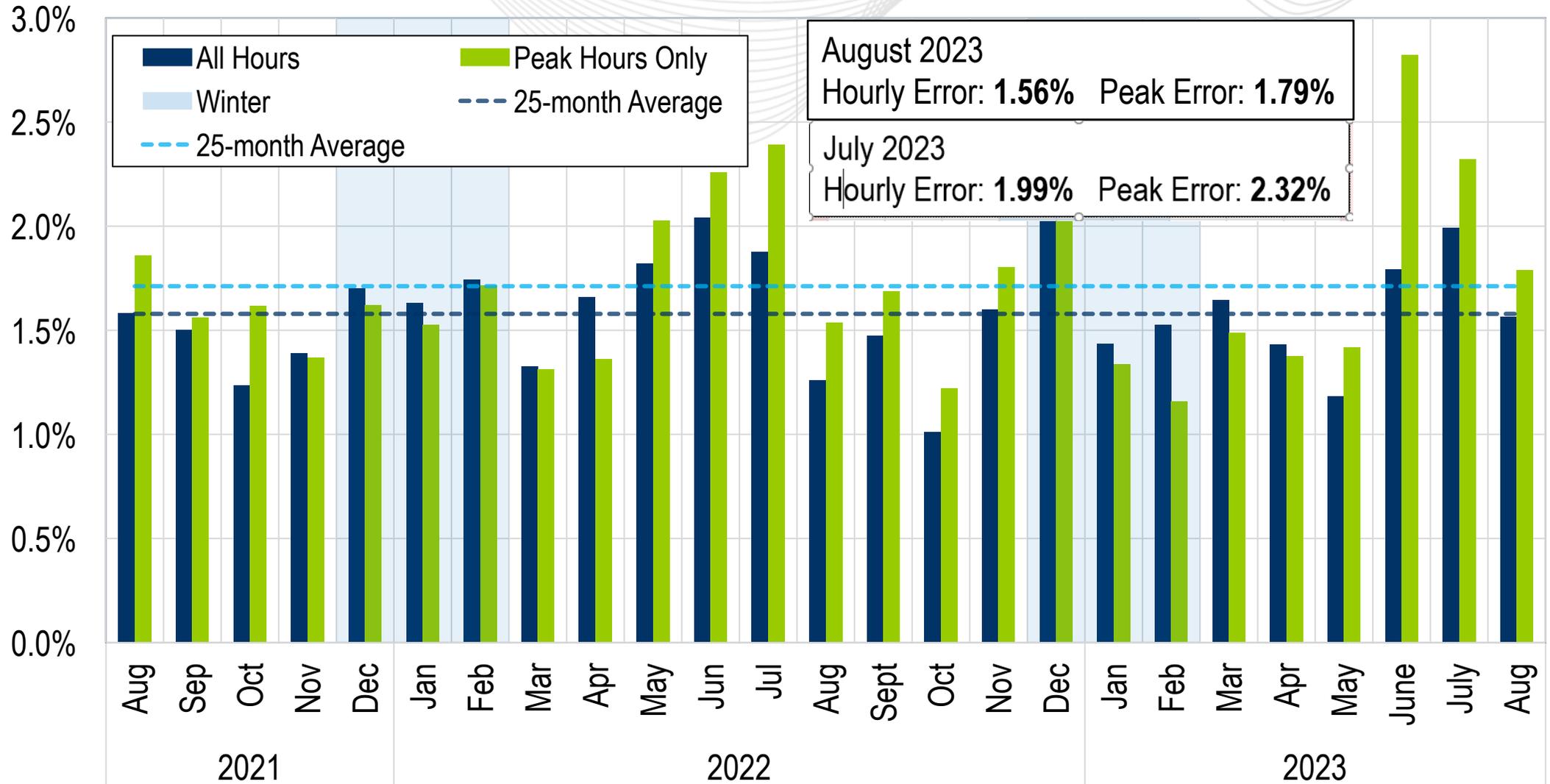




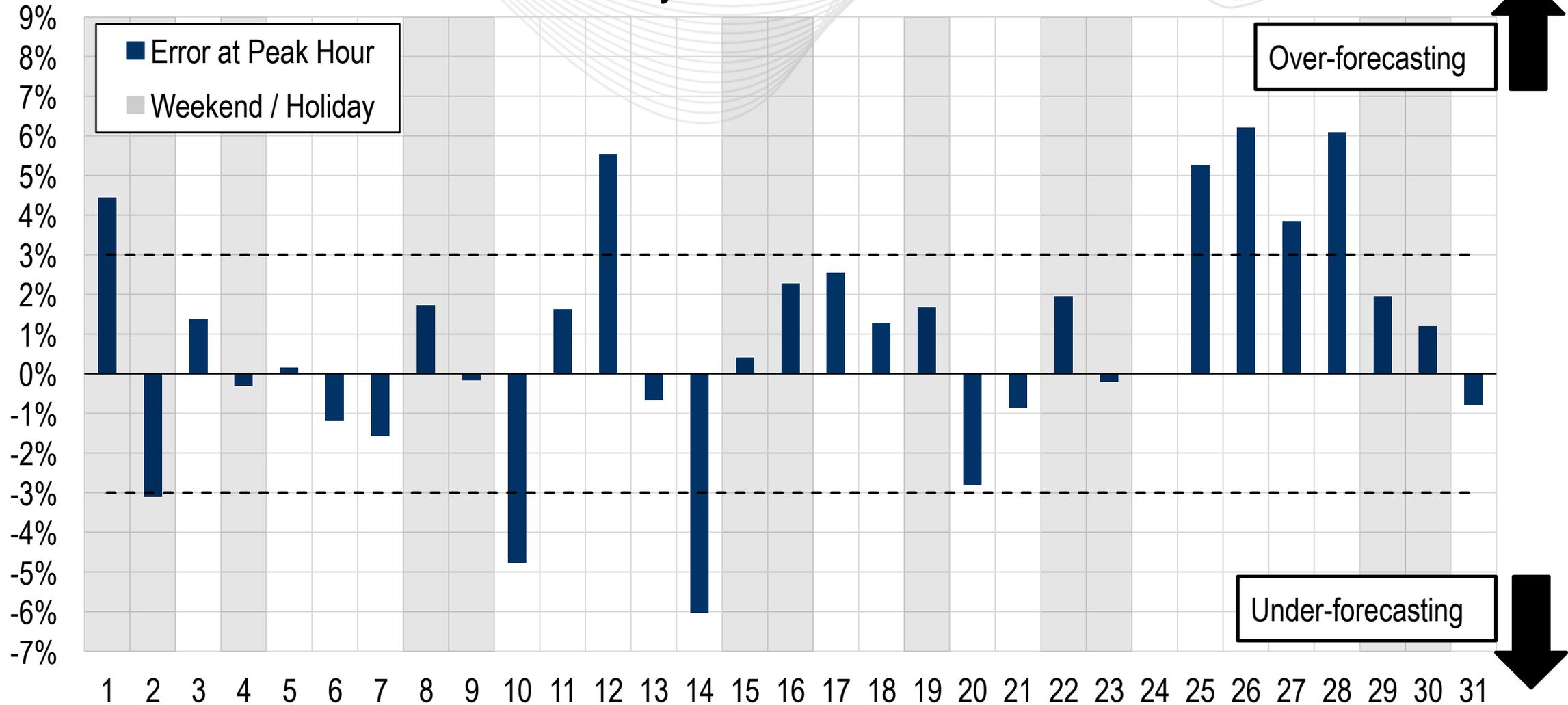
# System Operations Report

Hong Chen  
Principal Engineer, Markets Coordination  
MC Webinar  
September 18, 2023



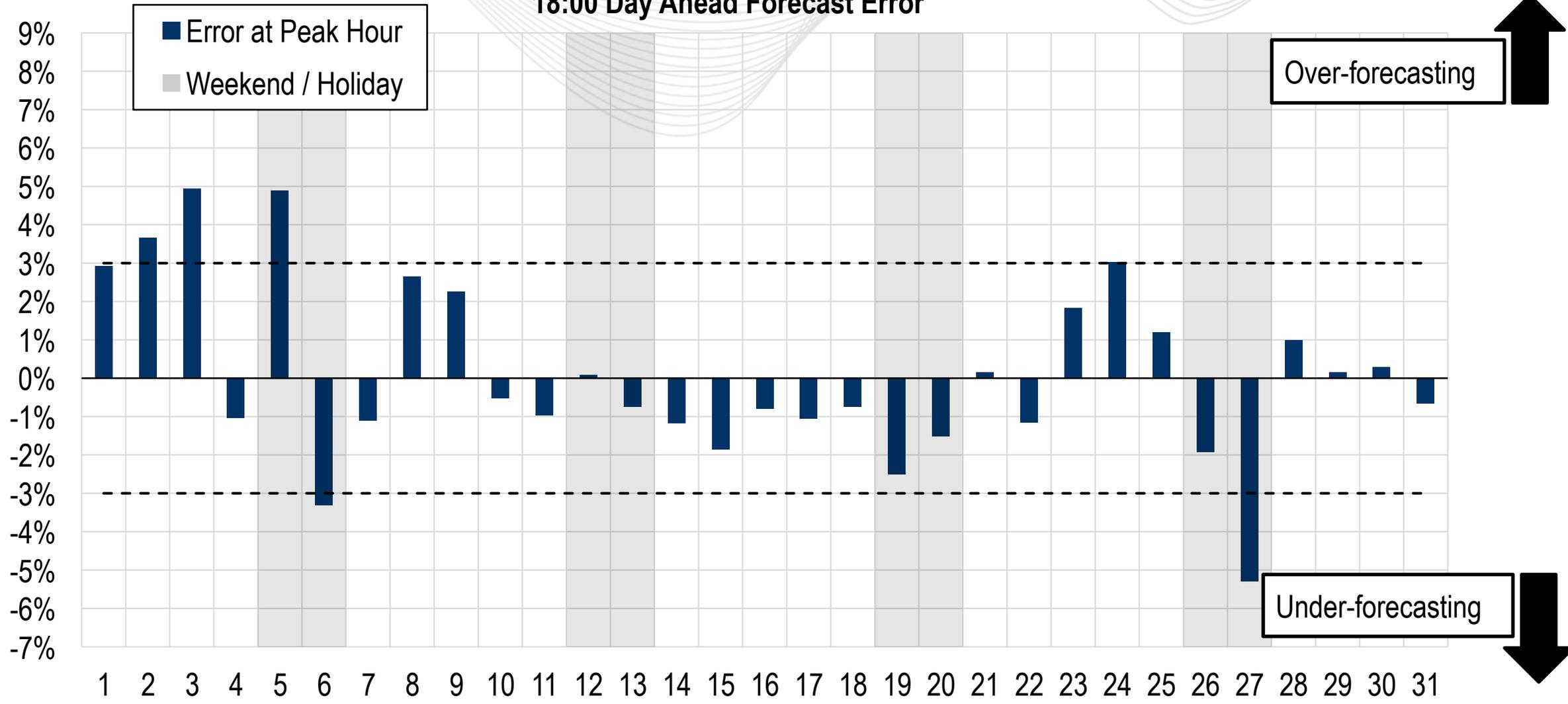
# Daily Peak Forecast Error (July)

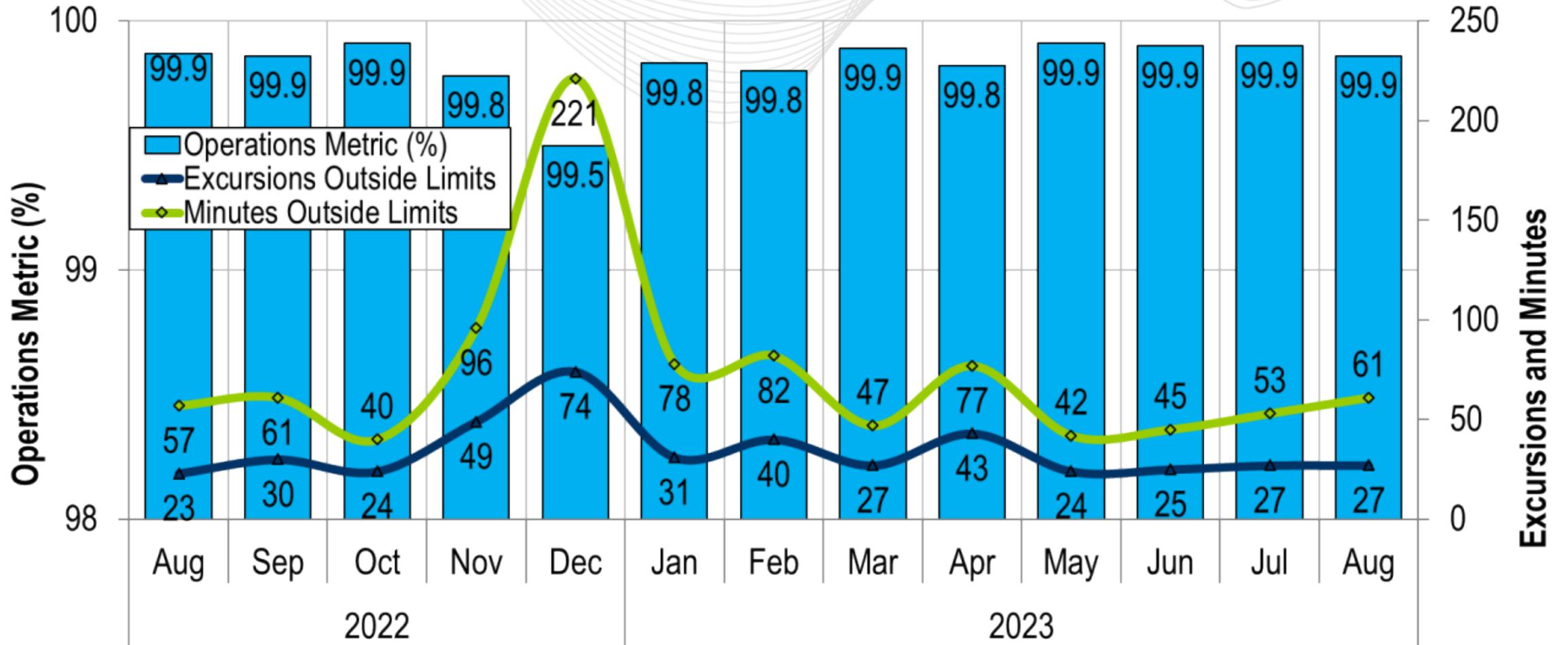
## 18:00 Day Ahead Forecast Error



# Daily Peak Forecast Error (August)

18:00 Day Ahead Forecast Error





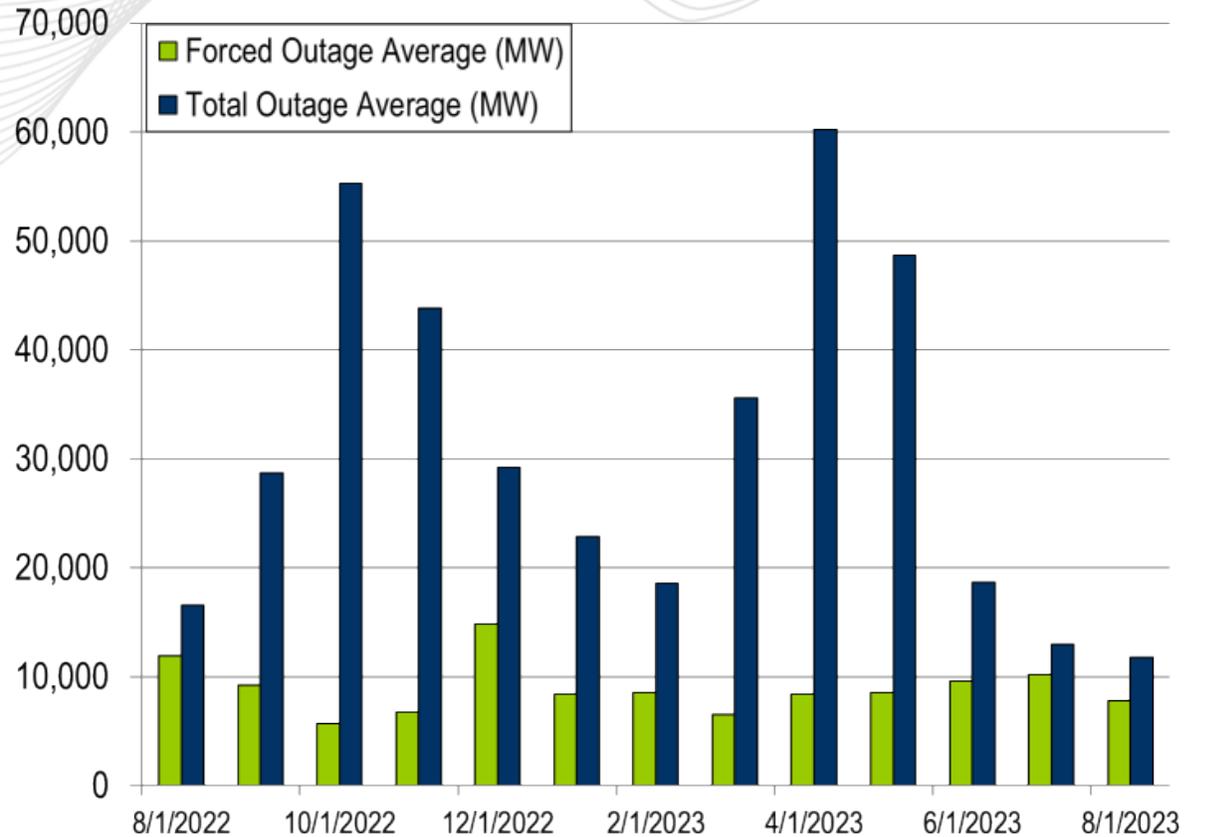
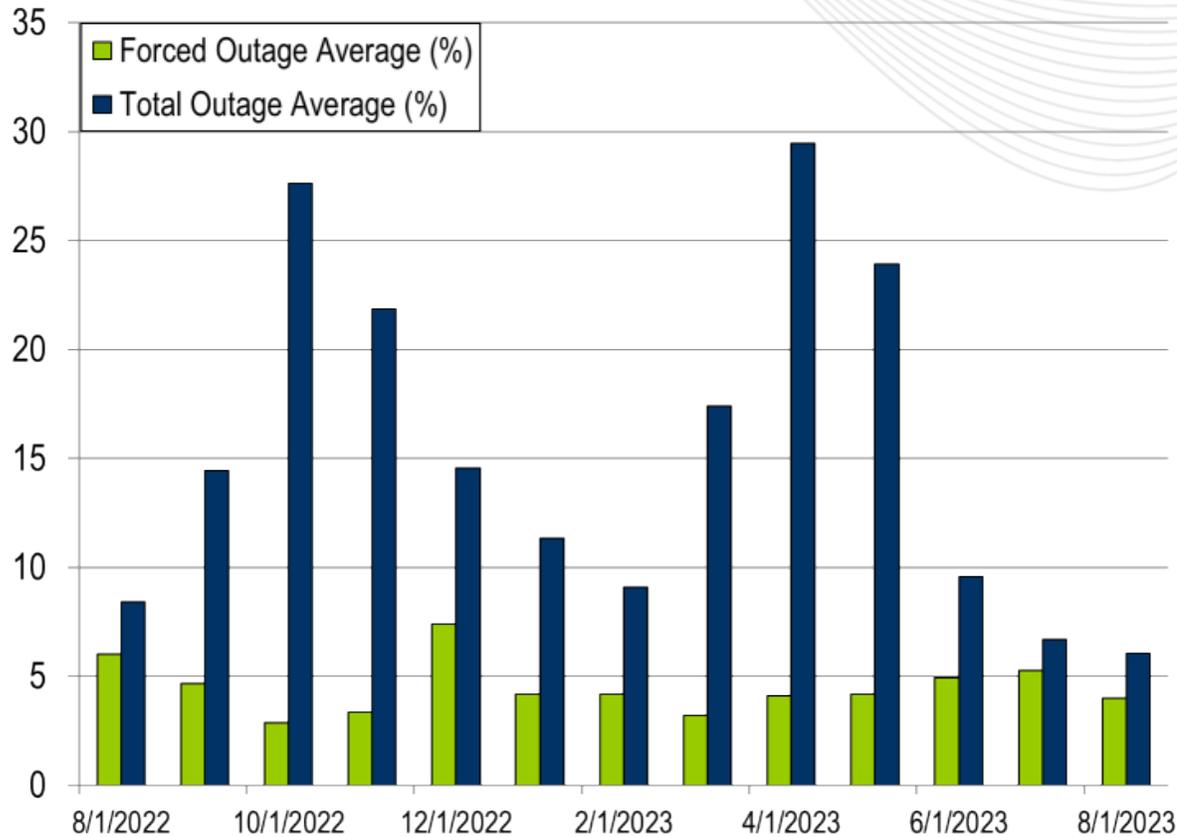
PJM's BAAL performance has exceeded the goal of 99% for each month in 2022 and 2023.

- 8 Shared Reserve events
- The following Emergency Procedures occurred:
  - 2 Maximum Generation Emergency Alerts
  - 1 Unit Startup Notification Alert
  - 10 Hot Weather Alert
  - 21 Post Contingency Local Load Relief Warnings

- 2 Shortage Cases Approved
- The approved Shortage Cases occurred on:
  - 07/21/2023:
    - 2 Shortage Cases for intervals 16:50 - 16:59
    - Factors: Load came in higher than forecast and CTs called not online yet

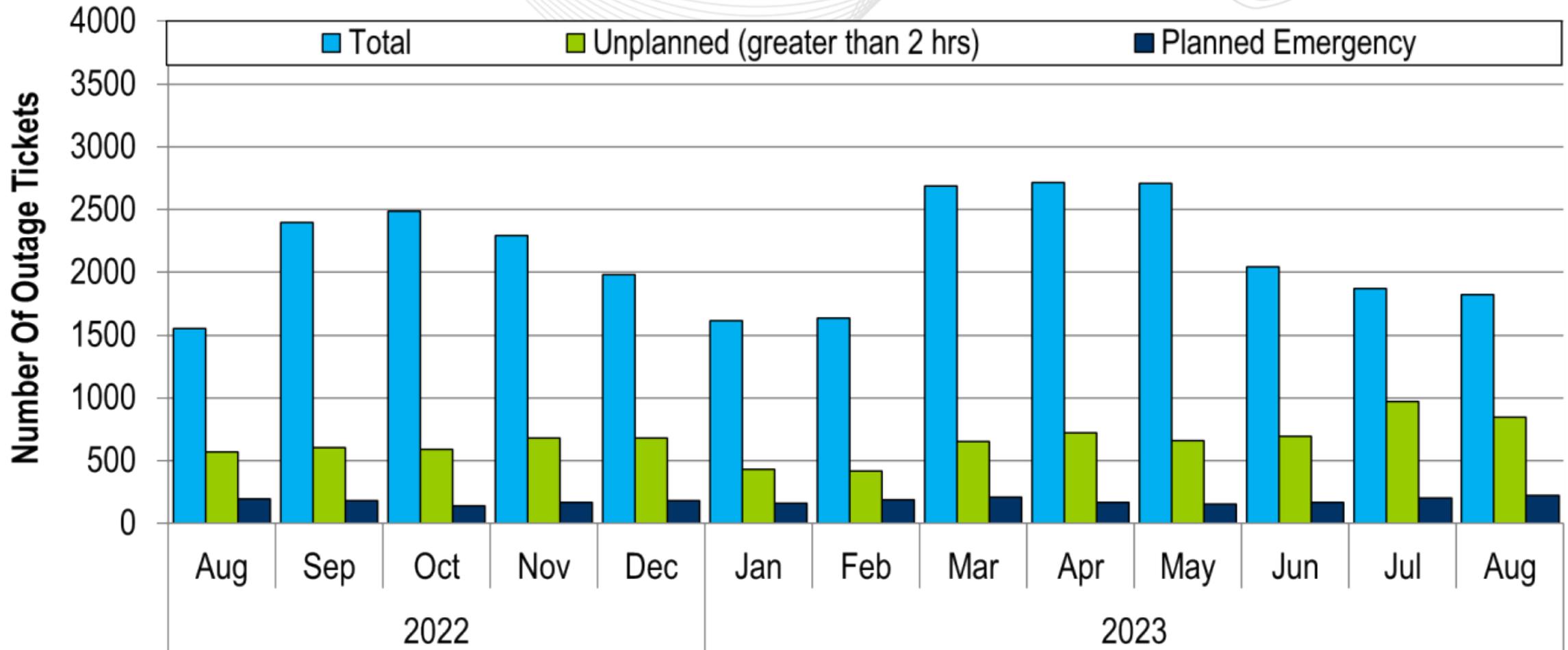
- 7 Shared Reserve events
- 1 Spinning Event
- The following Emergency Procedures occurred:
  - 1 Geomagnetic Disturbance Warning
  - 7 Hot Weather Alert
  - 11 Post Contingency Local Load Relief Warnings

There have been no shortage cases approved for the month of August 2023



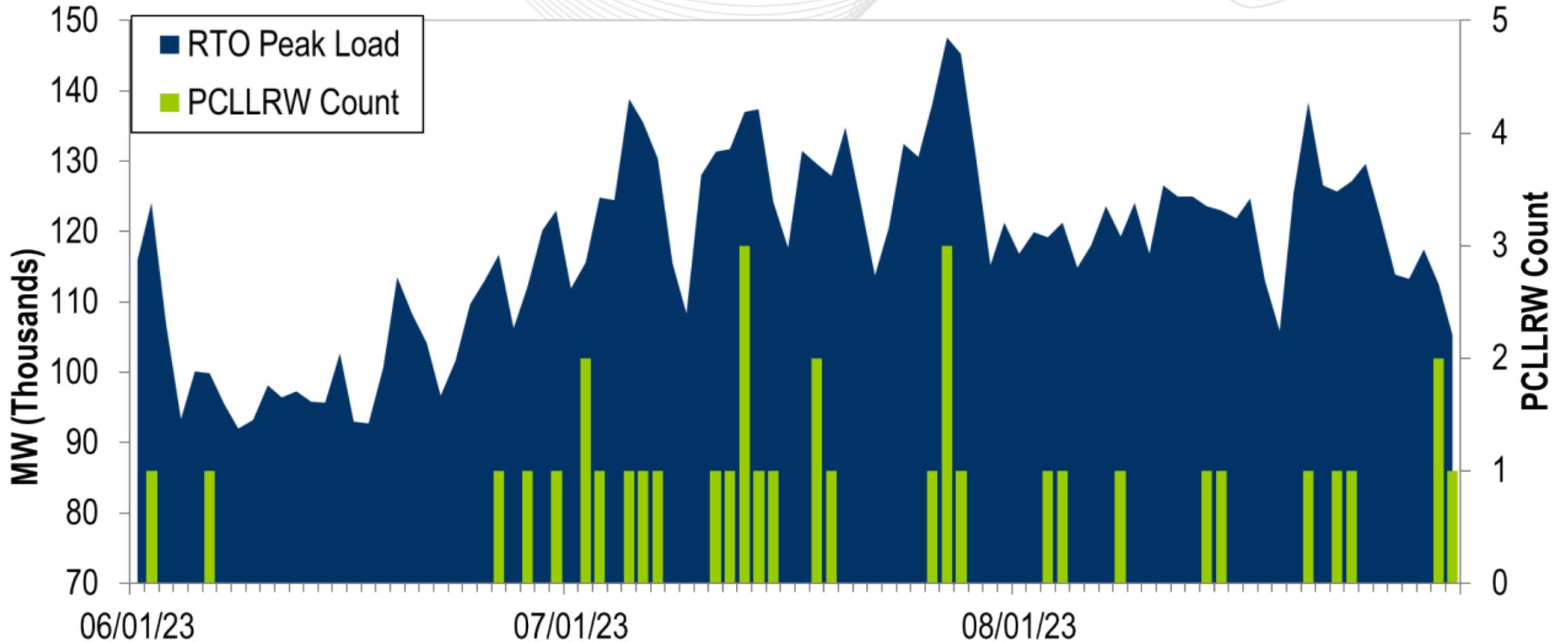
The 13-month average forced outage rate is 4.50% or 8,989 MW.  
 The 13-month average total outage rate is 15.44% or 31,037 MW.

# 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



- There were no spin events in July 2023

Event	Date	Start Time	End Time	Duration	Region	Assigned (MW)	Response (MW)	Penalty (MW)
1	08/10/23	00:41:38	00:49:11	00:07:33	RTO	2315.0	2315.0	0.0

Presenter:  
Hong Chen,  
[Hong.Chen@pjm.com](mailto:Hong.Chen@pjm.com)

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

System Operations Report



### Member Hotline

(610) 666 – 8980

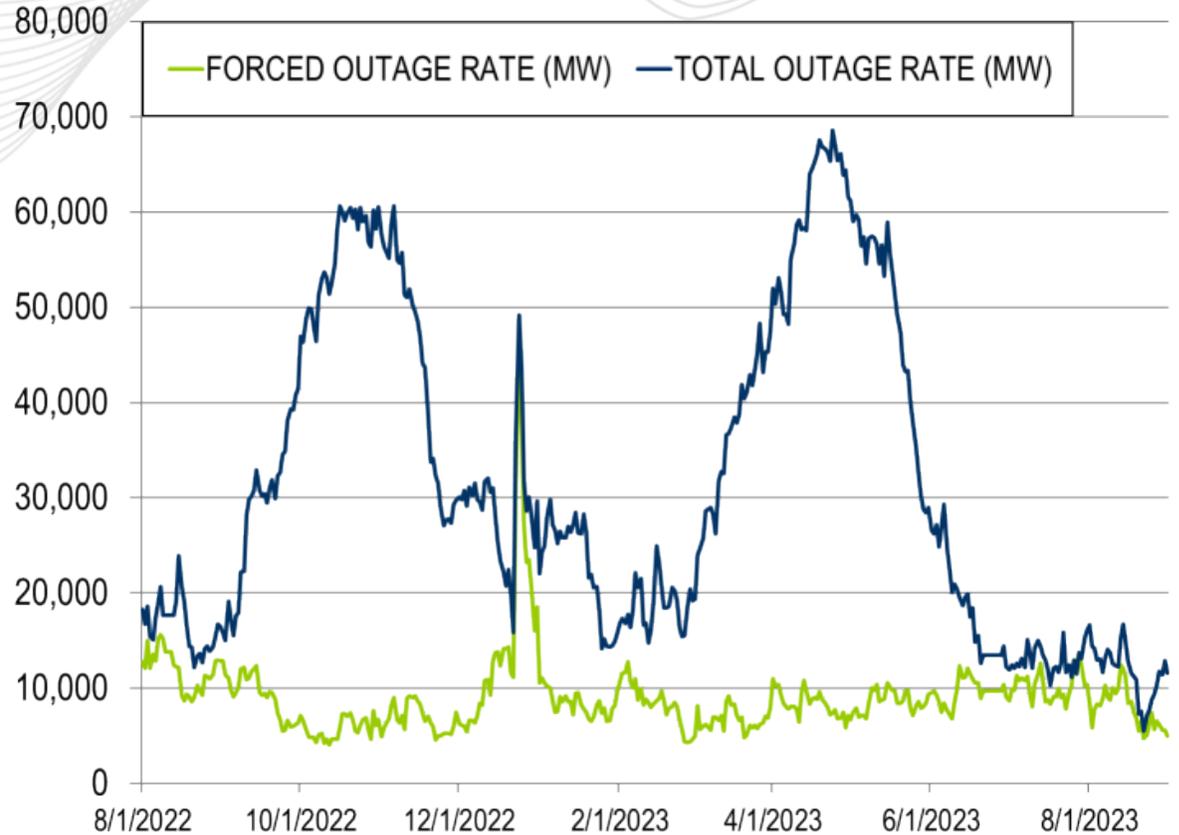
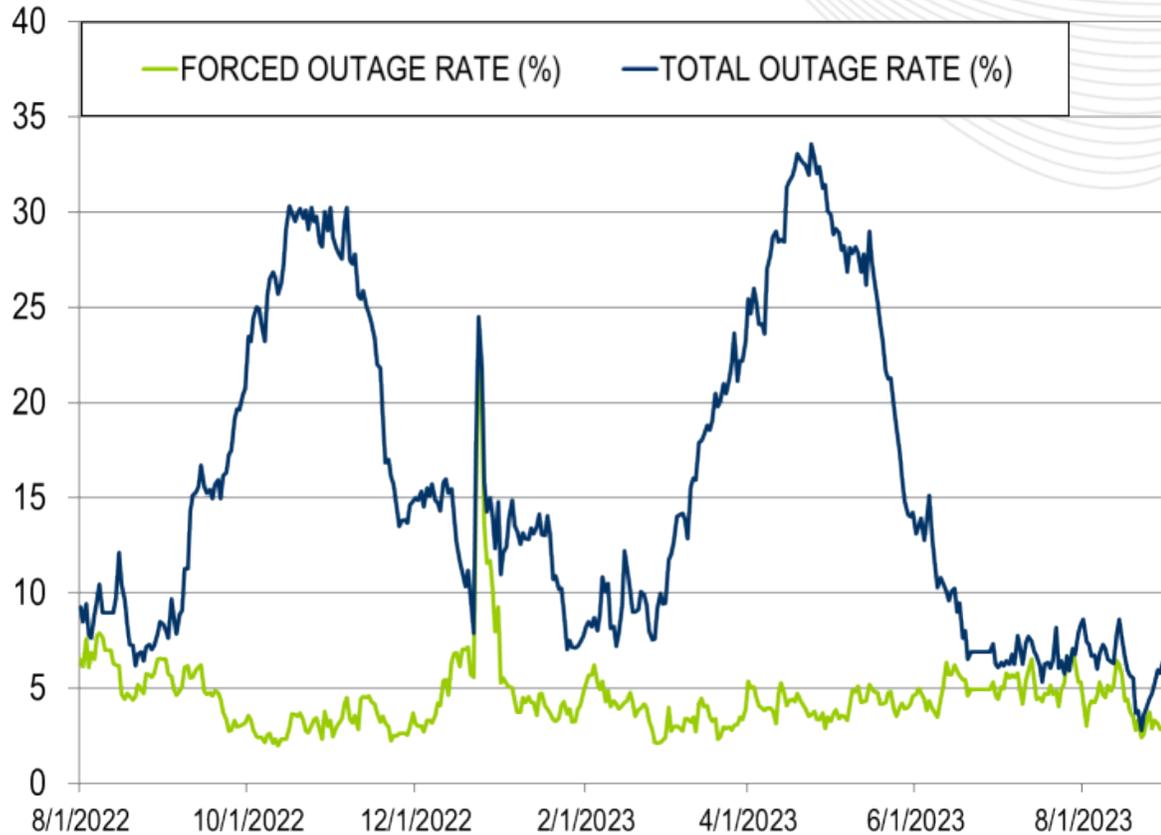
(866) 400 – 8980

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

# Appendix

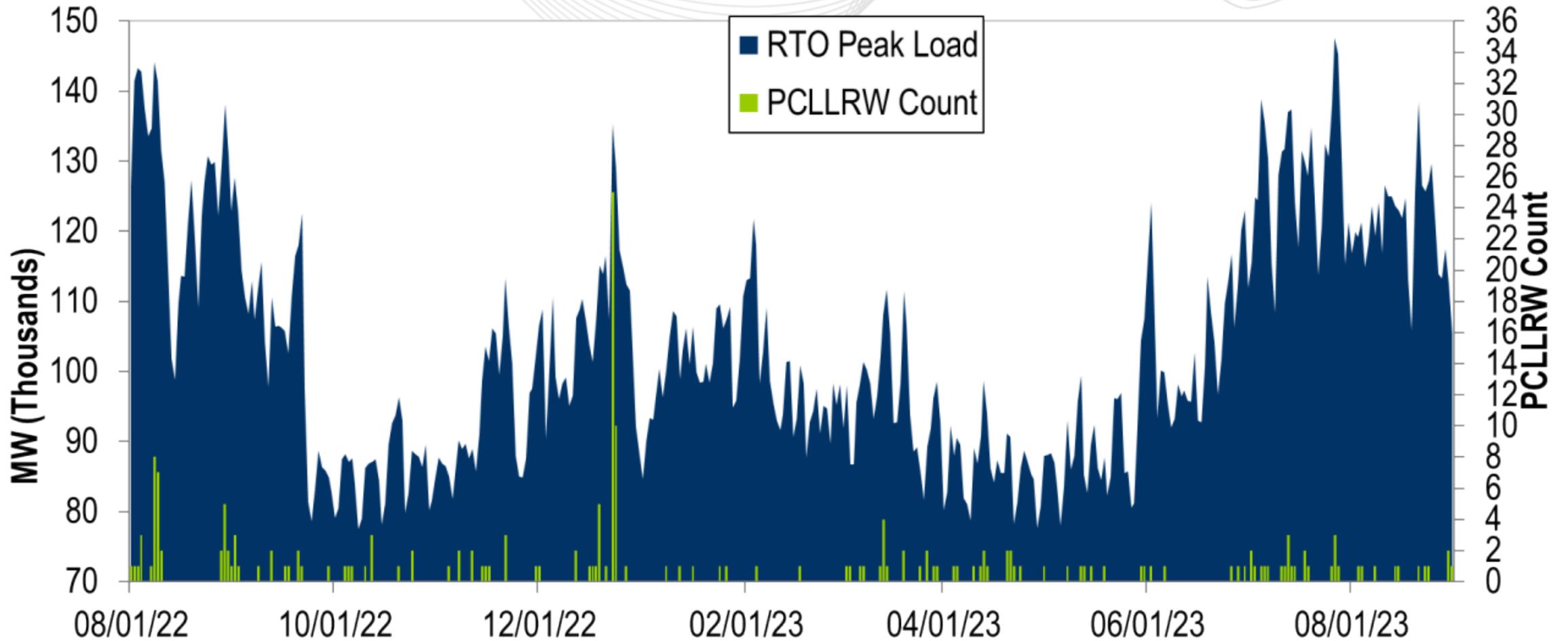
## Goal Measurement: Balancing Authority ACE Limit (BAAL)

- 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.



The 13-month average forced outage rate is 4.50% or 8,989 MW.  
 The 13-month average total outage rate is 15.44% or 31,037 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)

