System Operations Report

Hong Chen  
Principal Engineer, Markets Coordination  
MC Webinar  
May 22th, 2023
Average Load Forecast Error

April 2023
Hourly Error: 1.43%  Peak Error: 1.37%

25-month Average
Daily Peak Forecast Error (April)

18:00 Day Ahead Forecast Error

-6%  -5%  -4%  -3%  -2%  -1%  0%  1%  2%  3%  4%  5%  6%

-6%  -5%  -4%  -3%  -2%  -1%  0%  1%  2%  3%  4%  5%  6%

1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30

Error at Peak Hour
Weekend / Holiday

Over-forecasting
Under-forecasting
PJM’s BAAL performance has exceeded the goal of 99% for each month in 2022 and 2023.
The following Emergency Procedures occurred:

- 1 Geomagnetic Disturbance Warning
- 4 High System Voltage Actions
- 13 Post Contingency Local Load Relief Warnings
• There were no shortage cases approved for the month of April 2023
The 13-month average forced outage rate is 4.73% or 9,496 MW.
The 13-month average total outage rate is 17.64% or 35,532 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
• There were no spin events in April 2023

*Response is equal to Assigned for events with duration less than ten minutes
Presenter:
Hong Chen,
Hong.Chen@pjm.com

SME:
Ross Kelly,
Ross.Kelly@pjm.com

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 4.73% or 9,496 MW.
The 13-month average total outage rate is 17.64% or 35,532 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