Choosing our Energy Future

Conservation Law Foundation Testimony

The Joint Committee on Telecommunications, Utilities, and Energy

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A Winter Energy Crisis?
Average Residential Customer Monthly Electric Bill in 2014, by State*
(and rank of bill amount among 50 U.S. states and D.C.)
Source: Energy Information Administration
*2014 retail electric prices and 2013 average electric consumption (most recent data)

For a thriving New England
Average Residential Customer Electric Bill in 2014, by Region*

Source: Energy Information Administration

*2014 retail electric prices and 2013 average electric consumption (most recent data)

- Pacific Noncontiguous: $164.41
- West South Central: $130.64
- East South Central: $130.09
- South Atlantic: $128.01
- Middle Atlantic: $115.68
- New England: $115.45
- U.S. Total: $111.71
- West North Central: $107.94
- Mountain: $102.62
- East North Central: $99.67
- Pacific Contiguous: $91.96
ISO-NE Wholesale Real-Time Prices (LMPs, Internal Hub)
Monthly Average

<table>
<thead>
<tr>
<th>Month</th>
<th>2013/2014</th>
<th>2014/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec.</td>
<td>9.85</td>
<td>4.25</td>
</tr>
<tr>
<td>Jan.</td>
<td>16.29</td>
<td>6.56</td>
</tr>
<tr>
<td>Feb.</td>
<td>15.28</td>
<td>12.67</td>
</tr>
<tr>
<td>Mar. through 3/20</td>
<td>14.18</td>
<td>6.18</td>
</tr>
<tr>
<td>Winter (12/1 to 3/20)</td>
<td>13.84</td>
<td>7.39</td>
</tr>
</tbody>
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c/kilowatt-hour
The Path Forward
1. Strategic public investment in the resource with the best rate of return for ratepayers: Energy Efficiency
Source: ISO-NE 2014 Energy Efficiency Forecast
2.
Strategic public investment in electric generation not tied to fossil fuel prices:
Renewables
GWSA CO2e Emission Reduction Targets by Year Compared to Renewable Portfolio Standard

Source: Mass Energy Consumers Alliance
Percentage Change in Share of ISO-NE Fuel Mix
Winter 2015 vs. Winter 2014
December 1 - March 15, ISO-NE Generation by Fuel Type

- OIL
- COAL
- WIND
- SOLAR
- REFUSE
- NUCLEAR
- HYDRO
- GAS

-40% -20% 0% 20% 40% 60% 80%
3. Encourage the electric and gas markets to utilize the infrastructure we have now to meet peak gas demand
LNG Deliveries to New England Pipelines

Source: ISO-NE COO Report, April 10

New England pipeline schedule data provided by Genscape
Dramatic changes in the energy mix

The fuels used to produce New England's electric energy have shifted as a result of economic, technological, and public-policy factors.

<table>
<thead>
<tr>
<th>NET ENERGY</th>
<th>2000</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>15%</td>
<td>44%</td>
</tr>
<tr>
<td>Nuclear</td>
<td>31%</td>
<td>34%</td>
</tr>
<tr>
<td>Renewables</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Hydro</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Coal</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Oil</td>
<td>22%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: ISO-NE Regional Energy Outlook 2015
4.

Need for new gas infrastructure not yet demonstrated, but if it occurs, we should begin with small projects first
5. While *need* is not in evidence, if new pipeline capacity is constructed, do *incremental expansion first* and keep the ratepayers from being stuck with the bill.
Proposed Pipeline Projects

Source: Natural Gas Association
www.clf.org

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