



System Operations Report

George Chu

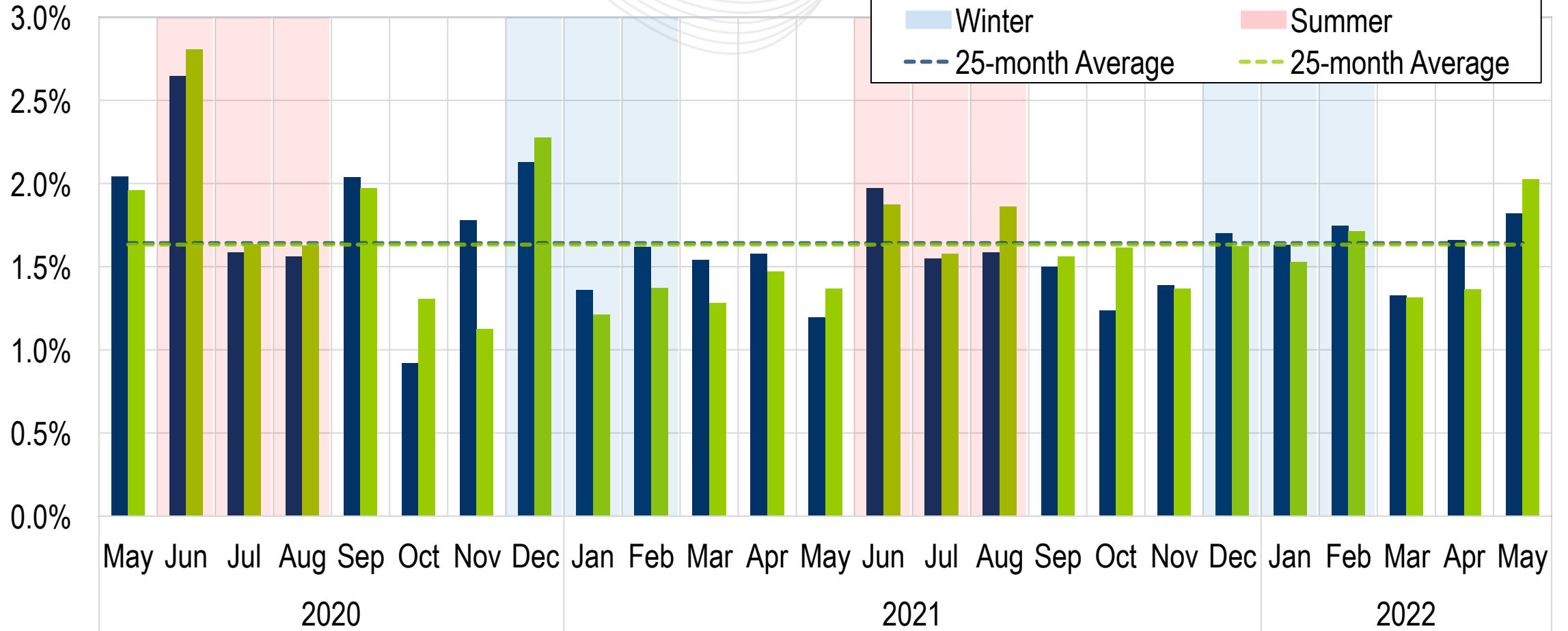
Lead Engineer, Markets Coordination

MC Webinar

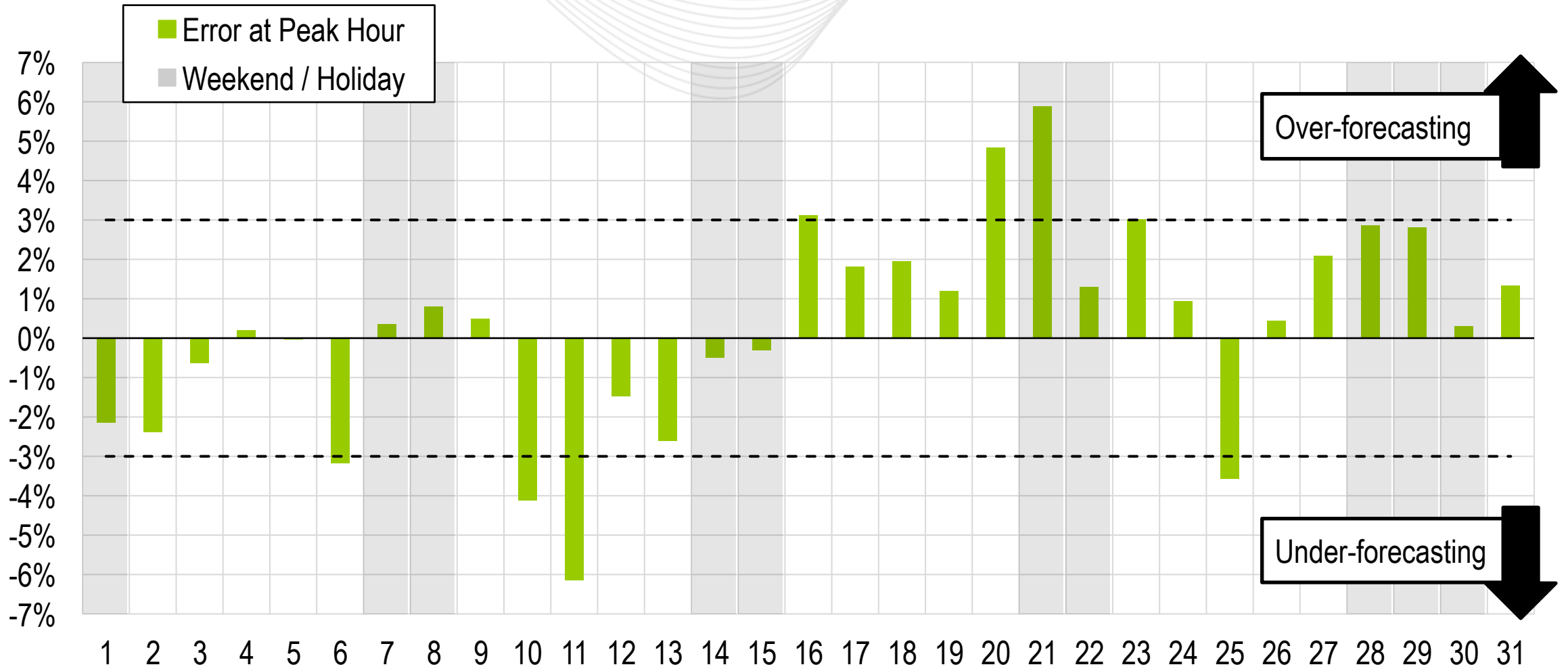
June 27th, 2022

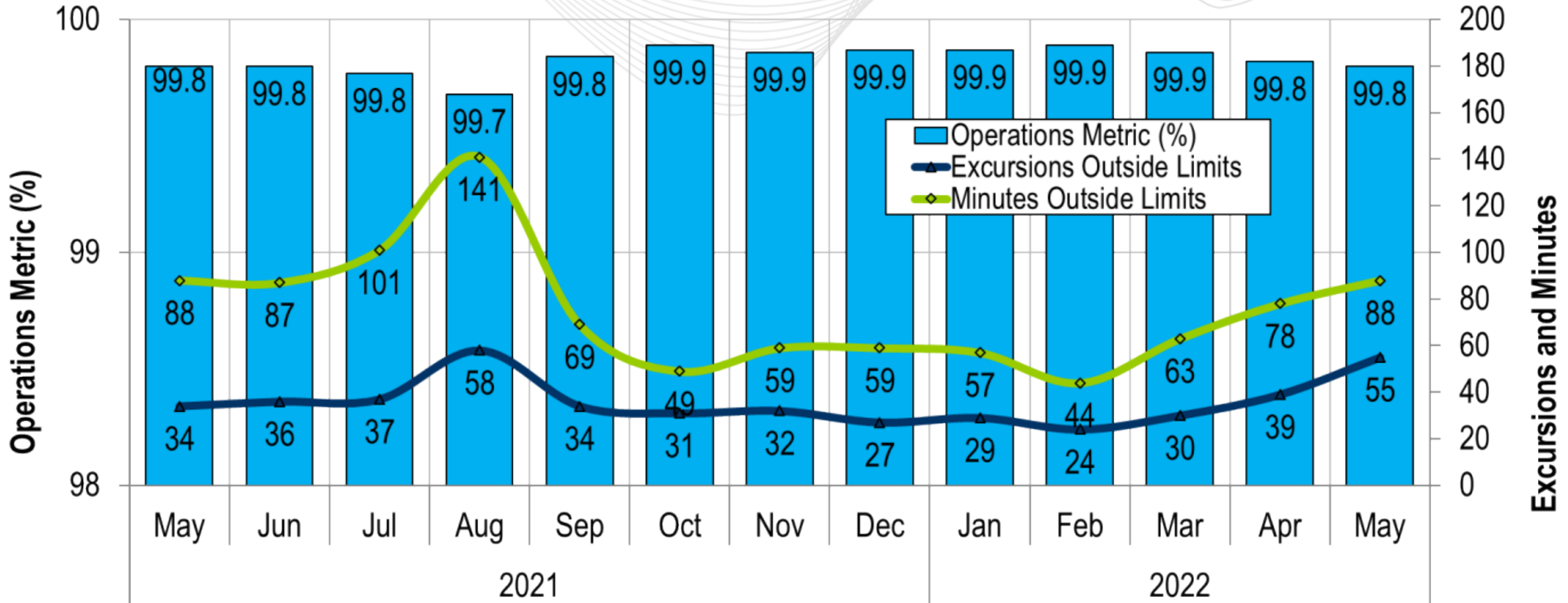
May 2022
 Hourly Error: **1.82%** Peak Error: **2.03%**

■ All Hours ■ Peak Hours Only
■ Winter ■ Summer
- - - 25-month Average - - - 25-month Average



Daily Peak Forecast Error (May)

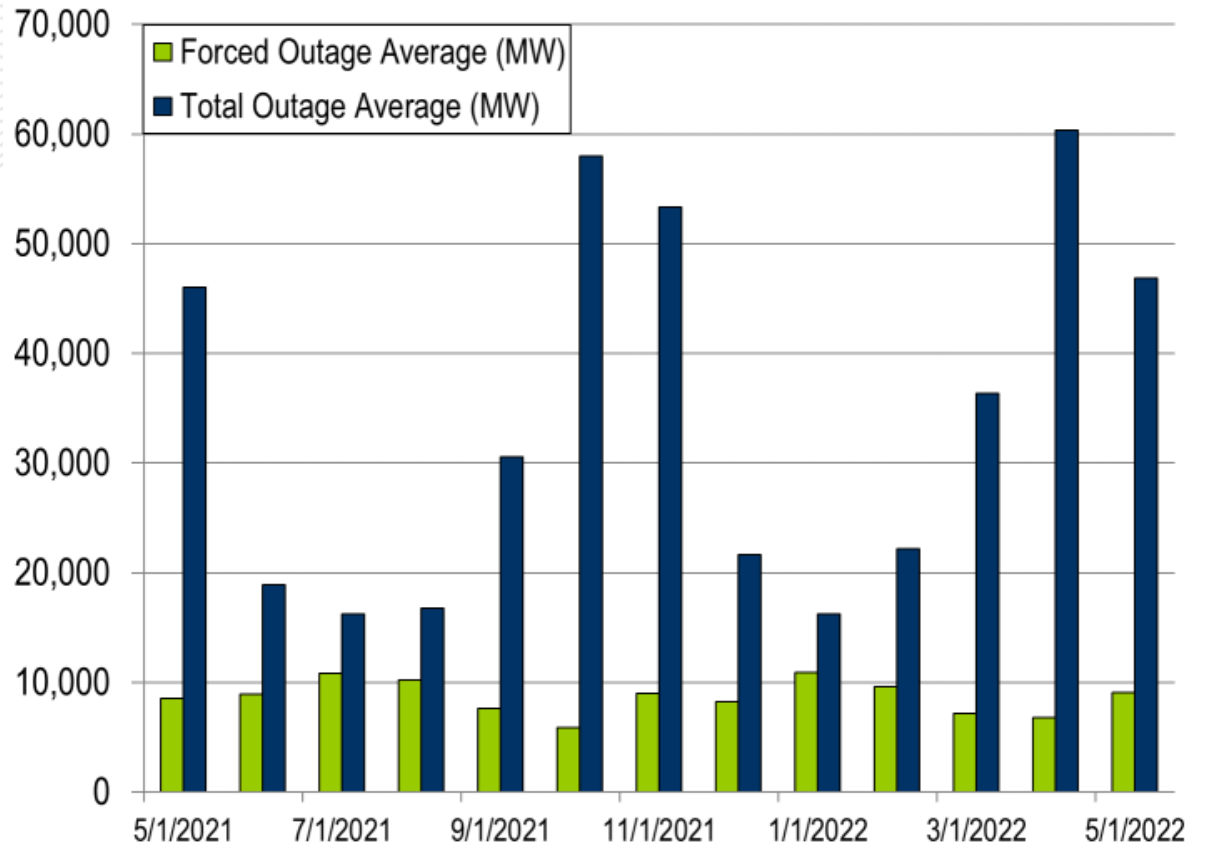
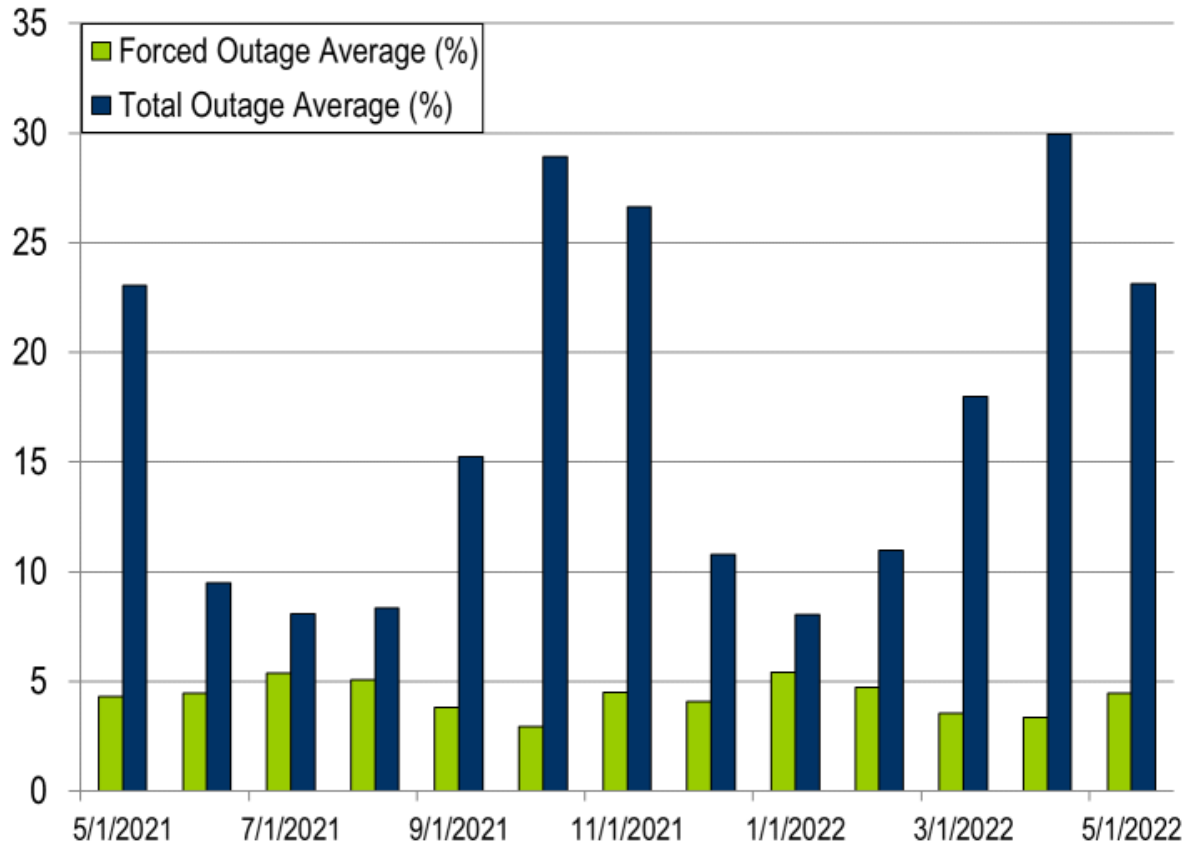




PJM's BAAL performance has exceeded the goal of 99% for each month in 2022.

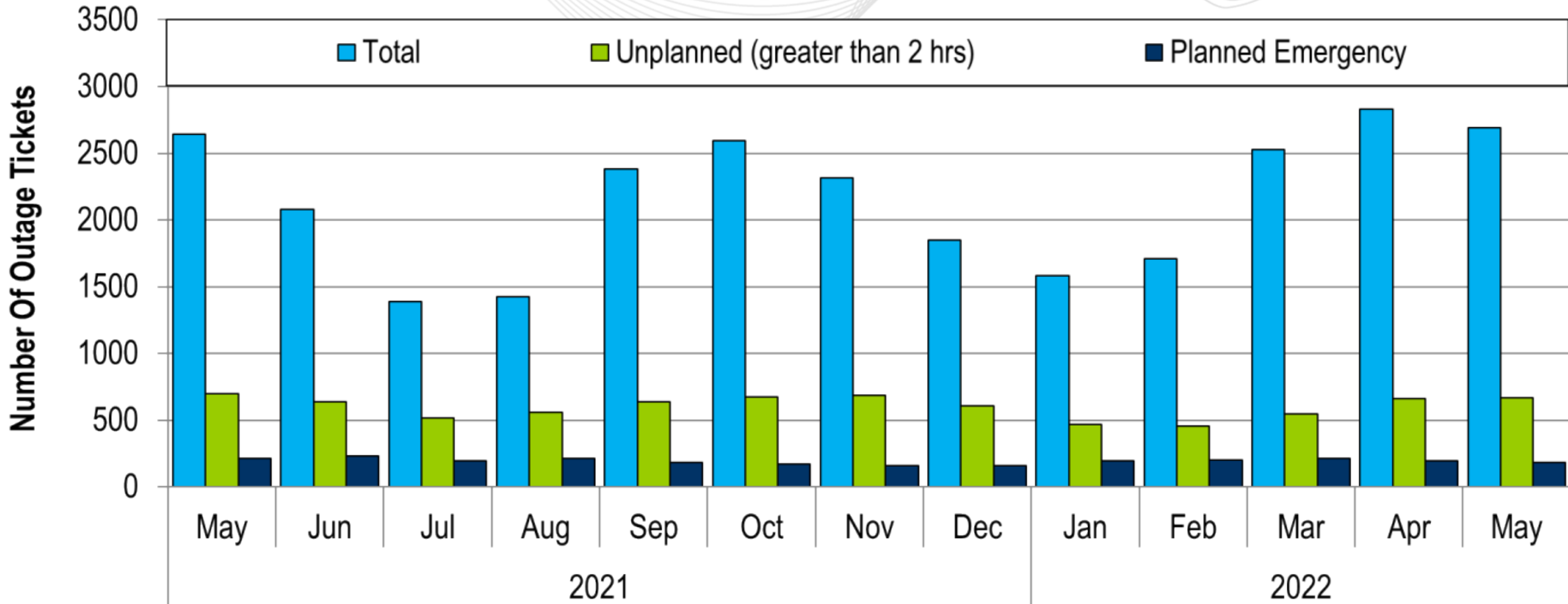
- Four spinning events
- Three reserve sharing events with the Northeast Power Coordinating Council (NPCC)
- The following Emergency Procedures occurred:
 - 24 Post-Contingency Local Load Relief Warnings (PCLLRW)
 - 4 Hot Weather Alerts

- 1 Shortage Case Approved
- The approved Shortage Case occurred on:
 - 05/16/22:
 - 1 Shortage Case for 15:59
 - Unit trip
 - Large interchange swing while load was ramping up



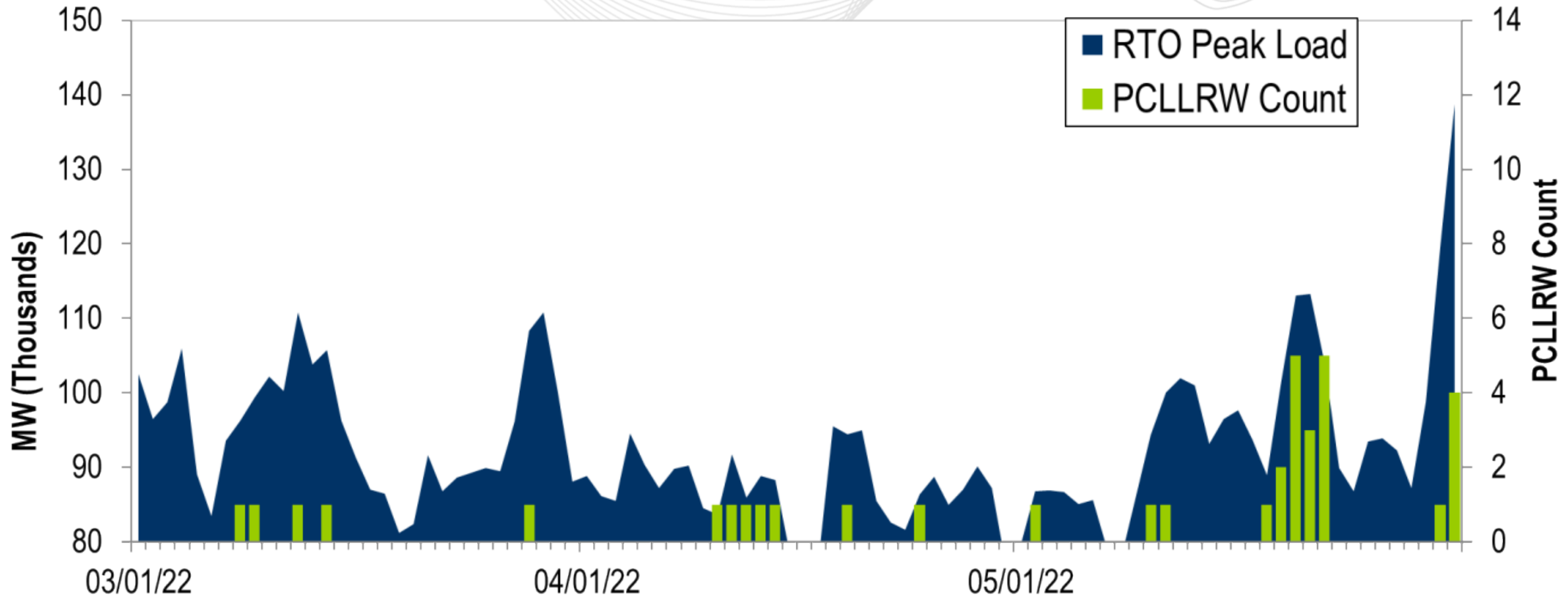
The 13-month average forced outage rate is 4.32% or 8,685 MW.
 The 13-month average total outage rate is 16.99% or 34,139 MW.

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	Tier 1 Estimate (MW)	Tier 1 Response (MW)
1	05/16/22	15:32:51	15:43:56	00:11:05	RTO	1490.0	895.3
2	05/16/22	15:53:53	16:03:27	00:09:34	RTO	1169.6	912.7
3	05/23/22	17:17:50	17:32:50	00:15:00	RTO	757.7	670.4
4	05/26/22	14:09:02	14:15:21	00:06:19	RTO	557.7	360.4

Event	Date	Start Time	End Time	Duration	Region	Tier 2 Assigned (MW)	Tier 2 Response (MW)	Tier 2 Penalty (MW)
1	05/16/22	15:32:51	15:43:56	00:11:05	RTO	295.0	91.8	203.2
2	05/16/22	15:53:53	16:03:27	00:09:34	RTO	618.4	618.4	0.0
3	05/23/22	17:17:50	17:32:50	00:15:00	RTO	1062.2	707.8	354.4
4	05/26/22	14:09:02	14:15:21	00:06:19	RTO	1269.6	1269.6	0.0

*Tier 2 Response is equal to Tier 2 Assigned for events with duration less than ten minutes

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Member Hotline

(610) 666 – 8980

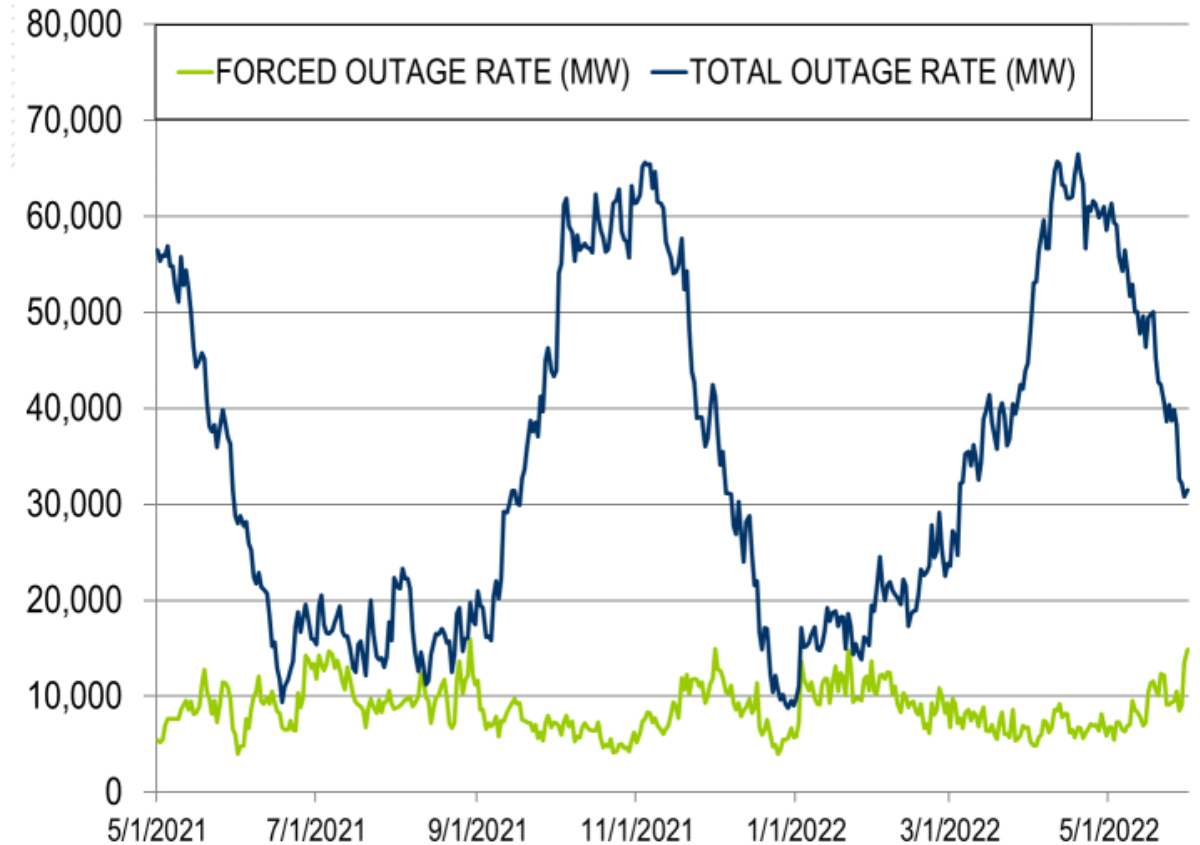
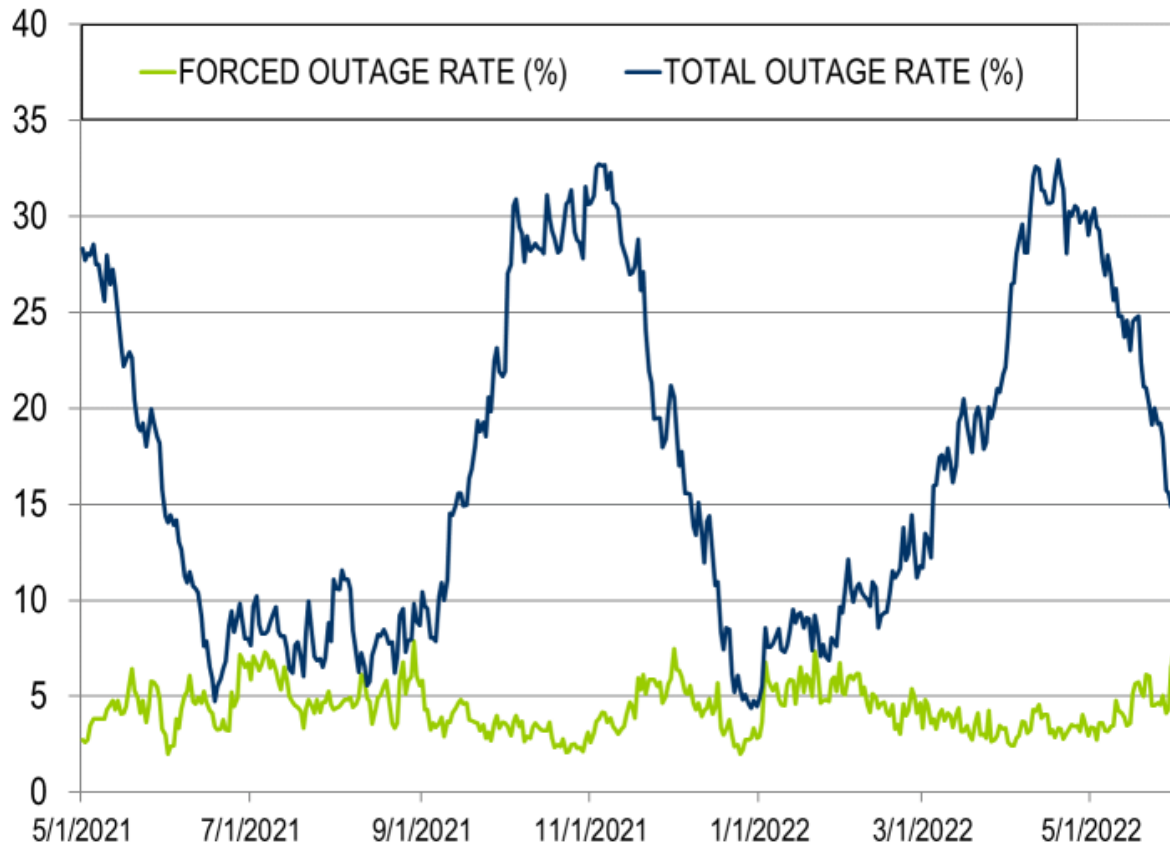
(866) 400 – 8980

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Appendix

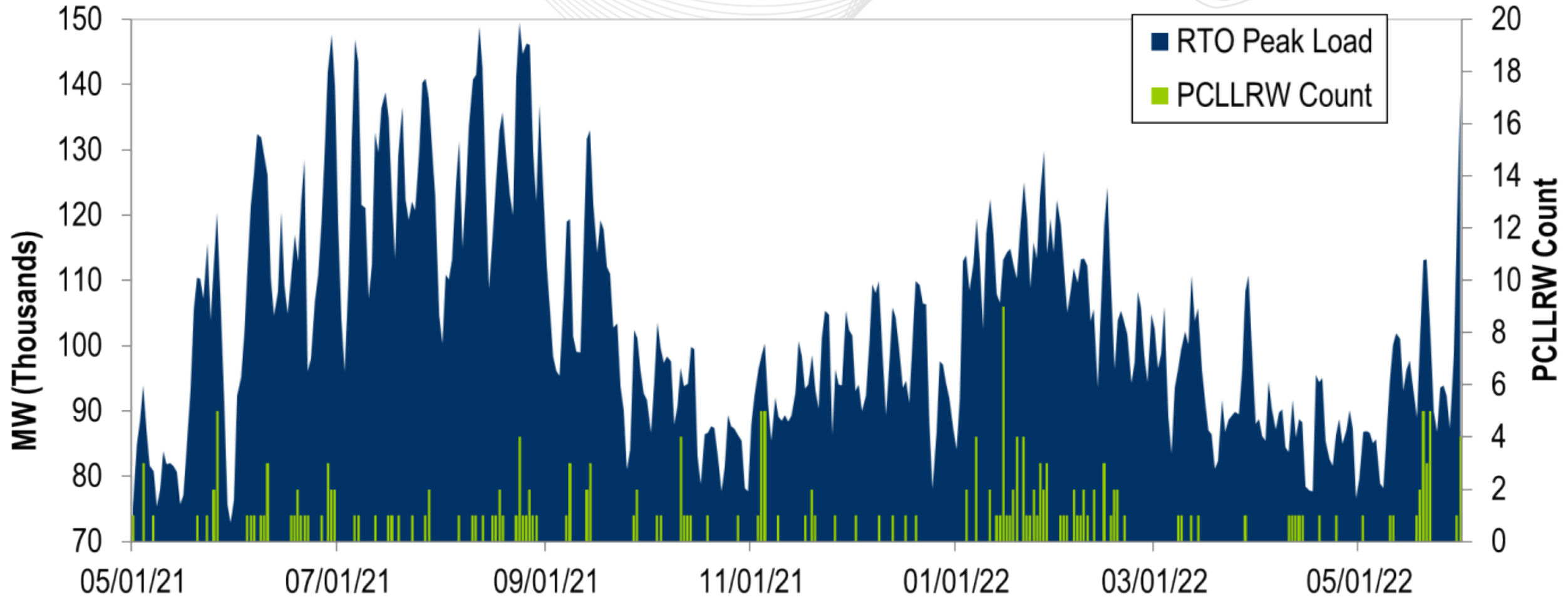
Goal Measurement: Balancing Authority ACE Limit (BAAL)

- 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 4.32% or 8,685 MW.
 The 13-month average total outage rate is 16.99% or 34,139 MW.

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



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POWER GRID
THINK BEFORE
YOU CLICK!**



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malicious
phishing emails.

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