Presentation for Webinar on July Plan Submitted by PAs

Presentation to the EEAC

July 17, 2012
The Three-Year Plan is the most aggressive, coordinated, and innovative integrated energy-efficiency plan in the nation.

- PAs have done extensive review of cost drivers to optimize savings while keeping costs down.
- PAs seek to mine all available cost efficiencies.
- PAs seeking deeper savings in 2013-2015, while continuing to seek additional participants.
- PAs have a continuing commitment to CHP while recognizing its challenges.
Schedule of Presenters

- CHP Strategies & Target Markets: Frank Gundal
- Cost Drivers: Matt Nelson & Marie Abdou
- Pursuing and Capturing Deeper Savings/Cost-Efficiencies: Lynn Westerlind and Frank Gundal
- Performance Incentives: Chris Goulding
CHP Strategies & Target Markets
(See, e.g., Section III.F of July Plan)
Go to Market

- We engage customers with a message of efficiency
- Appropriate technologies are pursued based on both opportunity and customer priorities
CHP in the Sales Process

- Need to build trust and engagement with customer –
  - Far more risk
  - Capital Intensive
  - Long sales cycle
- Conversely need to balance as –
  - Efficiency can change CHP performance
  - Will compete for same access to capital
BCRs are significantly lower than traditional efficiency

Some of the variables affecting BCRs –
- Spark spread (price of gas versus electricity)
- Hours of operation
- Utilization of the waste heat
- Maintenance

Small changes in variables have significant impacts to –
- BCRs and impact to programs
- Green house gas emissions
- Financial viability of project for the customer
BCRs remain challenging

|-----------------------------------|-------------------------|------------------------------------|-----------|------------------------------------------------------|
| **Internal Combustion Engine (ICE)** | 23%- 27%               | 42%- 88%                           | 1.01-2.16 | • DHW  
  • Heat dissipation  
  • Space Heating  
  • HW  
  • DHW reheat  
  • Absorber  
  • Ice Melting  
  • Dehumidification |
| **Gas Turbine**                    | 22%-24%                 | 64%-71%                            | 2.15-2.95 | • Steam  
  • DHW  
  • Space Heating  
  • DHW Reheat |
| **Steam Turbine**                  | 45%                     | 45%                                | 1.28-5.97 | • Process Steam                                       |
| **Micro Turbine**                  | 25.5%-29.9%             | 27.4%- 73.6%                       | 1.23-2.74 | • Space Heating  
  • Process Steam  
  • DHW  
  • Reheat |
In Conclusion

- Need CHP to meet goals
- Aggressively pursuing
  - In talks with multiple sectors including hospital and industrial
- Have leveraged multiple perspectives to promote
  - Vendor engagement
  - Successes over past several years
  - Independent studies such as KEMA
- Will remain a niche product
Cost Drivers
(See, e.g., Section III.D of July Plan)
Introduction

• Increases to costs to achieve can be attributed to several key items
  • The primary driver of costs is achieving aggressive savings; also yields benefits
  • Increased codes and standards increases the baseline and decreases the incremental savings PAs can claim
  • Evaluation impacts (changes in net-to-gross ratios, realization rates, etc)
  • Possible higher customer incentives (especially for gas custom C&I programs) to offset low cost of gas and economic drivers
  • CHP also has a large impact on costs
Five Areas of Continuing Discussion

- PAs and consultants have identified five key areas for future work on cost drivers, including:
  - 1) Standards/baselines
  - 2) EM&V results
  - 3) Lighting
  - 4) CHP
  - 5) New measures/approaches to going deeper

- PAs and consultants will continue to engage on these key topics
Key Recent and Upcoming Dates

- **July 13**: Cut-off for EM&V studies to be included in Plan
- **July 23**: Council meeting
- **July 30**: Council approval or comments to PAs re Plan
- **August 1**: 2011 Annual Reports to be Filed with DPU
- **August 10**: Council meeting
- **August 15**: Draft of TRM 2013- Plan Version
- **September 6**: Proposed full draft of Plan to Council
- **October 2**: PAs to provide final materials to Council for resolution
- **October 31**: Each PA to file final Plan with DPU
Increased Codes & Standards

- Changing standards and the initiatives impacted in 2013-2015 Plan
  - EISA Lighting Standards
    - Residential Lighting, Residential & Low-Income Multi-Family Retrofit, Residential Home Energy Services, C&I Direct Install, C&I Retrofit
  - Furnace and Boiler Efficiency Standards
    - Residential Heating & Hot Water
  - Refrigeration
    - Residential Products, C&I Retrofit
  - Heating & Cooling Equipment
Costs to Achieve Savings

• Cost to Achieve Savings =
  • Total PA dollars spent / Total net savings

• Cost to achieve will increase if:
  • dollars spent increases
  • total net savings decrease

• $/kwh or $/therm can increase even if costs are going down
## Impact of EISA on Lighting Initiative

<table>
<thead>
<tr>
<th>Lighting Initiative using NSTAR &amp; National Grid Data, 2013-2015</th>
<th>Without new EISA standards applied</th>
<th>With EISA standards applied (in current plan)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lighting Initiative Budget</td>
<td>$73,104,047</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Annual Savings (MWh)</td>
<td>374,653</td>
<td>328,025</td>
<td>-12.4%</td>
</tr>
<tr>
<td>Lifetime Savings (MWh)</td>
<td>2,989,991</td>
<td>2,537,985</td>
<td>-15.1%</td>
</tr>
<tr>
<td>Cost per Annual MWh</td>
<td>$195.12</td>
<td>$222.86</td>
<td>14.2%</td>
</tr>
<tr>
<td>Cost per Lifetime MWh</td>
<td>$24.45</td>
<td>$28.80</td>
<td>17.8%</td>
</tr>
</tbody>
</table>

### Lifetime Savings (MWh)

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential</th>
<th>Low-Income</th>
<th>C&amp;I</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 (Actual)</td>
<td>16,000,000</td>
<td>16,000,000</td>
<td>16,000,000</td>
</tr>
<tr>
<td>2011 (Prelim. Actual)</td>
<td>14,000,000</td>
<td>14,000,000</td>
<td>14,000,000</td>
</tr>
<tr>
<td>2012 (MTM)</td>
<td>12,000,000</td>
<td>12,000,000</td>
<td>12,000,000</td>
</tr>
<tr>
<td>2013</td>
<td>10,000,000</td>
<td>10,000,000</td>
<td>10,000,000</td>
</tr>
<tr>
<td>2014</td>
<td>8,000,000</td>
<td>8,000,000</td>
<td>8,000,000</td>
</tr>
<tr>
<td>2015</td>
<td>6,000,000</td>
<td>6,000,000</td>
<td>6,000,000</td>
</tr>
</tbody>
</table>

As lighting standards change, the lighting initiative sees decreasing measure lives and savings, especially for CFLs. Accordingly, this above statewide graph shows a dip in total lifetime savings from 2013 to 2014.
### Impact of Furnace & Boiler Standards on Heating & Hot Water Initiative

(National Grid Data Only)

<table>
<thead>
<tr>
<th>Heating &amp; Hot Water Initiative, 2013-2015</th>
<th>Without new standards applied</th>
<th>With standards applied (in current plan)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Initiative Budget</td>
<td>$43,955,111</td>
<td>$43,955,111</td>
<td>N/A</td>
</tr>
<tr>
<td>Annual Savings (Therms)</td>
<td>5,619,357</td>
<td>4,100,386</td>
<td>-27.0%</td>
</tr>
<tr>
<td>Lifetime Savings (Therms)</td>
<td>100,874,791</td>
<td>72,868,963</td>
<td>-27.0%</td>
</tr>
<tr>
<td>Cost per Annual Therm</td>
<td>$7.82</td>
<td>$10.72</td>
<td>37.0%</td>
</tr>
<tr>
<td>Cost per Lifetime Therm</td>
<td>$0.44</td>
<td>$0.60</td>
<td>38.0%</td>
</tr>
</tbody>
</table>

Furnace and Boiler baselines for standard equipment rose from 78% to 90% efficiency

This increase reduces the incremental savings between a standard boiler or furnace and an energy efficient piece of equipment

Despite constantly adding new, more efficient measures to this initiative (PAs offering rebates for 97% AFUE furnace), pre-2013 savings levels not sustainable
CHP: $/KWh is Not the Best Metric

**Portfolio for 2013-2015 NSTAR & National Grid**

<table>
<thead>
<tr>
<th></th>
<th><strong>BUDGETS</strong></th>
<th><strong>ANNUAL SAVINGS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHP</td>
<td>$37,758,779</td>
<td>332,590 MWh</td>
</tr>
<tr>
<td>% OF STATEWIDE</td>
<td>2.41%</td>
<td>9.2%</td>
</tr>
<tr>
<td>COST OF CHP</td>
<td>N/A</td>
<td>$0.114/kwh</td>
</tr>
<tr>
<td>COST OF TOTAL PORTFOLIO</td>
<td>N/A</td>
<td>$0.442/kwh</td>
</tr>
</tbody>
</table>

- Aggressive CHP Targets, but PAs need to strike a balance
- If CHP is overestimated, rest of portfolio would be under-budgeted
- $/KWh does not capture gas usage as noted earlier
- The data above does not factor in smaller-scale CHP that may be obtained through the low-income program
Adjusted Gross v. Net Statewide Savings Targets

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>2015 STATEWIDE NET SAVINGS AS % OF SALES</th>
<th>2015 STATEWIDE ADJUSTED GROSS SAVINGS AS % OF SALES</th>
<th>2015 STATEWIDE CLIMATE PLAN COMPLIANCE SAVINGS AS % OF SALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTRIC</td>
<td>2.49%</td>
<td>2.75%</td>
<td>2.71%</td>
</tr>
<tr>
<td>GAS</td>
<td>1.06%</td>
<td>1.24%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Adjusted Gross savings represent savings that are not adjusted for free-ridership or spillover rates. Savings are still being achieved but cannot be claimed by PAs.
Budgets

- The PAs will continue to refine budgets to best reflect the information at hand.
- The bulk of PA costs are dedicated to customer incentives. Gas customer incentives as a percentage of the overall budget rose approximately 6% from 2012 to 2013.
- Provides flexibility to incorporate initiatives mid-year in a three-year time span. For example, PAs were able to incorporate a trial for Pre-Weatherization in 2012 after budgets were set.
- Also provides flexibility to add new technologies/measures that were not available or cost effective at the time Plan is filed.
Mass Save Savings through energy efficiency

Budgets by Budget Category

Electric Statewide PA Budgets by Category

- Evaluation and Market Research
- Sales, Technical Assistance & Training
- Participant Incentive
- Marketing and Advertising
- Program Planning and Administration

Gas Statewide PA Budgets by Category

- Evaluation and Market Research
- Sales, Technical Assistance & Training
- Participant Incentive
- Marketing and Advertising
- Program Planning and Administration
• Goals in 2013-2015 represent aggressive efforts by PAs to achieve all available cost-effective energy efficiency through a sustainable effort.

• 2013 represents approximately 15% increase statewide over 2012 MTM goals once 2012 goals are adjusted for latest evaluation impacts.

• CHP presents unique challenges in planning for a three-year timeline and to the costs to achieve.
2010-2015 Electric Savings
(National Grid & NSTAR Data Only)

2012 MTM goals restated with 2013 impacts to show effects of EM&V and changing codes and standards

Result: Lower savings in 2012, higher costs to achieve
Big Picture – Gas

- Gas commodity prices expected to remain low over the duration of the next Plan
- Gas has limited end uses
- Costs to achieve for gas increased across the board in the first three year plan, and this trend is expected to continue
- Despite all these challenges, the PAs have still put forth aggressive goals that increase from 2013 to 2015 that seek to achieve all available cost-effective energy efficiency through a sustainable effort
2010-2015 Gas Savings Data
(National Grid data only)

- 2012 MTM goals restated with 2013 impacts to show effects of EM&V and changing codes and standards
- Result: Lower savings in 2012, higher costs to achieve
- Impact of evaluation results for custom C&I for Columbia Gas and NSTAR would increase the 2012 Adjusted cost per therm even more significantly
### Planning & Budgeting Walkthrough: Low-Income Single Family initiative

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Measures</th>
<th>2011 Est</th>
<th>Jan - May 2012 Actual</th>
<th>2013 Production Goal</th>
<th>2013 Actual</th>
<th>Avg Unit Price</th>
<th>Incentive Goal</th>
<th>Impl Em Fees</th>
<th>Mkt</th>
<th>Total</th>
<th>Gross Annual kWh Saved</th>
<th>Measure Life (years)</th>
<th>Annual kWh Goal</th>
<th>Lifetime kWh Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric - SF</td>
<td>Audits (Baseload)</td>
<td>3,500</td>
<td>2,155</td>
<td>5,172</td>
<td>6,500</td>
<td>$175</td>
<td>$1,137,500</td>
<td>$1,137,500</td>
<td>25</td>
<td>5</td>
<td>162,500</td>
<td>812,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Refrigerator</td>
<td>1,338</td>
<td>830</td>
<td>1,992</td>
<td>2,500</td>
<td>$745</td>
<td>$1,862,500</td>
<td>$93,125</td>
<td>$1,955,625</td>
<td>762</td>
<td>12</td>
<td>1,905,000</td>
<td>22,860,000</td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Electric Wx</td>
<td>18</td>
<td>8</td>
<td>19</td>
<td>40</td>
<td>$4,500</td>
<td>$190,000</td>
<td>$36,000</td>
<td>$216,000</td>
<td>1,616</td>
<td>20</td>
<td>64,640</td>
<td>1,292,800</td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Oil Wx</td>
<td>413</td>
<td>220</td>
<td>528</td>
<td>1,000</td>
<td>$4,500</td>
<td>$4,500,000</td>
<td>$900,000</td>
<td>$5,400,000</td>
<td>224</td>
<td>20</td>
<td>224,000</td>
<td>4,480,000</td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Heating System Retrofit</td>
<td>512</td>
<td>335</td>
<td>804</td>
<td>1,000</td>
<td>$3,330</td>
<td>$3,330,000</td>
<td>$666,000</td>
<td>$3,996,000</td>
<td>132</td>
<td>18</td>
<td>132,000</td>
<td>2,376,000</td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>HPWH - 40 Gallon</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>$3,517</td>
<td>$87,925</td>
<td>$17,585</td>
<td>$105,510</td>
<td>2,712</td>
<td>10</td>
<td>67,800</td>
<td>678,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>HPWH - 50 Gallon</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>$2,317</td>
<td>$57,925</td>
<td>$11,585</td>
<td>$69,510</td>
<td>1,817</td>
<td>10</td>
<td>45,425</td>
<td>454,250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>CFL’s</td>
<td>56,835</td>
<td>31,022</td>
<td>74,453</td>
<td>87,000</td>
<td>$9</td>
<td>$761,250</td>
<td>$761,250</td>
<td>41</td>
<td>6</td>
<td>3,567,000</td>
<td>21,402,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>LED’s</td>
<td>80</td>
<td>192</td>
<td>10,000</td>
<td>$31</td>
<td>$311,300</td>
<td>$311,300</td>
<td>16</td>
<td>645,000</td>
<td>7,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Fixtures</td>
<td>38</td>
<td>0</td>
<td>75</td>
<td>$95</td>
<td>$7,125</td>
<td>$1,425</td>
<td>$8,550</td>
<td>140</td>
<td>7</td>
<td>10,500</td>
<td>73,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Torchiere</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>50</td>
<td>$64</td>
<td>$3,200</td>
<td>$3,200</td>
<td>211</td>
<td>8</td>
<td>10,550</td>
<td>84,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>2nd Refrigerator Removal</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>1,180</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Freezer Replacement</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>128</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>DHW Measure (elec)</td>
<td>64</td>
<td>28</td>
<td>67</td>
<td>180</td>
<td>$5</td>
<td>$810</td>
<td>$810</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>DHW Measure (oil)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>DHW Measure (gas &amp; other)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>TLC Kit</td>
<td>2,200</td>
<td>5,280</td>
<td>6,500</td>
<td>$17</td>
<td>$108,225</td>
<td>$108,225</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Window AC Replacements</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>$391</td>
<td>$19,550</td>
<td>$3,910</td>
<td>$23,460</td>
<td>204</td>
<td>9</td>
<td>10,200</td>
<td>91,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Tstats</td>
<td>76</td>
<td>13</td>
<td>31</td>
<td>550</td>
<td>$88</td>
<td>$48,125</td>
<td>$48,125</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>ABCD Admin Cost</td>
<td>6</td>
<td>13</td>
<td>3</td>
<td>50</td>
<td>$120,000</td>
<td>$120,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>CRI QC</td>
<td>325</td>
<td>325</td>
<td>50</td>
<td>$150</td>
<td>$48,750</td>
<td>$48,750</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>Repairs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$150</td>
<td>$175,000</td>
<td>$175,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>PROGRAM MKT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$100,000</td>
<td>$100,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>STATEWIDE MKT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$40,000</td>
<td>$40,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>TRAINING</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric - SF</td>
<td>SUBTOTAL</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Costs:**
- **Electric - SF SUBTOTAL**: $12,415,435
- **2013 Production Goal**: $2,073,380
- **Total kWh Saved**: $14,000
- **Lifetime kWh Goal**: $14,628,815
- **Annual kWh Goal**: $6,649,615
- **Lifetime kWh Goal**: $61,805,250
BCRs/Deeper Savings

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>STATEWIDE 2012 BCR</th>
<th>STATEWIDE 2013-2015 BCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTRIC</td>
<td>3.46</td>
<td>3.19</td>
</tr>
<tr>
<td>GAS</td>
<td>1.81</td>
<td>1.73</td>
</tr>
</tbody>
</table>

- Several NEI (Non-Energy Impact) studies will be reflected in the 2013-2015 BCRs that were not incorporated into the 2011 Mid-Term Modification planned values.

- A different avoided cost study was used in 2012-2015 compared to 2011. On average, lowered gas benefits and increased electric benefits (especially capacity benefits).

- 2012 BCRs incorporate the Residential NEI study and are therefore more comparable to the 2013-2015 BCRs than 2011.

- In comparison to 2012, 2013-2015 BCRs are lower. However, there are many variables that change BCRs.
Deeper Savings & New Opportunities

- **New Technologies included in Plan**
  - Heat Pump Water Heaters
  - Wi-Fi Thermostats
  - Demand Circulators
  - MiniSplit Heat Pump SEER 23
  - LED Omnidirectional bulbs
  - Energy STAR Most Efficient and Top 10 Appliances

- **New Initiatives**
  - Pre-Weatherization (No savings)
  - Expanded HEATLoan (No savings)
  - Neighborhood Fitness+
  - Residential Education efforts
  - Codes & Standards
  - Multi-Year MOUs with C&I customers
  - Office of the Future ($2/kWH)
  - Performance lighting ($1/kWh)

Existing programs designed to help achieve deep savings.

Deeper opportunities present own set of challenges. Typically more expensive initiatives that have little or no savings initially.

PAs are diligently working on refining budgets and savings (if any) associated with each bullet listed above.
Seeking Deeper Savings/Cost-Efficiencies
(See, e.g., Section III.A, III.B, III.D, III.F, III.H, III.I of July Plan)
Cost Efficiencies: Statewide Collaborative Process

- Management Committees for sharing of best practices, coordination of planning and implementation
  - Residential Management Committee
  - C&I Management Committee
  - Low-Income Best Practices
  - Evaluation Management Committee
  - Statewide Marketing
- Joint preparation of regulatory filings (e.g., three-year plans, MTMs, annual reports, NOIs)
  - PAs share costs and efforts to prepare coordinated plans, comments, briefs, IRs, reports, and presentations
- Collaboration and sharing of tasks among staff at each PA; strong relationships lead to division of labor and therefore cost efficiencies
EM&V Cost Efficiencies

- The statewide EM&V framework, created by the 2009 EM&V Resolution, results in cost efficiencies, including:
  - Evaluation activities are performed at a statewide rather than individual basis; therefore PAs receive better pricing through economies of scale.
  - Evaluation activities are divided into research areas, with corresponding contracts awarded to fewer individual evaluation contractors; therefore PAs require fewer contractors and less procurement activity.
- EMC promotes sharing of ideas to study the programs and implement results in a uniform manner; regular re-evaluation of framework optimizes cost efficiencies.
Cost Efficiencies of Coordinated Program Delivery

- Integration of gas and electric program and information delivery – greater value for dollars spent
  - Case Study: Direct Install
    - PAs moved from separate electric and gas delivery to an integrated gas/electric delivery model
    - Cross training conducted for both internal and external personnel
  - Multiple trainings on technologies and opportunities, including with “circuit riders”
  - Examining new opportunities such as integrated ECMs
- Massachusetts Technical Assessment Committee
  - PAs collaboratively review technical and incentive issues of statewide interest; shared efforts to review new products and ensure cost-effectiveness reduce duplicative efforts
- Joint preparation and release of RFPs
  - Reduced cost based on division of labor
  - More competitive pricing for statewide efforts
Other Topics

- **Vendor Performance Incentives**
  - Need to be very careful to avoid potential consequences
  - Usage varies by programmatic area; for example, RMC is reviewing incentives for community engagement efforts (p.197-199), but not a core tool in C&I
  - Use of inspections
  - Willing to review specific proposals
Performance Incentives
(See, e.g., Section III.K of July Plan)
Performance Incentive Mechanism

- Continuation of the well-functioning performance incentive mechanism applicable to initial three-year plans as a basis for the 2013-2015 performance incentive model and allocations.

<table>
<thead>
<tr>
<th>PI Component</th>
<th>Calculation</th>
<th>Impact of Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings Mechanism</td>
<td>Payout rate for each $ value of benefit achieved</td>
<td>• Rewards deeper savings, “all cost effective savings”</td>
</tr>
<tr>
<td></td>
<td>Range: 75% to 125% of design</td>
<td>• Common payout rate ensures fairer incentives across the state</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dollar value ensures all benefit types are counted</td>
</tr>
<tr>
<td>Value Mechanism</td>
<td>Payout rate for each $ value of net benefit achieved</td>
<td>• Rewards good budgetary management</td>
</tr>
<tr>
<td></td>
<td>Range: 75% to 125% of design</td>
<td>• Rewards focus on “the best bang for the buck”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Common payout rate ensures fairer incentives across the state</td>
</tr>
<tr>
<td>Performance Metrics</td>
<td>Incentives for specific actions. Actions to be negotiated for 3 yrs prior</td>
<td>• Rewards specific initiatives and goals that require more focus or that don’t fit in well with the savings or value</td>
</tr>
<tr>
<td></td>
<td>to filing. Range: 75% to 125%</td>
<td>mechanisms (e.g., future strategies)</td>
</tr>
</tbody>
</table>
Performance Incentive Mechanism

- Performance Incentive Focus remains primarily on savings

<table>
<thead>
<tr>
<th></th>
<th>Electric</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mechanism</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013 - 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>savings</td>
<td></td>
<td>45%</td>
<td>48%</td>
<td>52%</td>
<td>52%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>value</td>
<td></td>
<td>35%</td>
<td>34%</td>
<td>35%</td>
<td>35%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td>20%</td>
<td>18%</td>
<td>13%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>gas</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mechanism</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013 - 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>savings</td>
<td></td>
<td>45%</td>
<td>46%</td>
<td>55%</td>
<td>55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>value</td>
<td></td>
<td>35%</td>
<td>26%</td>
<td>30%</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td>20%</td>
<td>28%</td>
<td>15%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Source: 3 yr plan compliance filing (March 12, 2010), 2011 mid-term modification settlement filed (October 29, 2010), 2012 mid-term modifications filed (October 28, 2011)

** Note for 2013-2015 year by year components may vary slightly from average
Performance Incentives

• Statewide incentive pool for design level performance:
  • Proposed statewide incentive pool of nearly $86.0 million for electric PAs.
  • Proposed statewide incentive pool of $16.7 million for gas PAs.
• Proposed incentive pool is proportional to savings targets and incentive pool supported by the Council in first three-year plan.
• Current system is working well and was heavily negotiated.
• Performance incentive recovery is fundamentally linked to all PA proposals.