



System Operations Report

Hong Chen

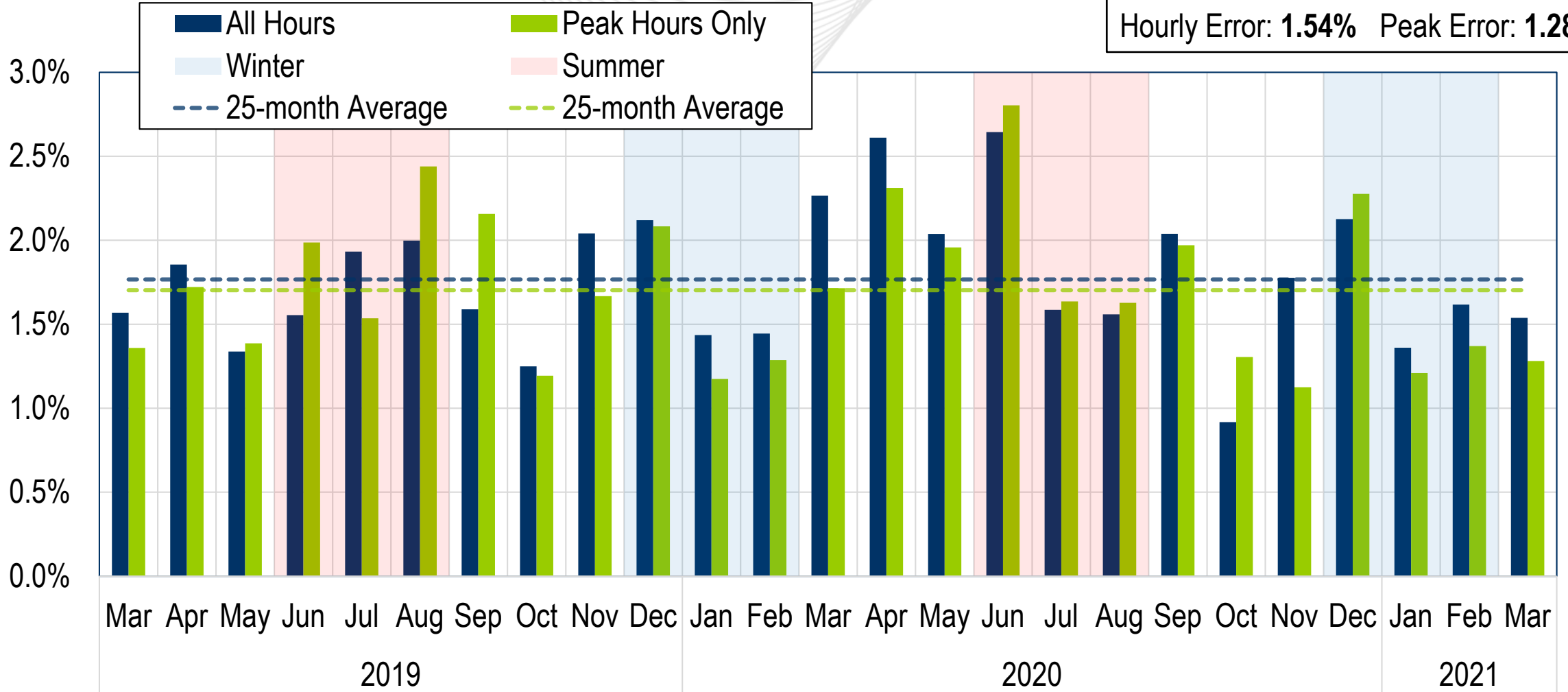
Senior Lead Engineer, Markets Coordination

MC Webinar

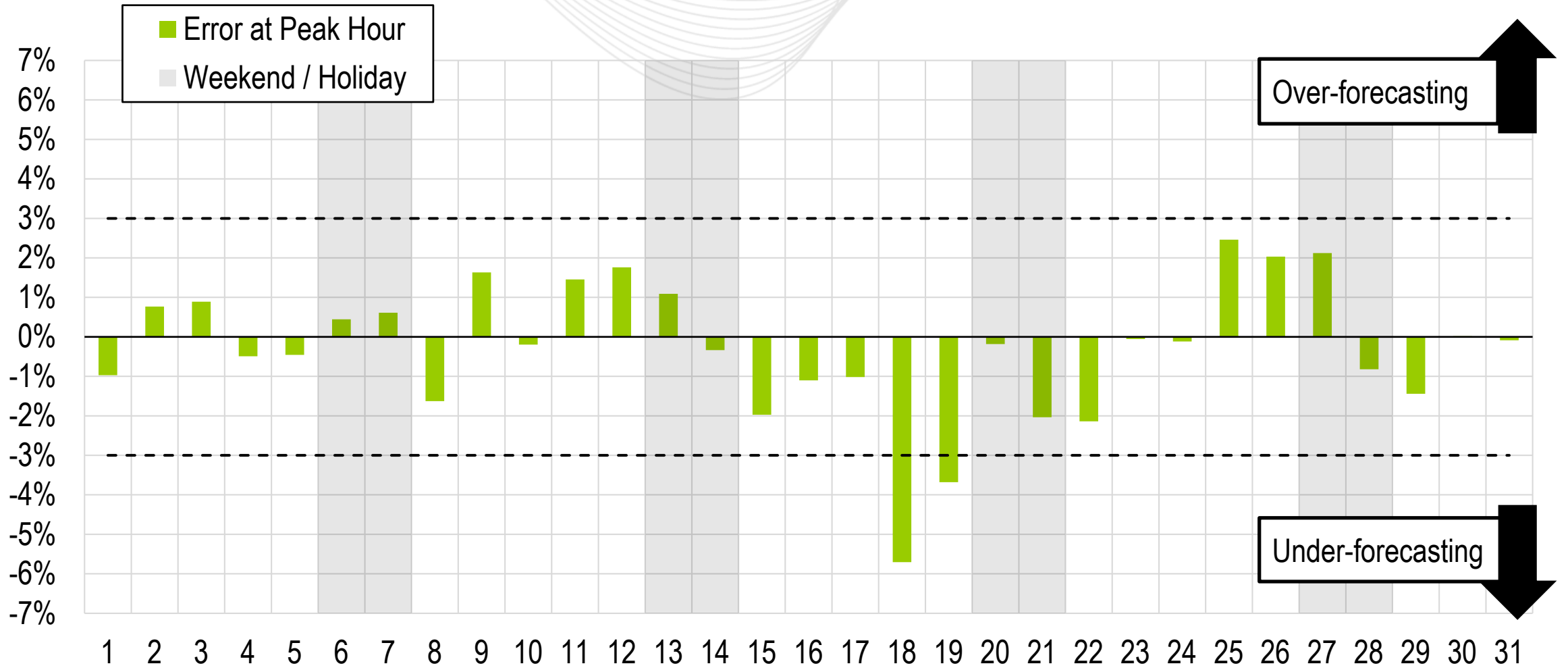
April 19, 2021

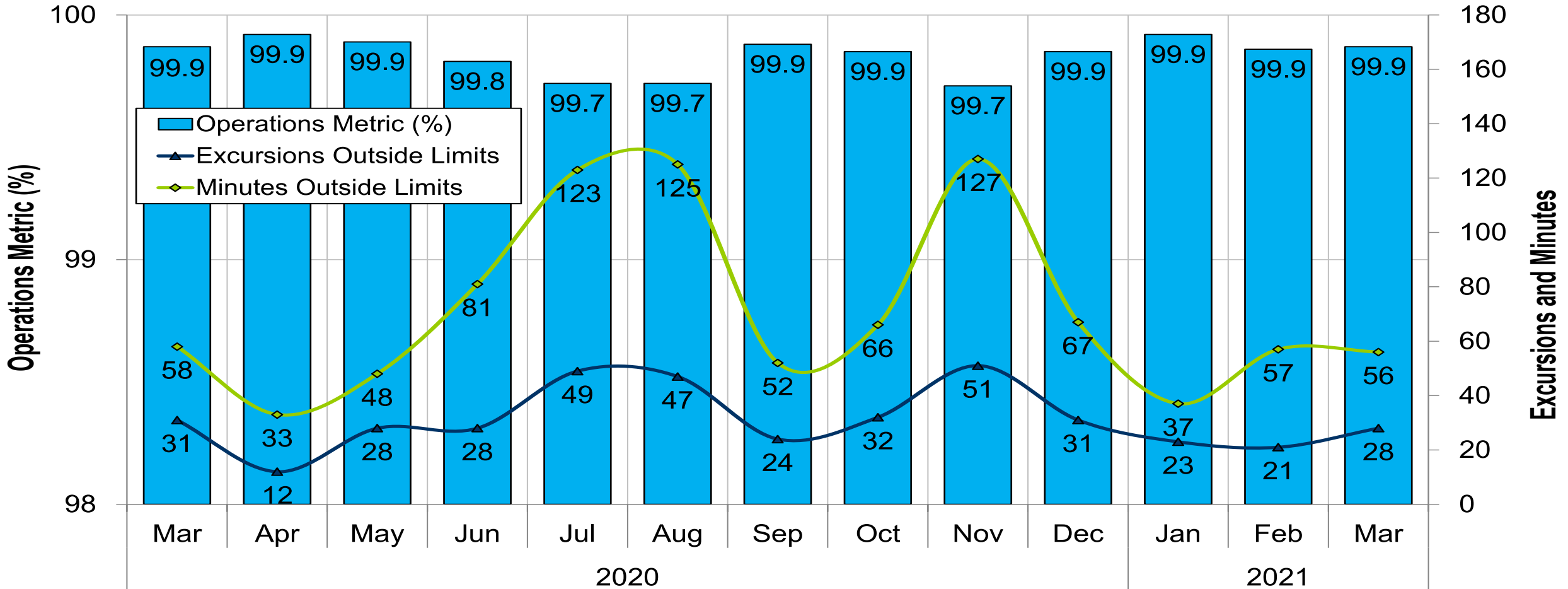
Average Load Forecast Error

March 2021
 Hourly Error: **1.54%** Peak Error: **1.28%**



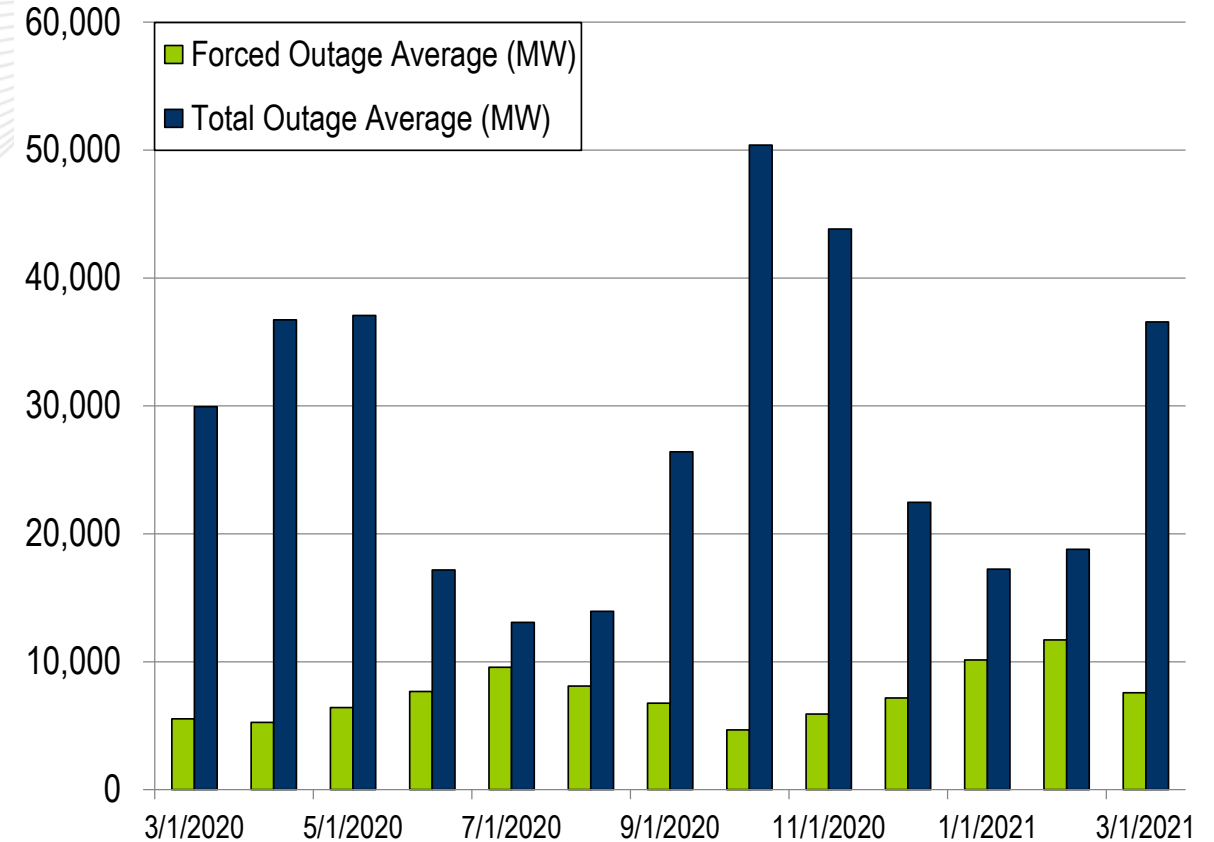
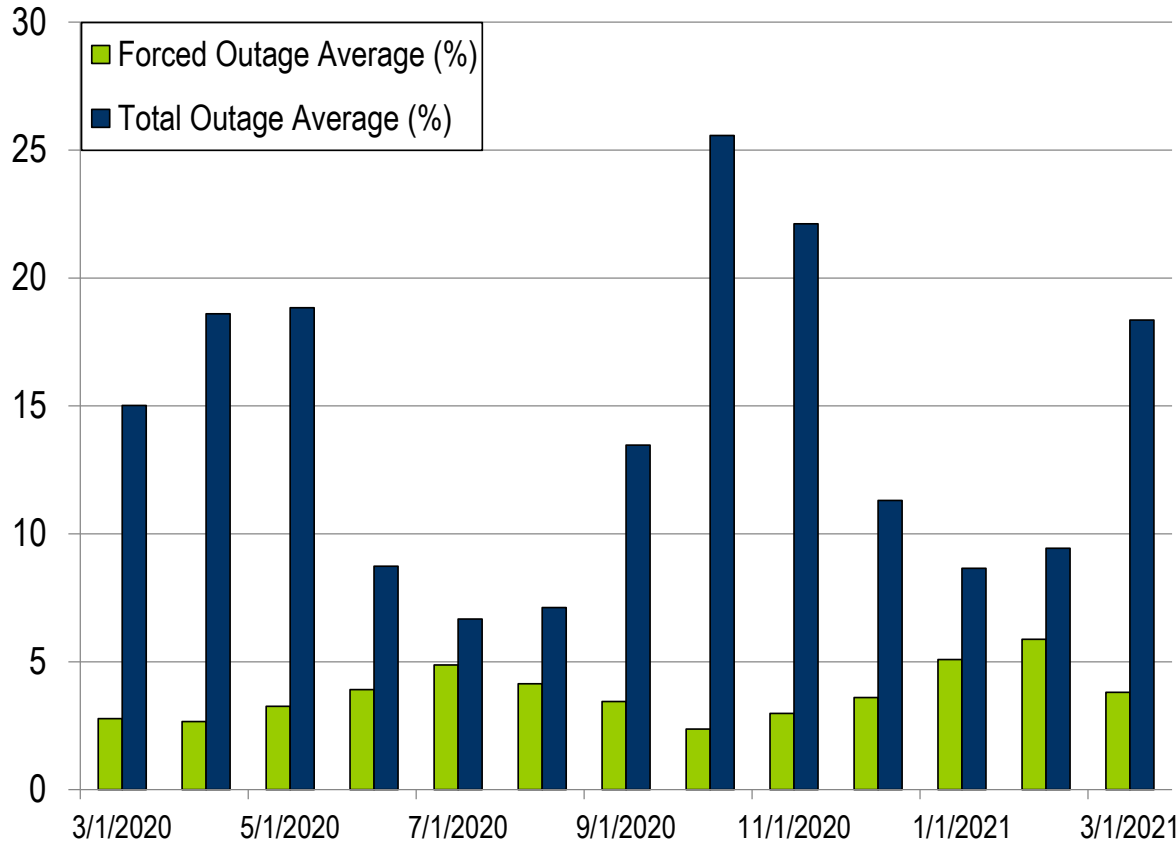
Daily Peak Forecast Error (March)





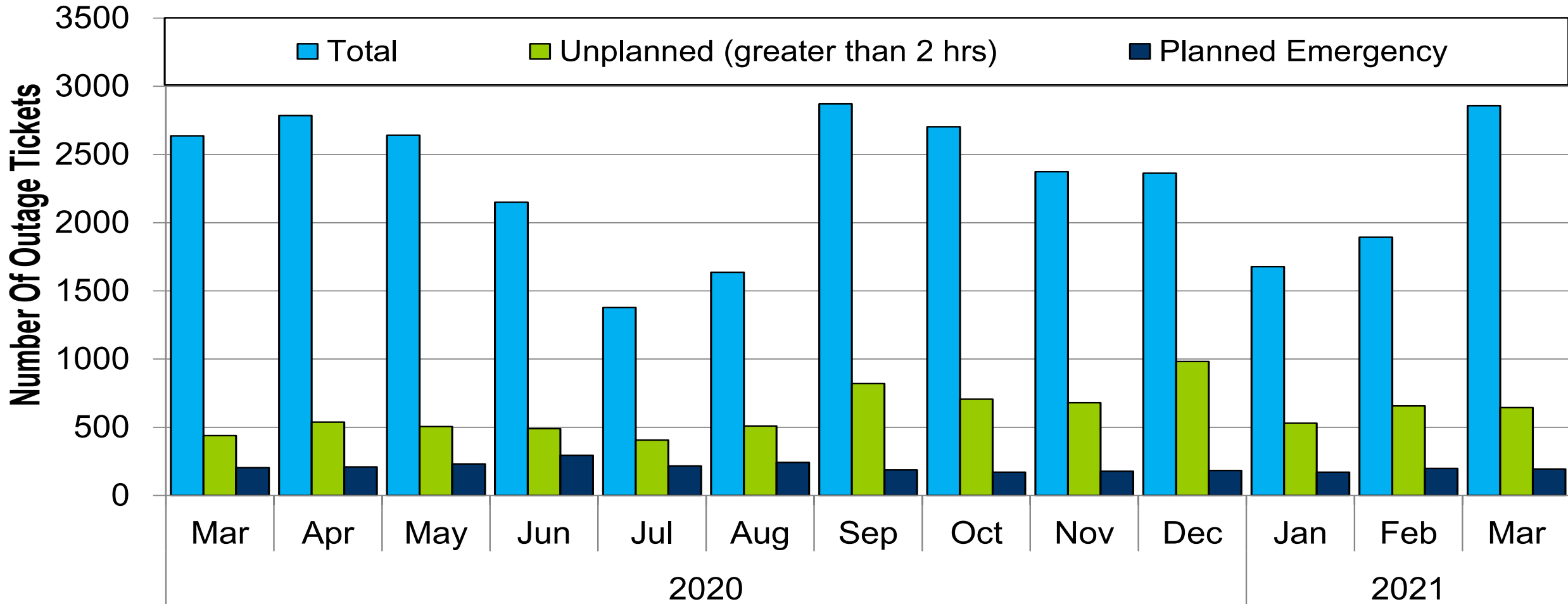
PJM's BAAL performance has exceeded the goal of 99% for each month in 2021.

- One spinning event in the month of March
- One reserve sharing event with the Northeast Power Coordinating Council (NPCC)
- The following Emergency Procedures occurred in March:
 - 12 Post-Contingency Local Load Relief Warnings (PCLLRW)
 - 3 High System Voltages
 - 4 Shortage Cases Approved



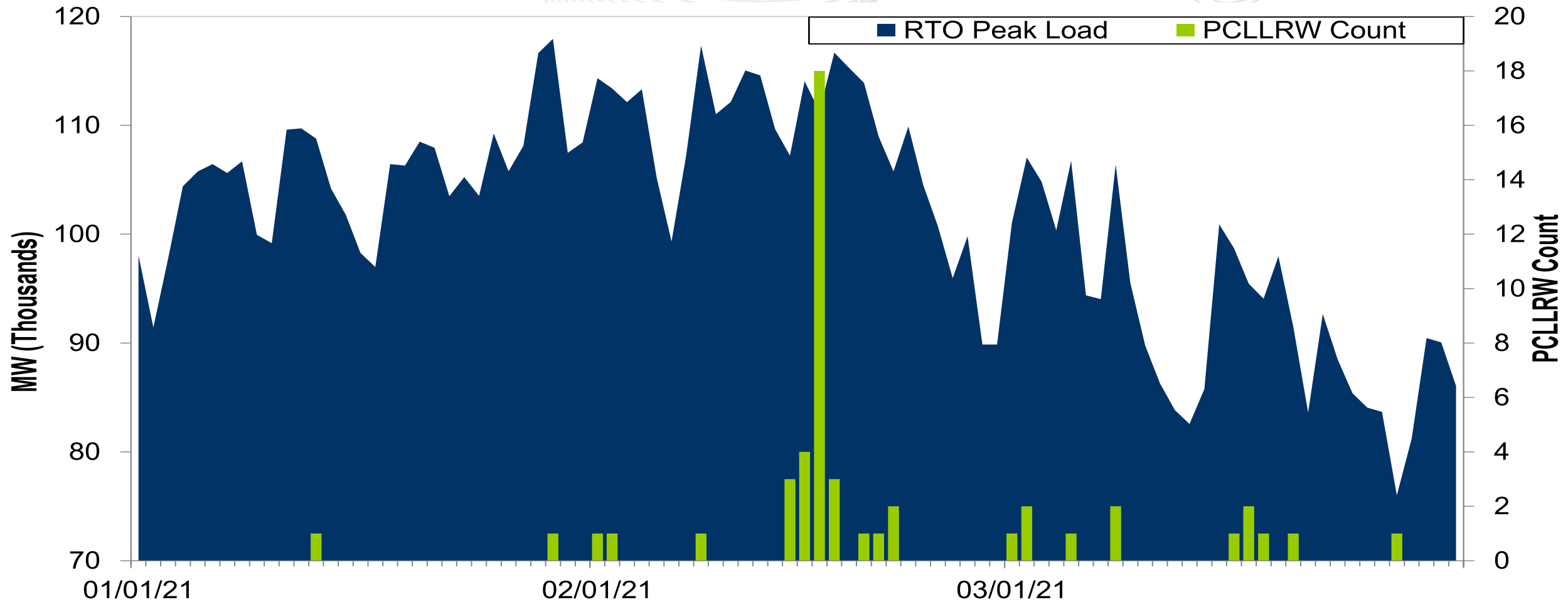
The 13-month average forced outage rate is 3.74% or 7,404 MW.
 The 13-month average total outage rate is 14.16% or 28,009 MW.

2020-2021 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	03/09/21	07:50:52	08:01:48	00:10:56	RTO	1354.9	635.4

Event	Date	Start Time	End Time	Duration	Region	Tier 2 Assigned (MW)	Tier 2 Response (MW)	Tier 2 Penalty (MW)
1	03/09/21	07:50:52	08:01:48	00:10:56	RTO	884.0	540.8	343.2

Presenter:
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Member Hotline

(610) 666 – 8980

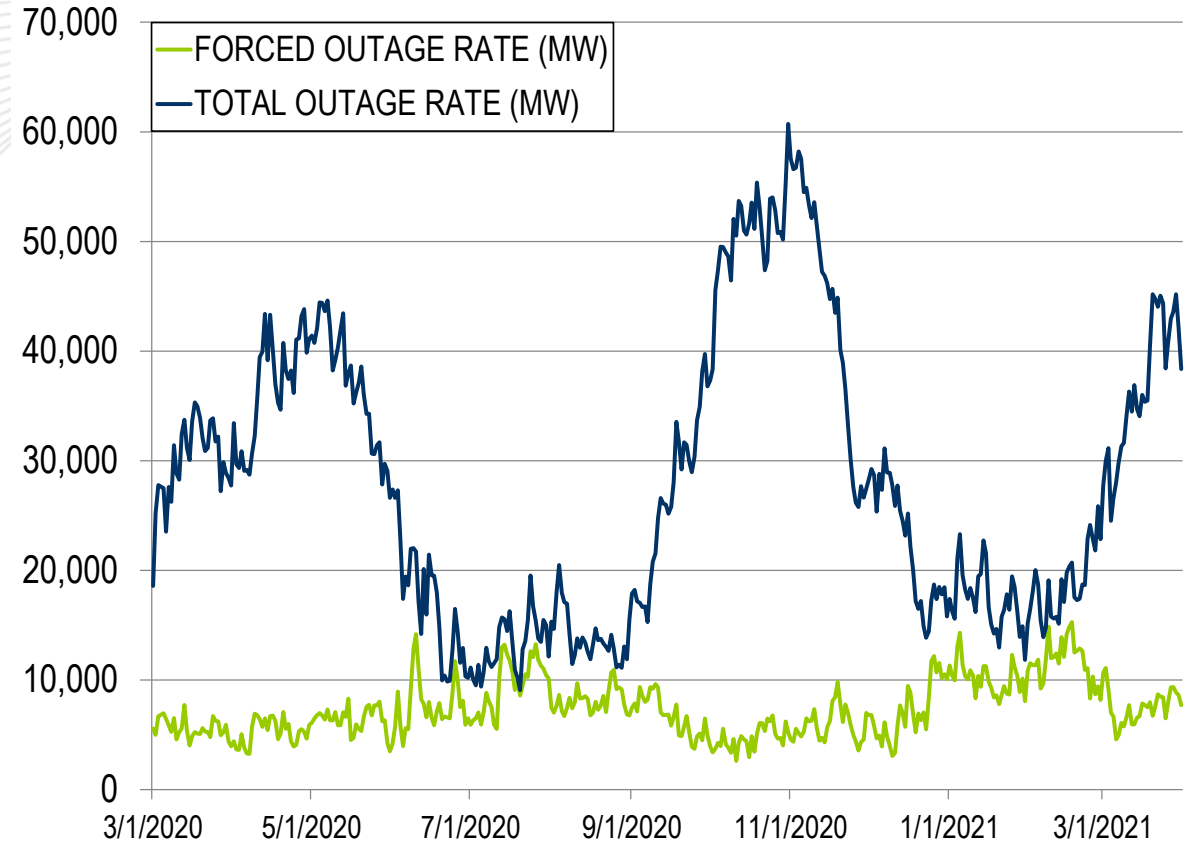
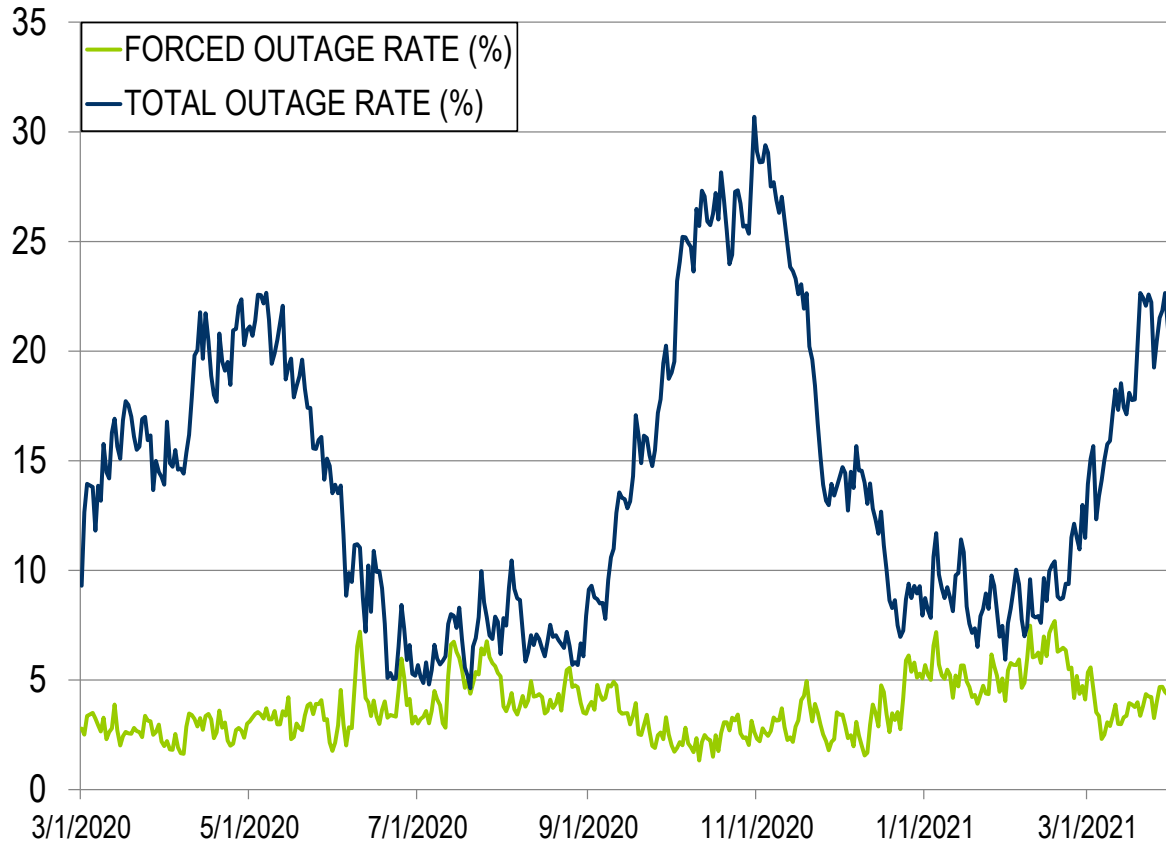
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Appendix

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 3.74% or 7,404 MW.
 The 13-month average total outage rate is 14.16% or 28,009 MW.

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

