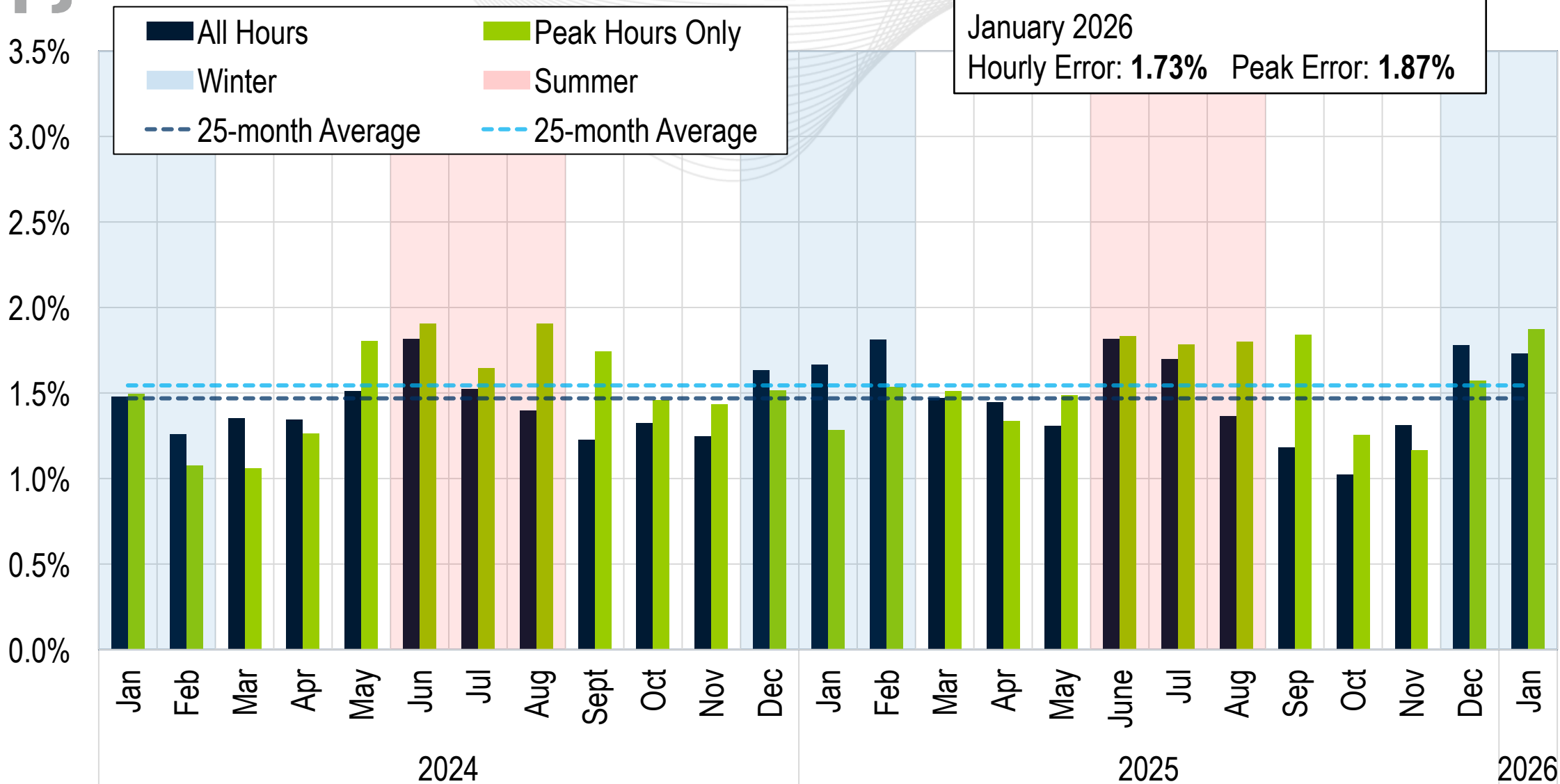


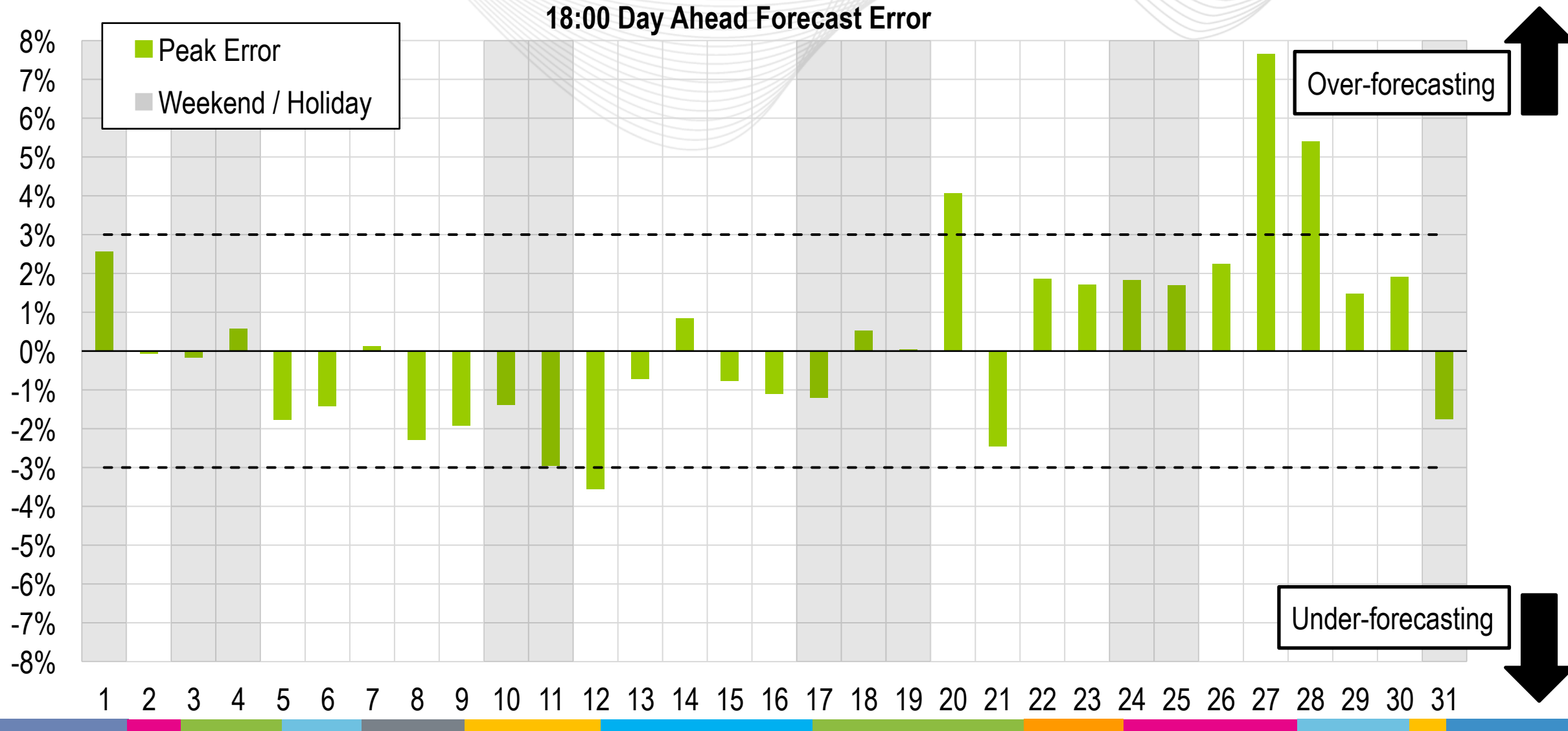
# System Operations Report

Marcus Smith, Lead Engineer –  
Operations Uncertainty & Risk  
David Kimmel, Sr. Engineer II –  
Performance Compliance  
Operating Committee  
February 5<sup>th</sup>, 2026

# Average Load Forecast Error



# Daily Peak Forecast Error (Jan.)



# Days Exceeding 3% Forecast Error at Peak Hour

## Over-forecasting

**Jan. 20**

Despite colder temperatures, demand came in lower than expected after the holiday.

**Jan. 27**

Temperatures came in much warmer across the footprint.

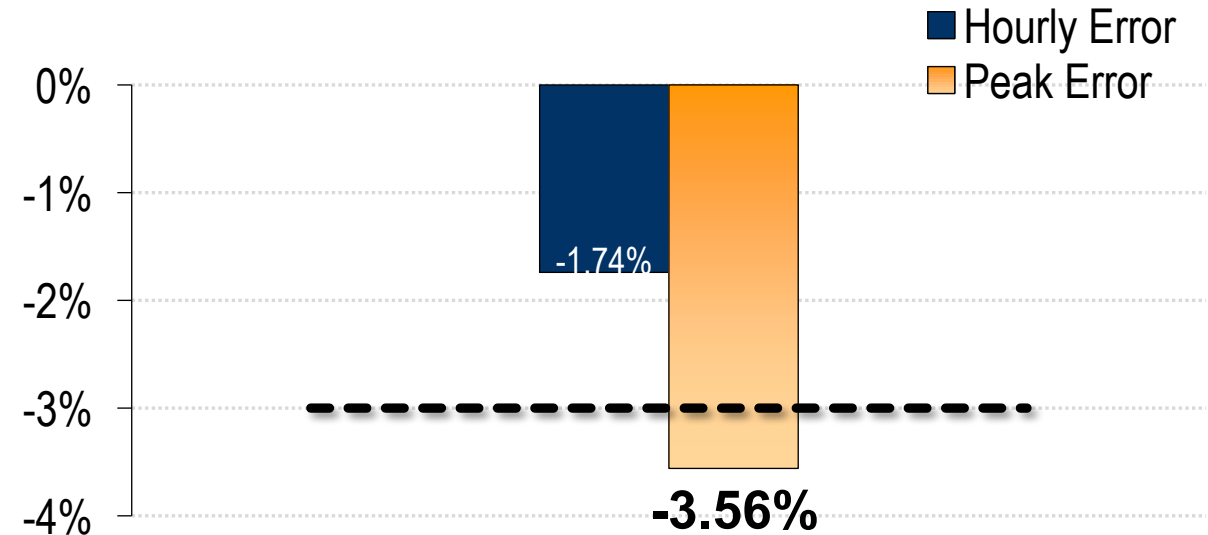
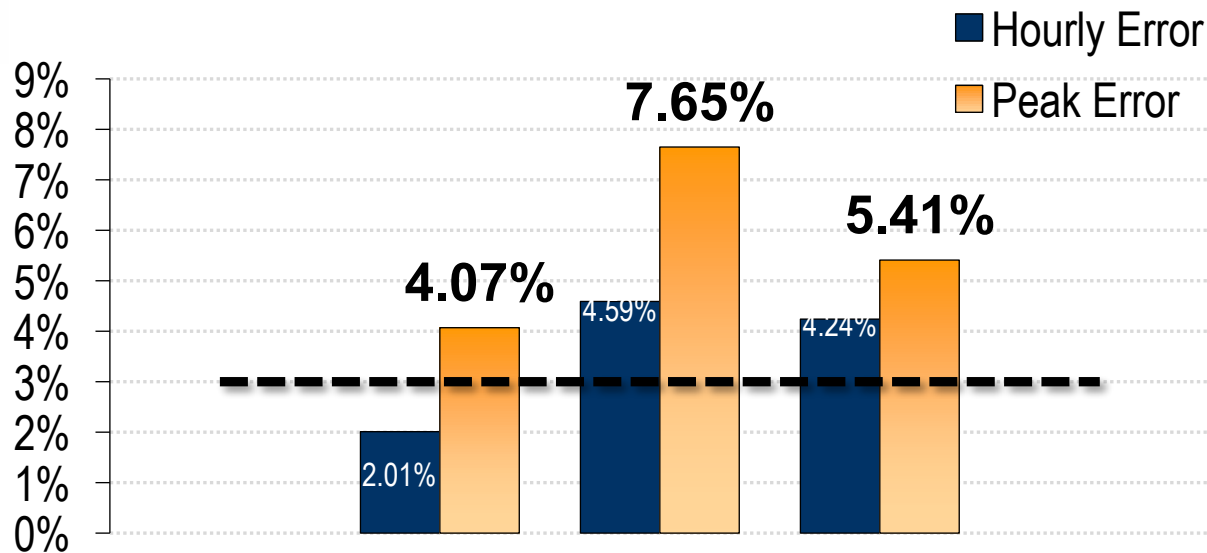
**Jan. 28**

Temperatures came in much higher than forecast across the footprint.

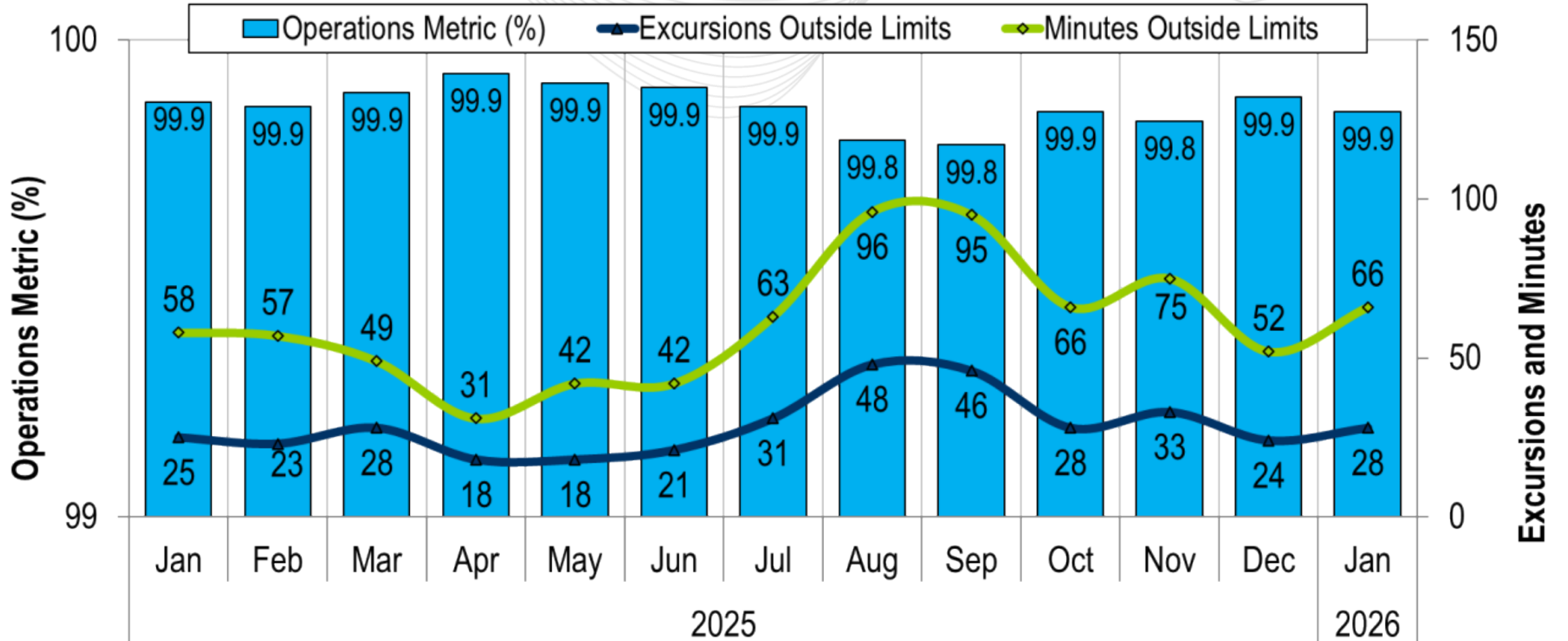
## Under-forecasting

**Jan. 12**

Temperatures came in colder leading to higher-than-expected loads.



# Monthly BAAL Performance Score



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

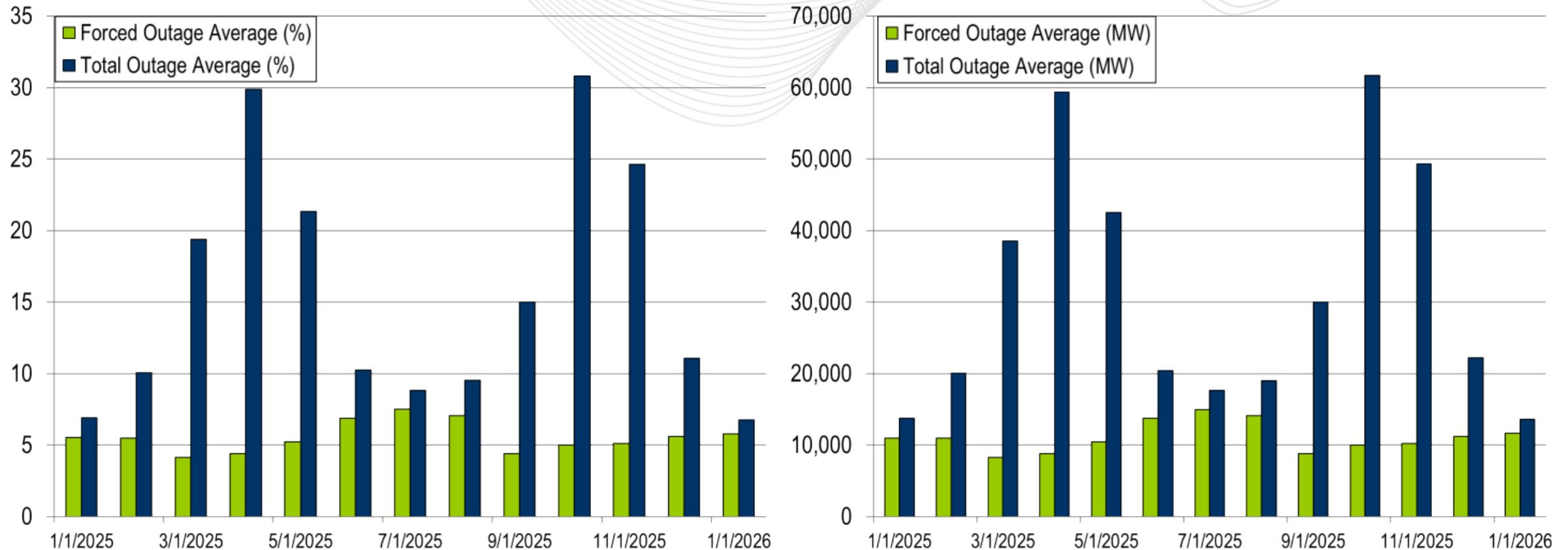
- The following Emergency Procedures occurred:
  - 4 Spin Events
  - 4 Shared Reserve Events
  - 1 Conservative Operations Alert
  - 1 Maximum Generation Emergency/Load Management Alert
  - 2 Pre-Emergency Load Management Reduction Action
  - 4 Cold Weather Alerts
  - 5 Geomagnetic Disturbance Warnings
  - 1 Low Voltage Alert
  - 1 NERC EEA Level 1
  - 22 Post Contingency Local Load Relief Warnings

- 19 Shortage Cases Approved
- The approved Shortage Cases occurred on:
  - 01/23/2026:
    - 1 shortage case approved for the 17:55 interval
    - Factors: Evening peak, under the market reserve requirement
  - 01/24/2026:
    - 4 shortage cases approved for the 05:40, 05:40, 05:45, and 05:50 intervals
    - Factors: Load pickup and export to neighbors

- The approved Shortage Cases occurred on:
  - 01/30/2026:
    - 1 shortage case approved for the 17:55 interval
    - Factors: Evening peak, under the market reserve requirement
  - 01/31/2026:
    - 2 shortage case approved for the 18:10 and 18:20 intervals
    - Factors: Evening peak, under the market reserve requirement
  - 01/31/2026:
    - 11 shortage cases approved for the 21:20, 21:25, 21:30, 21:45, 21:55, 22:00, 22:05, 22:10, 22:15, 22:20, and 22:25 intervals
    - Factors: Transmission Contingencies

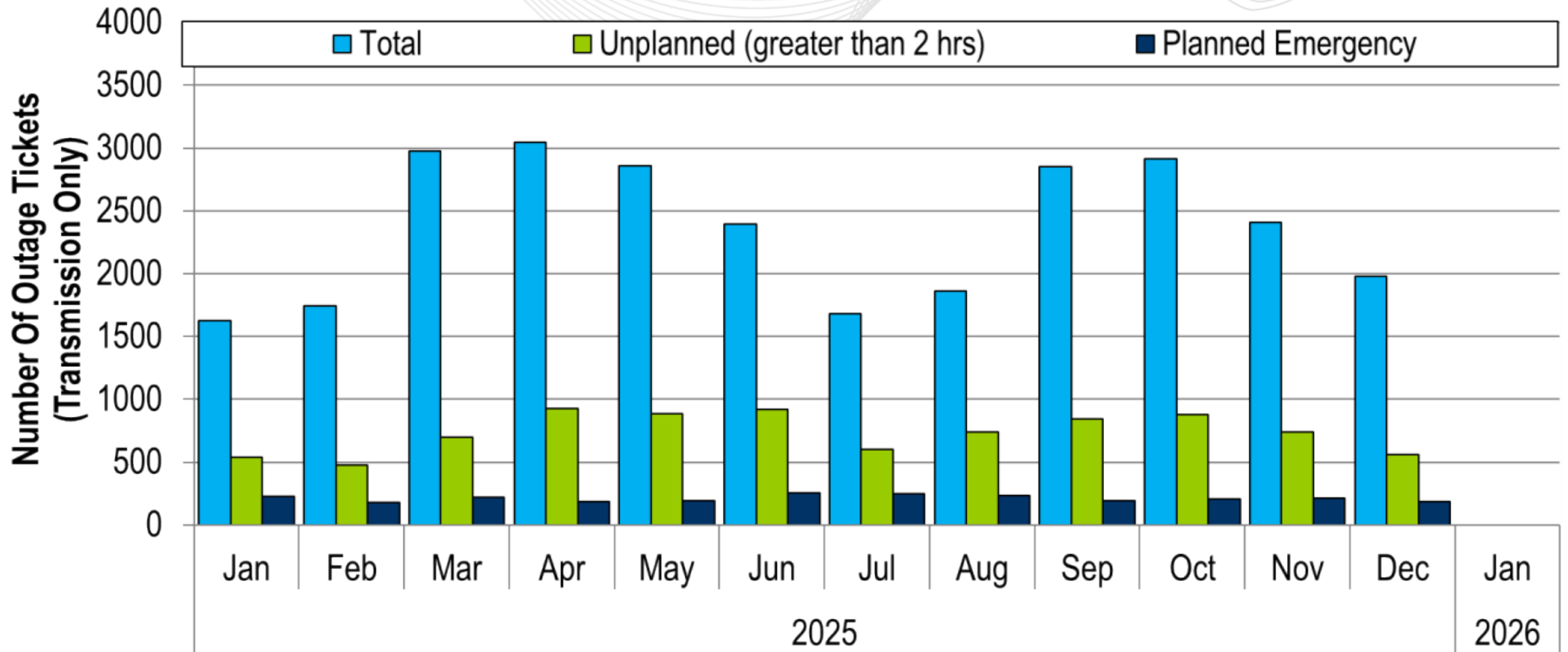


# RTO Generation Outage Rate - Monthly



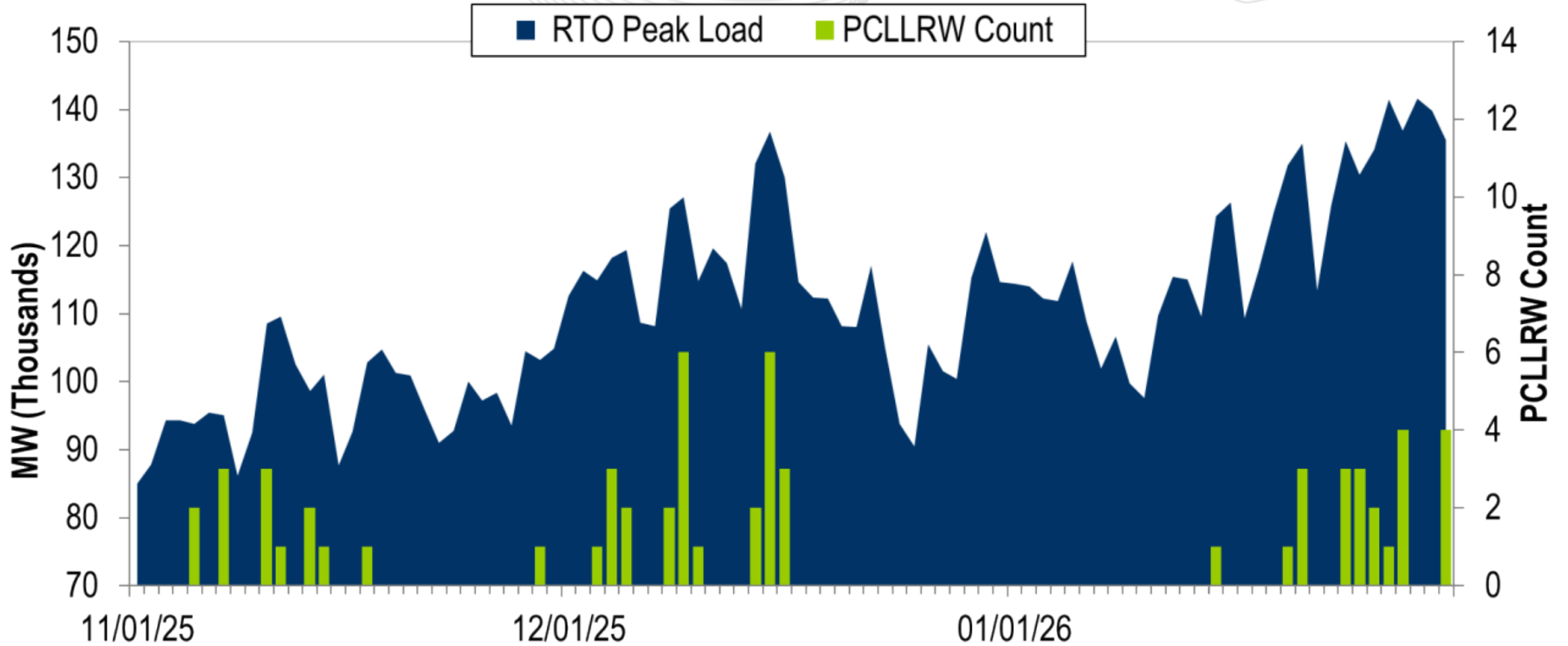
The 13-month average forced outage rate is 5.56% or 11,106 MW.  
The 13-month average total outage rate is 15.73% or 31,409 MW.

# 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			2			3			4		
Date	01/09/26			01/18/26			01/30/26			01/31/26		
Start Time	21:32:58			03:21:32			12:47:52			05:23:08		
End Time	21:38:16			03:30:43			12:52:29			05:29:04		
Duration	00:05:18			00:09:11			00:04:37			00:05:56		
Region	RTO			MAD			RTO			RTO		
Resource Type	Gen	DR	Total	Gen	DR	Total	Gen	DR	Total	Gen	DR	Total
Assigned (MW)	1655	725	2380	2245	6	2251	3739	189	3927	2393	156	2548
Estimated Expected Response of Assigned Resources (MW)	877	384	1261	2062	6	2067	1726	87	1813	1420	92	1512
Actual Response of Assigned Resources (MW)	696	547	1242	1097	4	1101	1762	88	1850	1460	153	1614
Output Increase of Resources without Assignment (MW)	899	0	899	281	0	281	2264	0	2264	2447	0	2447
Percent Response To Assignment (%)	42%	75%	52%	49%	59%	49%	47%	47%	47%	61%	98%	63%
Percent Response To Estimated Expected Response (%)	79%	142%	99%	53%	64%	53%	102%	102%	102%	103%	166%	107%
Penalty (MW)	0	0	0	0	0	0	0	0	0	0	0	0

Event Counted Toward Qualifying Events	Qualifying Reason	Individual Percent Response To Assignment (%)	Average Percent Response To Assignment (%)

## Load Forecast Report

### Presenter/SME:

Marcus Smith,  
[Marcus.Smith@pjm.com](mailto:Marcus.Smith@pjm.com)

## System Operations Report

### Presenter:

David Kimmel,  
[David.Kimmel@pjm.com](mailto:David.Kimmel@pjm.com)

### SME:

Ross Kelly,  
[Ross.Kelly@pjm.com](mailto: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.

?

## Member Hotline

(610) 666 – 8980

(866) 400 – 8980

[custsvc@pjm.com](mailto:custsvc@pjm.com)

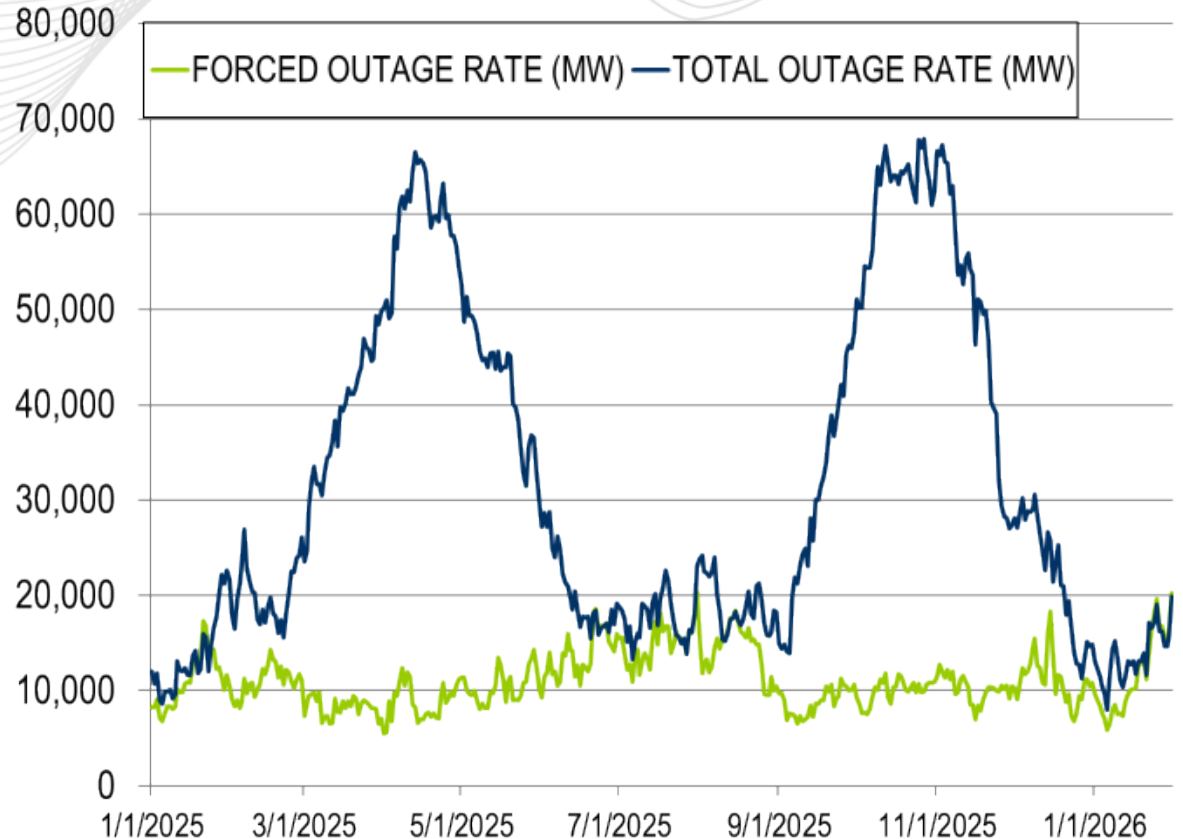
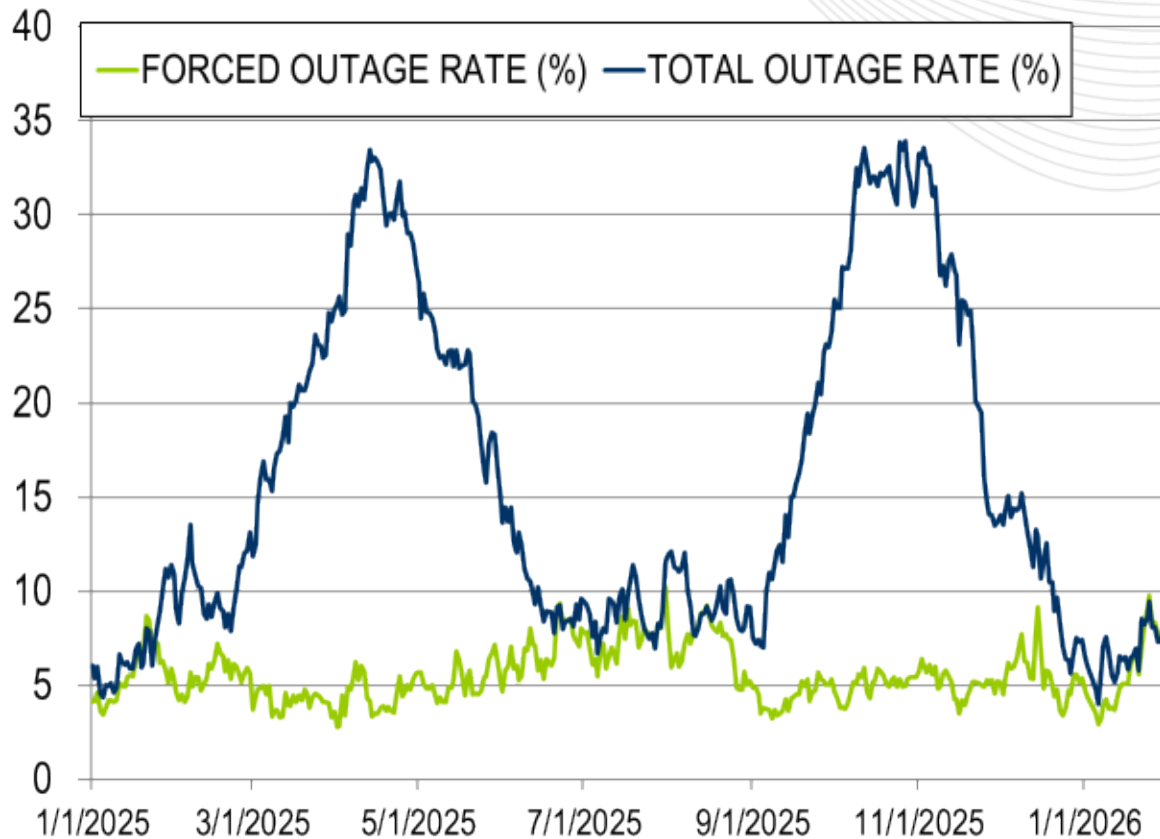
# Appendix

## 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.



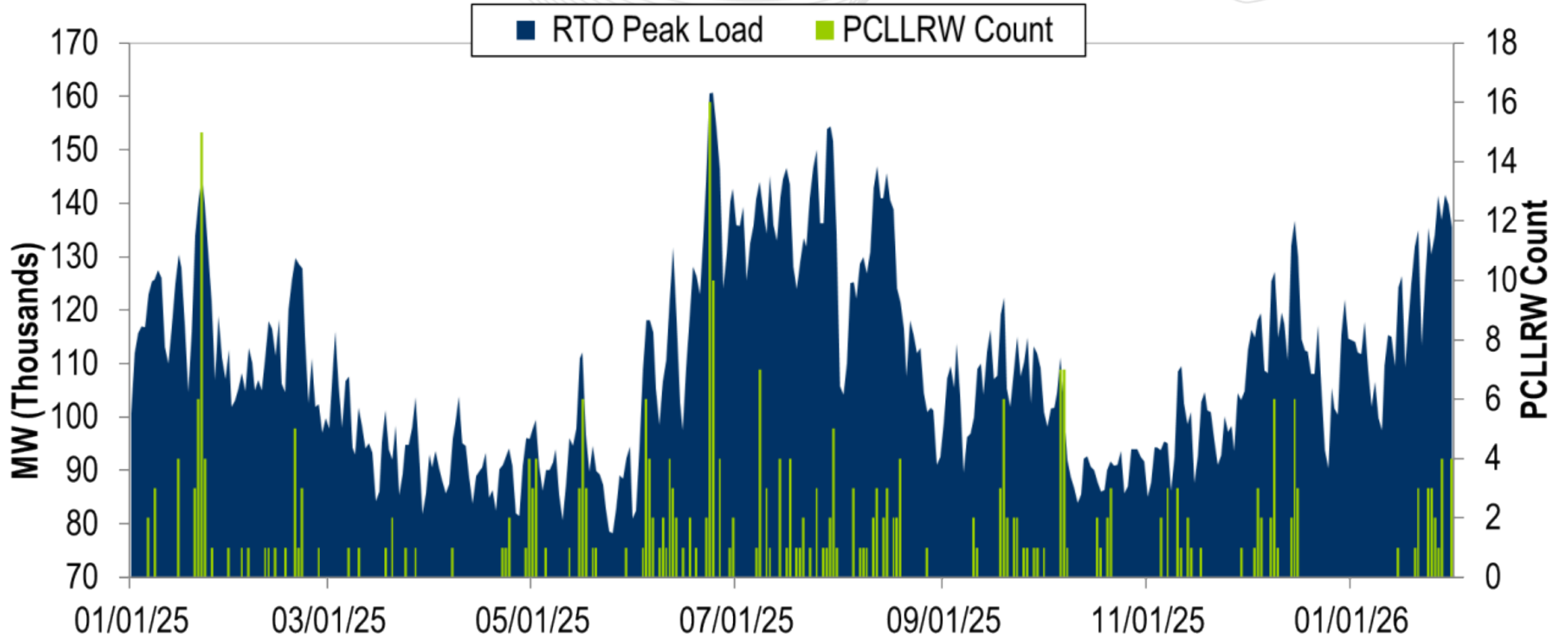
# RTO Generation Outage Rate - Daily



The 13-month average forced outage rate is 5.56% or 11,106 MW.  
The 13-month average total outage rate is 15.73% or 31,409 MW.



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

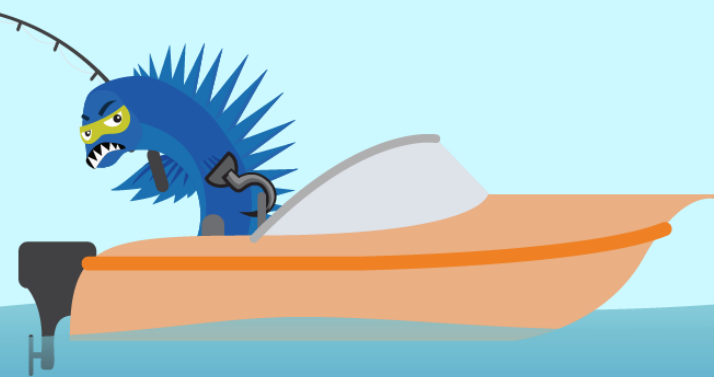


**PROTECT THE  
POWER GRID**

**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](mailto:it_ops_ctr_shift@pjm.com)