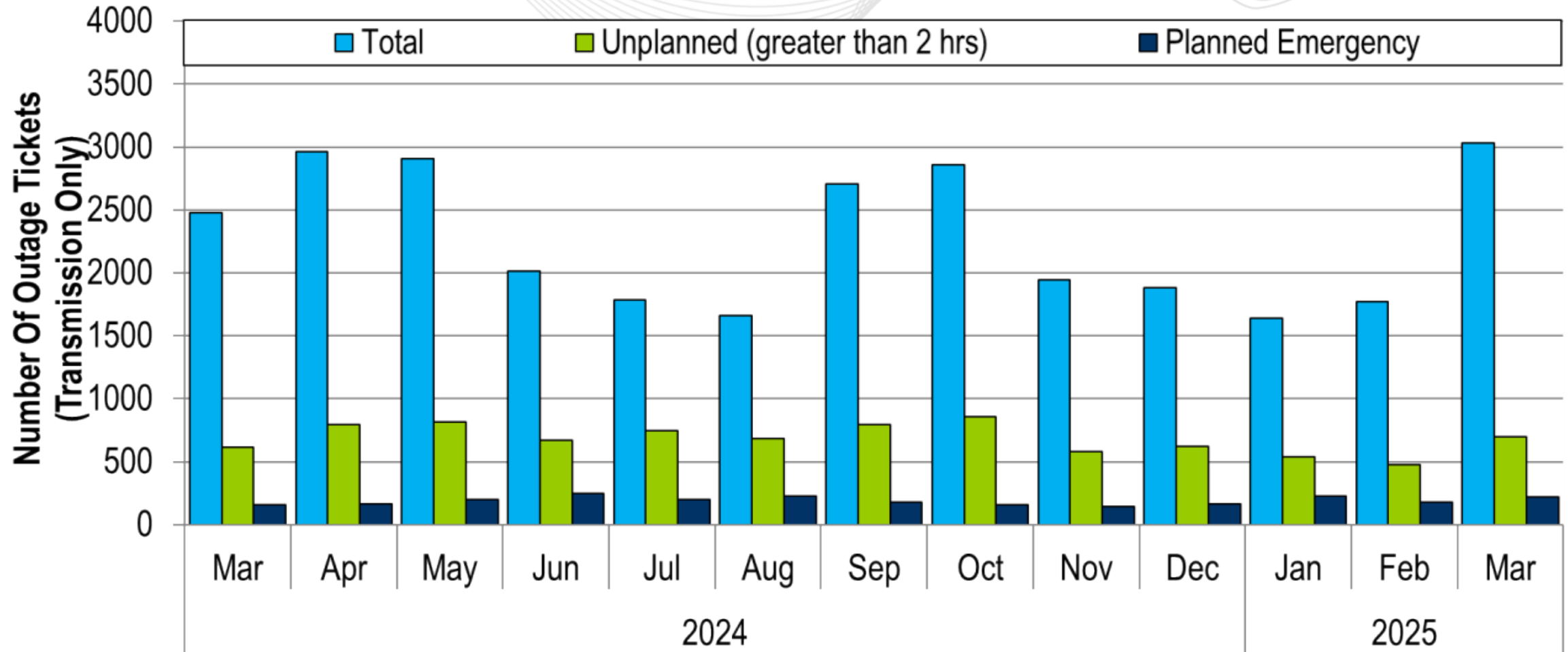
RTO Generation Outage Rate - Monthly



The 13-month average forced outage rate is 4.44% or 8,782 MW.

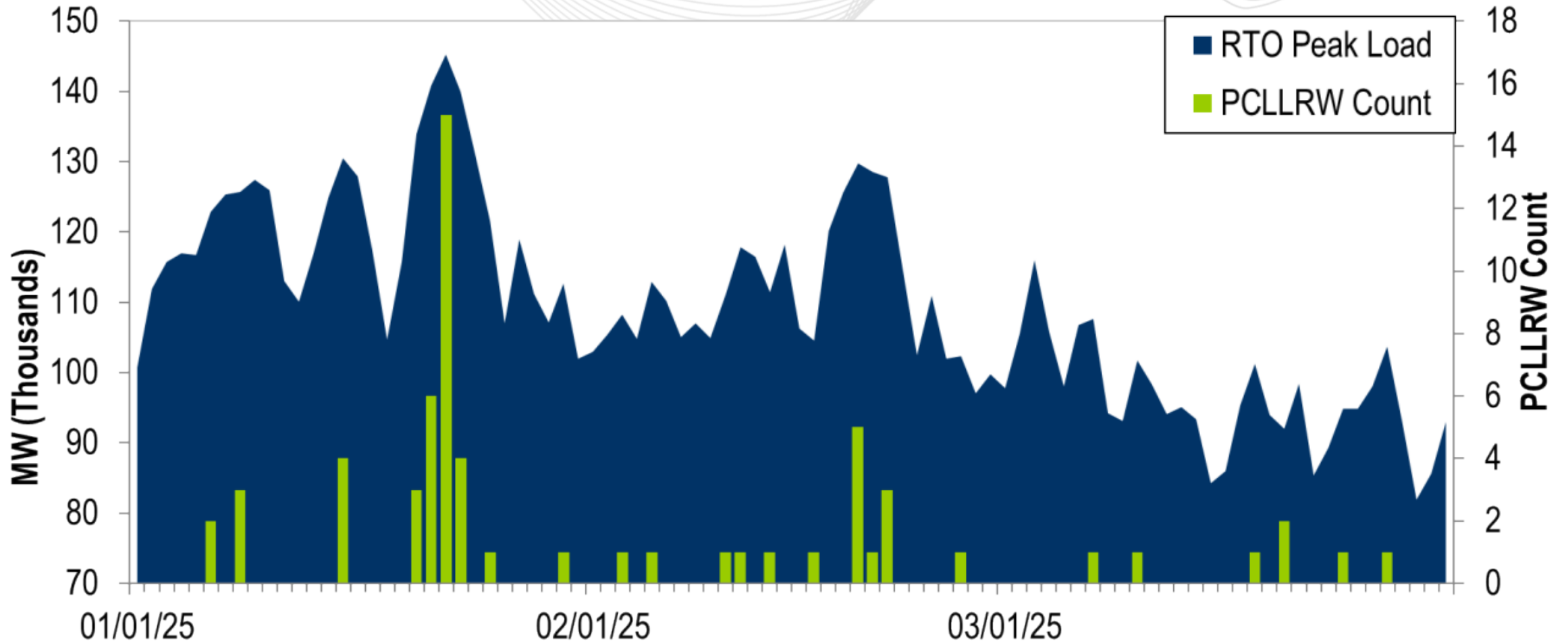
The 13-month average total outage rate is 15.70% or 30,978 MW.

2024-2025 Planned Emergency, Unplanned, and Total Outages by Ticket (Transmission Only)



Note: "Unplanned Outages" include tripped facilities. One tripping event may involve multiple facilities.

PCLLRW Count Vs. Peak Load – Daily Values For 3 Months



- There have been no spin events for the month of March 2025

Load Forecast Report

Presenter/SME:

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System Operations Report

Presenter:

David Kimmel,
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SME:

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A green speech bubble containing a white question mark, positioned above a blue speech bubble with three horizontal lines, indicating a question or contact point.

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Member Hotline

(610) 666 – 8980

(866) 400 – 8980

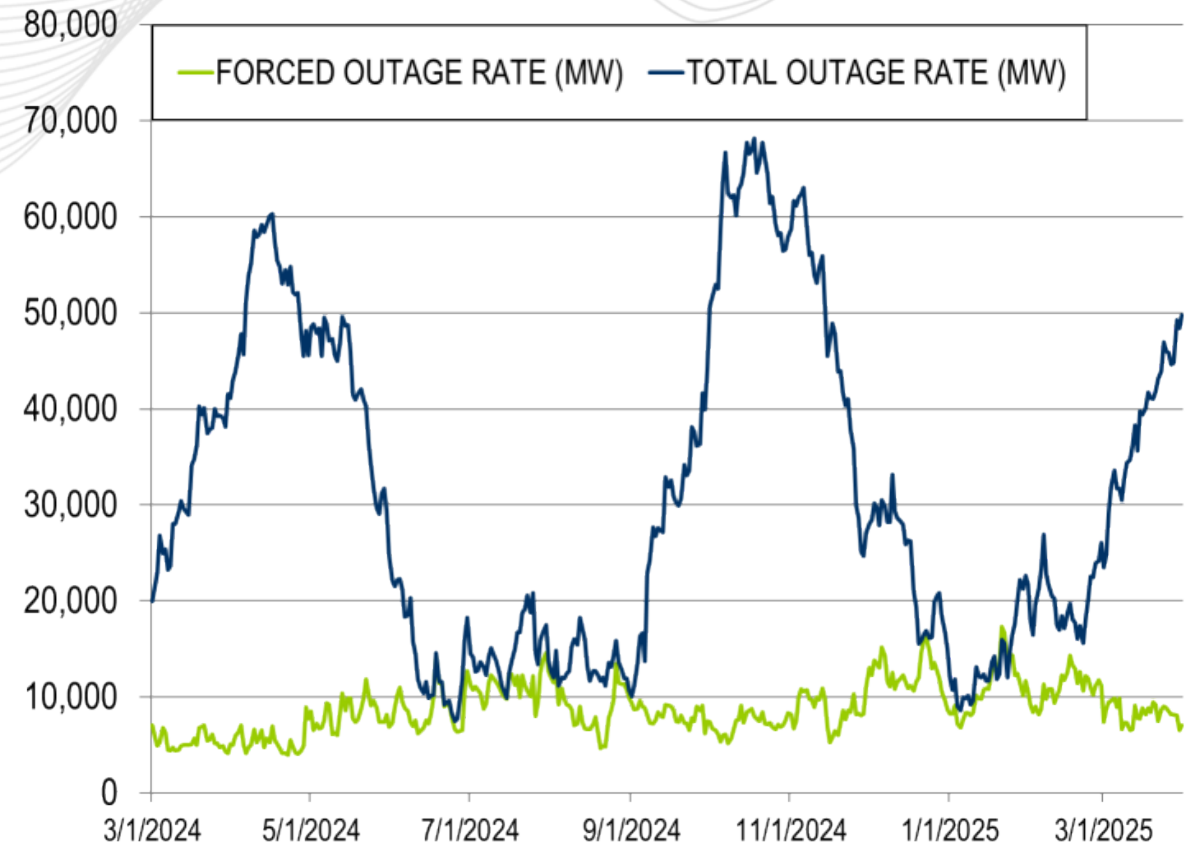
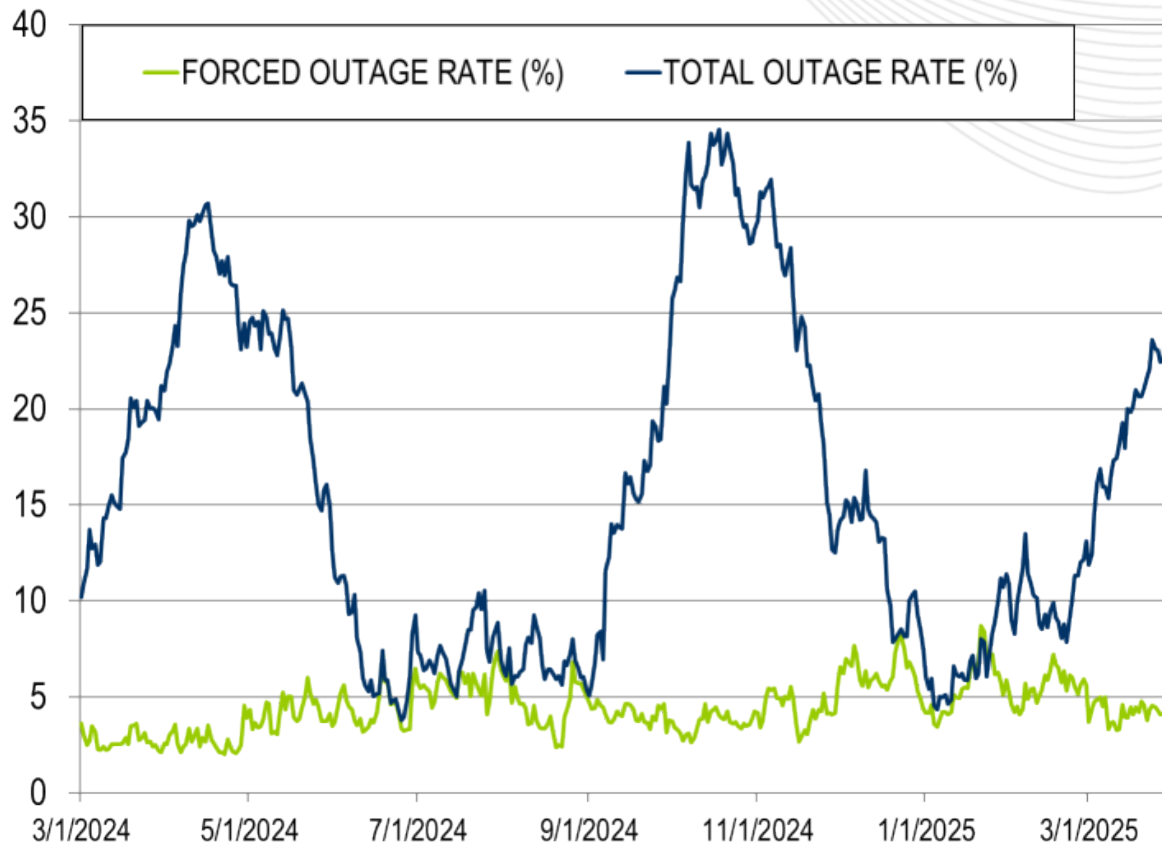
custsvc@pjm.com

Appendix

Goal Measurement: Balancing Authority ACE Limit (BAAL)

- The purpose of the new BAAL standard is to maintain interconnection frequency within a predefined frequency profile under all conditions (normal and abnormal), to prevent frequency-related instability, unplanned tripping of load or generation, or uncontrolled separation or cascading outages that adversely impact the reliability of the interconnection. NERC requires each balancing authority demonstrate real-time monitoring of ACE and interconnection frequency against associated limits and shall balance its resources and demands in real time so that its Reporting ACE does not exceed the BAAL ($BAAL_{LOW}$ or $BAAL_{HIGH}$) for a continuous time period greater than 30 minutes for each event.
- PJM directly measures the total number of BAAL excursions in minutes compared to the total number of minutes within a month. PJM has set a target value for this performance goal at 99% on a daily and monthly basis. In addition, current NERC rules limit the recovery period to no more than 30 minutes for a single event.

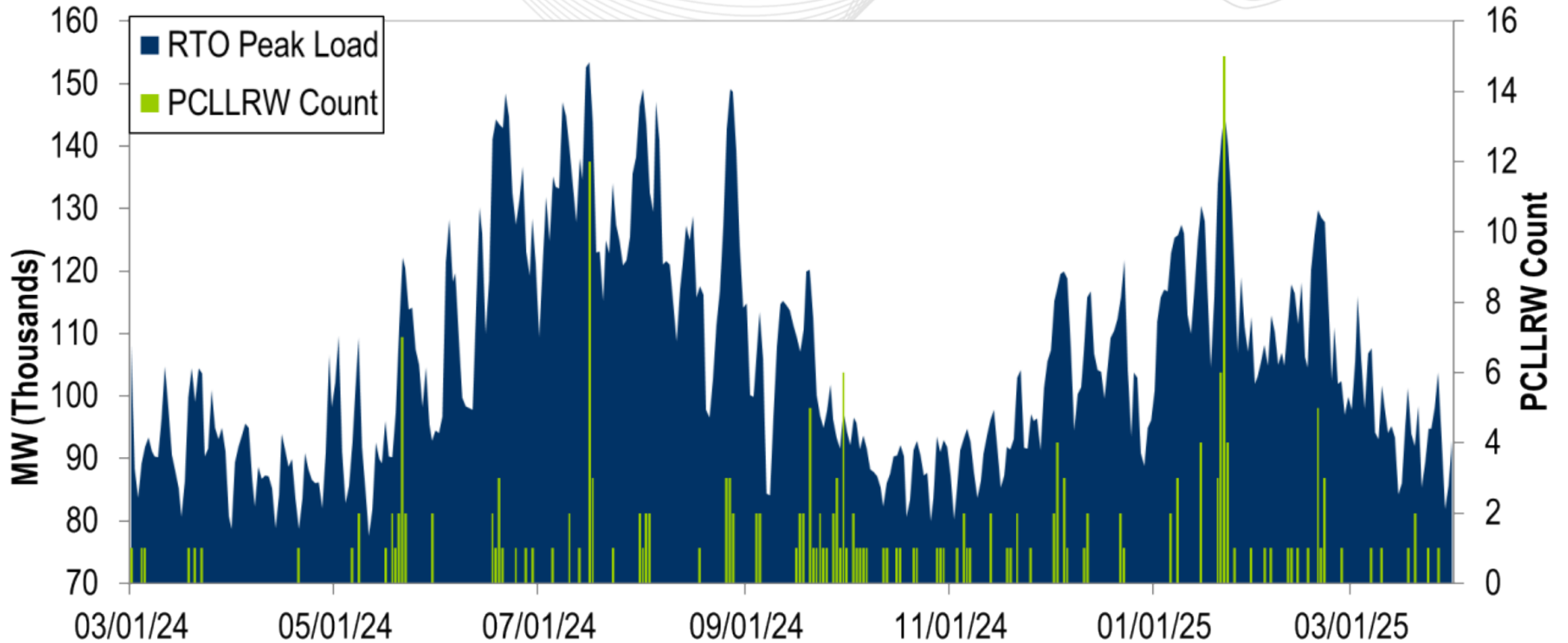
RTO Generation Outage Rate - Daily



The 13-month average forced outage rate is 4.44% or 8,782 MW.

The 13-month average total outage rate is 15.70% or 30,978 MW.

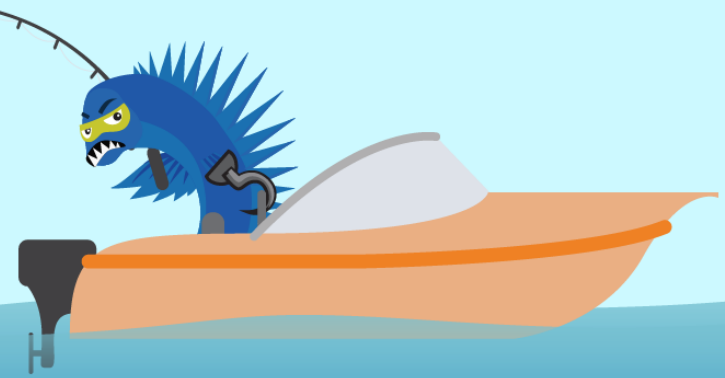
PCLLRW Count Vs. Peak Load – Daily Values For 13 Months



**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