2014 PJM Summer Preparedness

May 14, 2014
Illinois Commerce Commission
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PJM Interconnection LLC
## PJM Load and Capacity Comparison: 2014 vs. 2013

### 2013 (with EKPC)

<table>
<thead>
<tr>
<th>Forecast Load Total (MW)</th>
<th>Demand Response (DR) and Energy Efficiency (EE) (MW)</th>
<th>Forecast Load Less DR and EE (MW)</th>
<th>Installed Generation Capacity (MW)</th>
<th>Reserve Margin (MW)</th>
<th>Reserve Margin (%)</th>
<th>Required Reserve Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>155,553</td>
<td>11,175 (est.)</td>
<td>144,378</td>
<td>186,884</td>
<td>42,506</td>
<td>29.4%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

¹Includes 651MW of Energy Efficiency

### 2014

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<td>157,279</td>
<td>11,160¹ (est.)</td>
<td>146,119</td>
<td>183,220</td>
<td>37,101</td>
<td>25.4%</td>
<td>16.2%</td>
</tr>
</tbody>
</table>

²Includes 522 MW of Energy Efficiency

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2013 Actual Peak Load: 157,141 MW on 7/18/13 at HE 17
**Forecast Load**
Expected peak demand, based on normal weather

**Demand Response**
Contractually interruptible load and other customer load willing to be interrupted at the direction of PJM. Compliance check is performed at end of summer.

**Forecast Load Less Load Management**
Expected peak demand after demand response has been implemented (Net Internal Demand-NID)

**Installed Generation Capacity**
Total MW output of all of the generators that cleared in RPM and are committed to serve PJM load (Installed Capacity)

**Reserve (MW)**
Installed Generation Capacity minus Net Internal Demand

**Required Reserve Margin**
PJM required planning reserve, as determined by the RPM process (Installed Reserve Margin-IRM) -

**Reserve Margin**
Reserve expressed as a percent of Net Internal Demand
Challenges of the New Normal

- Aggressive transmission and generation maintenance to prepare for May 2015 EPA retirement deadlines
- Ongoing system maintenance and upgrades
- Demand Response Impacts
- Load Forecasting Improvements
- Coordination and Communication
- Generation Availability
- Annual DR & operational flexibility
- Review and update emergency procedures and tools
- Gas / Electric Coordination
Installed Capacity in PJM

Coal, 77,496.7, 42%
Gas, 53,425.9, 29%
Hydroelectric, 8,107, 4%
Nuclear, 33,077, 18%
Oil, 11,314, 6%
Solid Waste, 709, 0%
Solar, 83, 0%
Wind, 872, 1%

Wind Dependable Capacity = 872 MW/13%
Solar Dependable Capacity = 83 MW/38%

As of 09/30/2013