



System Operations Report

Marcus Smith, Lead Engineer –
Markets Coordination

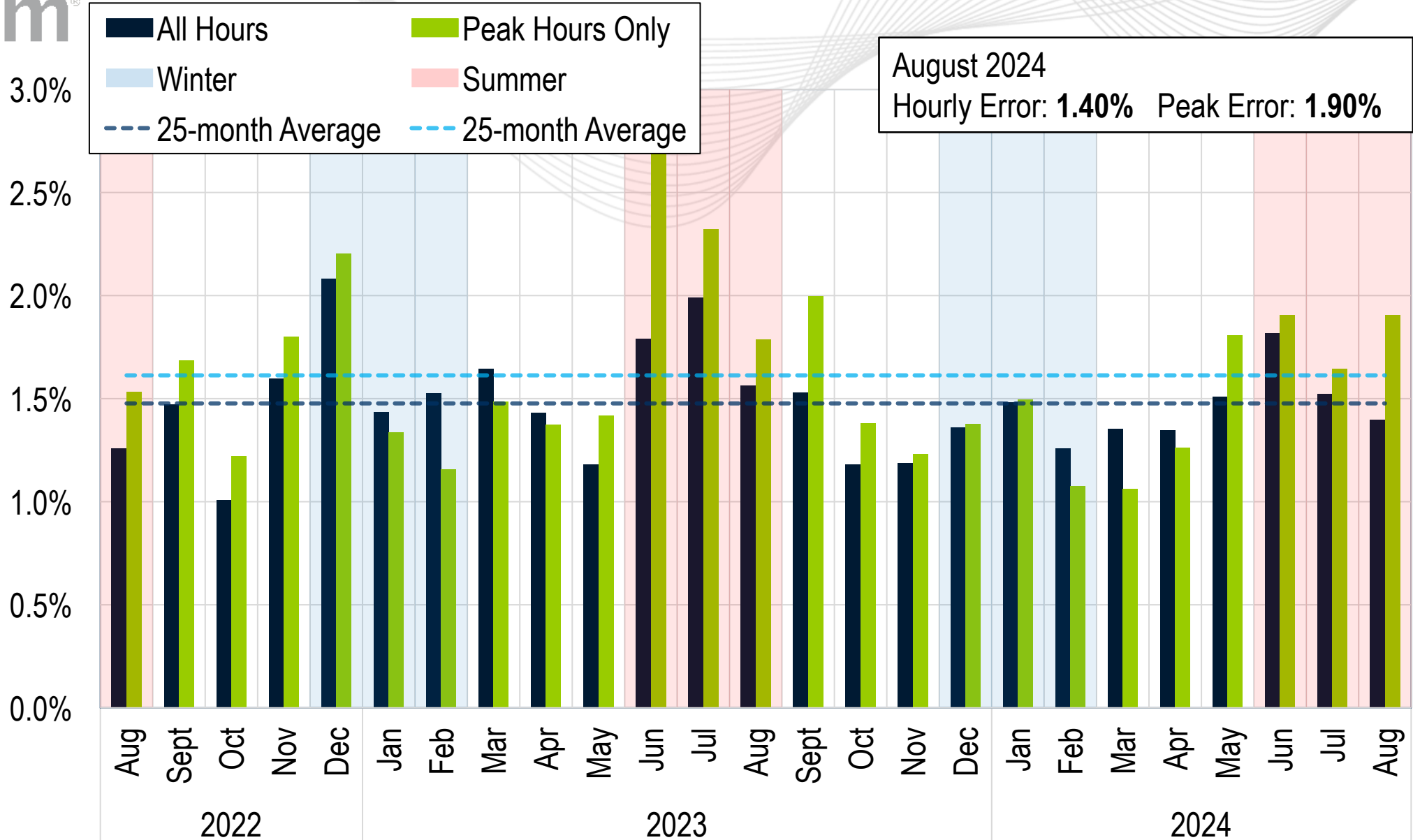
David Kimmel, Sr. Engineer –
Performance Compliance

Operating Committee

September 12, 2024



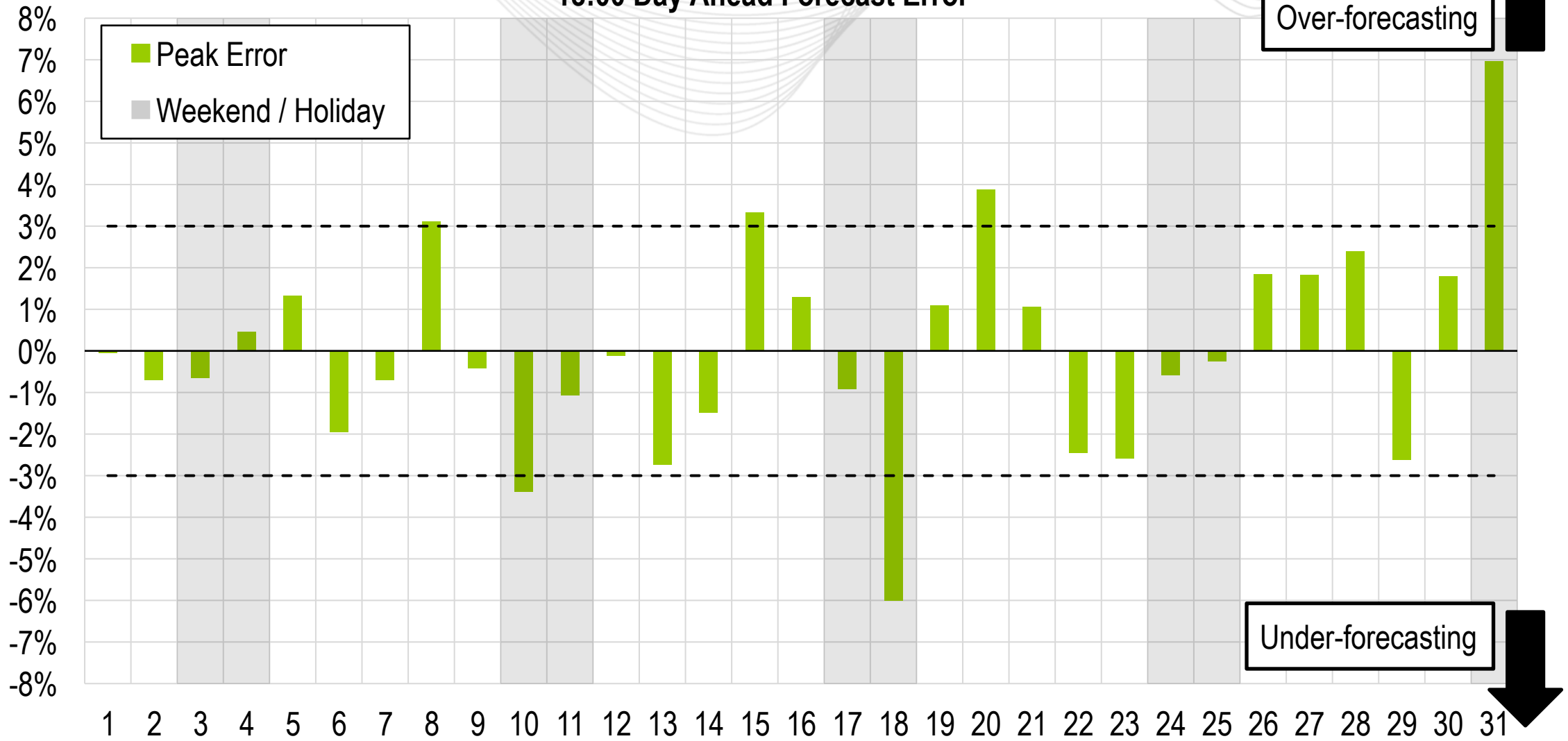
Average Load Forecast Error

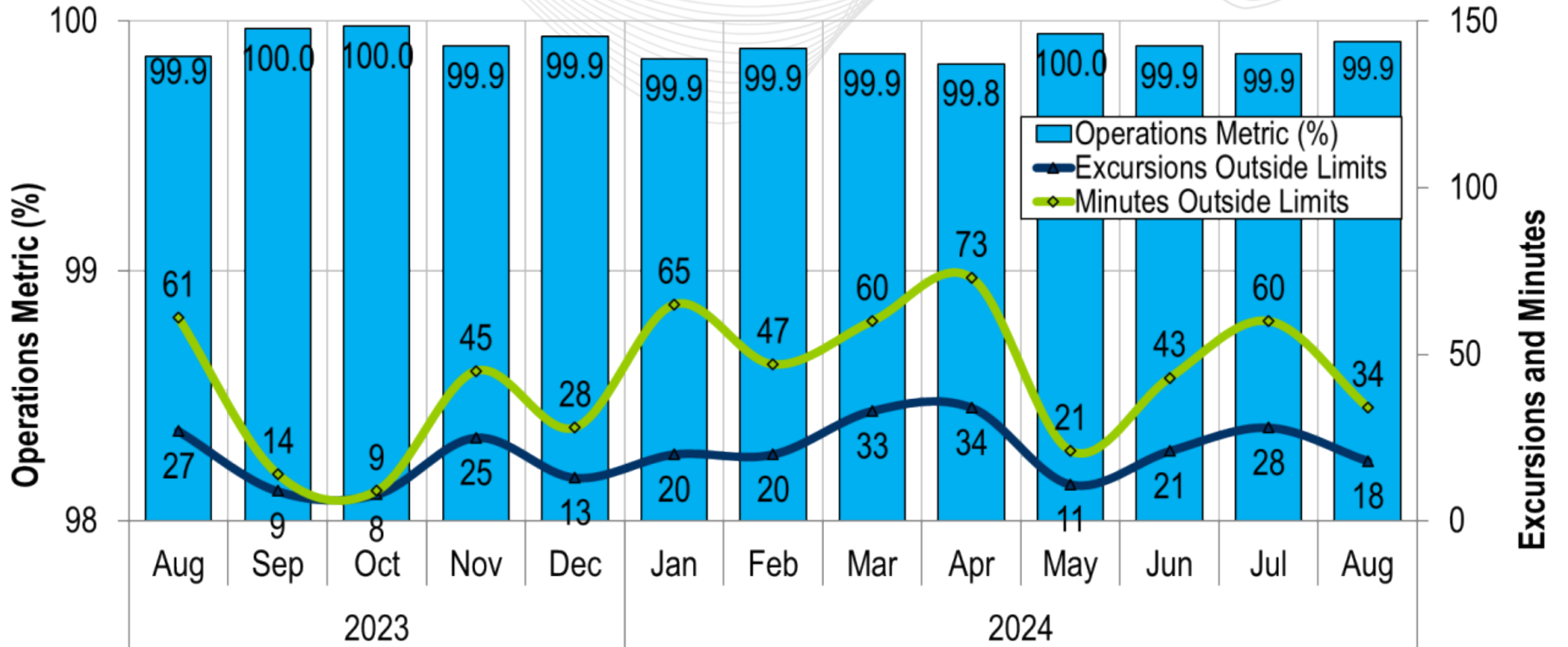


August 2024
Hourly Error: 1.40% Peak Error: 1.90%

Daily Peak Forecast Error (August)

18:00 Day Ahead Forecast Error

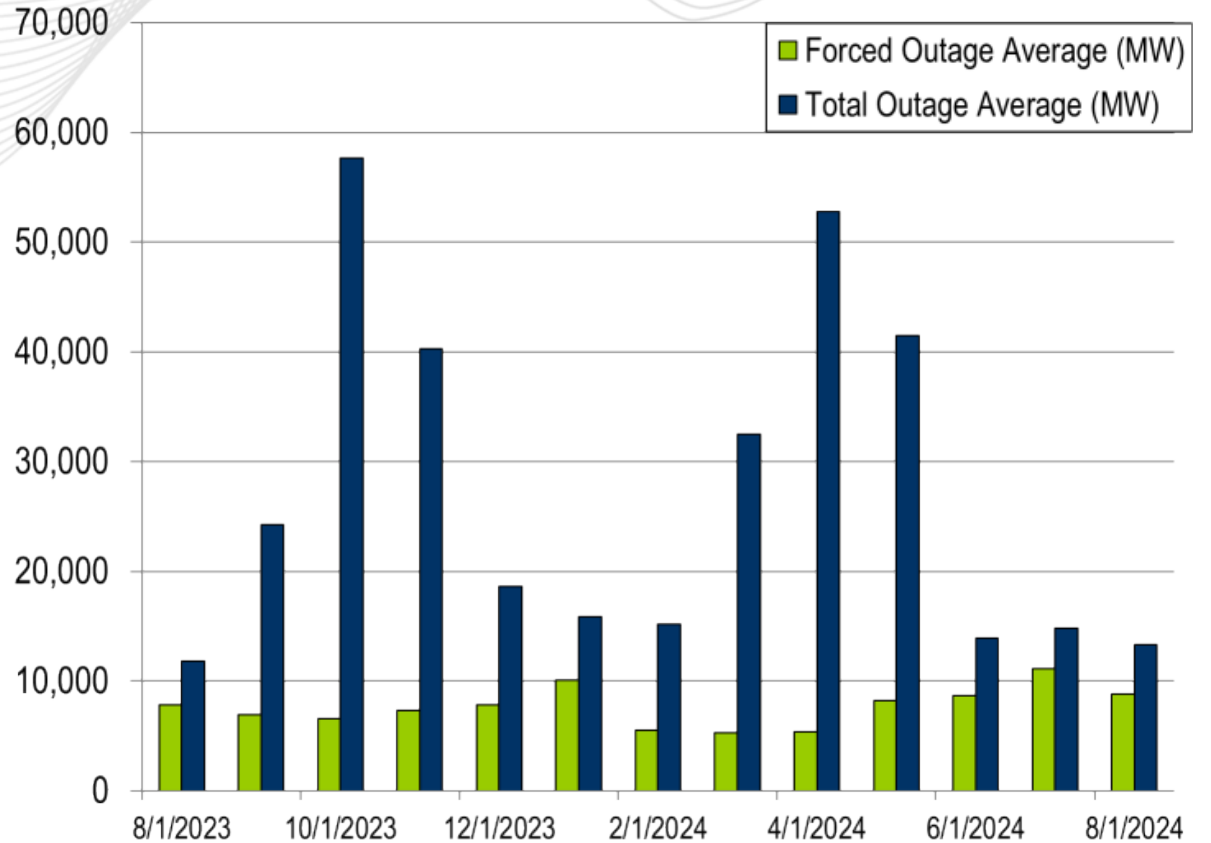
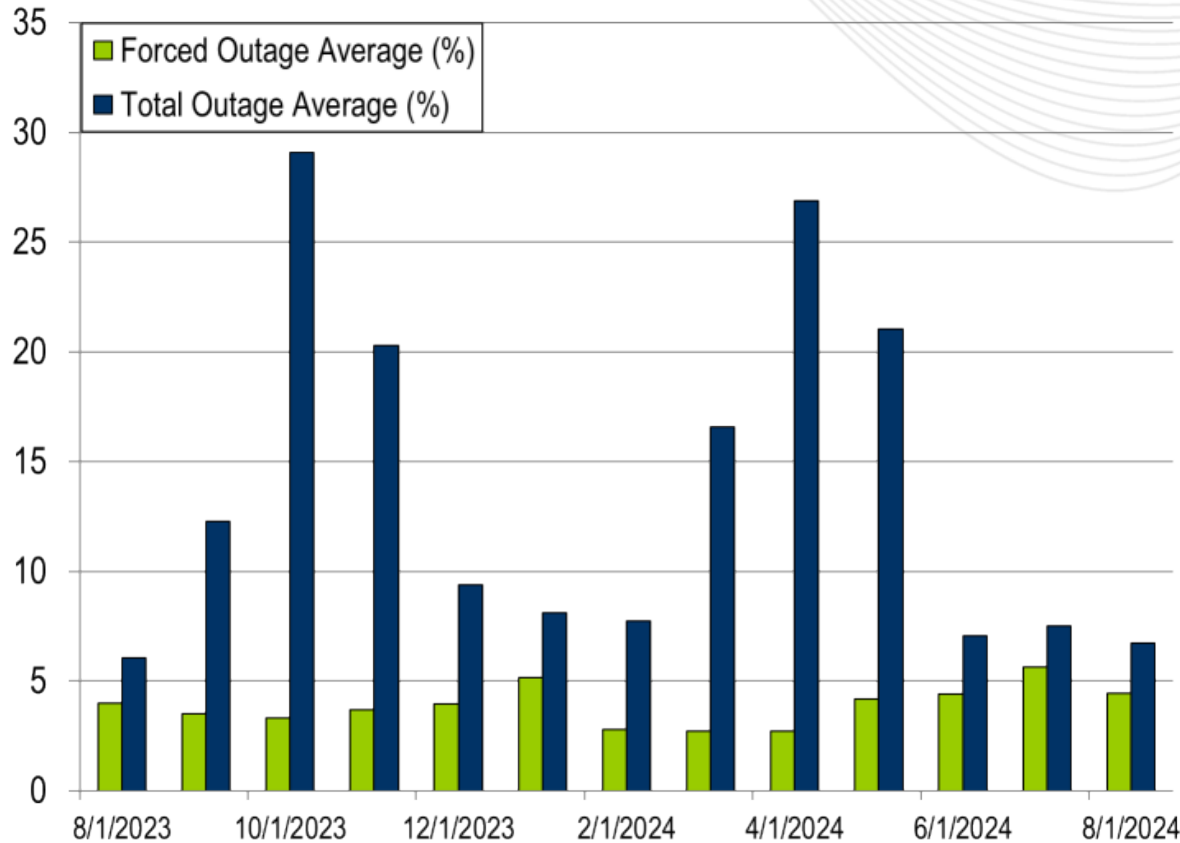




PJM's BAAL performance has exceeded the goal of 99% for each month in 2023 and 2024.

- The following Emergency Procedures occurred:
 - 8 Shared Reserve events
 - 3 Spin events
 - 6 Hot Weather Alerts
 - 5 Geomagnetic Disturbance Warnings
 - 1 NERC EEA Level 1
 - 14 Post Contingency Local Load Relief Warnings (PCLLRWs)

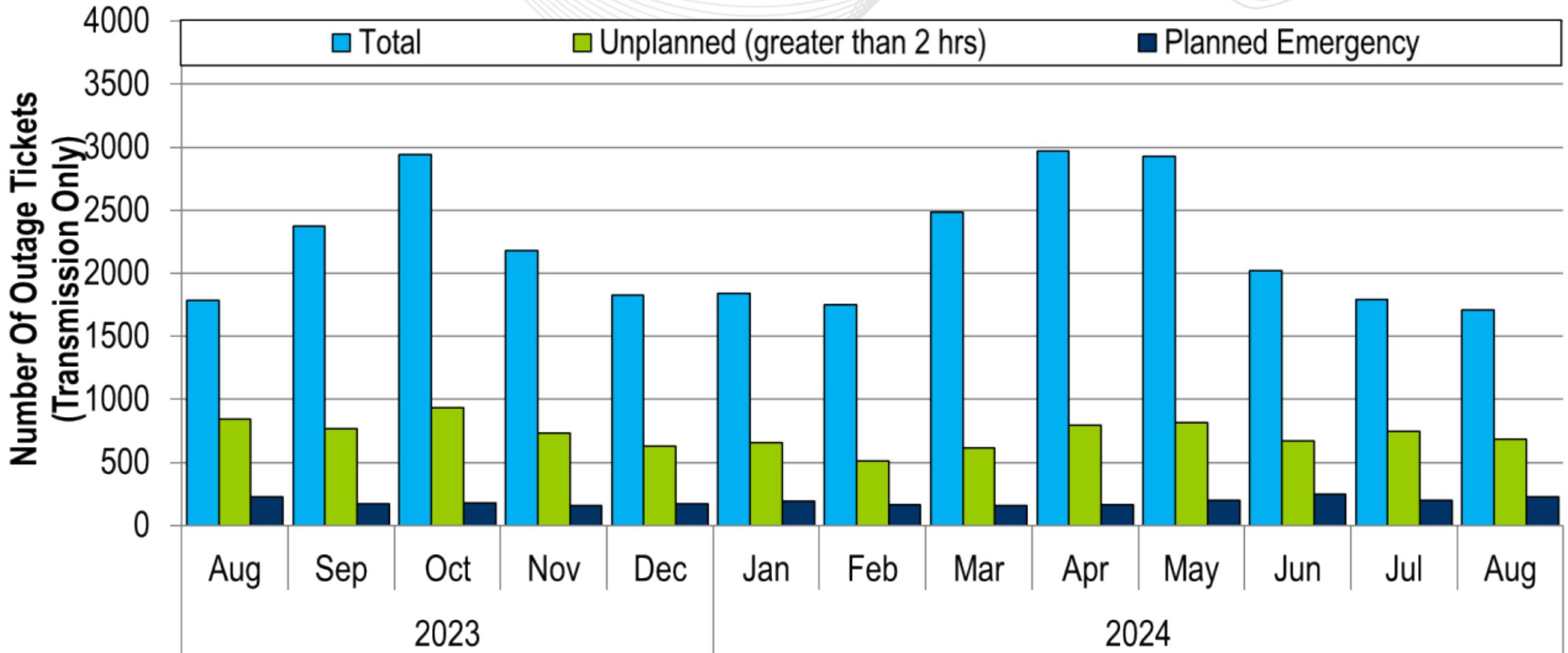
- There were no shortage case approvals for the month of August 2024



The 13-month average forced outage rate is 3.90% or 7,693 MW.
 The 13-month average total outage rate is 13.74% or 27,090 MW.

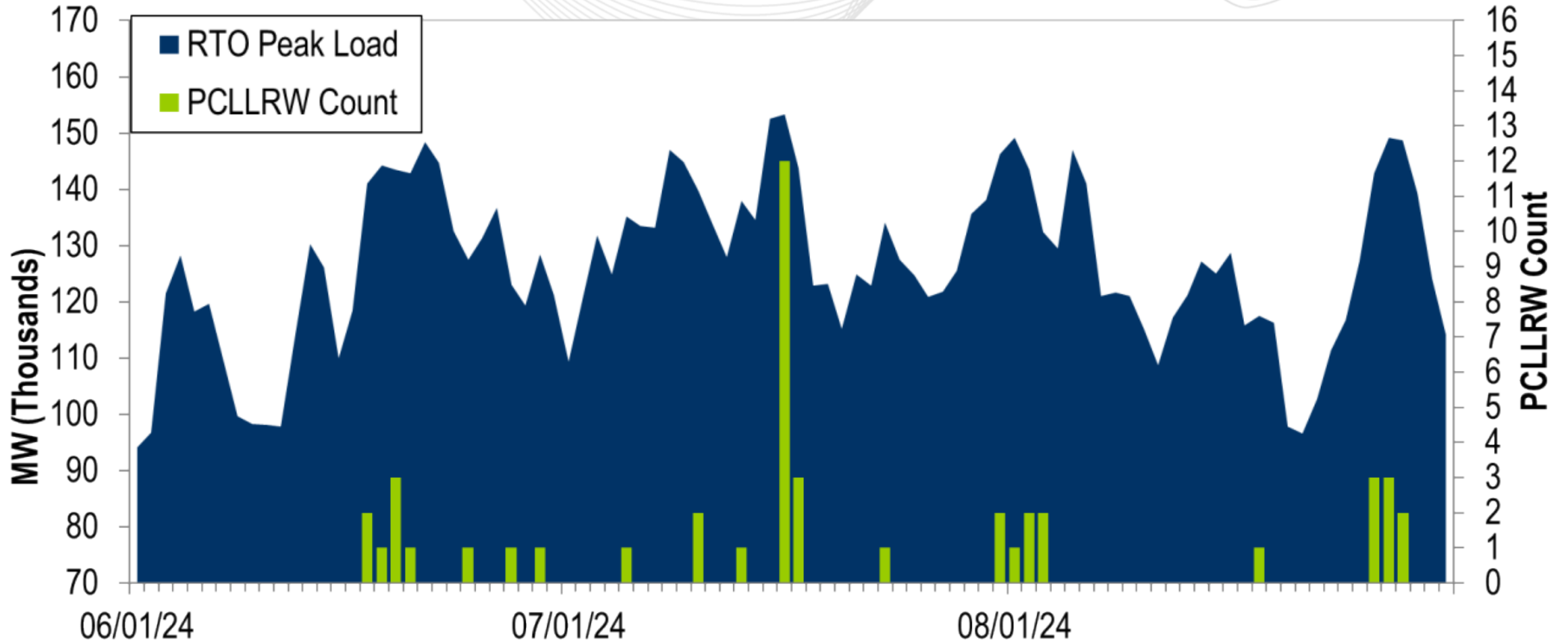


2023-2024 Planned Emergency, Unplanned, and Total Outages by Ticket (Transmission Only)



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		
Date	08/12/24			08/18/24			08/26/24		
Start Time	17:10:55			16:04:33			13:53:42		
End Time	17:20:34			16:20:24			13:57:55		
Duration	00:09:39			00:15:51			00:04:13		
Region	RTO			RTO			RTO		
Resource Type	Gen	DR	Total	Gen	DR	Total	Gen	DR	Total
Assigned (MW)	1338	49	1386	1417	529	1945	2111	539	2650
Estimated Expected Response of Assigned Resources (MW)	1291	47	1338	1417	529	1945	890	227	1117
Actual Response of Assigned Resources (MW)	965	43	1008	838	477	1316	720	307	1027
Output Increase of Resources without Assignment (MW)	695	0	695	3169	0	3169	1643	0	1643
Percent Response To Estimated Expected Response (%)	75%	92%	75%	59%	90%	68%	81%	135%	92%
Penalty (MW)	0	0	0	578	51	630	0	0	0

Load Forecast Report

Presenter/SME:

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System Operations Report

Presenter:

David Kimmel,
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Member Hotline

(610) 666 – 8980

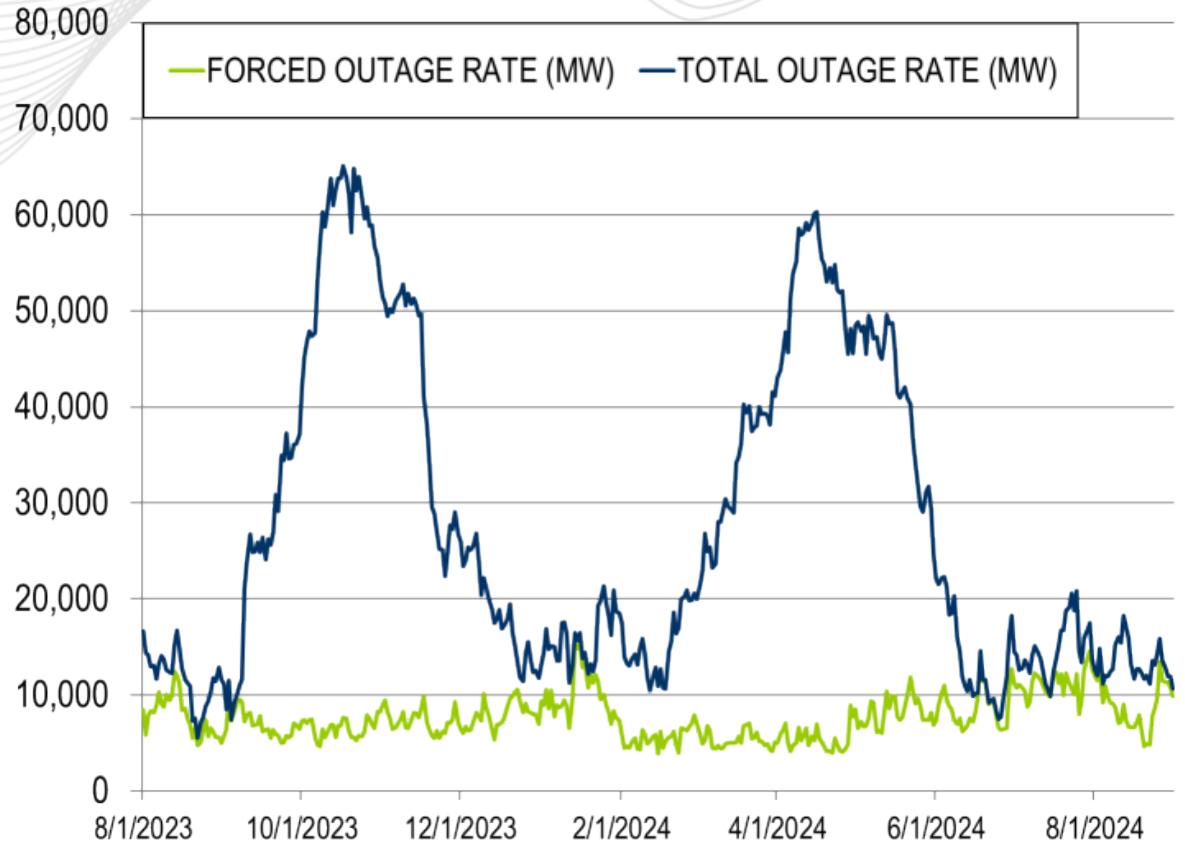
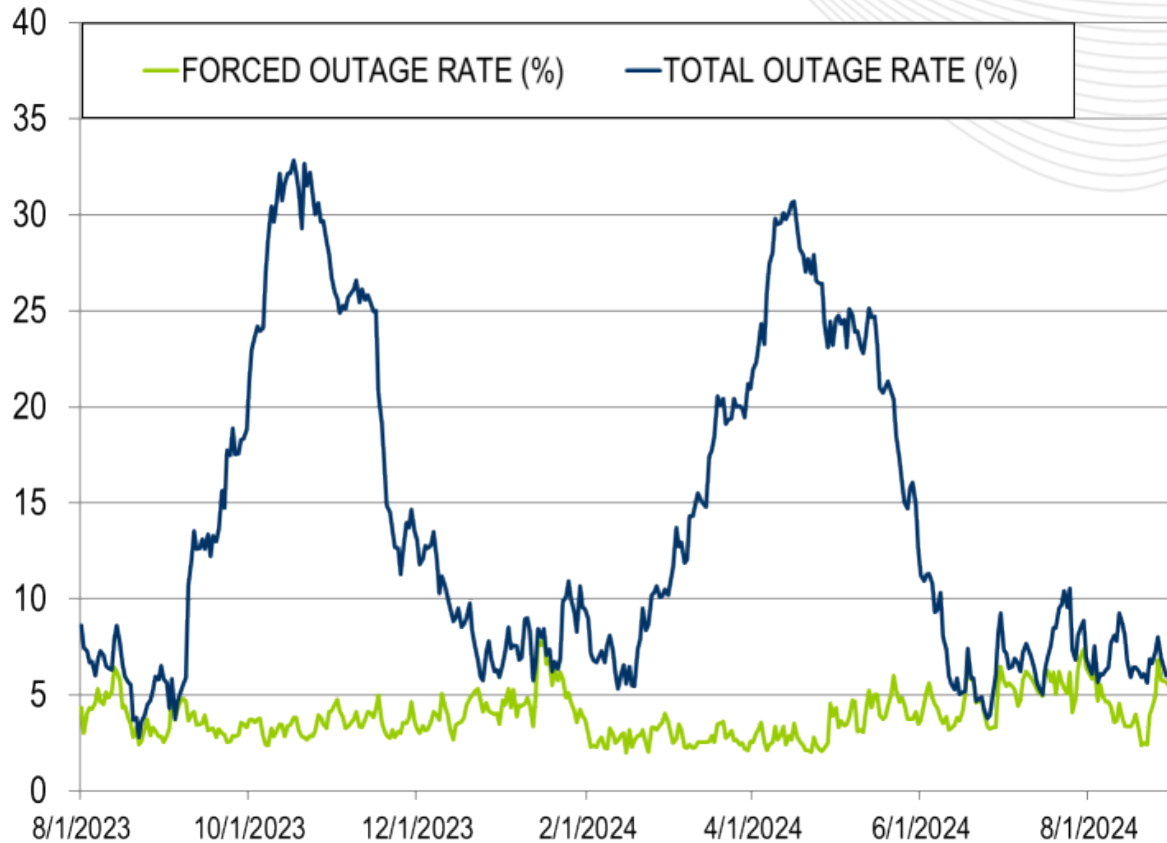
(866) 400 – 8980

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Appendix

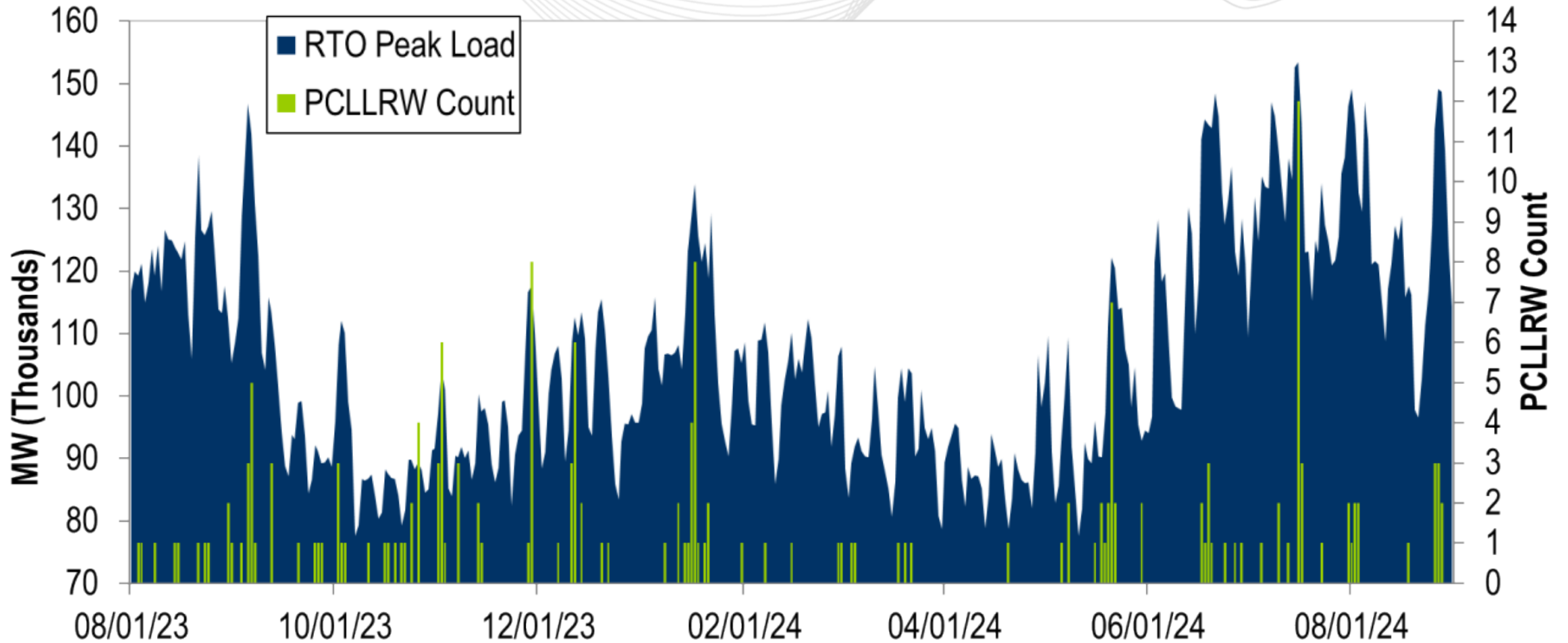
Goal Measurement: Balancing Authority ACE Limit (BAAL)

- 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 3.90% or 7,693 MW.
 The 13-month average total outage rate is 13.74% or 27,090 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

