PJM Summer Operations 2017

Illinois Commerce Commission
May 9, 2017
Kenneth S. Seiler, Executive Director
System Operations
Richard Mathias, Senior Consulate
Current forecasts show a higher probability of above average temperatures for the entire RTO this summer.
### PJM Load and Capacity Comparison: 2017 vs. 2016

#### 2017

<table>
<thead>
<tr>
<th></th>
<th>Forecast Load</th>
<th>Demand Response</th>
<th>Forecast Load Less Demand Response</th>
<th>Installed Generation Capacity (MW)</th>
<th>Reserve Margin (MW)</th>
<th>Reserve Margin Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>152,999</td>
<td>9,120</td>
<td>143,879</td>
<td>* 185,804</td>
<td>41,925</td>
<td>29.1%</td>
</tr>
<tr>
<td></td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td><strong>Reserve Margin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.6%</td>
</tr>
<tr>
<td><strong>Required Reserve Margin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summer installed capacity estimate as of 3/21/17 since the final installed capacity depends on the commissioning of new generation prior to the summer.*

#### 2016

<table>
<thead>
<tr>
<th></th>
<th>Forecast Load</th>
<th>Demand Response</th>
<th>Forecast Load Less Demand Response</th>
<th>Installed Generation Capacity (MW)</th>
<th>Reserve Margin (MW)</th>
<th>Reserve Margin Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>152,131</td>
<td>8,777</td>
<td>143,354</td>
<td>183,912</td>
<td>40,558</td>
<td>28.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reserve Margin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Required Reserve Margin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*www.pjm.com*
New Generation and Transmission

NEW Shickshinny 500 kV substation + NEW Freedom combined cycle (650 MW)

Wildcat Point (1000 MW)

St. Charles (690 MW)

Oregon Energy Center (799 MW)

Warren NEW 230 kV Ring Bus

NEW Bagley-Graceton (230 kV line)

Stonewall Energy (750 MW)

Re-conductor Meadow Lake – Olive (345 kV)

Re-conductor Meadow Lake – Reynolds (345 kV)

NEW Wayne – Byron (345 kV)

Re-conductor Meadow Lake – Olive (345 kV)

Stonewall Energy (750 MW)
ComEd
Bryon to Wayne 345 KV line
• In-service April 7, 2017
• Alleviates heavy west to east congestion

Powerton Bus Reconfiguration
• In-service by June 2017
• Improves area reliability
Summer Preparedness

- Perform a Summer Seasonal Assessment
- Run emergency drills to ensure readiness
- System Operator Training
- Assess the weather outlook daily
- Review projected load and capacity daily
- Coordinate with neighboring grid operators to discuss the season
Security and Resilience is Paramount

Cyber and physical security practices protect information, systems, facilities and the people within the PJM footprint

- PJM entrusted with critical member and market data
- Connected to nearly 1,000 members and 13 states + D.C.

From reliability and efficiency to system resilience