Connecting the Dots: Major New England Energy Initiatives

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Deputy Commissioner for Energy

Raab Roundtable
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A Few of the Dots...

• RGGI 2016 Program Review
• 3 State Clean Energy RFP
• CT Comprehensive Energy Strategy
• CT Governor’s Council on Climate Change
• IMAPP
RGGI 2016 Program Review

• Commitment to program review in 2016
• Key topics:
  – Program successes, areas for improvement
  – Opportunities for further reductions post-2020
  – Other program elements
  – Compliance with Clean Power Plan
Modeled RGGI CO₂ Caps

- RGGI Cap (CPP Ref)
- 2.5% Cap Decline 2024
- 2.5% Cap Decline
- 5% Cap Decline
Projected RGGI Allowance Prices

- CPP N+E
- CPP E
- CPP N+E 2.5%
- CPP N+E 2.5% 2024
- CPP E 2.5% 2024
- CPP N+E 5%
- CPP 5% CCR

Price in 2012$/Ton vs. Year:

- 2016
- 2018
- 2020
- 2022
- 2024
- 2026
- 2028
- 2030
- 2032
“The 3 State Clean Energy RFP remains a high priority effort for the Commonwealth of Massachusetts and the states of Connecticut and Rhode Island. The Clean Energy RFP evaluation team is providing this update to provide bidders and stakeholders with the latest information available on the status of the RFP. The evaluation process is still underway, and bidders will be contacted directly by the Clean Energy RFP evaluation team regarding their proposals, which were solicited to be valid until October 24, 2016 per the RFP. Final results of the RFP will be announced to the public when executed contracts are filed for regulatory review. This website —www.cleanenergyrfp.com— will be updated periodically on the evaluation progress.”
Governor’s Council on Climate Change

Generation Based-Accounting

- 2010 Target
- 2020 Target
- 2050 Target

9% reduction achieved to date (1990 baseline)
Governor’s Council on Climate Change

- Reference case assumptions of nuclear retirements: Millstone 2 in 2035; Millstone 3 in 2045; Seabrook granted 20-year license renewal in 2030.
- Assumes clean generation resources begin to replace natural gas after 2025. By 2050, natural gas produces 5% of MWh, renewables/hydro 75%
- Examples of thermal and transportation measure penetrations:

<table>
<thead>
<tr>
<th>Measure</th>
<th>2015</th>
<th>2030 - 35%</th>
<th>2030 - 45%</th>
<th>2030 - 55%</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger EV sales</td>
<td>2,902 (.1% of fleet)</td>
<td>462,149 (20%)</td>
<td>875,650 (38%)</td>
<td>1,532,388 (67%)</td>
<td>2,184,529 (79%)</td>
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<tr>
<td>Residential ASHP/GSHP</td>
<td>2,934 (.3% therm load)</td>
<td>11,400/yr (18%)</td>
<td>25,100/yr (39%)</td>
<td>38,656/yr (60%)</td>
<td>847,294 (87%)</td>
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<tr>
<td>Commerc’l ASHP/GSHP</td>
<td>111,981 ft² (0.3%)</td>
<td>3.6m ft² (10%)</td>
<td>13.8m ft² (39%)</td>
<td>19.4m ft² (60%)</td>
<td>28.0m ft² (69%)</td>
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CT Comp Energy Strategy, IMAPP

• How to secure more clean energy (hydro, renewables) at least cost & greatest benefit to CT ratepayers, within restructured market?

• How to ensure continued retention of existing nuclear, if nuclear retirement becomes imminent?

• How to maintain affordable electricity prices for economic competitiveness, and to facilitate fuel-switching in transportation and buildings?