Average Load Forecast Error

April 2020
Hourly Error: **2.61%**  Peak Error: **2.31%**

- **All Hours**
- **Winter**
- **Summer**
- **25-month Average**

- **Hourly Error:**
  - April 2020: 2.61%
  - Peak Error: 2.31%

- **Seasonal Error:**
  - Winter: [Bars]
  - Summer: [Bars]

- **25-month Average:**
  - [Bars]

- **Months:**
  - April 2018
  - May 2018
  - June 2018
  - July 2018
  - August 2018
  - September 2018
  - October 2018
  - November 2018
  - December 2018
  - January 2019
  - February 2019
  - March 2019
  - April 2019
  - May 2019
  - June 2019
  - July 2019
  - August 2019
  - September 2019
  - October 2019
  - November 2019
  - December 2019
  - January 2020
  - February 2020
  - March 2020
  - April 2020
PJM’s BAAL performance has exceeded the goal of 99% for each month in 2020.
• One spinning event in the month of April

• Five reserve sharing events with the Northeast Power Coordinating Council (NPCC)

• The following Emergency Procedures occurred in April:
  – 12 Post-Contingency Local Load Relief Warnings (PCLLRW)
  – 8 High System Voltages
  – 2 Shortage Cases Approved
The 13-month average forced outage rate is 3.77% or 7,446 MW.
The 13-month average total outage rate is 16.07% or 31,666 MW.
Note: "Unplanned Outages" include tripped facilities. One tripping event may involve multiple facilities.
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Start Time</th>
<th>End Time</th>
<th>Duration</th>
<th>Region</th>
<th>Tier 1 Estimate (MW)</th>
<th>Tier 1 Response (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>04/13/20</td>
<td>15:53</td>
<td>16:01</td>
<td>00:08</td>
<td>MAD</td>
<td>433.0</td>
<td>207.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Start Time</th>
<th>End Time</th>
<th>Duration</th>
<th>Region</th>
<th>Tier 2 Assigned (MW)</th>
<th>Tier 2 Response (MW)</th>
<th>Tier 2 Penalty (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>04/13/20</td>
<td>15:53</td>
<td>16:01</td>
<td>00:08</td>
<td>MAD</td>
<td>623.3</td>
<td>623.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Tier 2 Response is equal to Tier 2 Assigned for events less than ten minutes*
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 3.77% or 7,446 MW.
The 13-month average total outage rate is 16.07% or 31,666 MW.