

System Operations Report

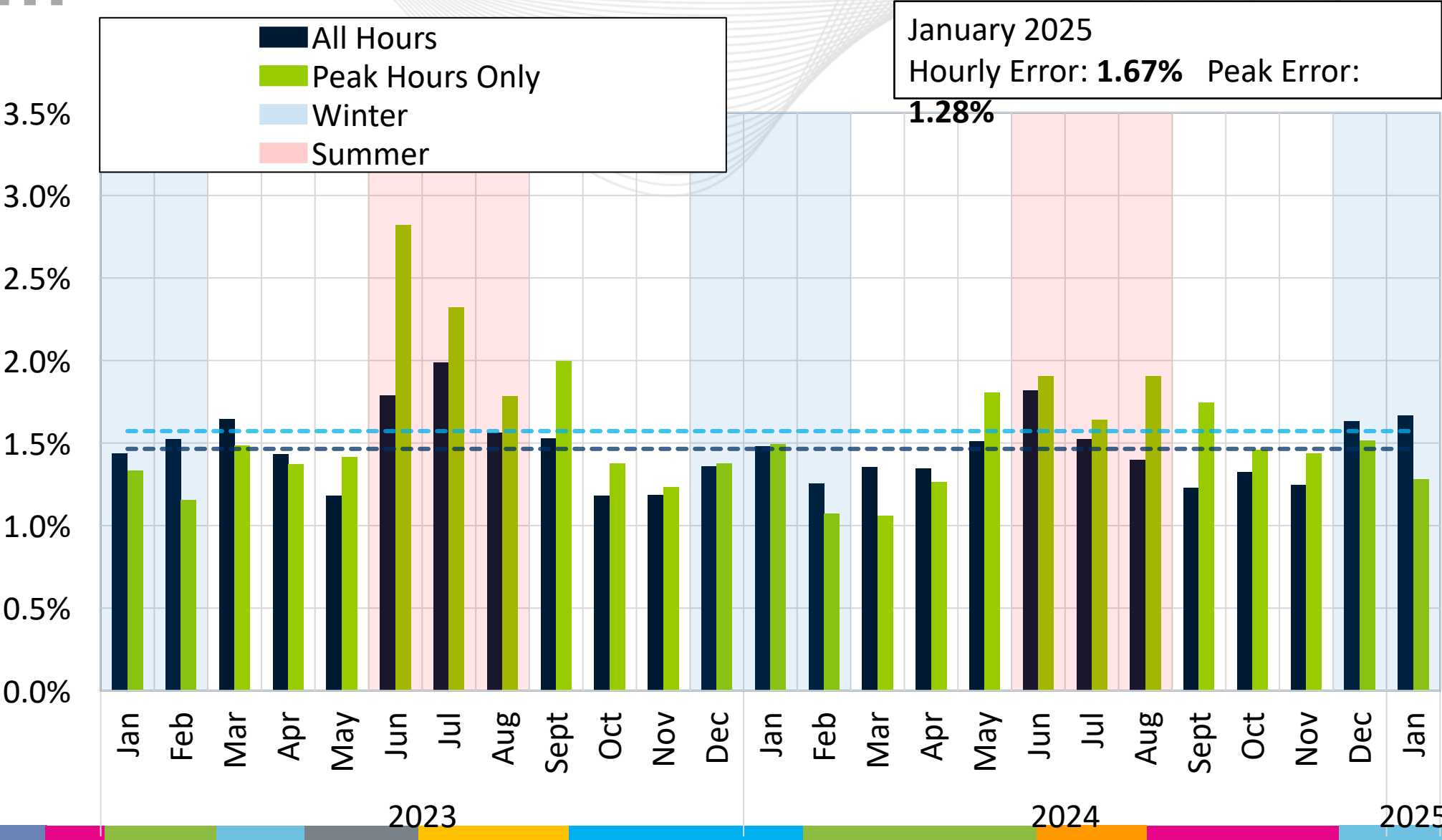
Marcus Smith, Lead Engineer –
Markets Coordination

David Kimmel, Sr. Engineer II –
Performance Compliance

Operating Committee

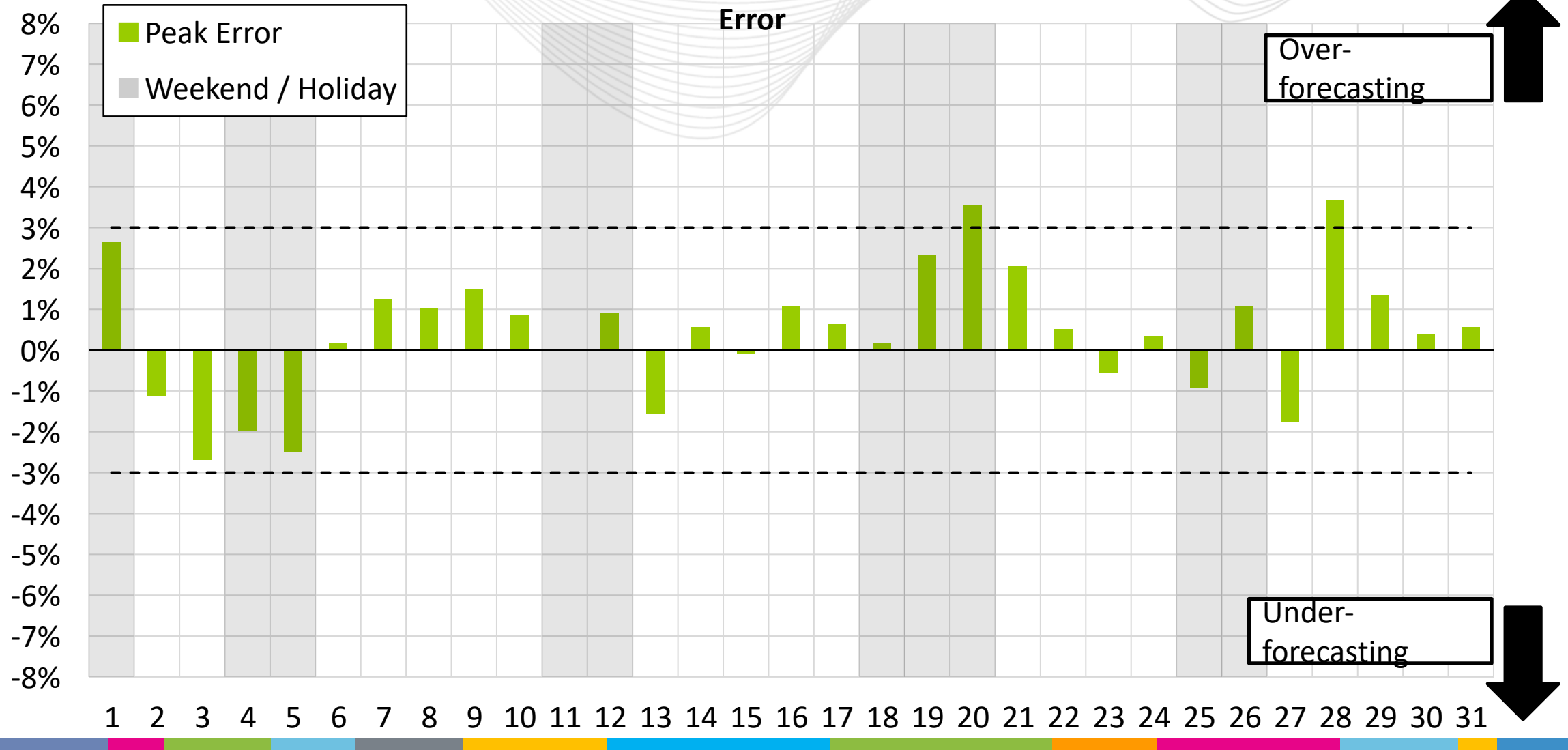
February 6, 2025

Average Load Forecast Error



Daily Peak Forecast Error (January)

18:00 Day Ahead Forecast
Error



Days Exceeding 3% Forecast Error at Peak Hour

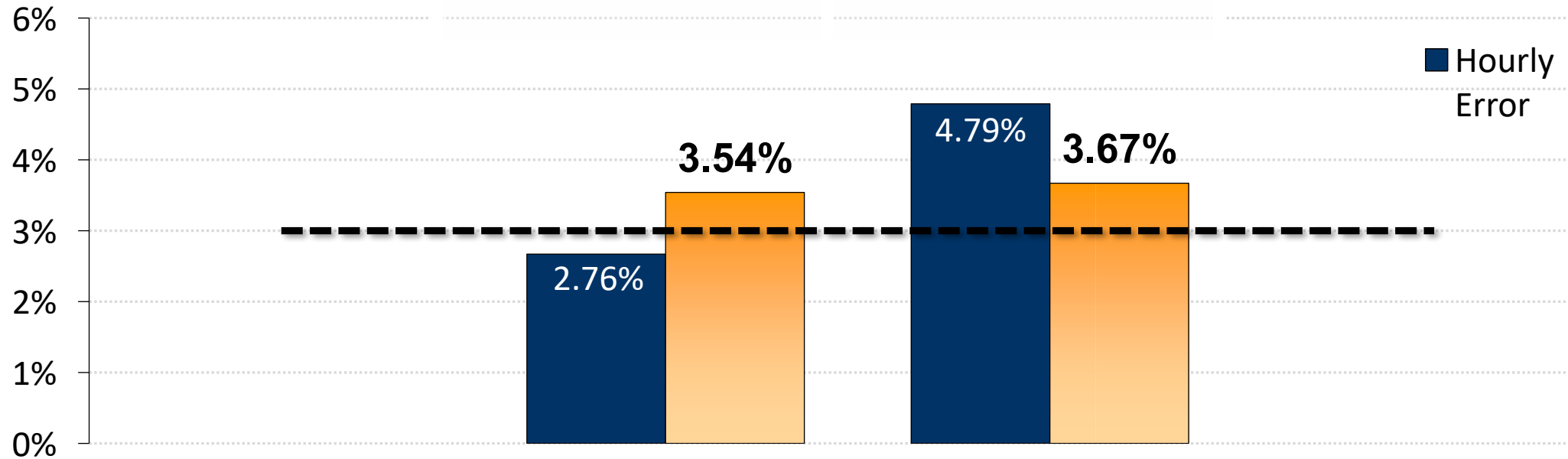
Over-forecasting

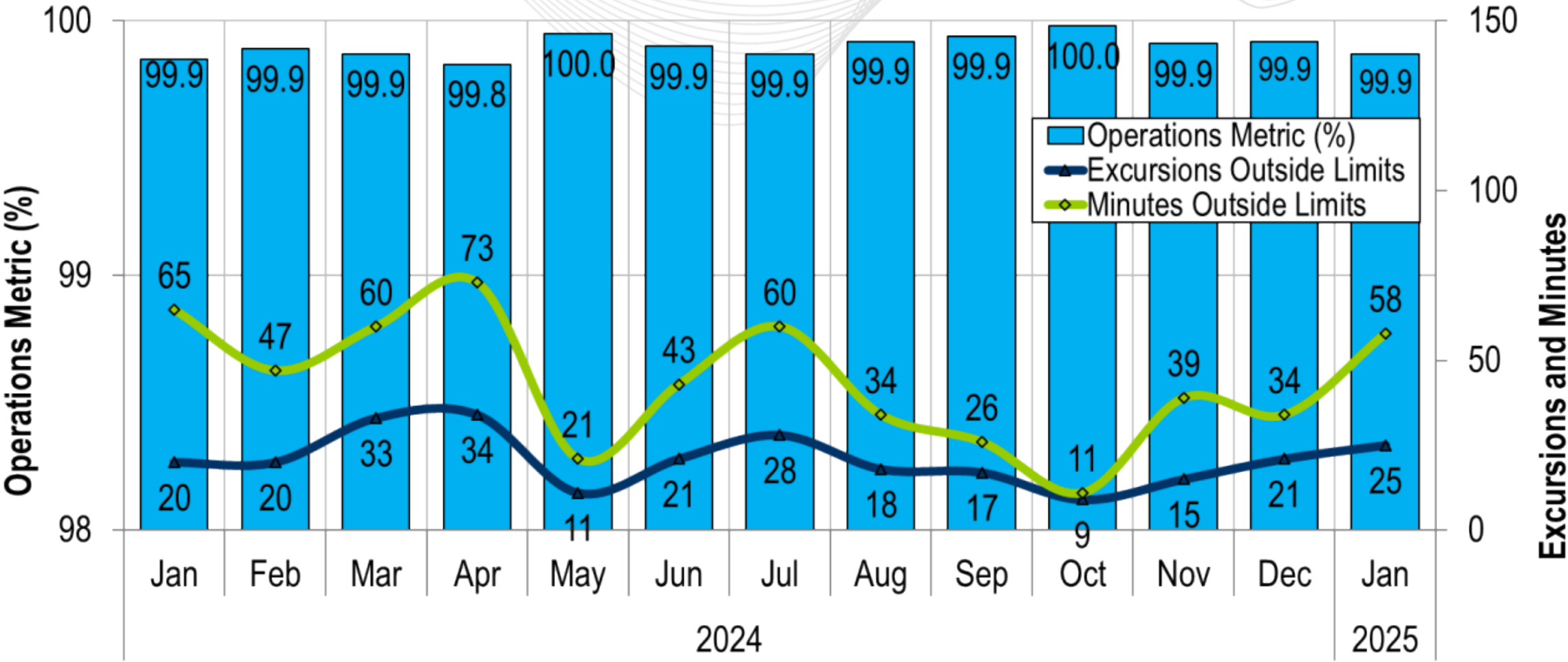
Jan. 20

Extreme cold temperatures moved into RTO, but holiday impact led to over-forecasting.

Jan. 28

Temperatures came in significantly warmer across the region, leading to over-forecasting.



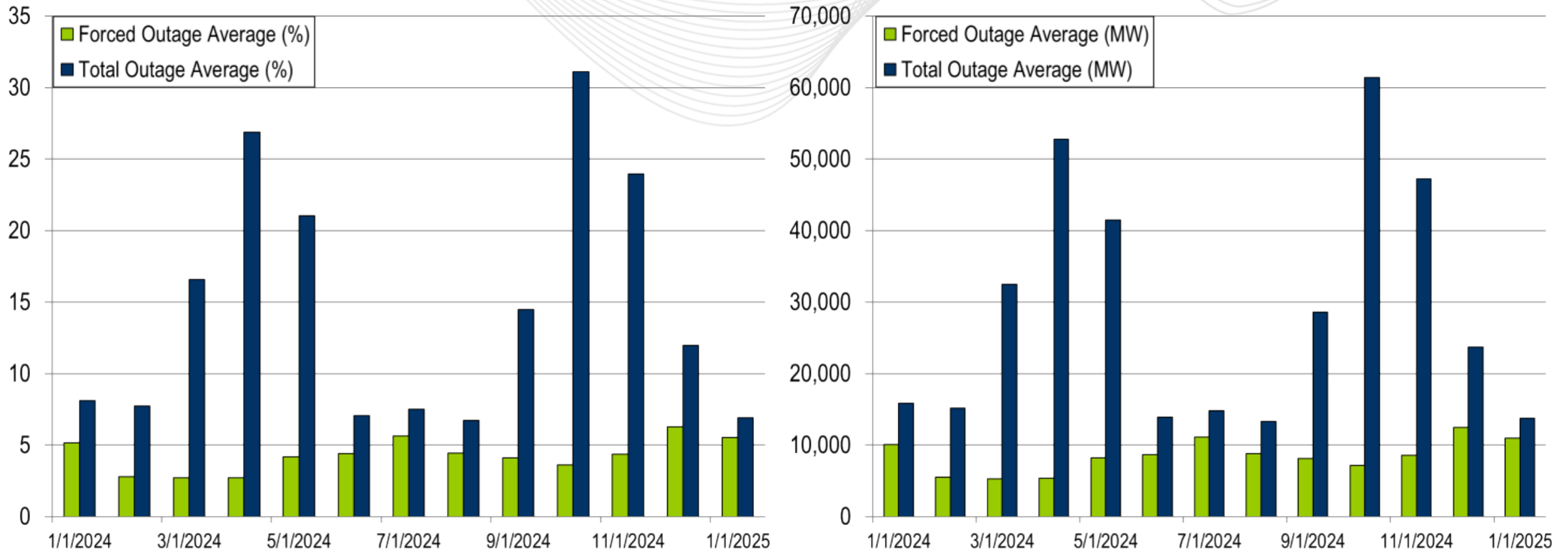


PJM’s BAAL performance has exceeded the goal of 99% for each month in 2023 and 2024.

- The following Emergency Procedures occurred:
 - 6 Shared Reserve events
 - 1 Spin Event
 - 1 Conservative Operations Alert
 - 1 Maximum Generation Emergency Alert
 - 6 Cold Weather Alerts
 - 1 Geomagnetic Disturbance Warning
 - 1 Low Voltage Alert
 - 39 Post Contingency Local Load Relief Warnings (PCLLRWs)
 - 1 TLR Level 1
 - 1 NERC EEA Level 1

- There have been no shortage case approvals for the month of January 2025.

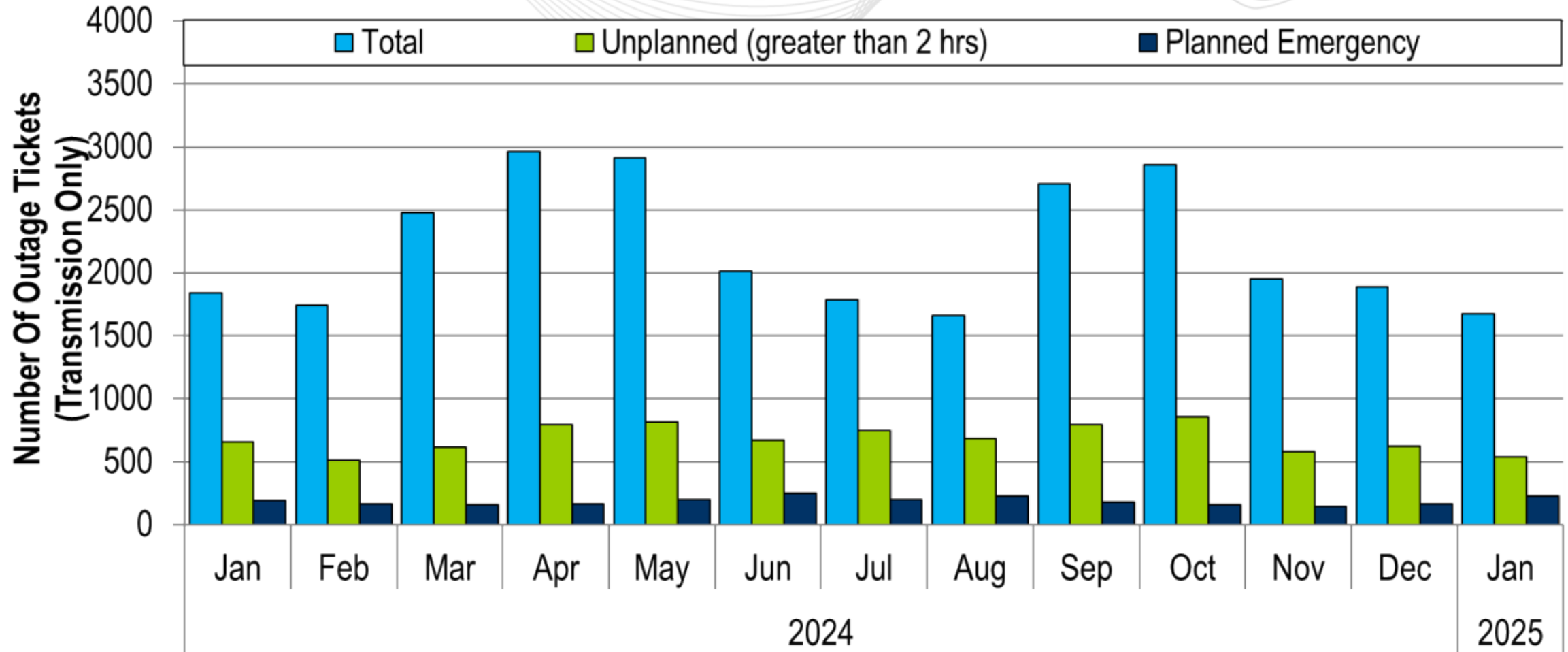
RTO Generation Outage Rate - Monthly



The 13-month average forced outage rate is 4.33% or 8,531 MW.

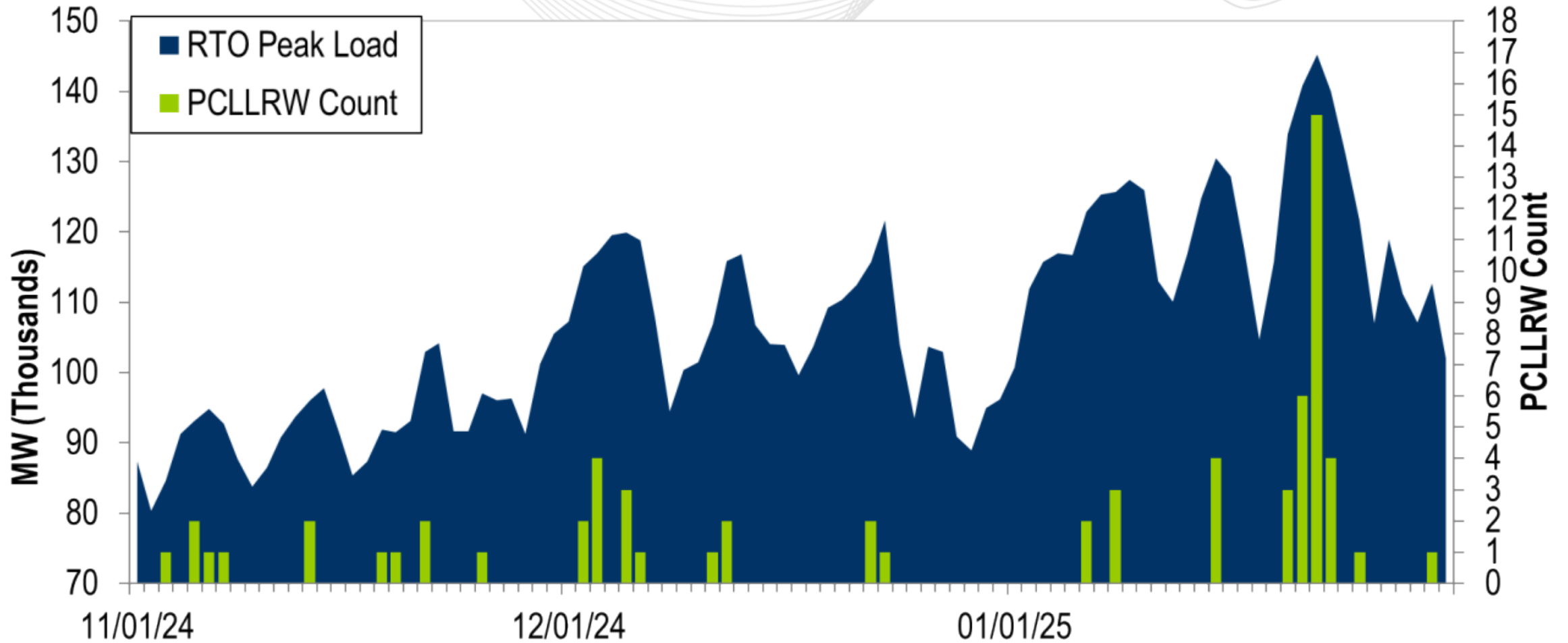
The 13-month average total outage rate is 14.63% or 28,821 MW.

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



Event	1		
Date	01/21/25		
Start Time	00:20:01		
End Time	00:24:41		
Duration	00:04:40		
Region	RTO		
Resource Type	Gen	DR	Total
Assigned (MW)	694	40	734
Estimated Expected Response of Assigned Resources (MW)	324	19	342
Actual Response of Assigned Resources (MW)	518	26	543
Output Increase of Resources without Assignment (MW)	2549	0	2549
Percent Response To Estimated Expected Response (%)	160%	139%	159%
Penalty (MW)	0	0	0

Note: This event includes only preliminary results for non-MAD units

Load Forecast Report

Presenter/SME:

Marcus Smith,
Marcus.Smith@pjm.com

System Operations Report

Presenter:

David Kimmel,
David.Kimmel@pjm.com

SME:

Ross Kelly,
Ross.Kelly@pjm.com

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

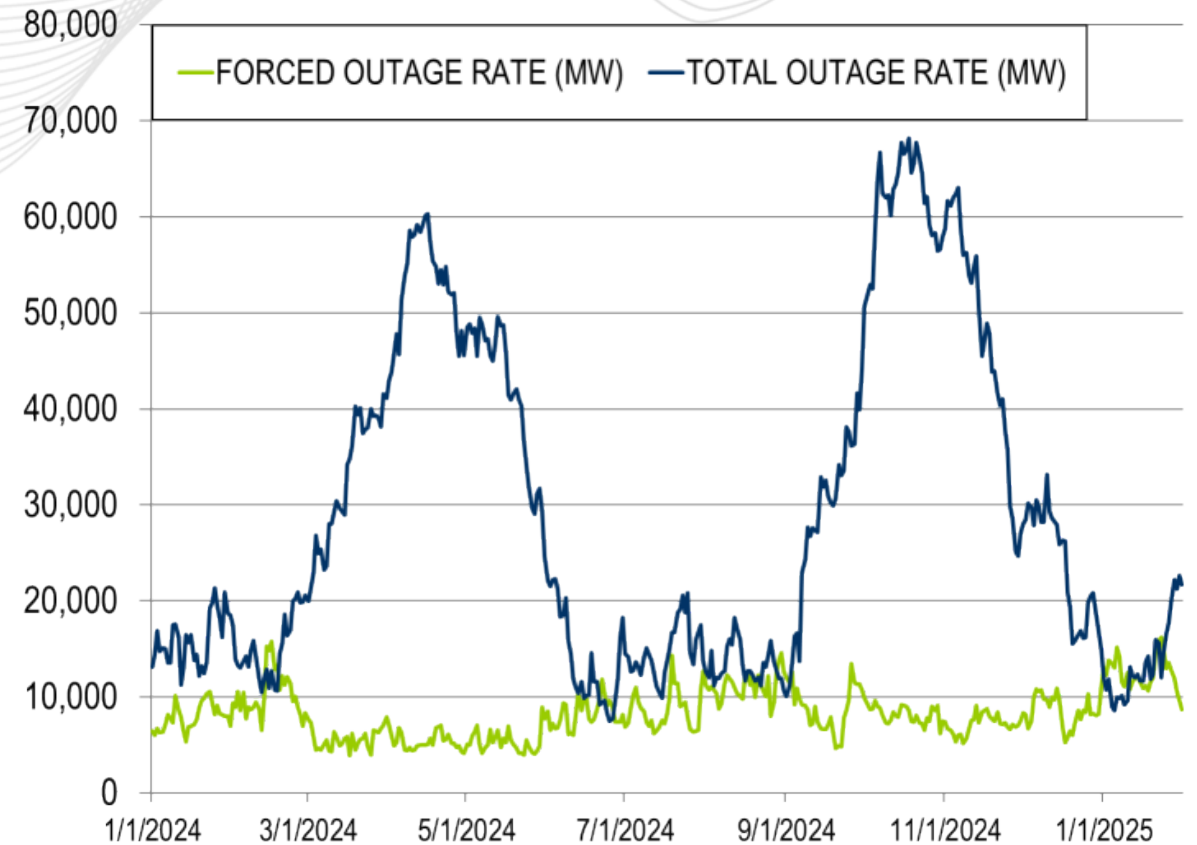
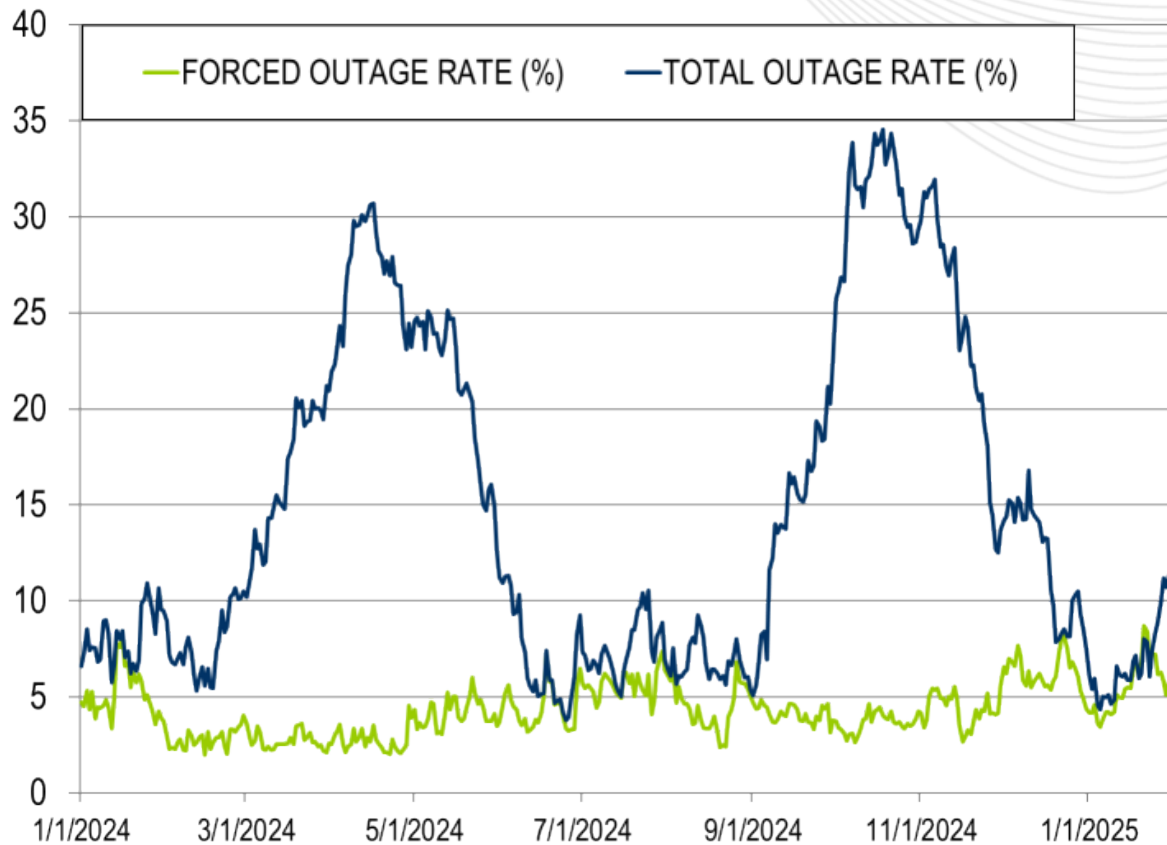
custsvc@pjm.com

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.

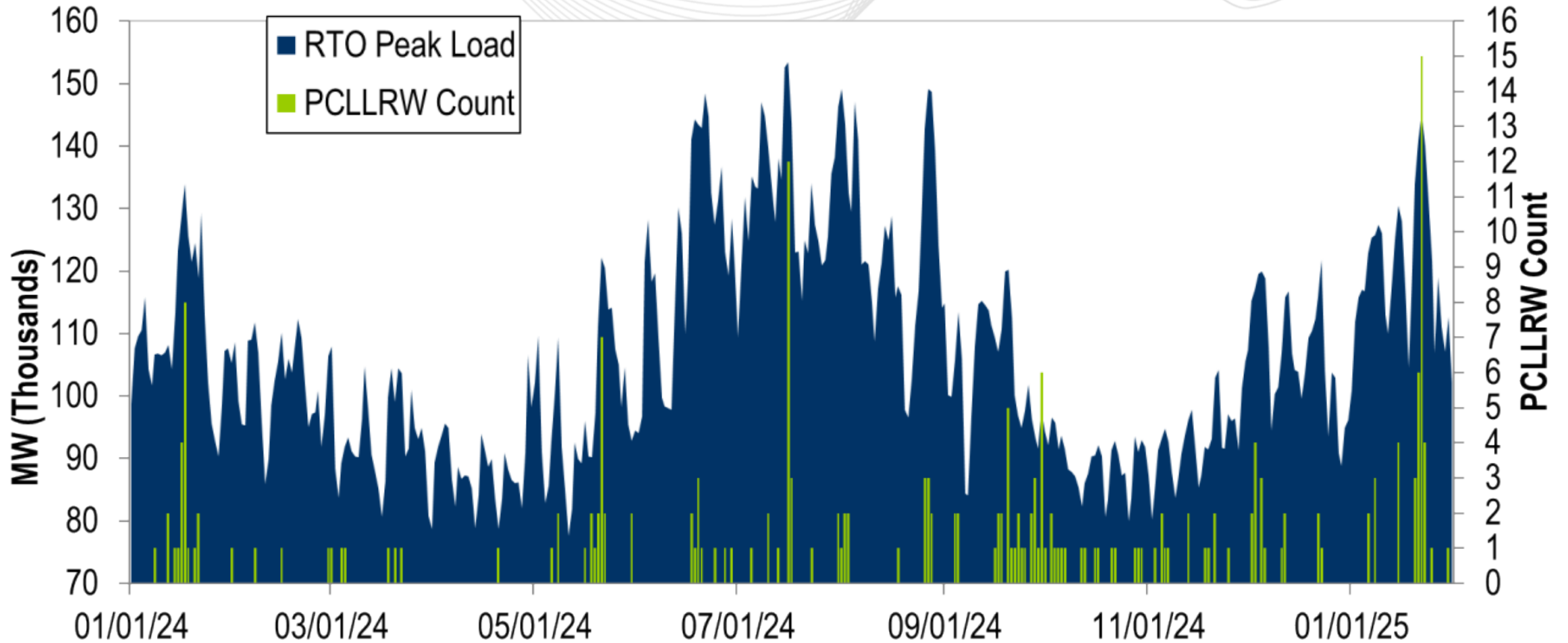
RTO Generation Outage Rate - Daily



The 13-month average forced outage rate is 4.33% or 8,531 MW.

The 13-month average total outage rate is 14.63% or 28,821 MW.

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



**PROTECT THE
POWER GRID
THINK BEFORE
YOU CLICK!**



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malicious
phishing emails.

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

