Winter Preparedness of the Natural Gas and Electric Supply for the 2015-2016 Winter Season

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

October 15, 2015
Albany, New York
Natural Gas
Winter Outlook

Daniel J. Wheeler
Gas Policy & Supply
Office of Electric, Gas, and Water
NYMEX Gas Future Prices

History vs. Futures

($/MMBTU)

NYMEX prices as of September 16, 2015

NYMEX Settled

NYMEX Projected
## LDC Commodity Portfolio

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Physical Storage</td>
<td>36%</td>
<td>$3.14</td>
<td>$2.03</td>
</tr>
<tr>
<td>Hedged Supply</td>
<td>12%</td>
<td>$3.56</td>
<td>$3.27</td>
</tr>
<tr>
<td>Flowing Gas</td>
<td>52%</td>
<td>$3.11</td>
<td>$2.55</td>
</tr>
<tr>
<td>Average Winter Commodity Price</td>
<td></td>
<td>$3.17</td>
<td>$2.45</td>
</tr>
<tr>
<td>Percent Change</td>
<td></td>
<td></td>
<td>-15%</td>
</tr>
</tbody>
</table>

### Firm Customers

New York State Gas Utility Typical 2015-16 Winter Supply Portfolio

- **Physical Storage**: 36% of $3.14, Forecast $2.03
- **Hedged Supply**: 12% of $3.56, Forecast $3.27
- **Flowing Gas**: 52% of $3.11, Forecast $2.55

**Average Winter Commodity Price**: $3.17, Forecast $2.45

**Percent Change**: -15%
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<tbody>
<tr>
<td>2014-15</td>
<td>$809</td>
<td>$774</td>
<td>$726</td>
<td>-10%</td>
<td>-6%</td>
</tr>
<tr>
<td>2015-16</td>
<td></td>
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Coordination with Oil Industry

- Interruptible customers must meet certain requirements for alternate fuel inventories so that there are no anticipated problems with fuel switching.

- LDCs will be conducting tests and may inspect alternate fuel burning equipment of interruptible customers where needed to ensure compliance with alternate fuel inventory requirements.

- Staff is in the process of implementing a new communications protocol for this winter season with the following measures:
Summary

- Commodity prices are expected to be lower than last winter.
- Customer bills are expected to be lower this year than last winter, due to lower gas price and a forecast of normal weather usage.
- NY gas utilities have contracted for adequate capacity and supplies and are ready to meet 2015-2016 winter conditions.
Bulk Electric System Preparedness

Leka P. Gjonaj
Electric Bulk Systems
Office of Electric, Gas, and Water
New York State Historic Coincident Peaks

**Winter 2013/2014**
- Record Peak: 25,738 MW

**Summer 2013**
- Record Peak: 33,956 MW

**Winter 2014/2015**
- 24,648 MW

**Summer 2015**
- 31,138 MW

**Winter 2013/2014**
- Record Peak: 25,738 MW

**Winter 2014/2015**
- 24,648 MW
# New York Winter 2015/16 Capability & Load

<table>
<thead>
<tr>
<th>NYISO Provided Data</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Generation</td>
<td>40,938</td>
</tr>
<tr>
<td>New York Special Case Resources (SCRs)</td>
<td>885</td>
</tr>
<tr>
<td>External Purchase Contracts</td>
<td>338</td>
</tr>
<tr>
<td>LESS: Total Projected Capacity Outages</td>
<td>(6,238)</td>
</tr>
<tr>
<td><strong>TOTAL 2015 CAPACITY</strong></td>
<td><strong>35,922</strong></td>
</tr>
<tr>
<td>Load Forecast</td>
<td>24,515</td>
</tr>
<tr>
<td>Operating Reserve Requirement</td>
<td>2,620</td>
</tr>
<tr>
<td>Capacity Margin</td>
<td>8,787</td>
</tr>
</tbody>
</table>
Major Generation Facilities

- Lessons learned and beneficial changes made as result of the 2013/2014 Polar Vortex are continuing
  - Increased pre-winter on-site fuel reserves
  - Firm contracts with fuel oil suppliers to maintain minimum inventory levels
  - More proactive/aggressive replenishment
  - More proactive pre-winter maintenance and facilities preparation

- Staff met with major generation facility owners located primarily on the eastern portion of New York

- On-site storage and replenishment of fuel oil is a critical issue

- State Agencies and NYISO Winter Protocol
  - DPS, DEC, NYSERDA, DOT and NYISO Protocol
  - Provides process for State Agencies and NYISO and generation owner to coordinate and expedite the generation owner fuel waiver request should one be required
NYISO

Winter 2014/2015

- Took numerous actions during weather events
  - Rescheduled planned electric transmission outages to minimize risk
  - Cold weather generator fuel monitoring
  - Out of merit commitments when day-ahead committed units were unable to run
  - Demand Response was notified but not activated

Winter 2015/2016

- Enhanced shortage pricing curves – incentives for generators to meet day-ahead commitments – in effect as of November 4th, 2015
- Increase total reserve requirements – in effect as of November 4th, 2015
- NYISO and interstate pipelines can now share non-public, operational information with each other for the purpose of promoting reliable service or operational planning on either system

Neighboring RTO/ISO

- ISO New England
  - Continued Winter Reliability Program (WRP)
    - Compensation for unused oil inventory
    - Compensation for unused LNG contract volume
    - Demand response
    - Incentives for commissioning dual-fuel capacity

- PJM
  - Enhanced Capacity Performance Proposal to go in effect winter 2016/2017
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)

Coefficient of Variation

Portfolio  Market

NY State Electric Delivery Utility

June 2008 to June 2015

NEW YORK STATE ELECTRIC DELIVERY UTILITY

Department of Public Service
Average Energy Price Comparison
Winter Season

New York City LBMP ($/MWH)
- NYMEX Futures Dec 2014 - Mar 2015: $64.29
- NYMEX Futures Dec 2015 - Mar 2016: $91.06

NY Hudson Valley LBMP ($/MWH)
- NYMEX Futures Dec 2014 - Mar 2015: $63.54
- NYMEX Futures Dec 2015 - Mar 2016: $88.69

NY West LBMP ($/MWH)
- NYMEX Futures Dec 2014 - Mar 2015: $42.43
- Spot Market Dec 2014 - Mar 2015: $44.04
- NYMEX Futures Dec 2015 - Mar 2016: $55.20
DPS Outreach Efforts

- Outreach staff will provide materials on energy assistance, gas safety, and other issues that will be available to community based organizations.
2015-2016 Winter Preparedness

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