Winter Preparedness of the Natural Gas and Electric Systems

2018-2019 Winter Season

Office of Electric, Gas, and Water
Office of Consumer Services

October 18, 2018
Albany, New York
Natural Gas Winter Outlook

Chris Stolicky
Gas and Water Rates and Supply
Office of Electric, Gas, and Water
Adequate Capacity and Supplies

- Review of expected customer requirements for design weather conditions for this winter
- Review of supplies to meet those customer requirements
- Staff will continue to monitor supply, prices and interruptible customers throughout the winter
National Fuel Heating Degree Days (HDD)
Buffalo, NY - 2017-2018

Winter HDD through 3-31-18
1.5% CTN

January 5th (Fri)
63 HDD
542,313 Dth

January 14th (Sun)
56 HDD
418,876 Dth

January 22nd (Mon)
20 HDD
130,379 Dth

January 11th (Thu)
10 HDD
92,142 Dth

Actual HDD 12 AM - 12 PM
Normal HDD (NOAA 1981-2010)
Working gas in underground storage compared with the 5-year maximum and minimum

billions of cubic feet

Source: U.S. Energy Information Administration
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</thead>
<tbody>
<tr>
<td>Physical Storage</td>
<td>34%</td>
<td>2.22</td>
<td>2.14</td>
<td>2.38</td>
</tr>
<tr>
<td>Hedged Supply</td>
<td>15%</td>
<td>3.06</td>
<td>2.98</td>
<td>2.85</td>
</tr>
<tr>
<td>Flowing Gas</td>
<td>51%</td>
<td>3.14</td>
<td>4.28</td>
<td>3.14</td>
</tr>
<tr>
<td>Average Winter Commodity Price</td>
<td>2.83</td>
<td>3.39</td>
<td>2.85</td>
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**Firm Customers**

New York State Gas Utility Typical 2018-19 Winter Supply Portfolio

- PHYSICAL HEDGES (Storage)
- FINANCIAL HEDGES
- FLOWING
## Statewide Avg. Winter Bills

<table>
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<tbody>
<tr>
<td>$803</td>
<td>$801</td>
<td>-0.3%</td>
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Summary

- NY gas utilities have contracted for adequate capacity and supplies and are ready to meet 2018-2019 winter conditions.
- Commodity prices are projected to be slightly higher compared to last year, but will vary depending on service territory.
- Customer bills this winter are expected to be about the same as last year.
Bulk Electric Systems Preparedness

Vijay Puran
Bulk Electric Systems
Office of Electric, Gas, and Water
New York State Historic Coincident Peaks

Historic Coincident Peaks

Winter

Summer

Record Winter Peak 25,739
Record Summer Peak 33,956
Forecast 24,269

MW

22,000 24,000 26,000 28,000 30,000 32,000 34,000 36,000


Year
### New York Winter 2018/19 Capability & Load

<table>
<thead>
<tr>
<th>NYISO Provided Data</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Generation Capacity</td>
<td>41,539</td>
</tr>
<tr>
<td>New York Special Case Resources (SCRs)</td>
<td>884</td>
</tr>
<tr>
<td>Net Purchase &amp; Sales</td>
<td>1519</td>
</tr>
<tr>
<td>LESS: Total Projected Capacity Outages</td>
<td>(5,618)</td>
</tr>
<tr>
<td><strong>NET WINTER CAPACITY RESOURCES</strong></td>
<td>38,324</td>
</tr>
<tr>
<td>Winter Peak Load Forecast</td>
<td>24,269</td>
</tr>
<tr>
<td>Operating Reserve Requirement</td>
<td>2,620</td>
</tr>
<tr>
<td>Capacity Margin</td>
<td>11,435</td>
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</tbody>
</table>
Major Generation Facilities

- Staff reached out to major generation facility owners located primarily in the Southeastern portion of New York

- Lessons learned and beneficial changes made as a result of the 2013/2014 Polar Vortex are continuing

- On-site storage and replenishment of fuel oil is a critical issue
State Agencies and NYISO Preparations

- State Agencies and NYISO Winter Protocol

- NYISO Winter 2018/2019 Preparations
  - Continue enhancements and activities developed over recent years
    - Monitor fuel availability
    - Share confidential operational information with interstate pipelines
Electric Utility Portfolio
Price Volatility and
Supply Price Outlook

Paul J. Darmetko Jr.
Electric Rates & Tariffs
Office of Electric, Gas, and Water
NYISO Spot Market vs. Utility Full Service Residential Customer Supply Portfolio Volatility
(Statewide 12-month rolling average)
NYISO Day Ahead-Around The Clock Historic Actual Energy Prices vs. NYMEX Futures
Average Energy Price Comparison
Winter Season

New York City LBMP ($/MWH)

NY Hudson Valley LBMP ($/MWH)

NY West LBMP ($/MWH)

NYMEX Futures Dec 2017 - Mar 2018
Day Ahead Market Dec 2017 - Mar 2018
NYMEX Futures Dec 2018 - Mar 2019
Outreach and Education Programs

Sharon Alvaro
Consumer Outreach and Education
Office of Consumer Services
Messages

- Bill management strategies
  - Financial assistance programs
  - Budget billing
  - Payment options

- Energy efficiency tips

- Special customer protections

- Safety information
  - natural gas/electricity
  - carbon monoxide

- Storm preparation
DPS Outreach Efforts

- Educational materials

- Grassroots outreach
  - Events/presentations
  - Websites and toll-free numbers

- Partnerships
  - service organizations
  - government agencies
  - community based groups
Utility Outreach Efforts

- Media Advertisements – print/radio/tv/outdoor
- Website/Social Media/Mobile Applications
- Consumer Education
  - Publications - brochures/newsletters/bill inserts and messaging
  - Events
  - Weatherization kits
- Public Relations
- Outbound calling
- Employee Training and Quality Monitoring