New England (ISO-NE) Electric Regions

This map was created using Platts PowerMap.
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.
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

<table>
<thead>
<tr>
<th></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>
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<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>
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<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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<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>
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<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

March 2012
Daily Average of ISO-NE Day-Ahead Prices - All Hours

Source: Derived from Bloomberg data

March 2012
Daily Average of ISO-NE Day-Ahead Prices - All Hours

Source: Derived from Bloomberg data

Updated: March 06, 2012

March 2012
Eastern Daily Index Day-Ahead On-Peak Prices

Price ($/MWh)

Source: Derived from Platt's data

Updated: March 12, 2012
Eastern Daily Index Day-Ahead On-Peak Prices

Price ($/MWh)

- Indiana Hub
- PJM West
- West New York
- Mass Hub
- Dominion Hub

Source: Derived from Platts data

Updated: March 12, 2012
New England Electric Market: Eastern Implied Heat Rates


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

Updated: March 05, 2012
Weekly Generation Output and Temperatures New England

Source: Derived from EEI and NOAA data

Updated: March 08, 2012
New England Electric Forward Price Curves and Implied Heat Rate

Source: Derived from Nymex data

March 2012