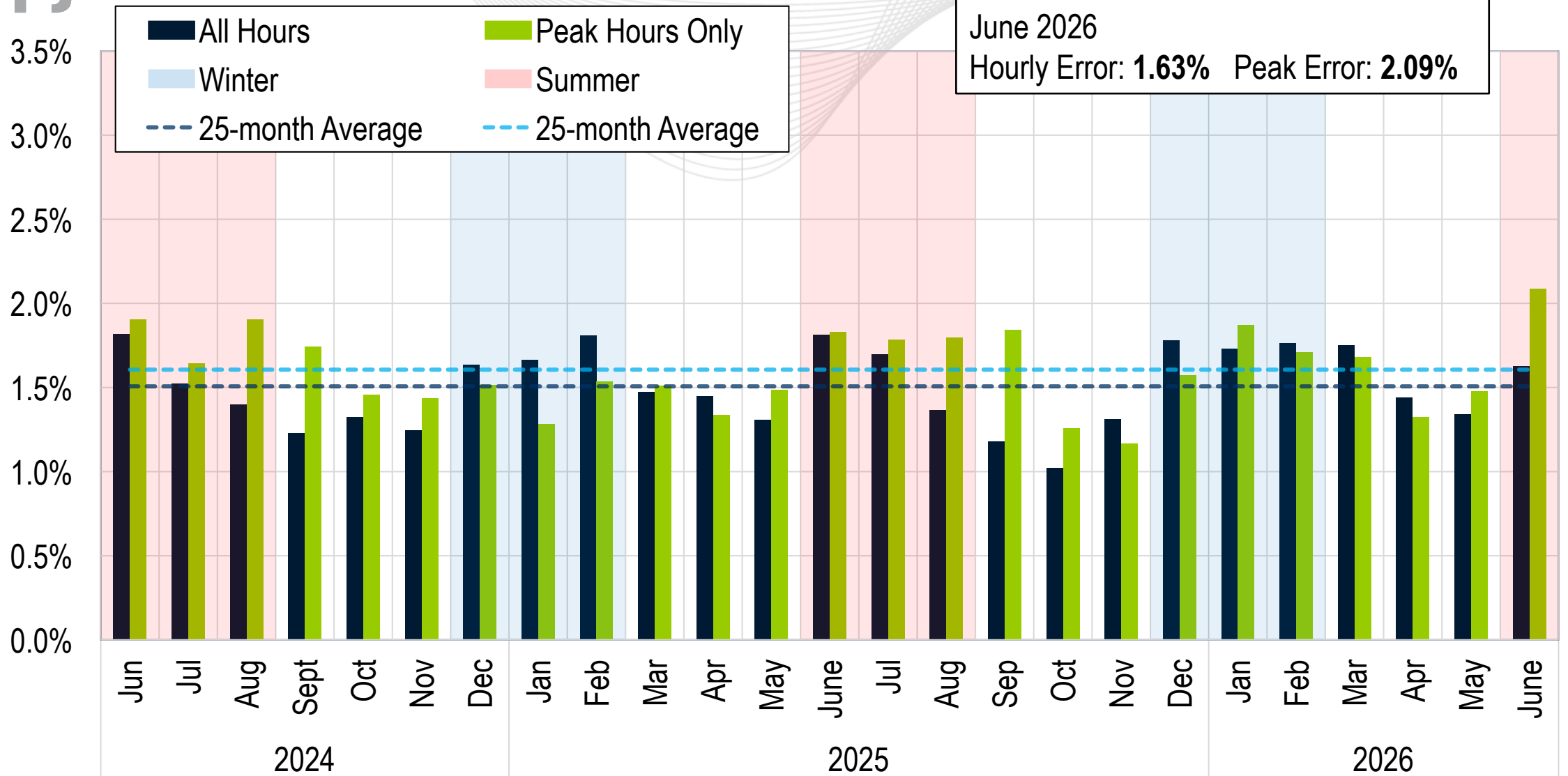


# System Operations Report

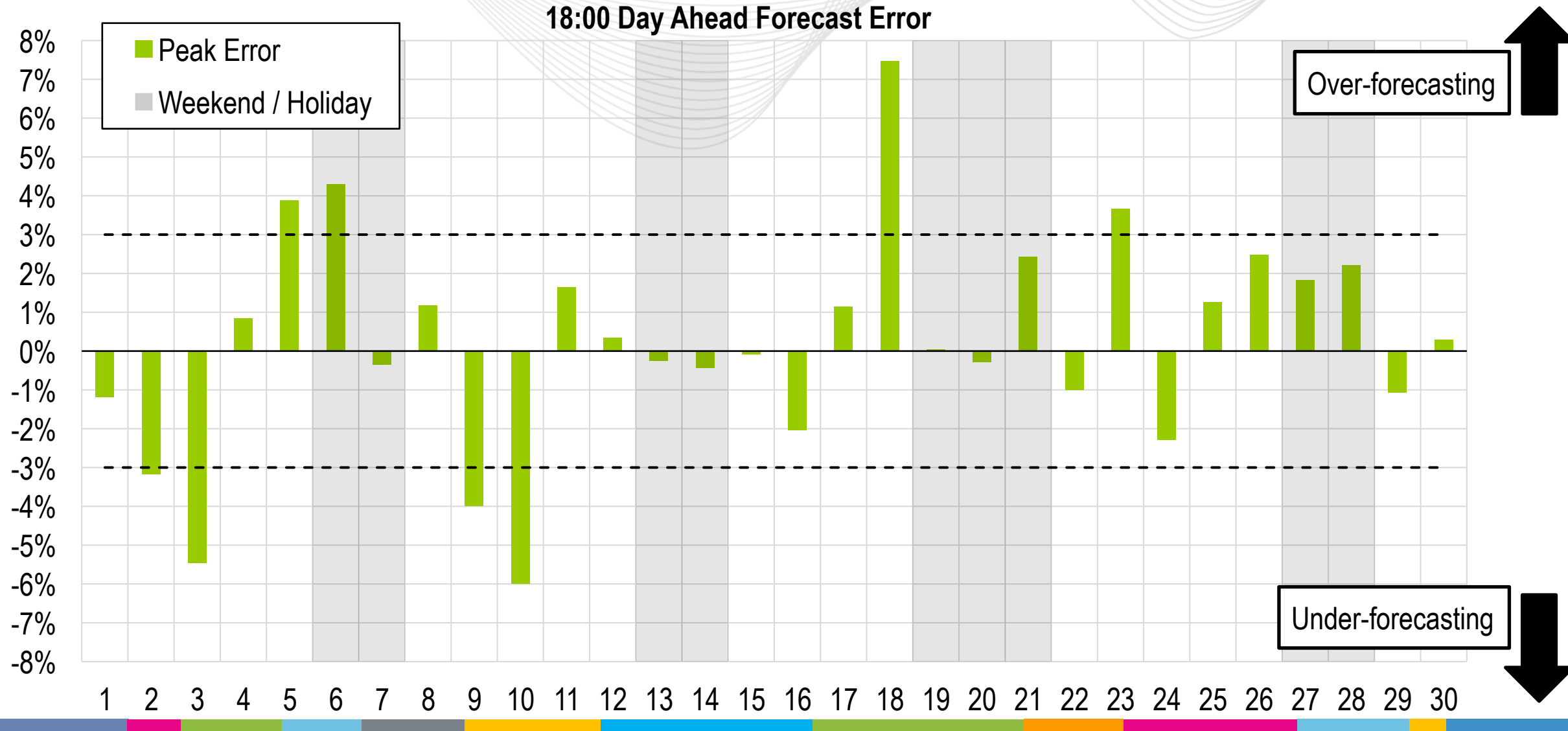
Marcus Smith, Lead Engineer –  
Operations Uncertainty & Risk  
David Kimmel, Sr. Engineer II –  
Performance Compliance  
MC Information Webinar  
July 27<sup>th</sup>, 2026

*Disclaimer: While materials are current at the time of publishing, applicable requirements may change. PJM Governing Documents control.*

# Average Load Forecast Error



# Daily Peak Forecast Error (June)



# Days Exceeding 3% Forecast Error at Peak Hour

## Over-forecasting

**June 5**

Temps. were cooler in several zones, leading to decreased load.

**June 6**

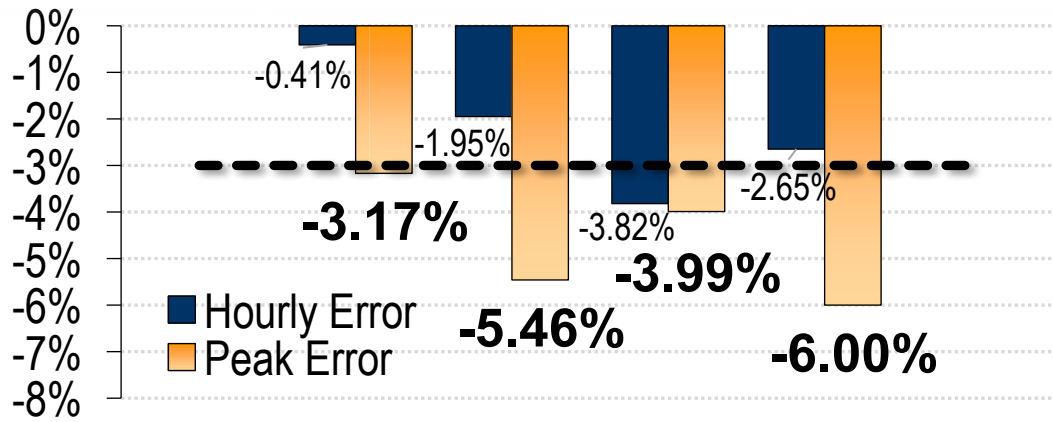
Temps. decreased, caused largely by the presence of thunderstorms, leading to low load.

**June 18**

Temps. were much cooler than forecast across the RTO, leading to lower load.

**June 23**

Thunderstorms impacted the East much more than forecast, leading to cooler temps. and suppressed load.



## Under-forecasting

**June 2**

Temps. were higher than forecast, leading to increased load.

**June 3**

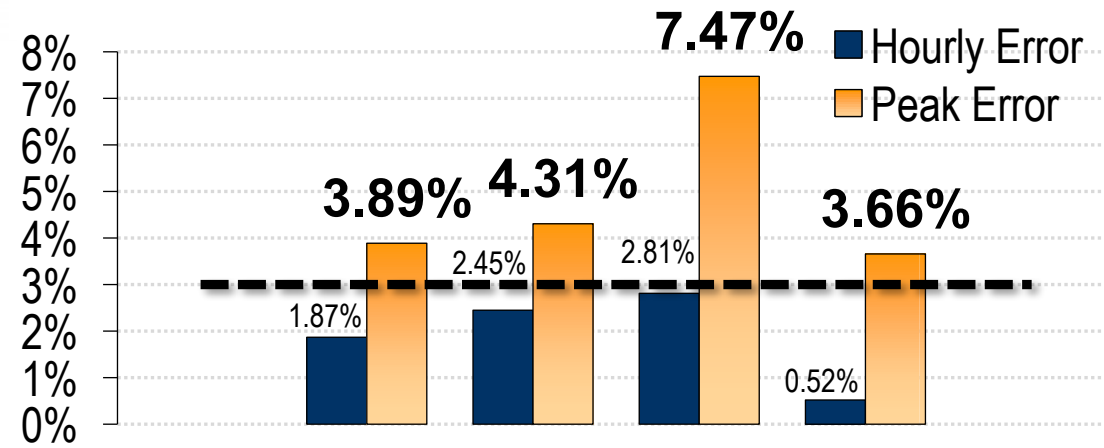
Temps. were higher than forecast, leading to increased load.

**June 9**

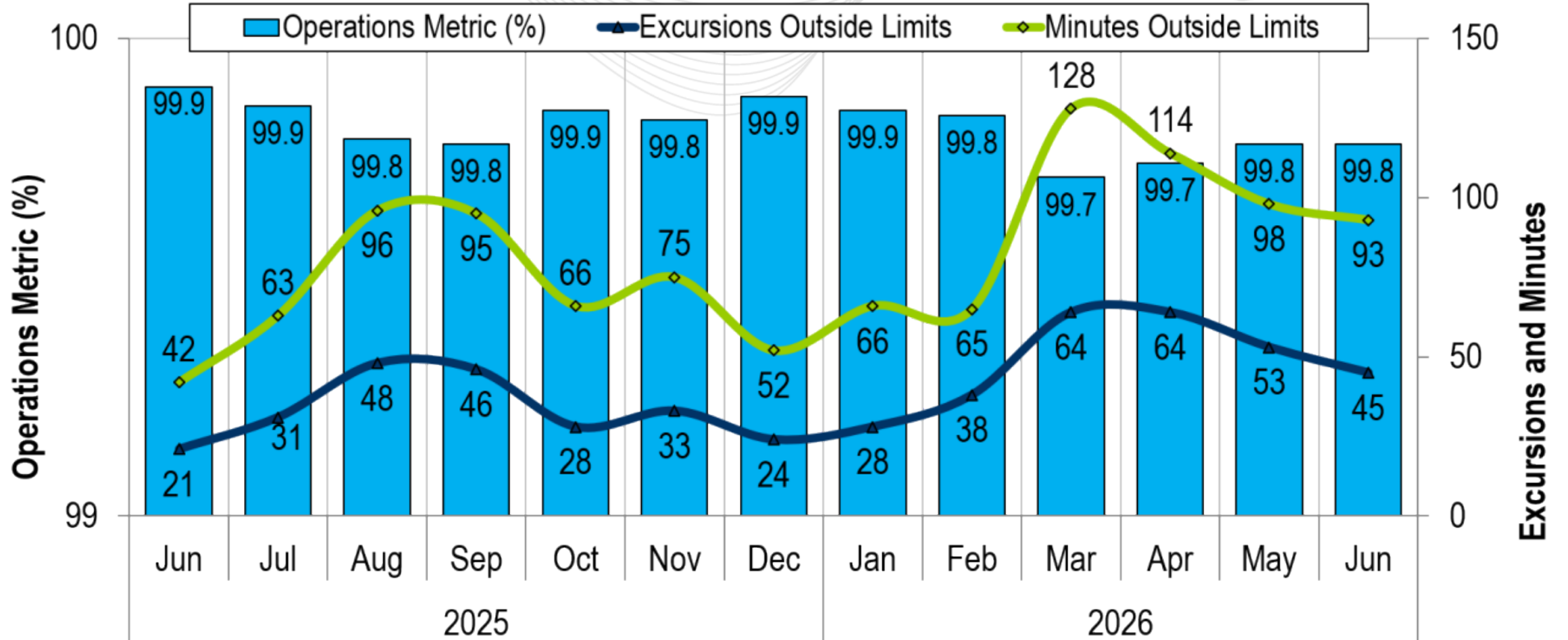
Less rain and fewer clouds than forecast in the Ohio Valley led to warmer temps. and higher load.

**June 10**

Hotter early temps. increased load, but thunderstorms in the East and COMED later reduced demand, shifting the load peak earlier than forecast.



# Monthly BAAL Performance Score

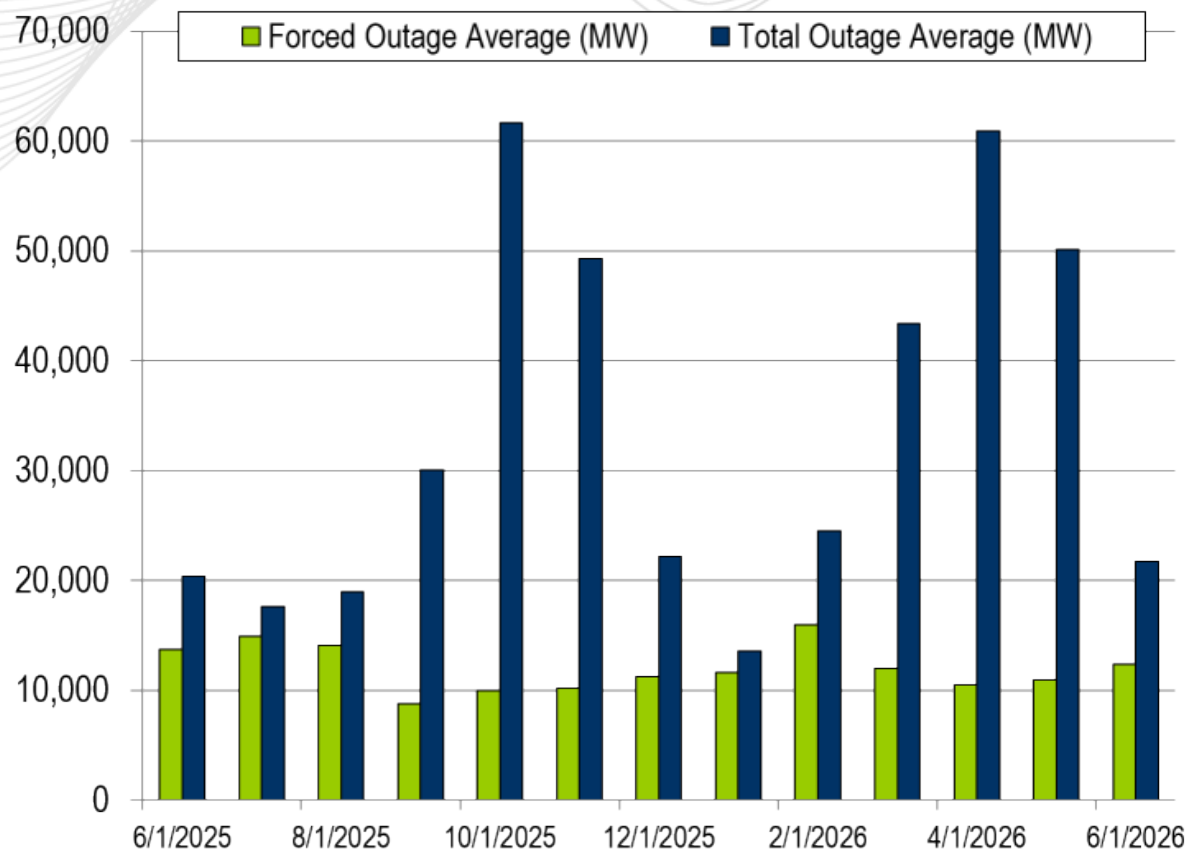
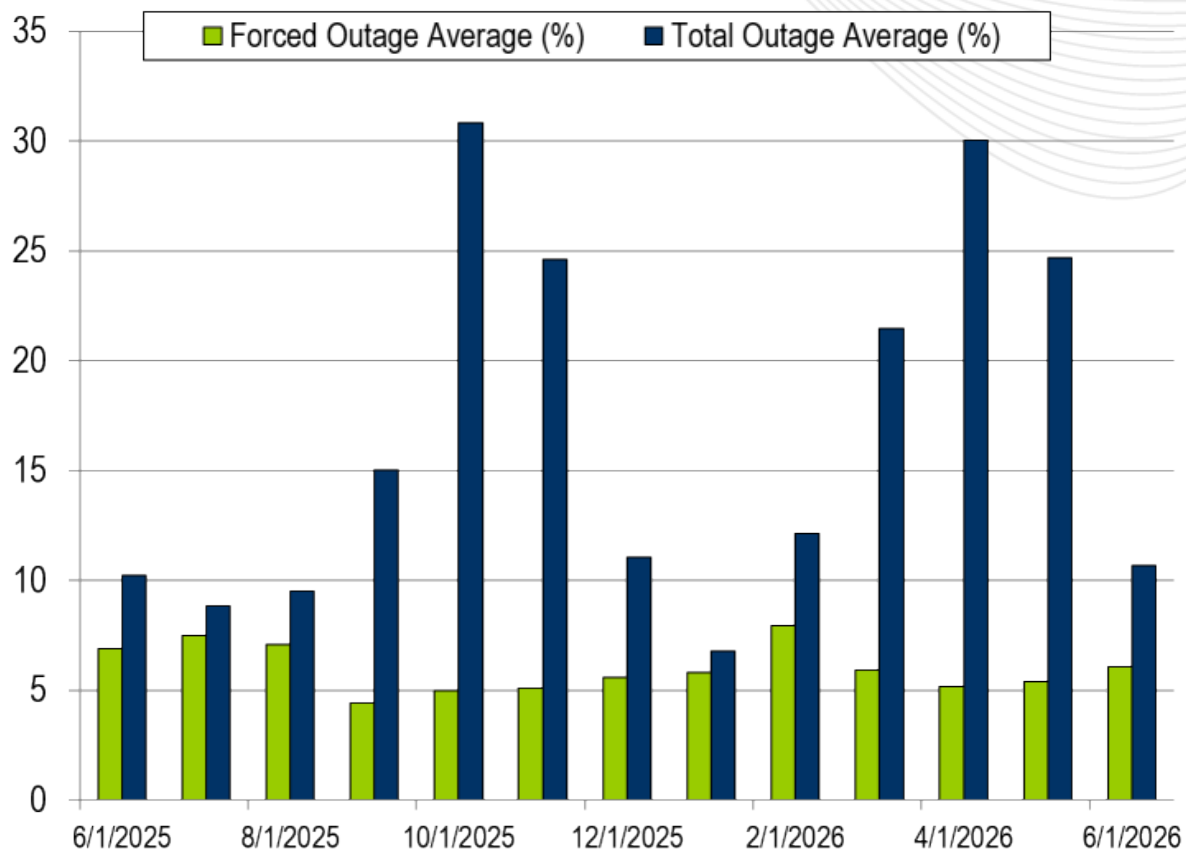


PJM's BAAL performance has exceeded the goal of 99% for each month in 2025 and 2026.

- The following Emergency Procedures occurred:
  - 3 Shared Reserve Events
  - 2 Maximum Generation Emergency/Load Management Alerts
  - 5 Hot Weather Alerts
  - 1 Geomagnetic Disturbance Warning
  - 1 Low Voltage Alert
  - 2 NERC EEA Level 1s
  - 72 Post Contingency Local Load Relief Warnings

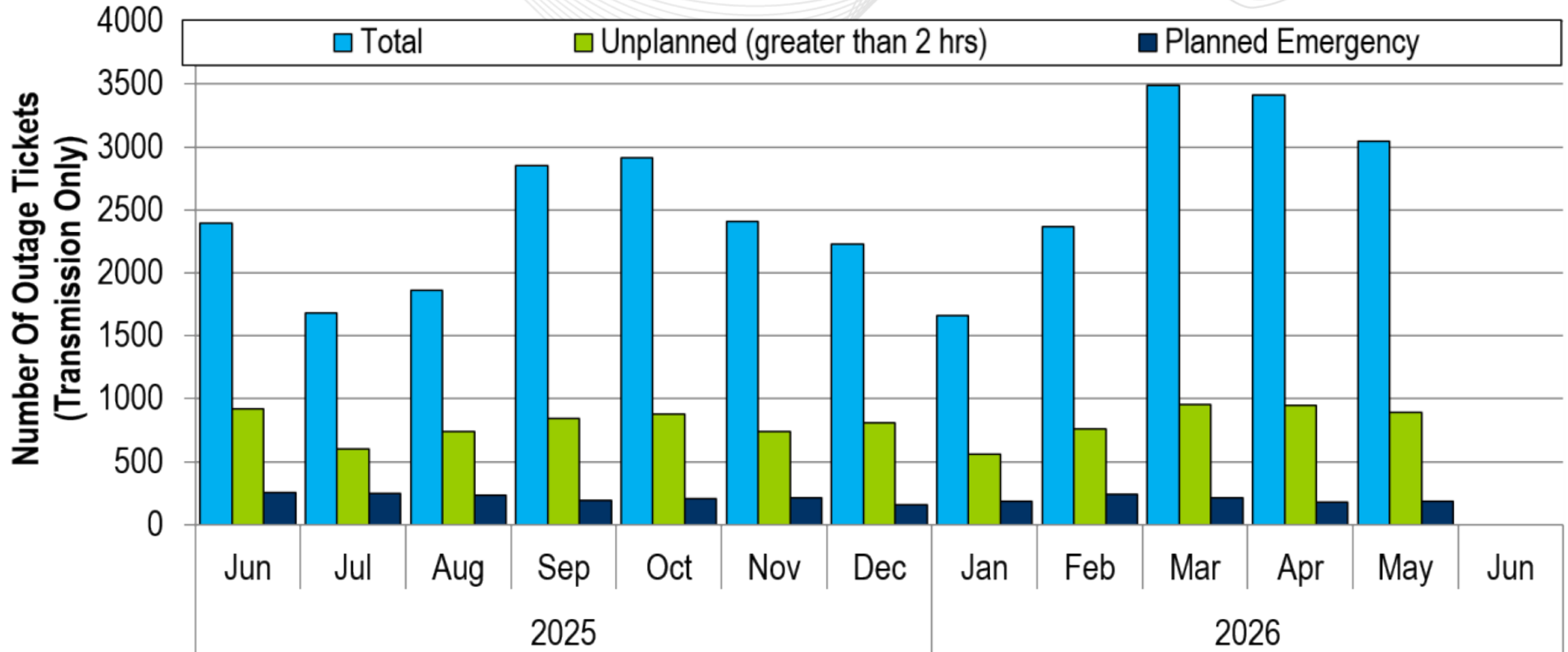
- 8 Shortage Cases Approved
- The approved Shortage Cases occurred on:
  - 06/02/2026:
    - 2 shortage cases approved for the 20:10 and 20:15 intervals
    - Factors: Unit trip coupled with large interchange ramp out
  - 06/17/2026:
    - 1 shortage case approved for the 22:20 interval
    - Factors: Unexpected loss of generation; Dispatch was able to recover before a second case was approved.
  - 06/29/2026:
    - 5 shortage cases approved for the 19:59, 20:05, 20:10, 20:15, and 20:20 intervals
    - Factors: Constraint binding hard, solar dropping out faster than steam could ramp up

# RTO Generation Outage Rate - Monthly



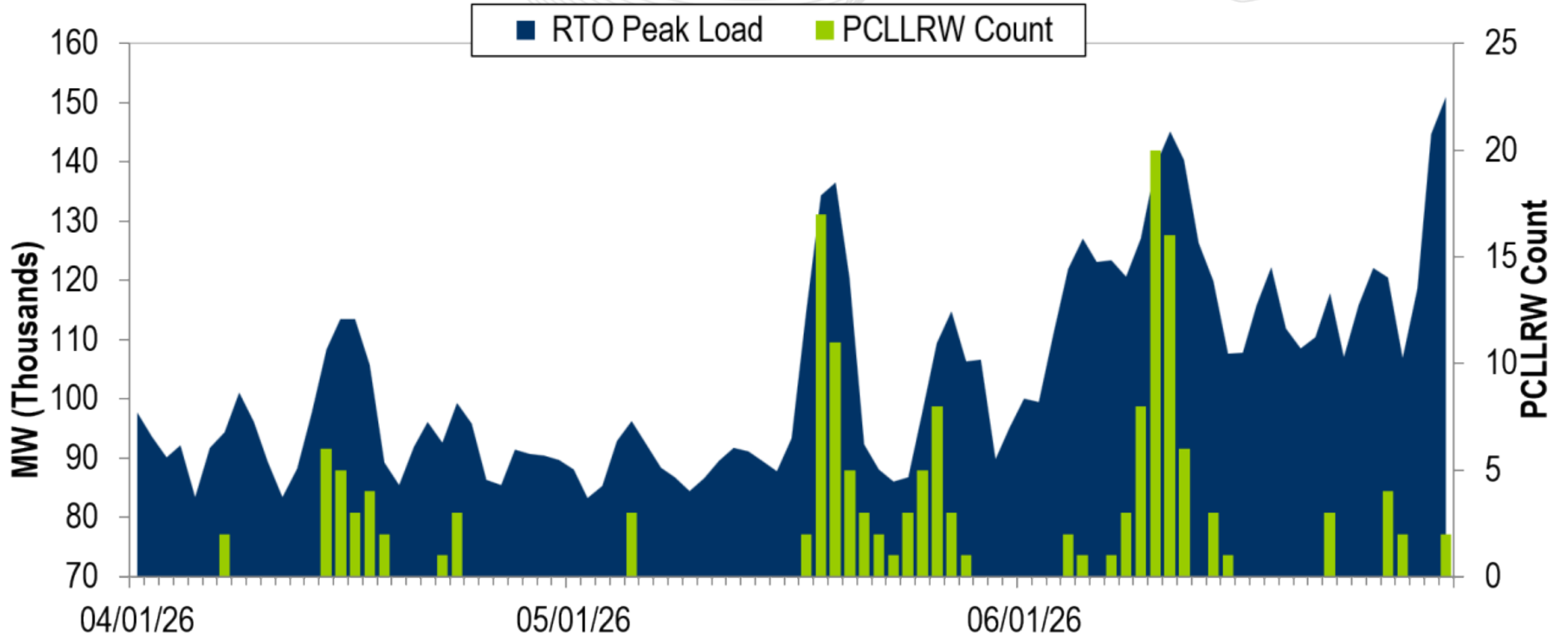
The 13-month average forced outage rate is 5.98% or 12,023 MW.  
The 13-month average total outage rate is 16.64% or 33,486 MW.

# 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 events for the month of June 2026

| Event Counted Toward Qualifying Events | Qualifying Reason | Individual Percent Response To Assignment (%) | Average Percent Response To Assignment (%) |
|----------------------------------------|-------------------|-----------------------------------------------|--------------------------------------------|
| 03/01/26 19:29:03                      | ≥10 Minutes       | 71.0%                                         | 71.0%                                      |
|                                        |                   |                                               |                                            |
|                                        |                   |                                               |                                            |

## 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

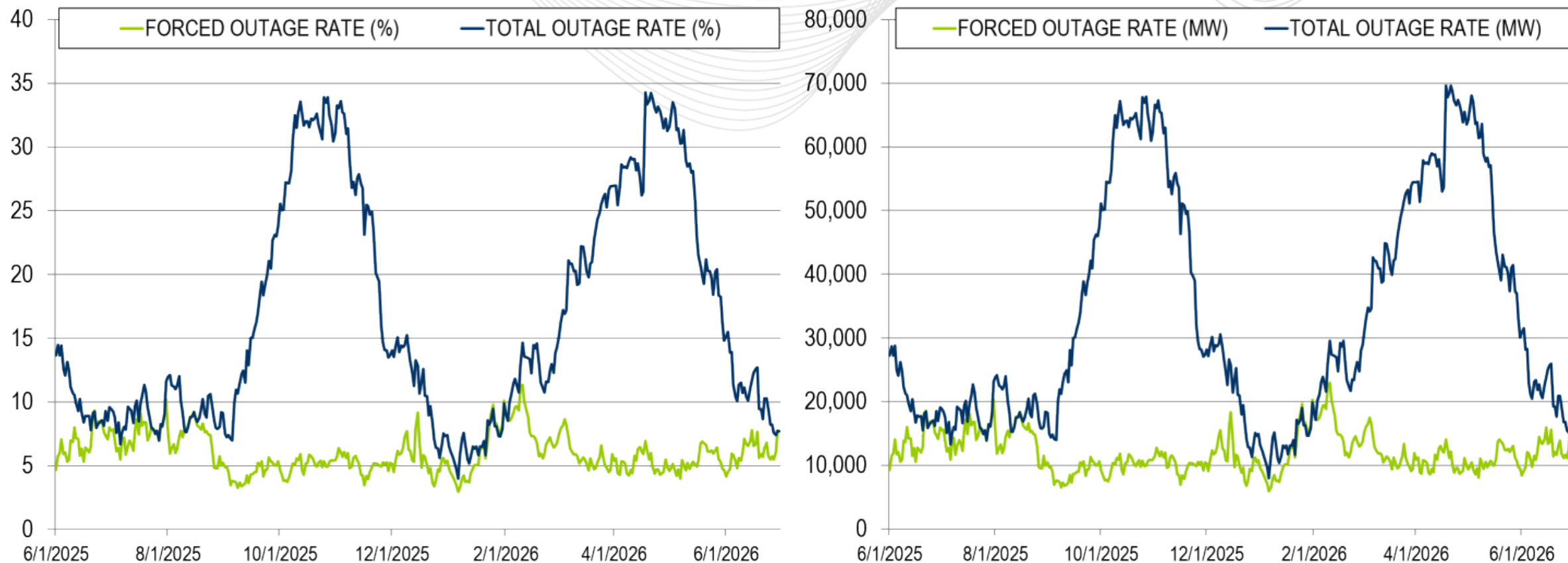
[custsvc@pjm.com](mailto:custsvc@pjm.com)

# Appendix

## Goal Measurement: Balancing Authority ACE Limit (BAAL)

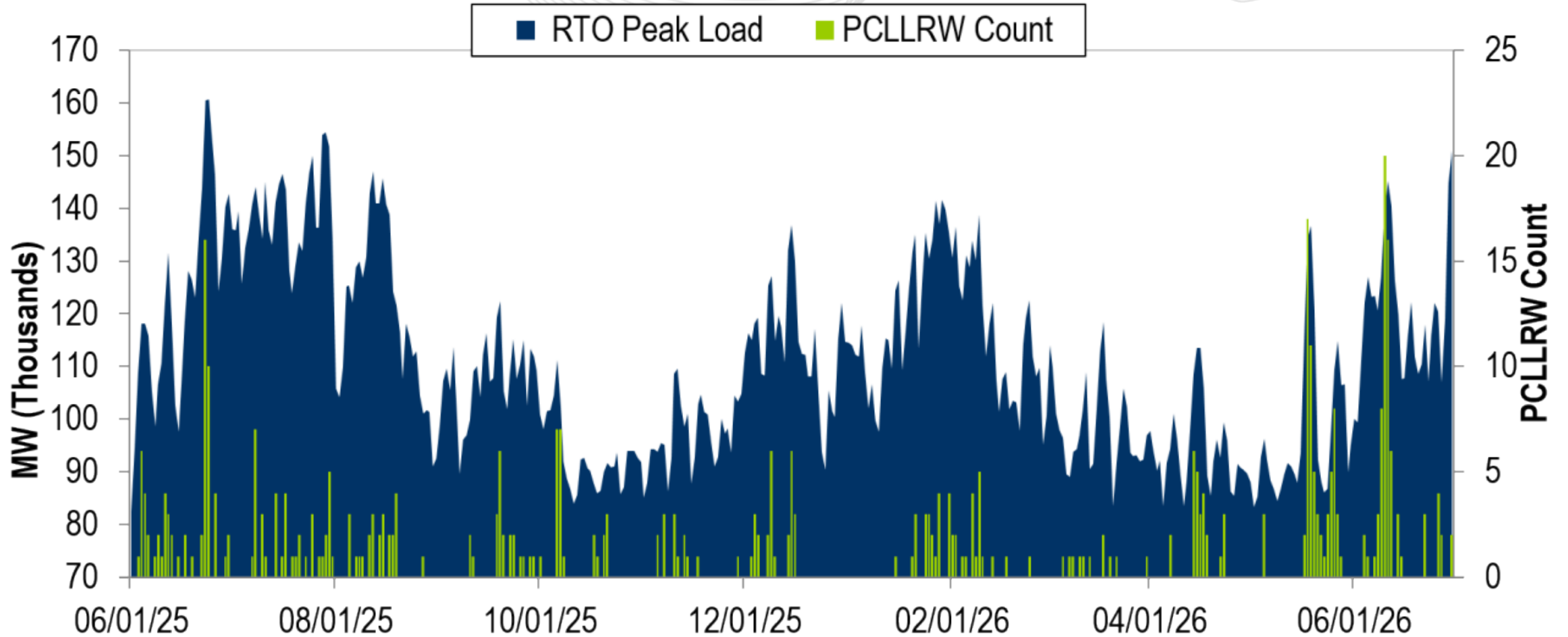
- The purpose of the new BAAL standard is to maintain interconnection frequency within a predefined frequency profile under all conditions (normal and abnormal), to prevent frequency-related instability, unplanned tripping of load or generation, or uncontrolled separation or cascading outages that adversely 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 5.98% or 12,023 MW.  
The 13-month average total outage rate is 16.64% or 33,486 MW.

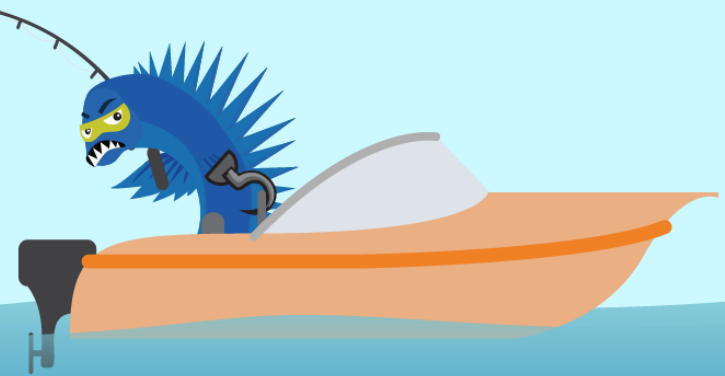
# PCLLRW Count Vs. Peak Load – Daily Values For 13 Months



**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)