Cracking the Code on Net Savings

Northeast Energy Efficiency Partnerships
EMV Forum Annual Public Meeting
Dec. 12, 2013

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Outline of Presentation

• Purpose
  ▫ teeing up the discussion
  ▫ a state “case study”
• Massachusetts and net savings
  ▫ Energy efficiency in MA
  ▫ MA DPU investigation into net savings
    • Methods/ approaches
    • Gross savings and net savings
    • Updating factors
• What is region doing on net savings?
• 2012 NEEP Report on net savings
  ▫ 5 Conclusions and Recommendations
Caveats

• This presentation does not reflect the views of the MA DPU or the MA DPU Commission.
• Presentation does include language from DPU orders, to illustrate state “case study.”
• The process is ongoing in Massachusetts.
Energy Efficiency in MA

- Green Communities Act (2008) (“GCA”)—all available cost-effective energy efficiency
  - GHG reduction requirements, 2020 - 2050
  - EE is largest single bucket of GHG reductions in 2020 Plan
  - Of 25% reduction requirement in 2020 relative to 1990 levels, 7% from energy efficiency plans
- Most recent Three Year Plans in MA nearly $9 billion benefits statewide; $1.5 billion in costs; goal of savings equal to 2.55% of sales by 2015.
MA DPU: Investigating Net Savings

- Why net savings is important
  - MA uses net savings figure for cost effectiveness evaluation
  - Important for both savings and GHG emissions
- D.P.U. 11-120 (Nov. 2011) – Generic proceeding to investigate issues related to energy efficiency, including net savings
  - “As the Program Administrators pursue the goal of acquiring all available cost-effective energy efficiency resources, it becomes increasingly important to ensure the accuracy and reliability of the benefits included in the analysis of program cost-effectiveness.” (at 6)
D.P.U. 11-120

• DPU sought comments on:
  ▫ “(1) the extent to which the existing approaches to estimating net savings produce accurate and reliable results; and
  ▫ “(2) alternate ways to determine net savings estimates that may improve upon the existing approaches.” (at 18)
“... satisfying [the GCA] obligation will require the PAs to adopt innovative approaches to program design and implementation that incorporate multi-year and cross-program strategies.”

“... the current approach used to determine net savings, which focuses on participants in specific programs in specific years, is unlikely to produce sufficiently reliable results for these new and innovative approaches to program design and implementation.”

“... it is appropriate to consider adopting alternate approaches to determining net savings that look at effects that occur over multi-year periods and across programs.”

“In concept, a market-focused approach to determining net savings that examines the level of energy efficiency that would be expected to take place with and without the programs in effect, should improve upon the current approach.” (at 12-13)

Continuing questions... therefore, a working group.
Application of Updated Impact Factors

• Gross savings and net savings
  ▫ Updating the numbers?

• D.P.U. 11-120-A
  ▫ Also addressed whether to apply updated impact factors prospectively or retrospectively
  ▫ Previously – PAs apply updated factors retrospectively
  ▫ DPU Decision: to apply updated net savings factor prospectively

• Broader issue: which savings “figures” to use/when
## Snapshot of the Region

<table>
<thead>
<tr>
<th>State or Region</th>
<th>Type of Policy</th>
<th>Metrics</th>
<th>Type of Savings Reported</th>
<th>Net and Gross Applied for Different Purposes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>IRP</td>
<td>Net Energy Savings Other*</td>
<td>Net</td>
<td>No</td>
</tr>
<tr>
<td>DE</td>
<td>EE Plans (Title 26)</td>
<td>Energy Savings</td>
<td>TBD</td>
<td>Unclear from document</td>
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<tr>
<td>MA</td>
<td>GCA and DPU orders</td>
<td>Net Energy Savings Other*</td>
<td>Net</td>
<td>No</td>
</tr>
<tr>
<td>MA</td>
<td>GWSA &amp; Climate Plan</td>
<td>GHG emissions Other*</td>
<td>Net for original estimates Undecided for reporting</td>
<td>Not determined</td>
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<tr>
<td>MD</td>
<td>EmPower Maryland and PSC Order 84569</td>
<td>Energy Savings Other*</td>
<td>Net and Gross</td>
<td>Yes: Gross for reported; Net for planning and c/e</td>
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<tr>
<td>ME</td>
<td>Triennial Plan</td>
<td>Energy Savings Other*</td>
<td>Net and Gross</td>
<td>Yes: Gross for reported; Net for planning and c/e</td>
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<tr>
<td>NY</td>
<td>EE Portfolio Standard and NYSERDA 3-year plan</td>
<td>Net Energy Savings Other*</td>
<td>Net</td>
<td>No</td>
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<tr>
<td>RI</td>
<td>3-Year Least Cost Procurement Plans</td>
<td>Net Energy Savings</td>
<td>Net</td>
<td>No</td>
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<tr>
<td>VT</td>
<td>State EE Plans</td>
<td>Energy Savings Other*</td>
<td>Net and Gross</td>
<td>Yes: Gross reported to RTO; Net for performance awards but with predetermined FR/SO values</td>
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<tr>
<td>NE-ISO</td>
<td>EE Forecast for Regional Transmission Planning</td>
<td>EE Resources</td>
<td>Net and Gross</td>
<td>No</td>
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<tr>
<td>VT/NH</td>
<td>ISO Transmission Needs Assessment</td>
<td>Projected Peak Electricity Demand</td>
<td>Gross</td>
<td>No</td>
</tr>
<tr>
<td>RGGI</td>
<td>RGGI Draft 2012 Reference Case and Analyses</td>
<td>Includes Projected Generating Capacity additions, CO2 emissions</td>
<td>Varies by state, usually Gross</td>
<td>Varies by state</td>
</tr>
</tbody>
</table>
NEEP 2012 Report on Net Savings

5 Conclusions and Recommendations address:

1. Defining Gross and Net Savings
2. Use of Net Savings
3. Energy Savings Goals and Metrics
4. Role and Methods for Market-Level Net Savings
5. Need for technical discussion across broad stakeholder community to bring parties together
Today’s Discussion

• Address many of the five conclusions/recommendations
• Embody: “5. Need for technical discussion across broad stakeholder community to bring parties together”
• Learn from and reflect with the experts
• What are key questions? What are the goals? What are the next steps?
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