New England (ISO-NE) Electric Regions
Overview

Geography

States covered: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont

Reliability region: ISO New England (ISO-NE) sub-region of the Northeast Power Coordinating Council (NPCC)

Balancing authority: ISO New England (ISO-NE)

Load zones: Connecticut, Maine, New Hampshire, Rhode Island, Vermont, Northeastern Massachusetts/Boston (NEMA), Southeastern Massachusetts (SEMA) and Western/Central Massachusetts (WCMA).

Hub: Mass Hub

RTO/ISO

ISO New England (ISO-NE) (established 1997) operates the region's power grid and wholesale electric markets:

- Energy market: two-settlement (day ahead and real-time) spot market with locational marginal pricing (an internal hub, eight load zones and more than 500 nodes),
- Capacity market,
- Forward reserves market,
- Regulation market, and
- Financial transmission rights market.

ISO-NE 2009 State of the Markets Report
Market Monitor: David LaPlante – Internal Market Monitor

Updated September 8, 2009
**Generation/Supply**

Marginal fuel type: natural gas

Generating capacity (summer 2007): 30,879 MW

Very little new generation has been brought on line recently in New England. The ISO states that it, “…has adequate installed capacity to meet regional capacity needs through 2009. The ISO is optimistic that adequate demand and supply resources will be purchased and installed in time to meet the projected capacity needs and the resource adequacy requirements for 2010 and beyond.”

Capacity reserve (summer 2007): 4,736 MW

Reserve margin (summer 2007): 18.1%

**Demand**

All time peak demand: 28,130 MW (set August 2, 2006)

In summer of 2006, demand reached record levels on several occasions due to extremely hot weather.

Peak demand growth: 7.1% (2007-2006) (weather-normalized peak increased by 1.9%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Summer Peak Demand (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>24,116</td>
</tr>
<tr>
<td>2005</td>
<td>26,885</td>
</tr>
<tr>
<td>2006</td>
<td>28,130</td>
</tr>
<tr>
<td>2007</td>
<td>26,143</td>
</tr>
</tbody>
</table>

*Source: Derived from ISO-NE Data*

Load pockets: Southwest Connecticut, Southeastern Massachusetts (SEMA), and Northeastern Massachusetts/Boston (NEMA).
Prices

Annual Average Price (RTO Day-Ahead Mass Hub)

2004: $53.74/MWh
2005: $78.63/MWh
2006: $60.88/MWh
2007: $67.97/MWh
# New England Annual Average Bilateral Prices

## Annual Average Day Ahead On Peak Prices ($/MWh)

<table>
<thead>
<tr>
<th>Zone</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>5-Year Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Hub</td>
<td>$77.39</td>
<td>$91.55</td>
<td>$46.24</td>
<td>$56.18</td>
<td>$52.64</td>
<td>$68.23</td>
</tr>
<tr>
<td>Ny Zone G</td>
<td>$83.51</td>
<td>$100.99</td>
<td>$49.80</td>
<td>$59.48</td>
<td>$56.41</td>
<td>$73.94</td>
</tr>
<tr>
<td>NY Zone J</td>
<td>$94.15</td>
<td>$112.63</td>
<td>$55.77</td>
<td>$65.76</td>
<td>$62.71</td>
<td>$82.84</td>
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<tr>
<td>NY Zone A</td>
<td>$64.02</td>
<td>$68.34</td>
<td>$35.54</td>
<td>$43.89</td>
<td>$41.52</td>
<td>$54.09</td>
</tr>
<tr>
<td>PJM West</td>
<td>$71.15</td>
<td>$83.70</td>
<td>$44.60</td>
<td>$53.68</td>
<td>$51.99</td>
<td>$63.00</td>
</tr>
</tbody>
</table>

*Source: Derived from Platts data.*

*Updated January 11, 2012*
Daily Average of ISO-NE Day-Ahead Prices - All Hours

Source: Derived from Bloomberg data

January 2012

Updated: January 04, 2012
Daily Average of ISO-NE Day-Ahead Prices - All Hours

Source: Derived from Bloomberg data

Updated: January 04, 2012
Eastern Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data
January 2012
New England Electric Market: Last Month’s Eastern Bilateral Prices

Eastern Daily Bilateral Day-Ahead On-Peak Prices

Source: Derived from Platts data

Updated: January 03, 2012
**New England Electric Market: Eastern Implied Heat Rates**

**Implied Heat Rates at Eastern Trading Points - Weekly Avgs.**

Source: Derived from *Platts* on-peak electric and natural gas price data

January 2012

Updated: January 03, 2012
Weekly Generation Output and Temperatures New England

Source: Derived from EEI and NOAA data

Updated: January 05, 2012

January 2012
New England Electric Market: Forward Price Curves

New England Electric Forward Price Curves and Implied Heat Rate

- Electric Price ($/MWh)
- Gas Price ($/MMBtu)
- Implied Heat Rate

Source: Derived from Nymex data

Updated: January 04, 2012