February Cold Weather Review

March 3, 2015
TOA-AC
Temperatures

Polar Vortex 1/7/2014

Surface Temperature (F)

11Z Tue Jan 07 2014

2/20/2015

Surface Temperature (F)

12Z Fri Feb 20 2015

WW2010

(http://ww2010.atmos.uiuc.edu)
Atmospheric Sciences, University of Illinois at Urbana-Champaign
## Load Values (MW)

<table>
<thead>
<tr>
<th>Date</th>
<th>Valley</th>
<th>Morning Actual</th>
<th>Morning Forecast</th>
<th>Evening Actual</th>
<th>Evening Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/19/2015</td>
<td>112,141</td>
<td>134,109</td>
<td>134,305</td>
<td>140,860</td>
<td>140,885</td>
</tr>
<tr>
<td>2/20/2015</td>
<td>125,397</td>
<td>143,826</td>
<td>141,851</td>
<td>132,728</td>
<td>132,429</td>
</tr>
</tbody>
</table>

### Top Ten Winter Peaks

<table>
<thead>
<tr>
<th>Rank</th>
<th>Date</th>
<th>Load MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2/20/2015</td>
<td>*143,826</td>
</tr>
<tr>
<td>2</td>
<td>1/7/2014</td>
<td>‡142,863</td>
</tr>
<tr>
<td>3</td>
<td>2/19/2015</td>
<td>‡140,860</td>
</tr>
<tr>
<td>4</td>
<td>1/24/2014</td>
<td>‡137,584</td>
</tr>
<tr>
<td>5</td>
<td>1/28/2014</td>
<td>137,336</td>
</tr>
<tr>
<td>6</td>
<td>2/5/2007</td>
<td>‡136,675</td>
</tr>
<tr>
<td>7</td>
<td>1/8/2015</td>
<td>*136,669</td>
</tr>
<tr>
<td>8</td>
<td>1/30/2014</td>
<td>136,215</td>
</tr>
<tr>
<td>9</td>
<td>1/7/2015</td>
<td>*136,119</td>
</tr>
<tr>
<td>10</td>
<td>1/29/2014</td>
<td>136,020</td>
</tr>
</tbody>
</table>

‡ Includes demand response
* Preliminary telemetered data
† Includes coincident not-yet-integrated zones
## Generator Performance

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Forced Outages - ALL fuel types (MW)</th>
<th>Forced Outage Rate</th>
<th>Total Forced Outages - Gas Units (MW)</th>
<th>% of forced outages due to gas issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/19 Evening</td>
<td>17,500</td>
<td>9.4%</td>
<td>5,700</td>
<td>32.6%</td>
</tr>
<tr>
<td>2/20 Morning</td>
<td>22,800</td>
<td>12.3%</td>
<td>5,100</td>
<td>22.4%</td>
</tr>
</tbody>
</table>

NOTE: All outage numbers are approximate and will be finalized when GADs data is submitted and reviewed.
RTO Total Forced Outages by Fuel Type on 01/08/15 HE 08

Data Set = 18,861 MW

- Coal: 50%
- Natural Gas: 35%
- Nuclear: 2%
- Oil: 0%
- Water: 6%
- Wind: 0%
- Other: 0%
- Solar: 0%
RTO Total Forced Outages by Fuel Type
02/20/15 HE 08

Data Set = 22,800 MW

- Coal: 42%
- Natural Gas: 44%
- Nuclear: 3%
- Oil: 0%
- Water: 3%
- Other: 7%
- Wind: 0%
- Other: 1%
- Solar: 0%
Anecdotal observations

• No major transmission constraints

• Generators did a good job of getting outage information and parameter changes into the system /increased notification information into eDart and/or updating notification parameters to reflect fuel procurement timelines

• Dual fuel unit swapping worked well. Gen Owners kept PJM informed of fuel inventory concerns via SSR, Max Run and email notifications.

• Some gas Gen owners still calling PJM to ask about day-ahead commitments without updating parameters.
  – PJM operators gave proper response: “Update unit parameters and let the system work as designed”