

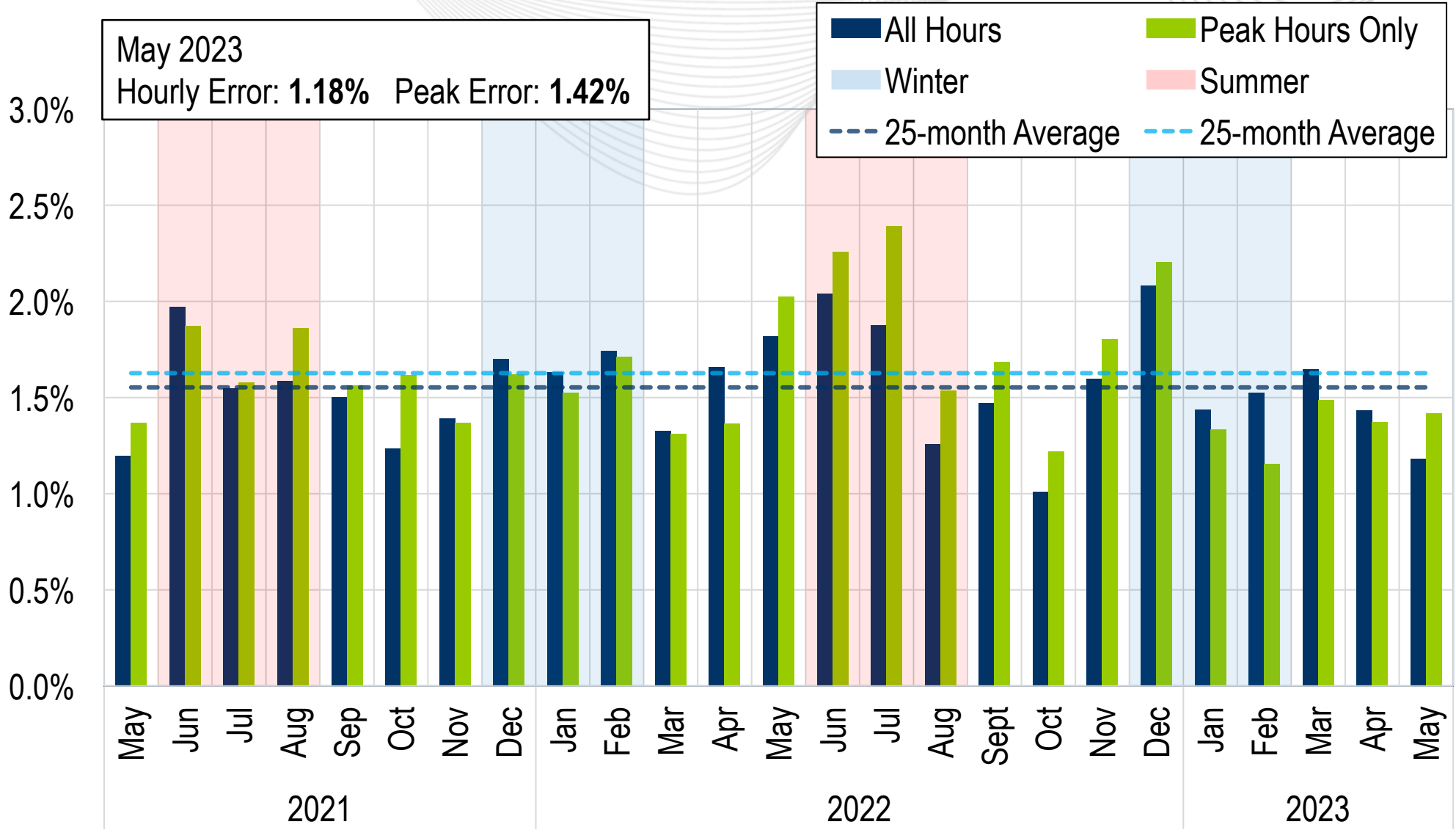


System Operations Report

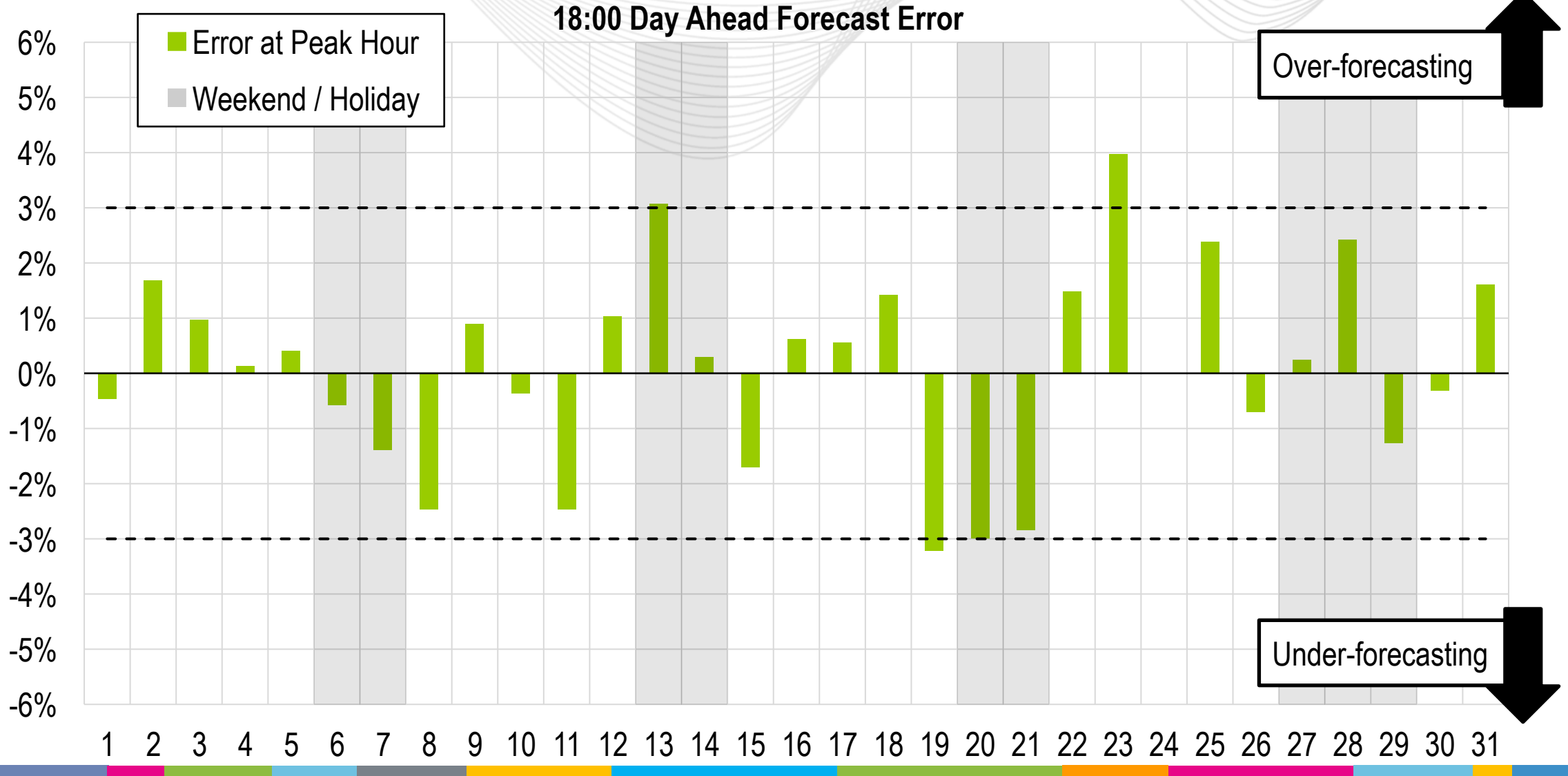
Hong Chen
Principal Engineer, Markets Coordination
MC Webinar
June 20th, 2023

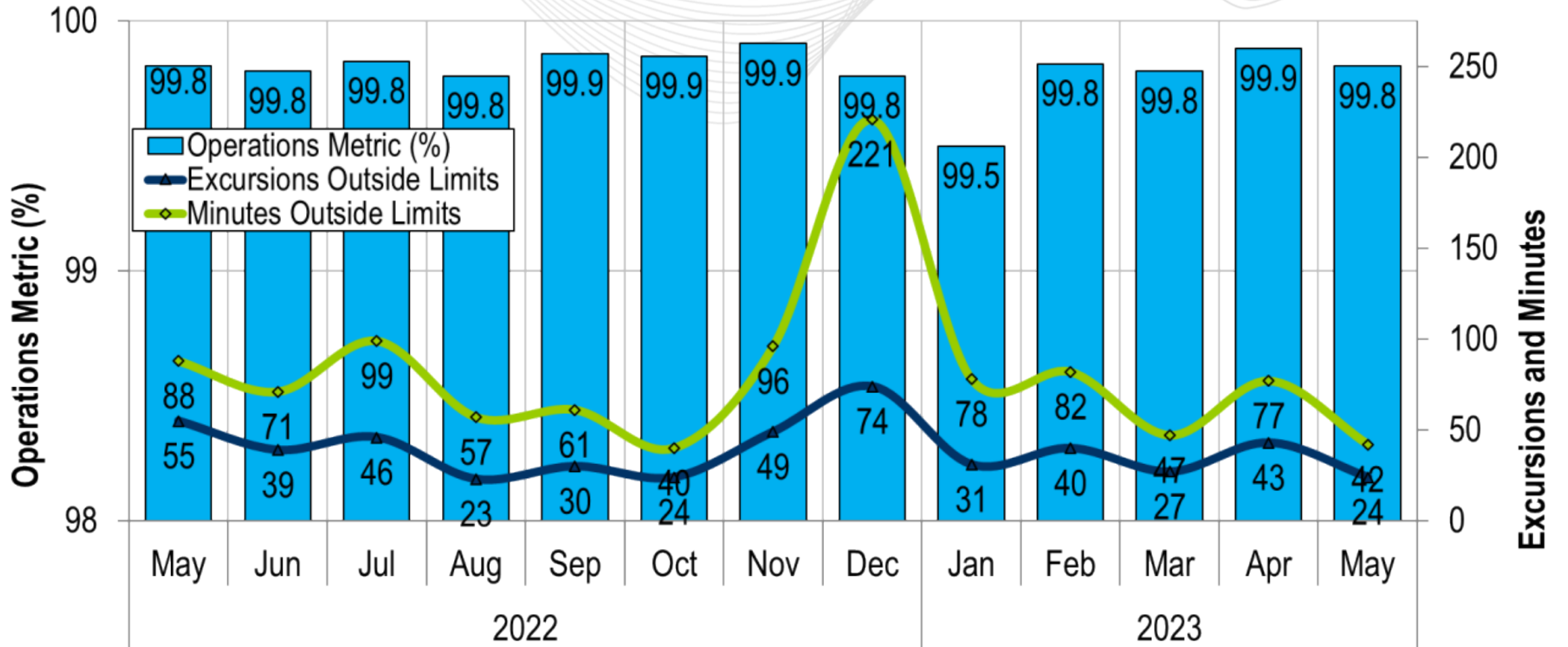


Average Load Forecast Error



Daily Peak Forecast Error (May)

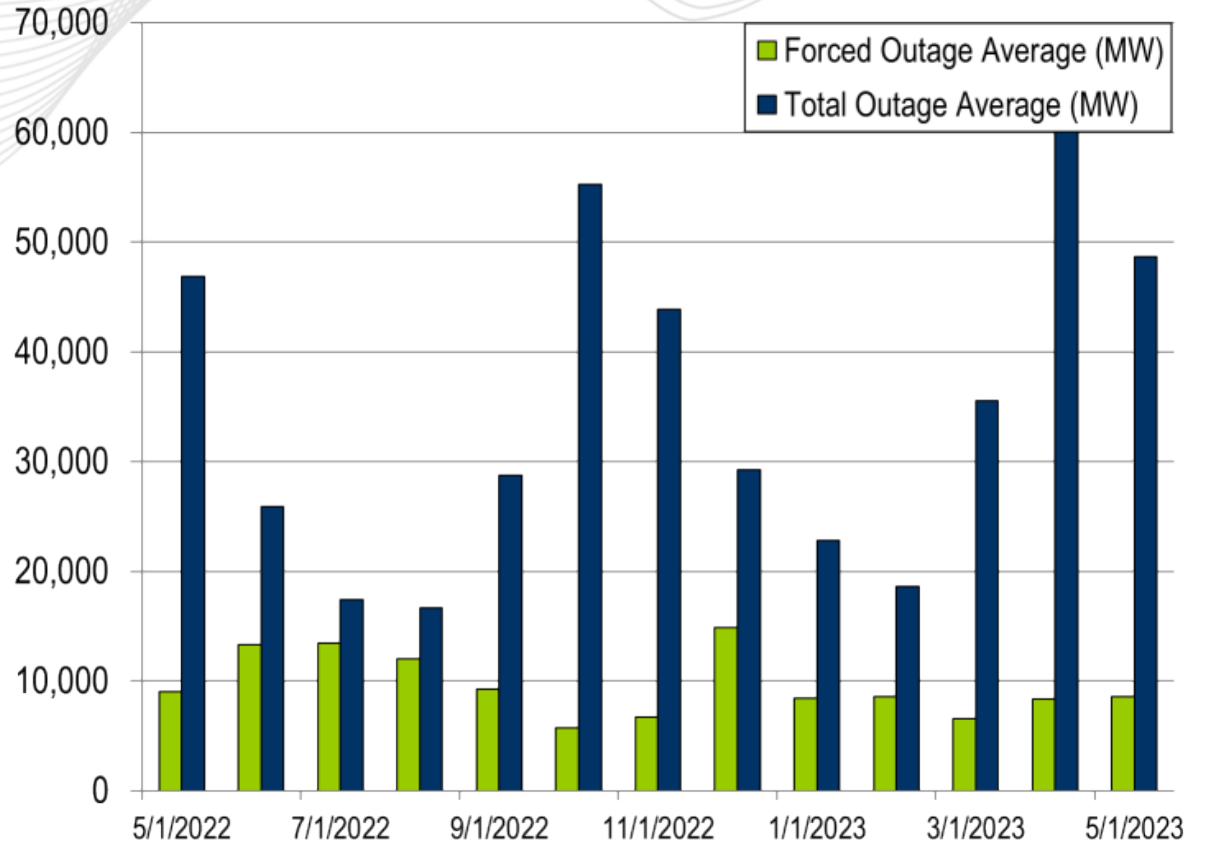
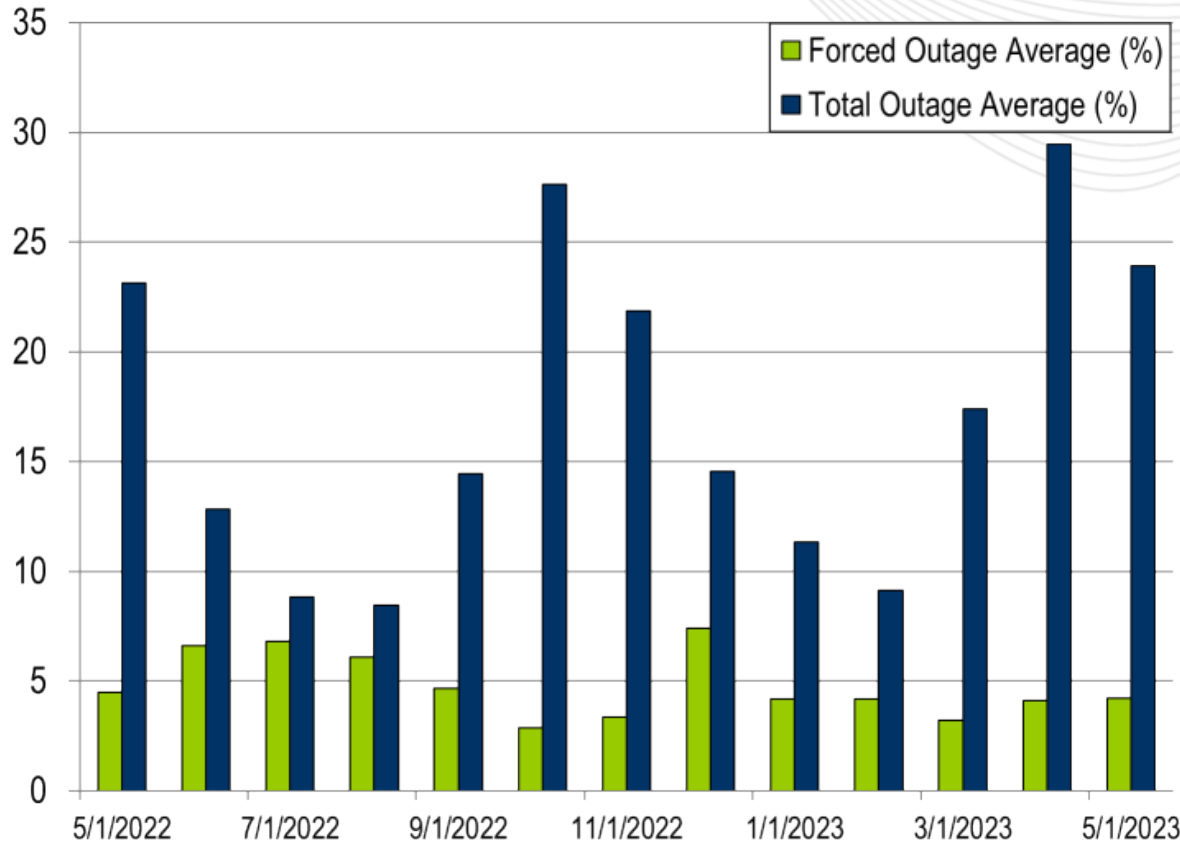




PJM's BAAL performance has exceeded the goal of 99% for each month in 2022 and 2023.

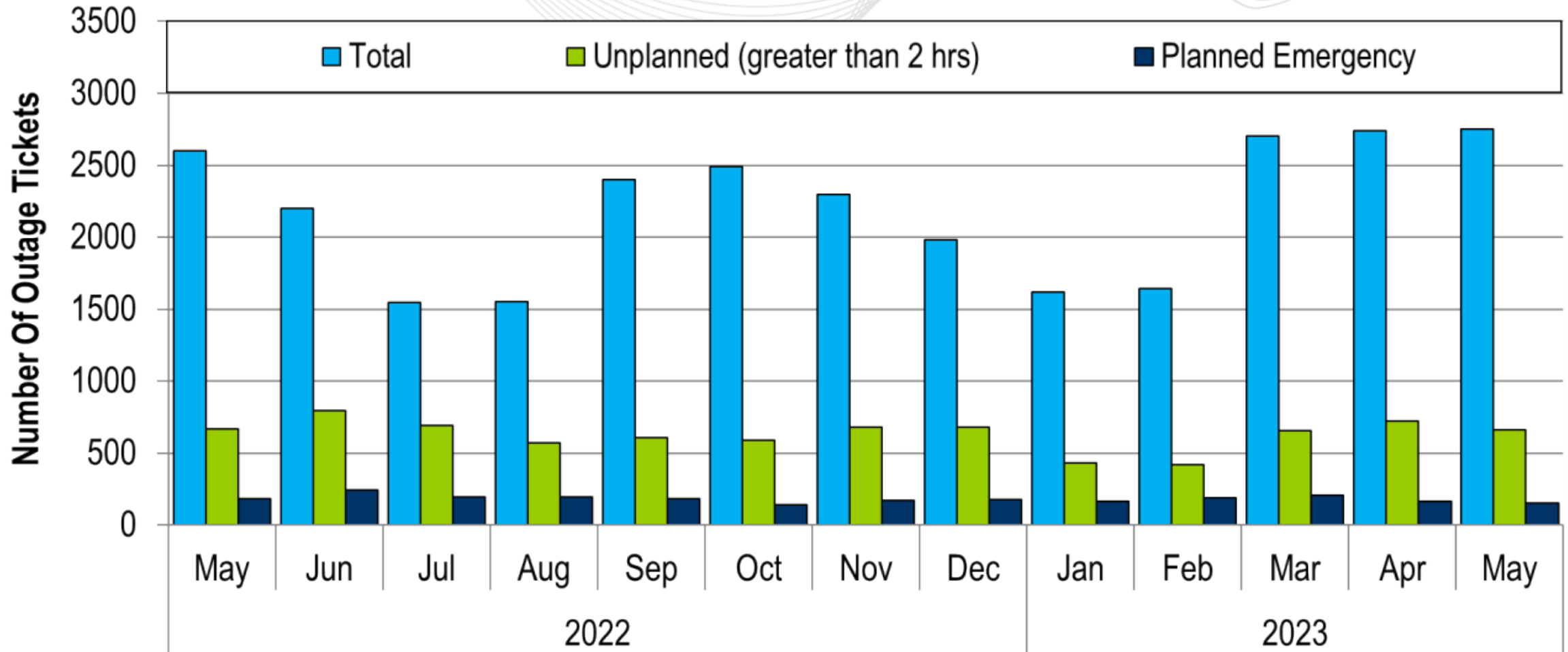
- 1 spinning event
- 5 Shared Reserve events
- The following Emergency Procedures occurred:
 - 7 High System Voltage Actions
 - 1 Hot Weather Alert
 - 8 Post Contingency Local Load Relief Warnings

- 39 Shortage Cases Approved
- The approved Shortage Cases occurred on:
 - 5/12/2023 – 13 Approved Shortage Cases
 - Approved for the 1:59, 2:10-2:50, and 5:35-5:59 intervals
 - Mainly due to increased RTO reserve requirement
 - 5/15/2023 – 21 Approved Shortage Cases
 - Approved for the 00:25-00:55, 1:25-1:59, 17:50-17:55, and 18:10 intervals
 - Mainly due to increased RTO reserve requirement
 - 5/26/2023 – 5 Approved Shortage Cases
 - Approved for the 22:10-22:25 intervals
 - Mainly due to increased RTO reserve requirement



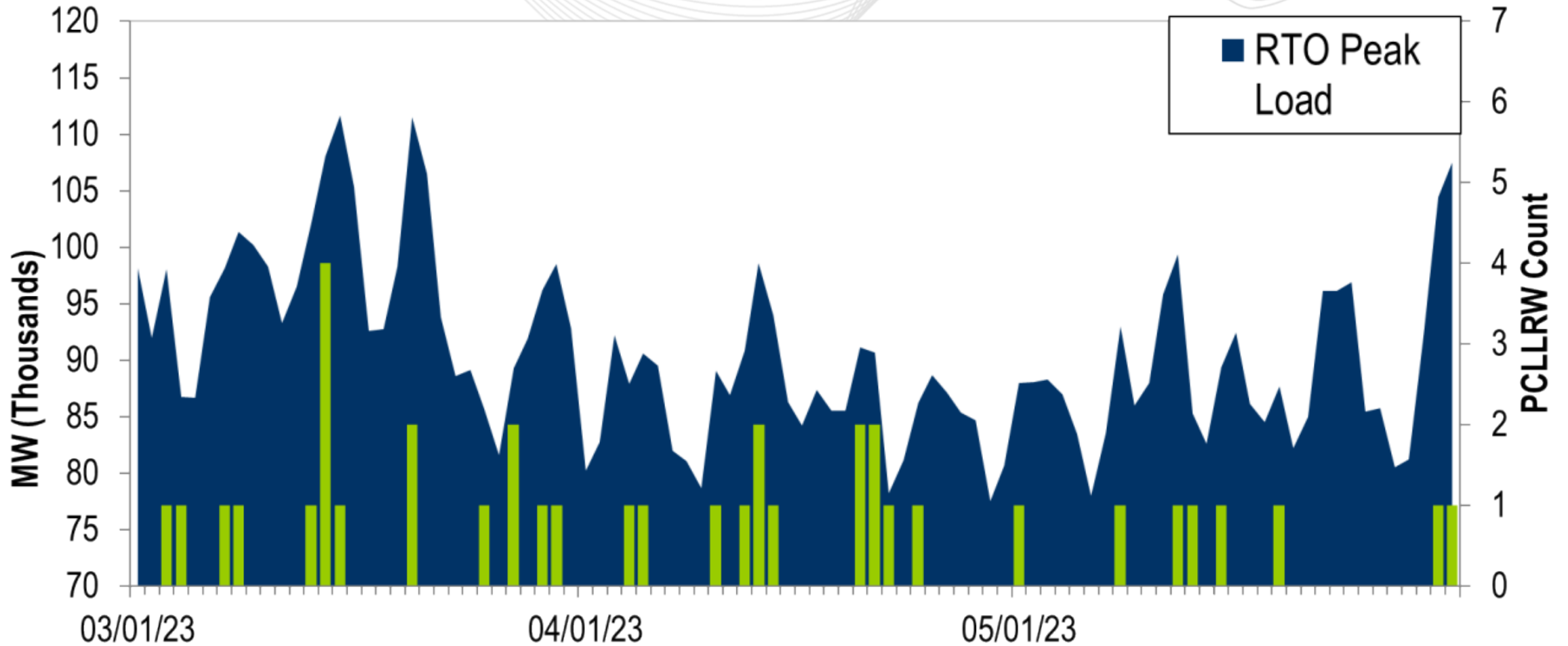
The 13-month average forced outage rate is 4.79% or 9,629 MW.
 The 13-month average total outage rate is 17.19% or 34,681 MW.

2021-2022 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	Date	Start Time	End Time	Duration	Region	Assigned (MW)	Response (MW)	Penalty (MW)
1	05/28/23	20:09:28	20:16:50	00:07:22	RTO	2437.1	2437.1	0.0

*Response is equal to Assigned for events with duration less than ten minutes

Presenter:
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SME:
Ross Kelly,
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System Operations Report



Member Hotline

(610) 666 – 8980

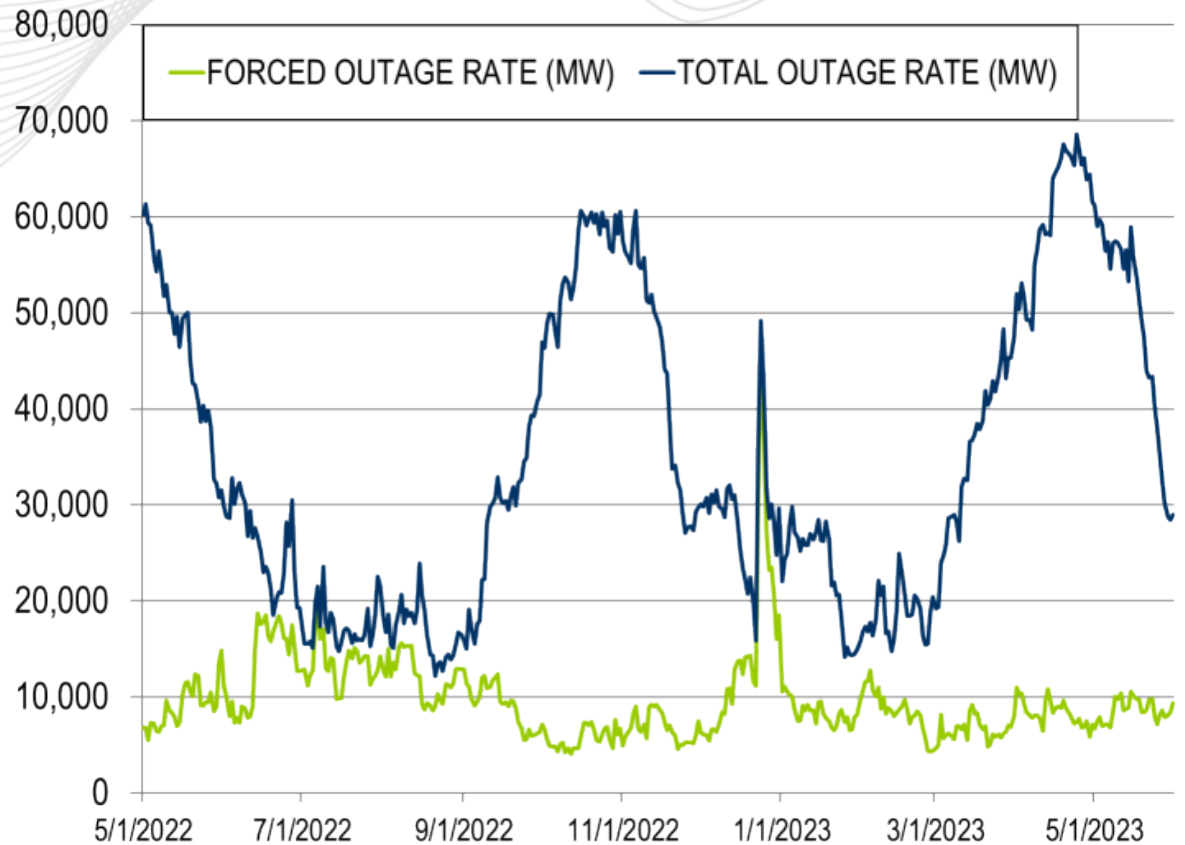
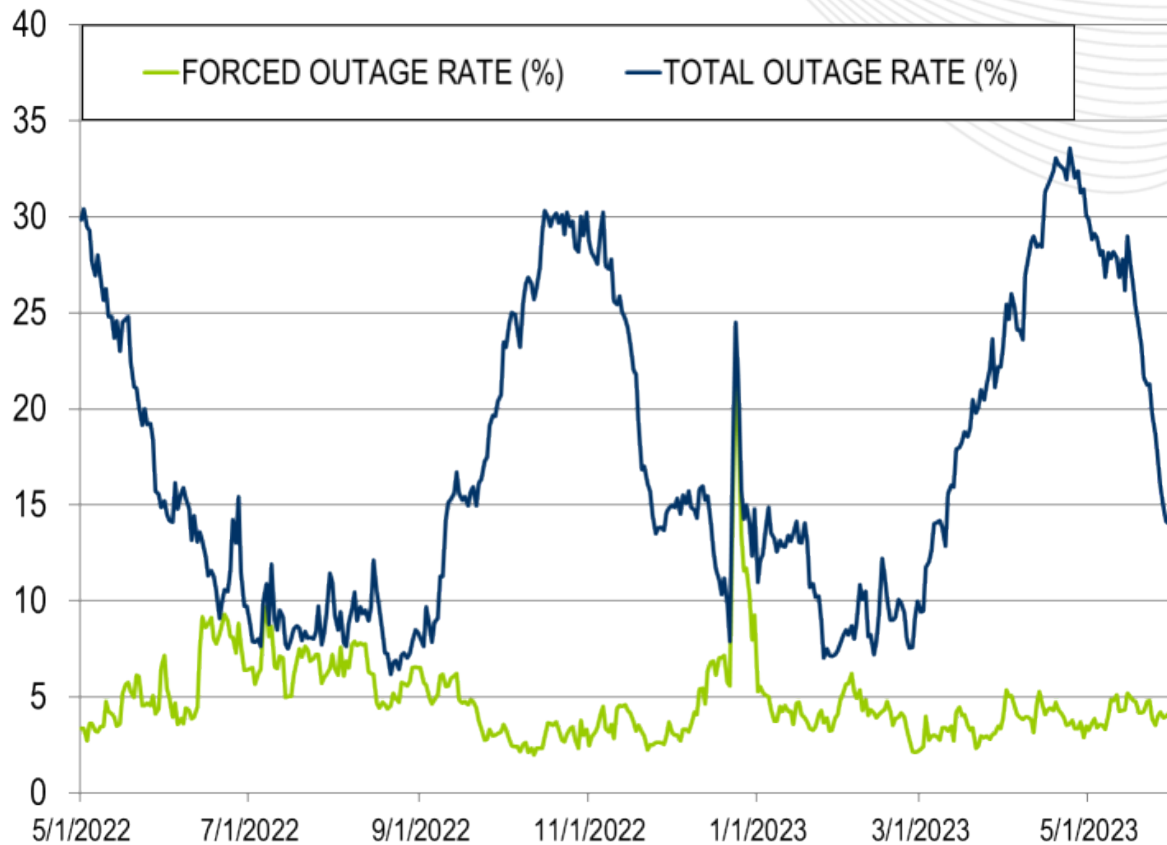
(866) 400 – 8980

custsvc@pjm.com

Appendix

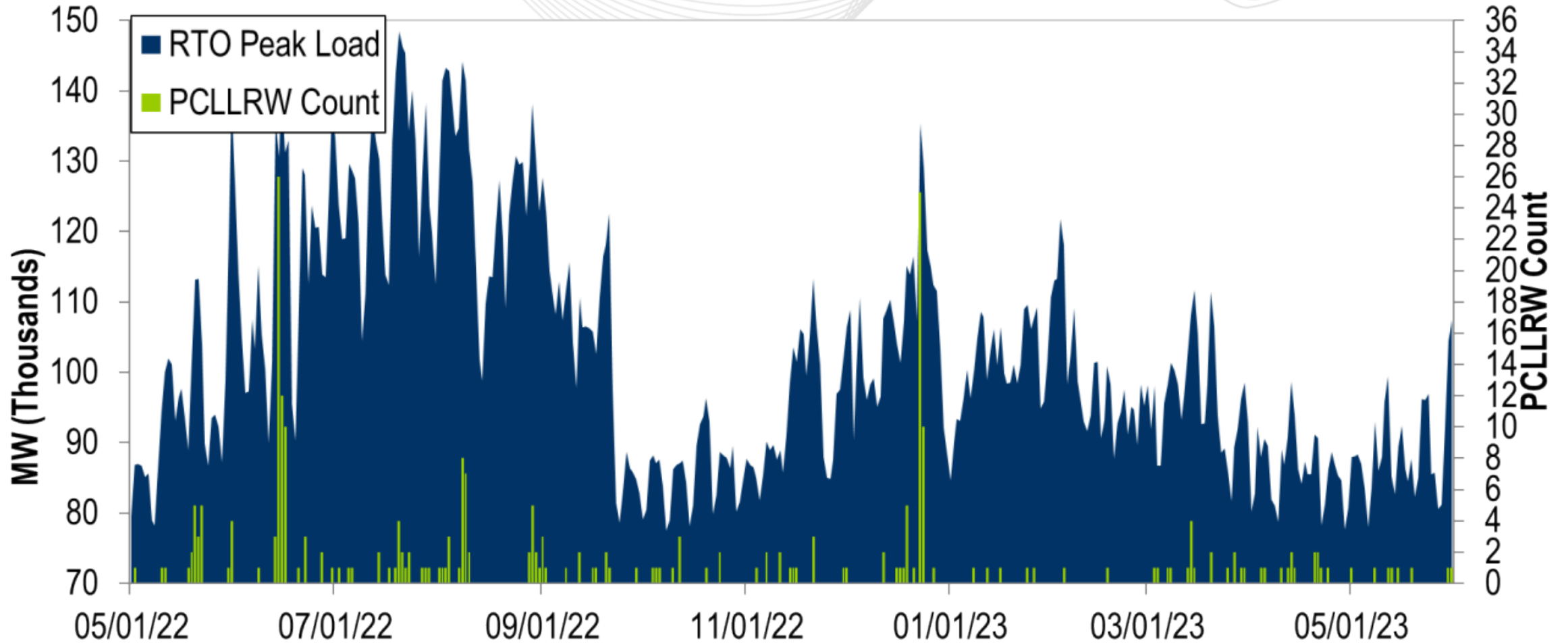
Goal Measurement: Balancing Authority ACE Limit (BAAL)

- 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 4.79% or 9,629 MW.
 The 13-month average total outage rate is 17.19% or 34,681 MW.

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



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