

System Operations Report

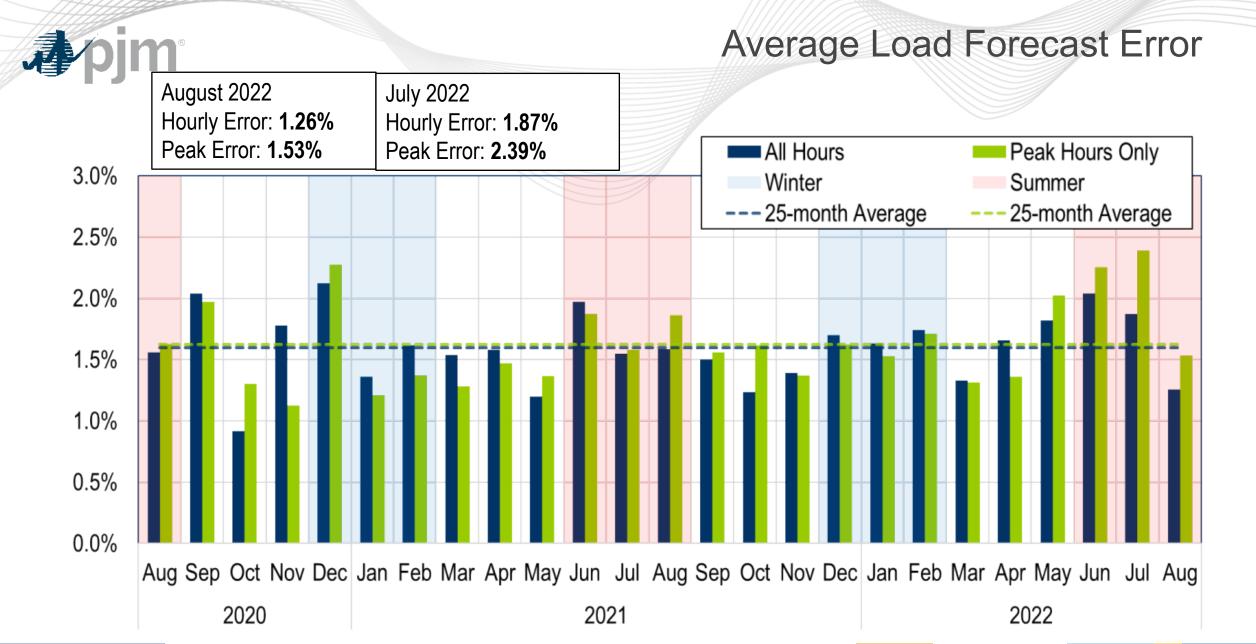
Hong Chen

Principal Engineer, Markets Coordination

MC Webinar

September 19th, 2022

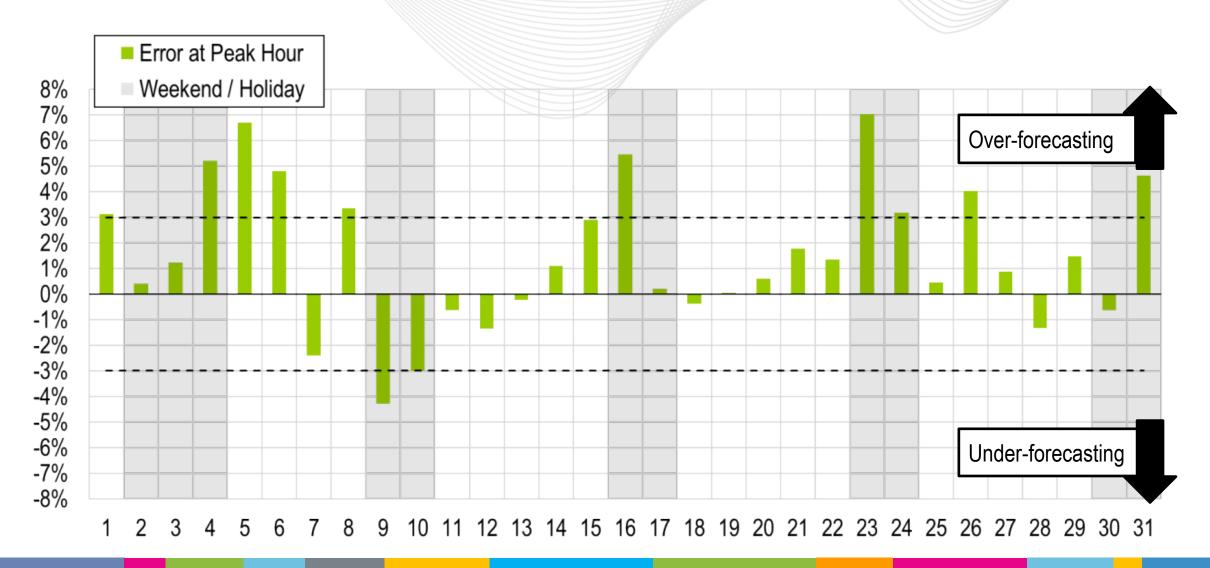
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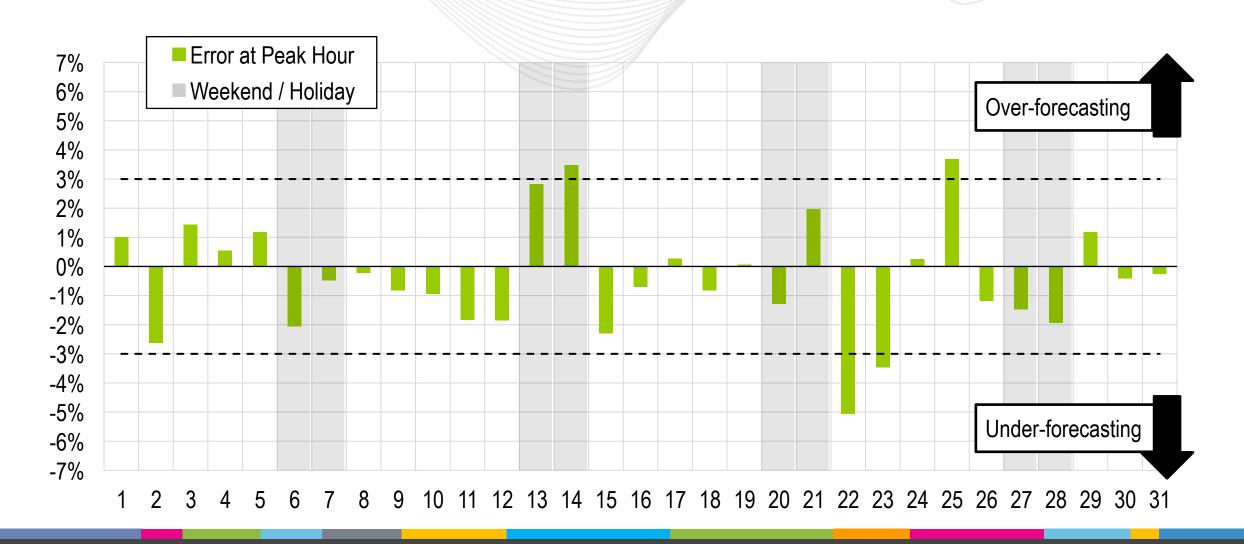


Daily Peak Forecast Error (July)



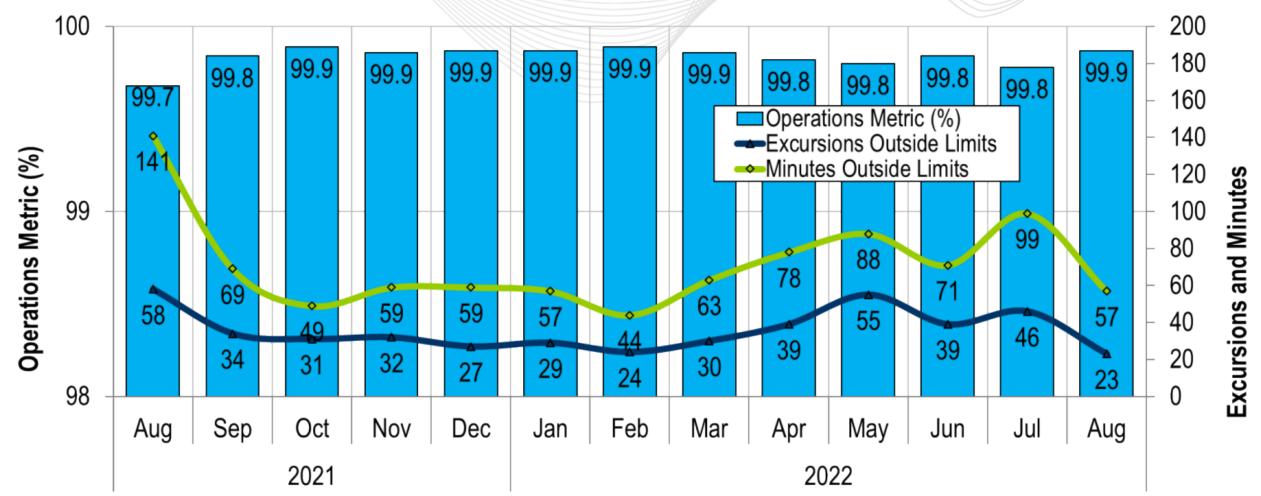


Daily Peak Forecast Error (August)





Monthly BAAL Performance Score



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



- One spinning event
- Five reserve sharing events with the Northeast Power Coordinating Council (NPCC)
- The following Emergency Procedures occurred:
 - 20 Post-Contingency Local Load Relief Warnings (PCLLRW)
 - 10 Hot Weather Alerts



- 1 Shortage Case Approved
- The approved Shortage Case occurred on:
 - -07/28/22:
 - 1 Shortage Case for 16:10 interval
 - Load coming in higher than expected



- Four reserve sharing event with the Northeast Power Coordinating Council (NPCC)
- The following Emergency Procedures occurred:
 - 7 Hot Weather Alerts
 - 1 Geomagnetic Disturbance Warning
 - 34 Post-Contingency Local Load Relief Warnings (PCLLRW)

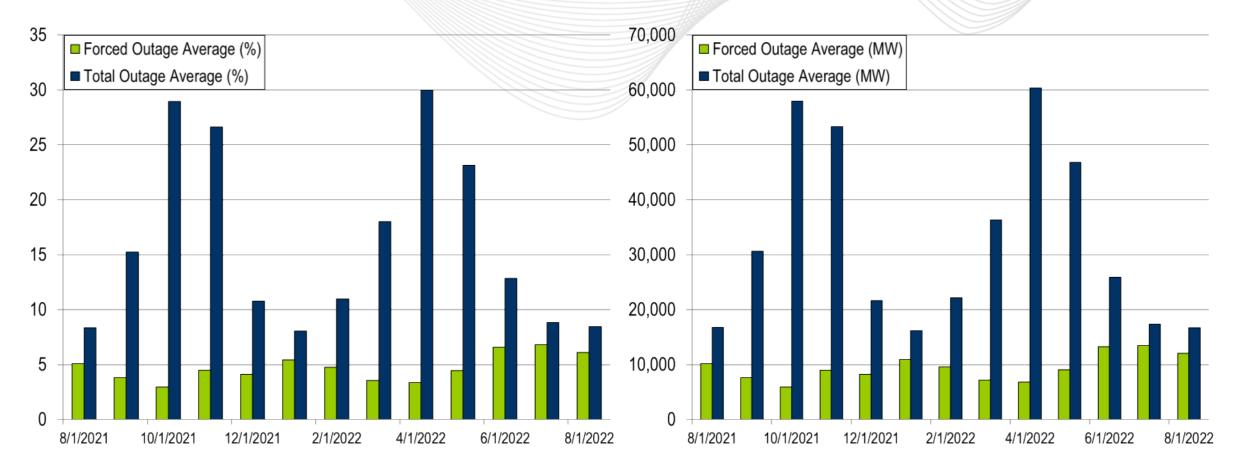


Shortage Case Approvals

No Shortage Cases were approved in August 2022



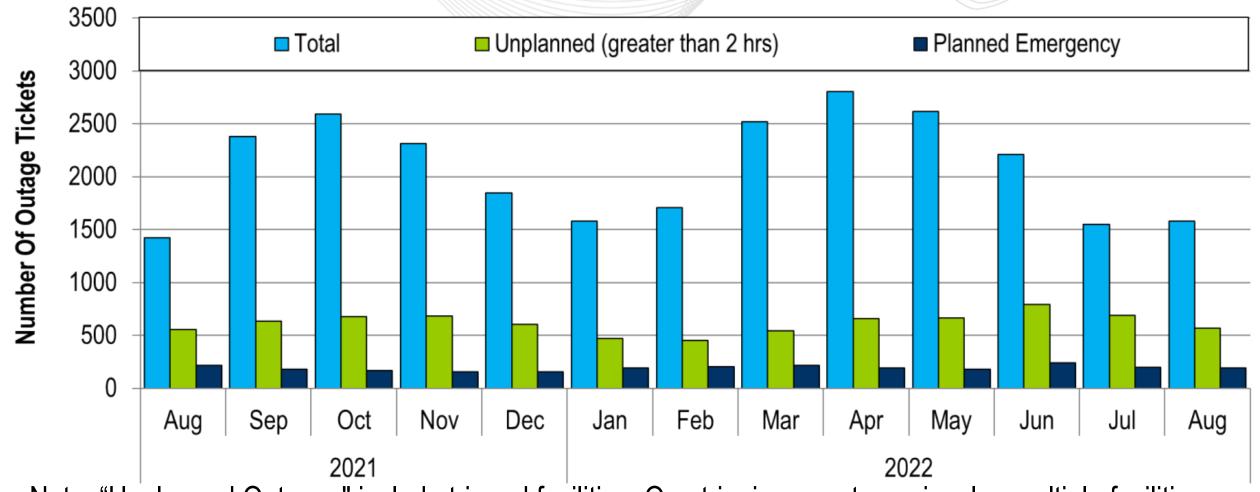
RTO Generation Outage Rate - Monthly



The 13-month average forced outage rate is 4.74% or 9,496 MW. The 13-month average total outage rate is 16.16% or 32,464 MW.



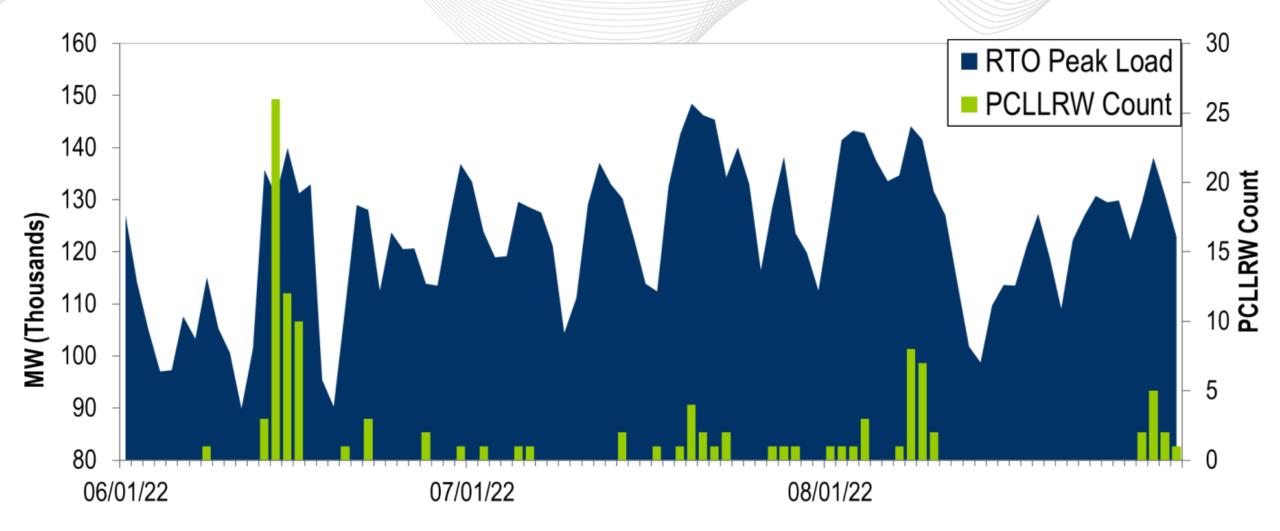
2021-2022 Planned Emergency, Unplanned, and Total Outages by Ticket



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	07/07/22	17:21:41	17:29:33	00:07:52	RTO	805.8	522.0

Event	Date	Start Time	End Time	Duration	Region	Tier 2 Assigned (MW)	Tier 2 Response (MW)	Tier 2 Penalty (MW)
1	07/07/22	17:21:41	17:29:33	00:07:52	RTO	952.2	952.2	0.0

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



No Spin Events occurred in August 2022

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



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System Operations Report



Member Hotline

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Appendix

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Balancing Authority ACE Limit - Performance Measure

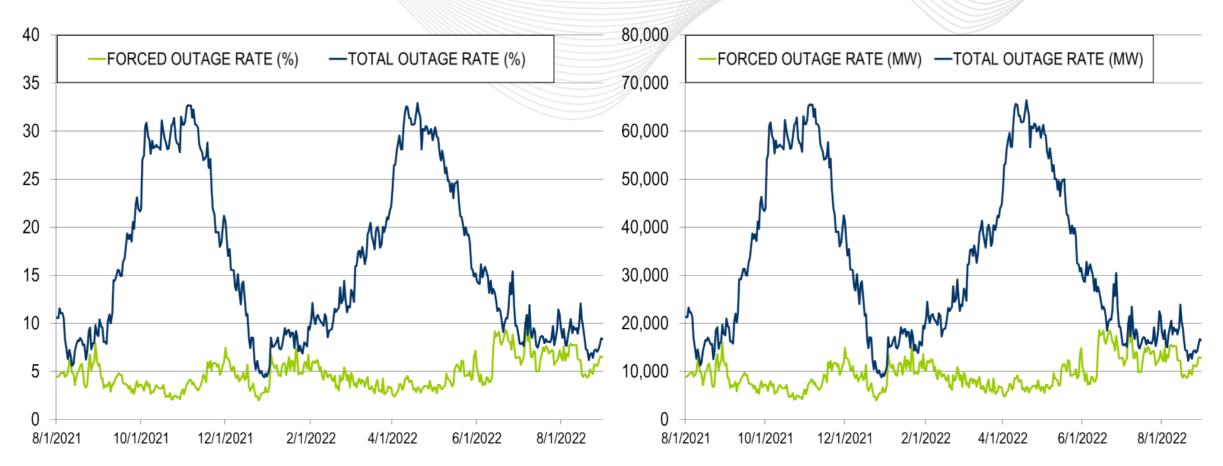
Goal Measurement: Balancing Authority ACE Limit (BAAL)

- 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.

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RTO Generation Outage Rate - Daily



The 13-month average forced outage rate is 4.74% or 9,496 MW. The 13-month average total outage rate is 16.16% or 32,464 MW.



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

