



# System Operations Report

David Kimmel, Sr. Engineer –  
Performance Compliance

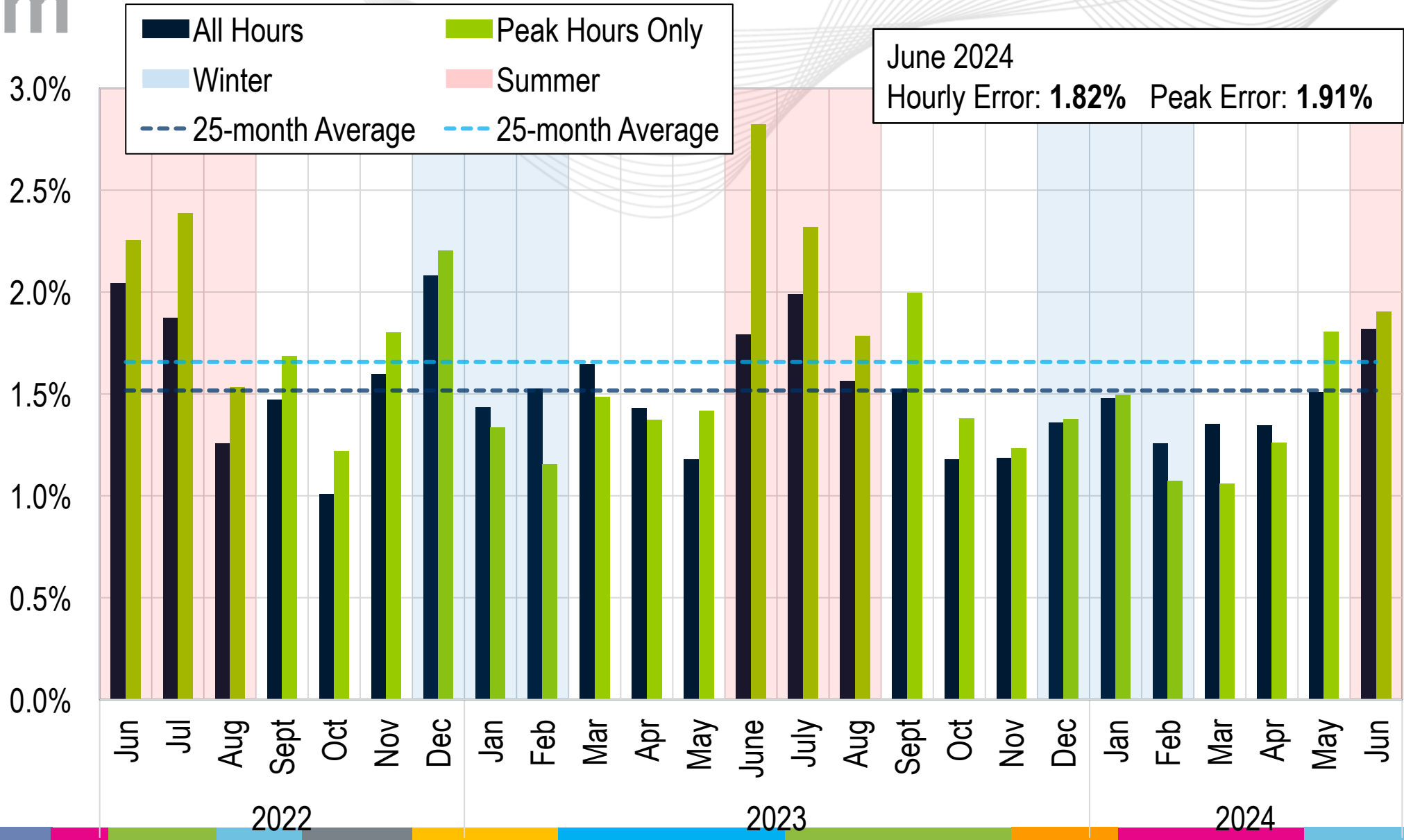
Marcus Smith, Lead Engineer –  
Markets Coordination

Operating Committee

July 11, 2024

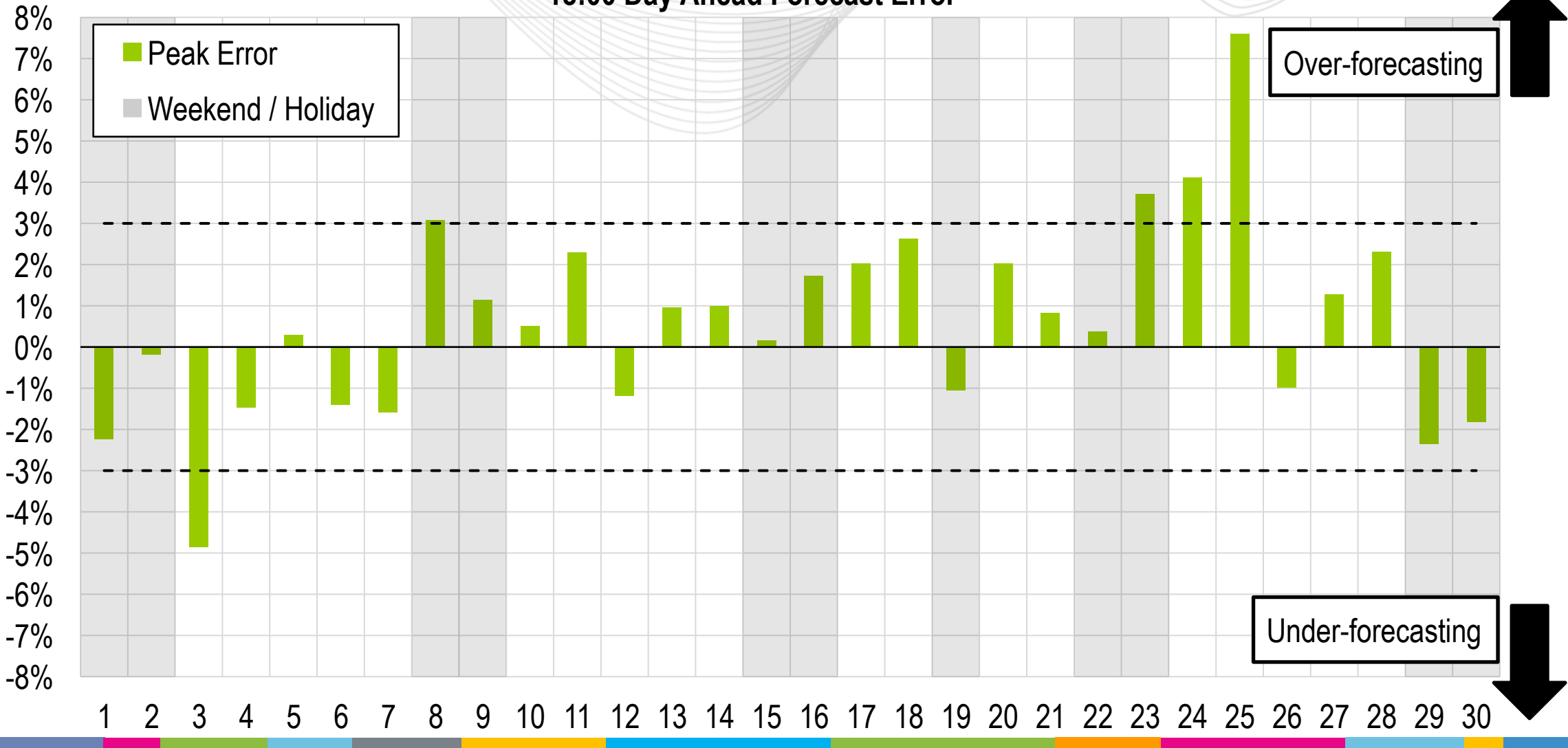


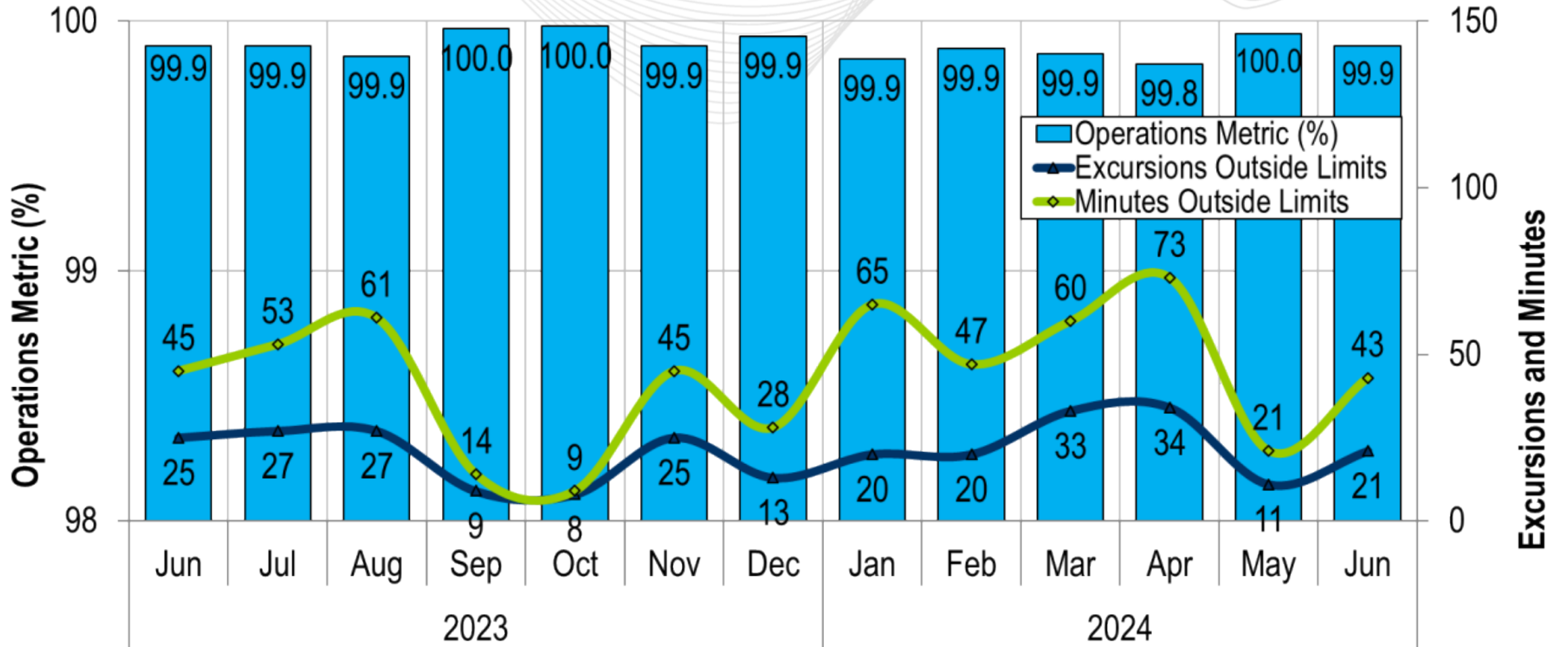
# Average Load Forecast Error



# Daily Peak Forecast Error (June)

18:00 Day Ahead Forecast Error

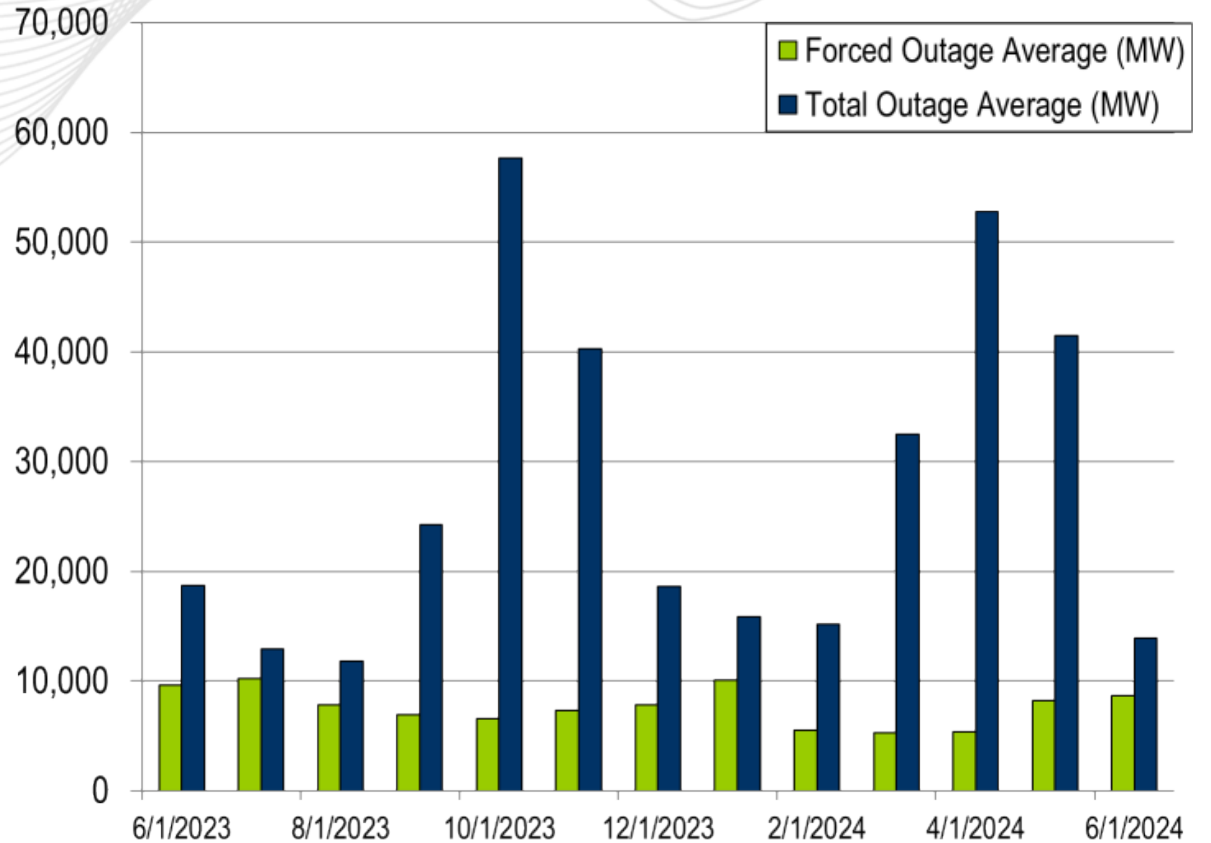
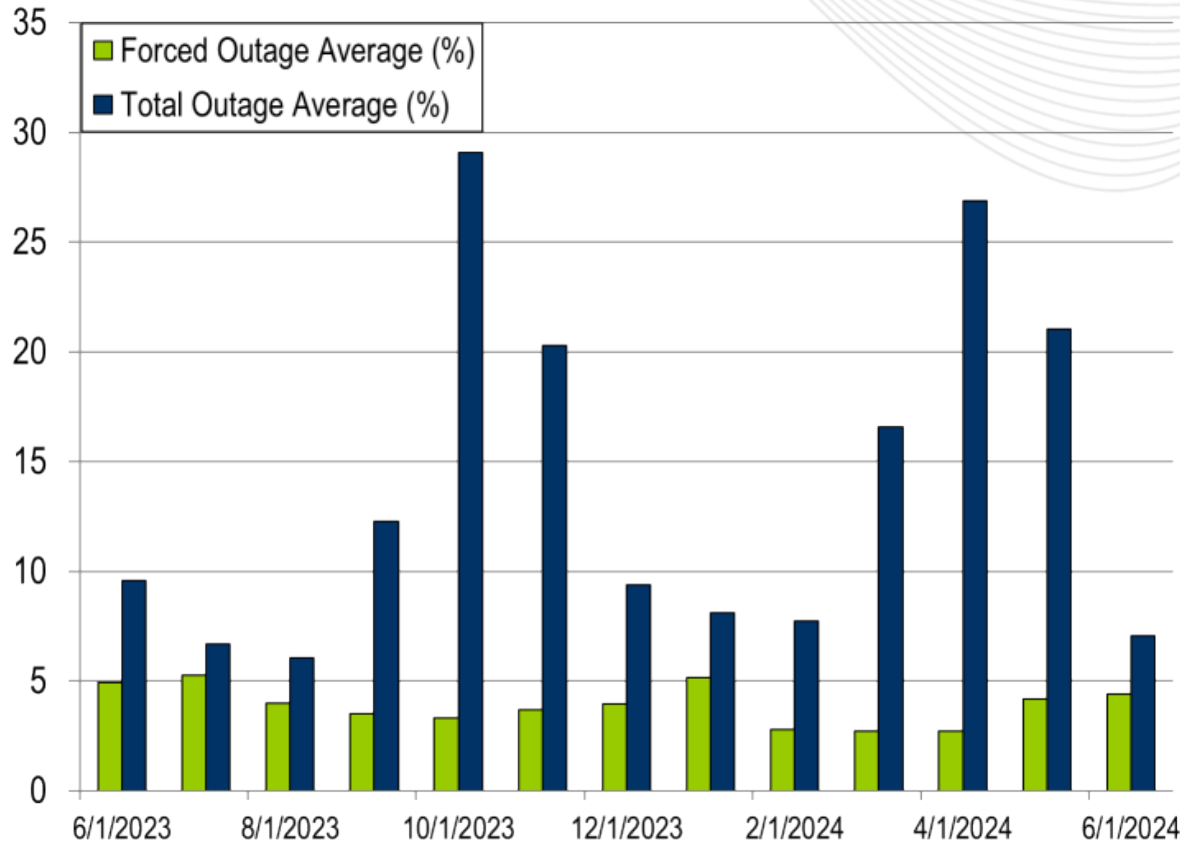




PJM's BAAL performance has exceeded the goal of 99% for each month in 2023 and 2024.

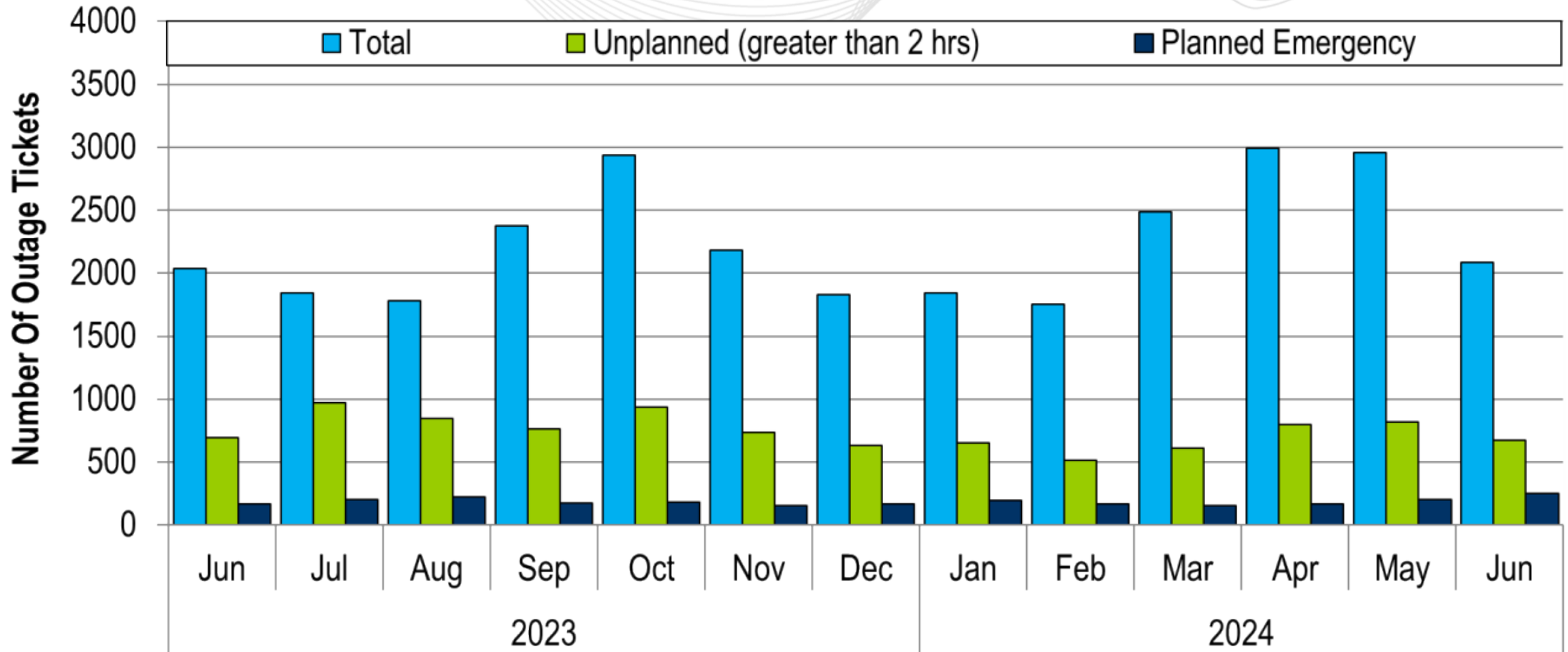
- The following Emergency Procedures occurred:
  - 2 Shared Reserve events
  - 3 Spin events
  - 7 Hot Weather Alerts
  - 1 Geomagnetic Disturbance Warning
  - 10 Post Contingency Local Load Relief Warnings (PCLLRWs)

- 3 Shortage Cases Approved
- The approved Shortage Cases occurred on:
  - 06/03/2024:
    - 3 shortage cases approved for the 18:59 and 19:05 intervals
    - Factors: Unit Tripping



The 13-month average forced outage rate is 3.91% or 7,679 MW.  
 The 13-month average total outage rate is 13.91% or 27,389 MW.

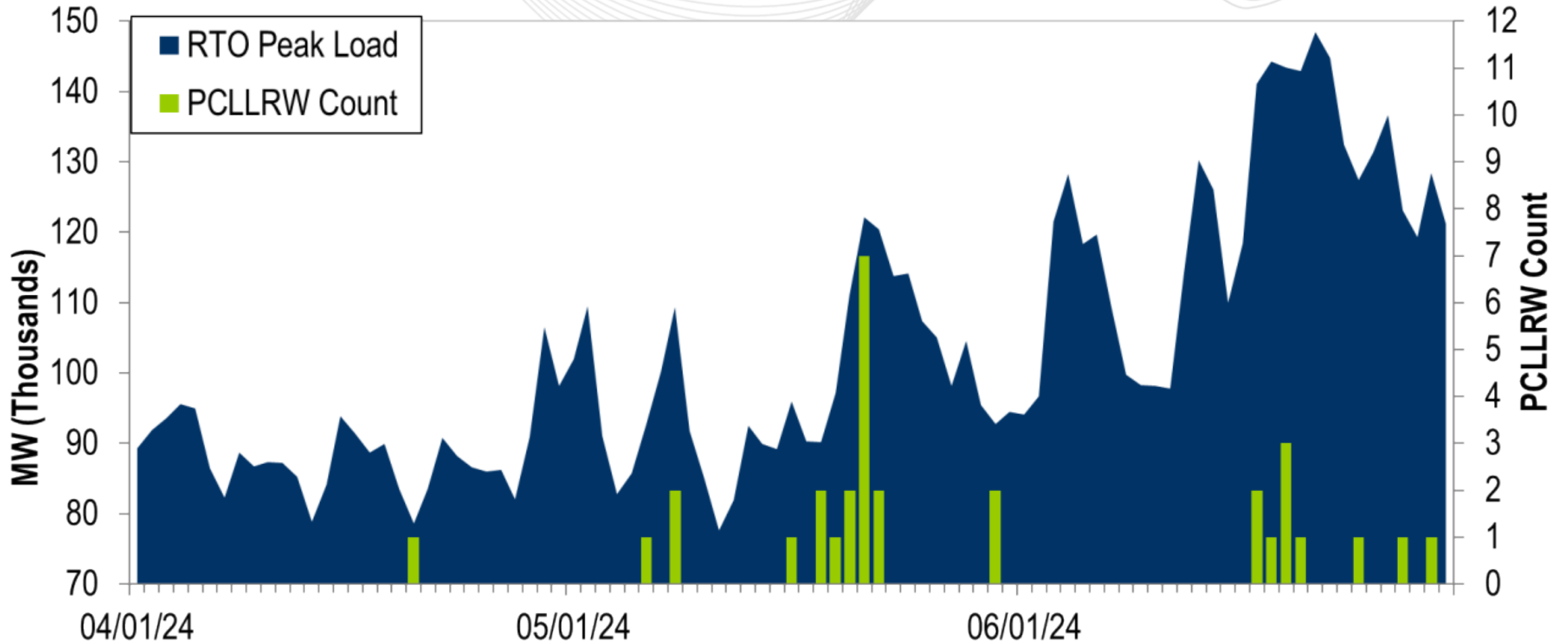
# 2022-2023 Planned Emergency, Unplanned, and Total Outages by Ticket



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		
Date	06/03/24			06/29/24		
Start Time	18:53:27			21:03:55		
End Time	19:02:02			21:09:31		
Duration	00:08:35			00:05:36		
Region	RTO			RTO		
Resource Type	Gen	DR	Total	Gen	DR	Total
Assigned (MW)	2987	346	3333	1627	318	1945
Estimated Expected Response (MW)	2564	297	2861	911	178	1089
Actual Response (MW)	1549	245	1794	759	202	961
Percent Response To Estimated Expected Response(%)	60%	83%	63%	83%	113%	88%
Penalty (MW)	0	0	0	0	0	0

## 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)



### Member Hotline

(610) 666 – 8980

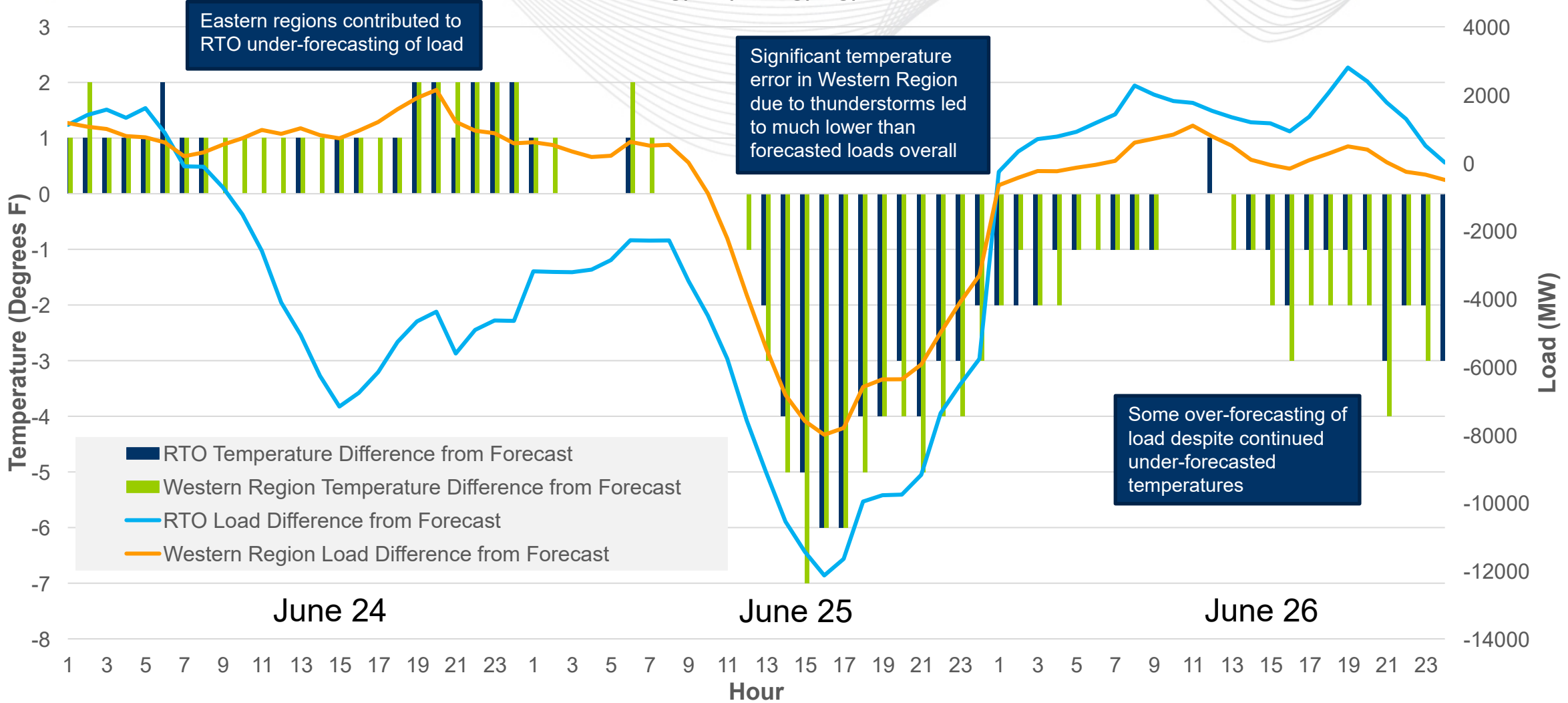
(866) 400 – 8980

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

# Appendix

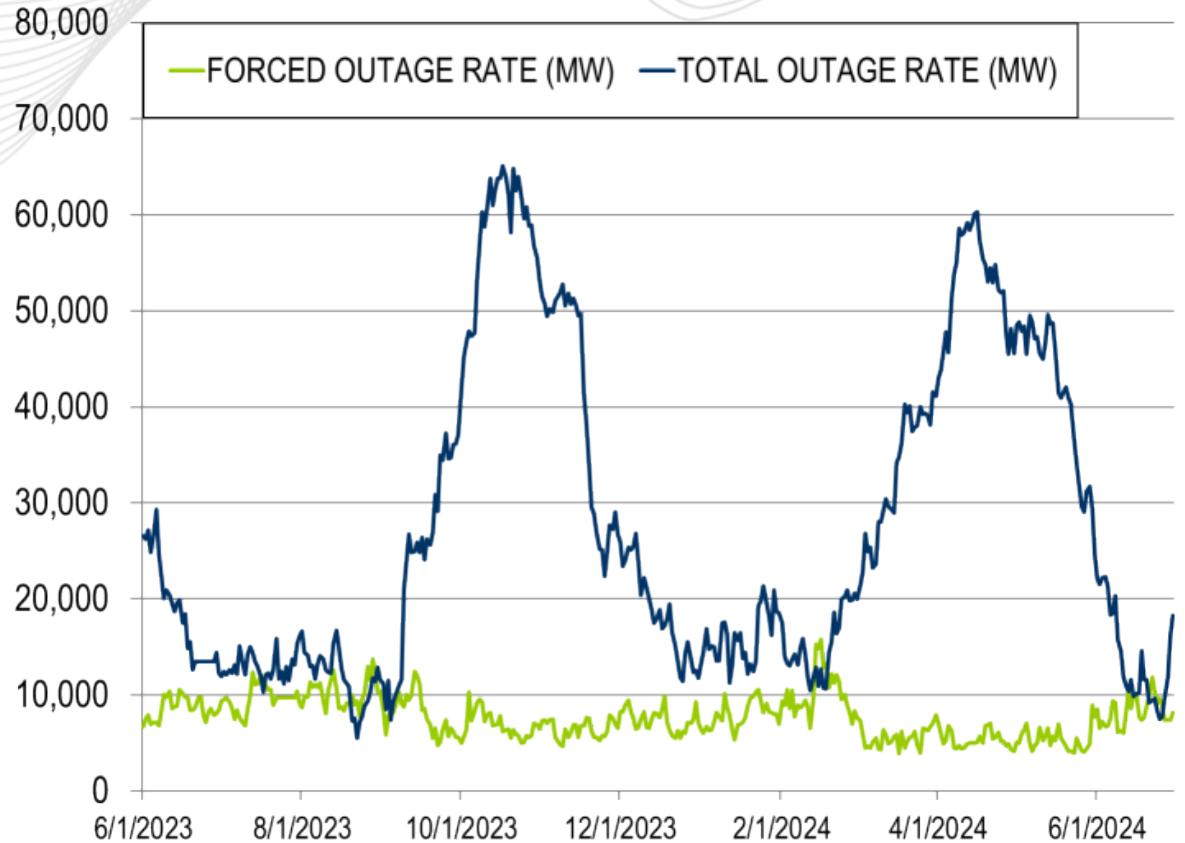
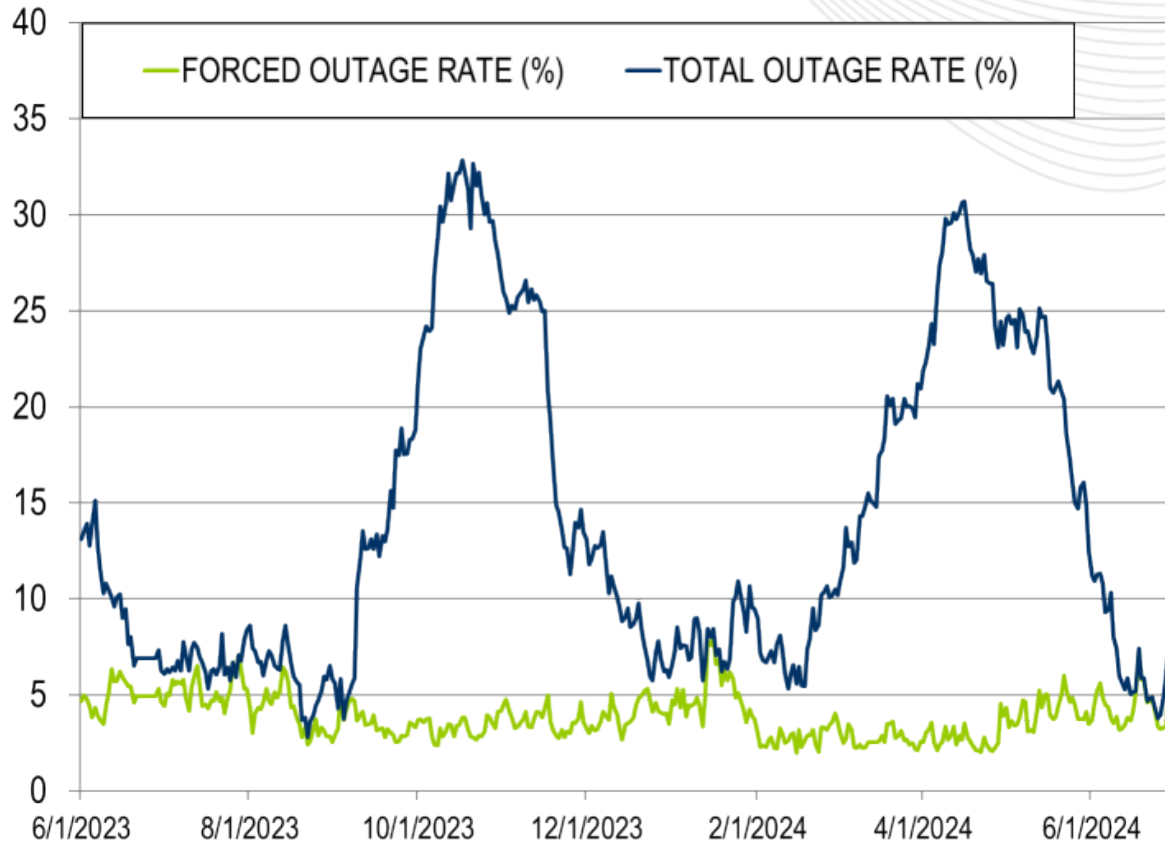


# RTO & Western Region Temperature & Load Differences from Day-Ahead Forecasts 6/24/24-6/26/24



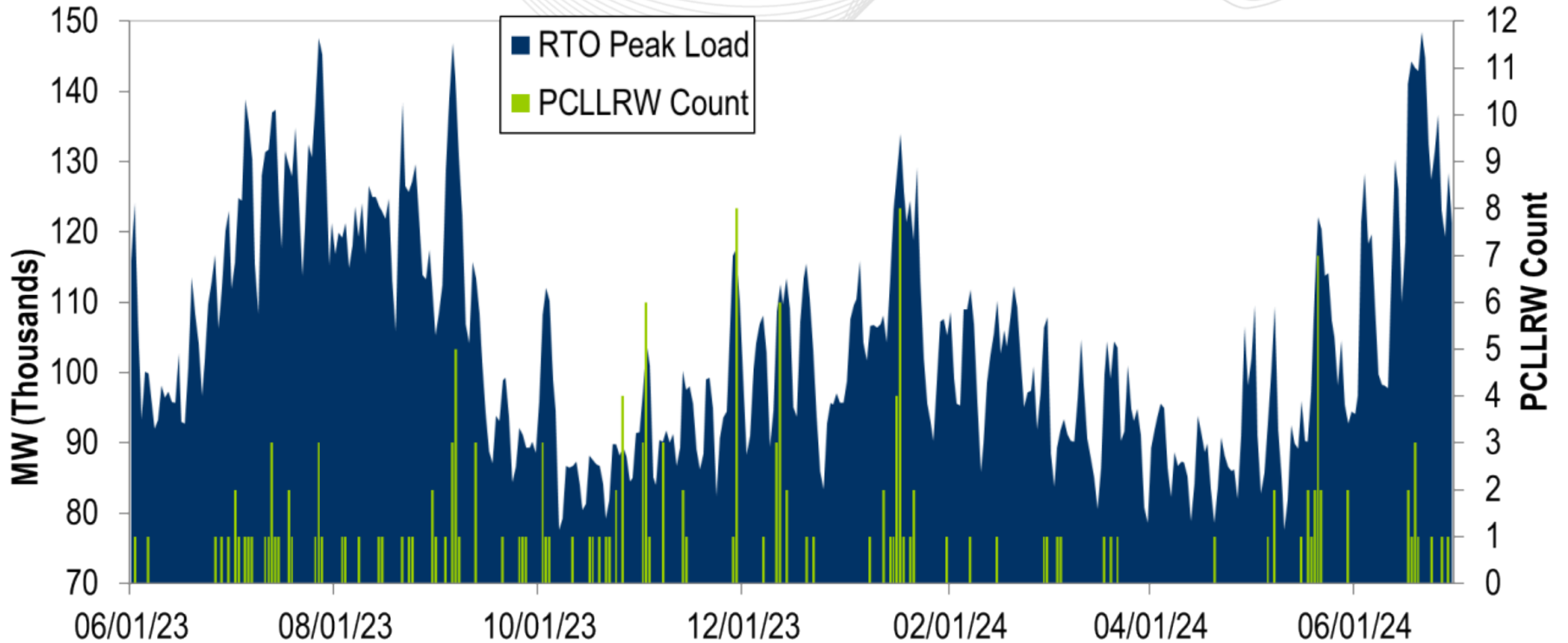
## Goal Measurement: Balancing Authority ACE Limit (BAAL)

- 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.



The 13-month average forced outage rate is 3.91% or 7,679 MW.  
 The 13-month average total outage rate is 13.91% or 27,389 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.**  
(610) 666-2244 / [it\\_ops\\_ctr\\_shift@pjm.com](mailto:it_ops_ctr_shift@pjm.com)

