2013 – 2015

Massachusetts

Joint Statewide Three-Year

Electric and Gas Energy Efficiency Plan

April 30, 2012—Initial Filing Template
I. EXECUTIVE SUMMARY

A. Procedural Background
   1. Green Communities Act
   2. D.P.U. 08-50-A
   3. D.P.U. 08-50-B
   4. D.P.U. 08-50-C
   5. January 28, 2010 Orders in D.P.U. 09-116 to D.P.U. 09-120 and D.P.U. 09-121 to D.P.U. 09-128
   6. D.P.U. 11-120

B. Core Goals for 2013-2015
   1. Emphasis on Three-Year Nature Of Plan
   2. Reflecting Experience-Based Knowledge from Initial Three-Year Plan
   3. Enhanced Performance Incentives Structure

C. Significant Updates/Changes from 2010-2012
   1. Enhanced Integration of Gas and Electric Plan
   2. Program Consolidation
   3. Budget/Savings Comparison to 2010-2012
   4. Efforts Remain – Challenging and Compliant with GCA
D. **Overview of the Key Aspects of the Plan**

1. Core Benefits – savings and dollar benefits for customers
2. Cost-Effectiveness – screening complies with Department Guidelines
3. Progress toward Green Communities Act Requirements and Goals
4. Program Budgets – sustainability and concern for bill impacts, while pursuing aggressive savings goals
5. Program Consolidation – simplification will help delivery and reduce need for mid-term modifications
6. Evaluation, Verification and Monitoring – building on current successes and wealth of data
7. Cost Recovery and Performance Incentives – utilize current cost recovery mechanisms and enhanced (TBD) performance incentive structure
8. Mid-Term Modifications – applying lessons learned; seeking more of one **three-year** plan than three **one-year** plans
9. Economic Development and Job Growth
10. Summary
II THE THREE-YEAR PLAN

A. Core Benefits

1. Energy and Demand Savings

2. Environmental Benefits

3. Net Benefits and Cost-Effectiveness

4. Progress towards Green Communities Act Requirements and Goals
   a. Acquisition and Assessment of All Available Cost-Effective Energy Efficiency and Demand Reduction Resources
      i. Experience in Field
      ii. Point 380 Market Assessment
      iii. Customer Experience Inquiry
      iv. Synapse Economic Assessment
      v. EEAC Consultant Update to Survey of Studies in Other Jurisdictions Regarding Energy Efficiency and CHP
      vi. Review of EM&V Results
      vii. Consideration of Bill Impacts and Ability for Sustained Effort
   b. Further Discussion of the Program Administrators’ Other Assessment Activities and of Key Barriers and Challenges
   c. Key Factors, Challenges and Market Barriers

5. Gas and Electric Program Integration and Coordination
   a. Focus on Seamless Delivery
   b. Ongoing work of Residential Management Committee and C&I Management Committee
B. Cost-Effectiveness

- Modeled largely on 2010-2012 absent a change in the Guidelines, but will take into account results of D.P.U. 11-120 and related working group efforts on savings basis
  - describe proposals to ensure that energy efficiency is not undercounted and to bring less volatility and fewer mid-term adjustments to savings basis used in cost-effectiveness screening (see PA NOI comments)

- PAs to use common assumptions
  - Explain and address any material differences

- Screen at sector level for April 30, 2012 submission

- Avoided Cost Factors
  - Use 2011 Avoided Cost Study for 2013 Plan
  - Consider using one study for the full three years of the plan to increase consistency and allow for more accurate planning
C. Funding Sources

- Financing Initiatives and Differences
  - Massachusetts Bankers Association Financing
    - HEAT Loan
    - C&I Loan
  - Continued Search For Sources of Outside Funding
    - Other Financing Initiatives
- System Benefit Charge (electric only)
- Forward Capacity Market Proceeds (electric only)
- Regional Greenhouse Gas Initiative Proceeds (electric only)
- Energy Efficiency Reconciliation Factor (electric only)
- Carryover Information
- No Specific Outside Funding Levels – 2013-2015 plan does not contain specific outside funding level assumptions as was done in 2010-2012 approach
D. Summary of Budgets, Savings, and Benefits

- Levels to be aggressive to acquire all available cost-effective energy efficiency, but sustainable and consider bill impacts
- Integrated planning
- Ensure compliance with statutory low-income expenditure requirements
- Factor EM&V factors and trends into savings goals
- Focus on PA-Delivered savings
- Incorporate results of D.P.U. 11-120
- Accommodate effect of changed avoided costs when considering benefits
- Increased focus on benefits in 2013-2015
- D.P.U. 08-50 tables to be provided by June 1, 2012 with:
  - Revised program names
  - Updates to clarify programs/pilots/hard-to-reach
  - General clean-up
1. Statewide Summary of Budgets by Sector

BUDGET in Dollars

<table>
<thead>
<tr>
<th>Sector</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
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<td>Residential</td>
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<td>Low-Income</td>
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<td>C&amp;I</td>
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<td>TOTAL</td>
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2. Statewide Summary of Savings by Sector

LIFETIME SAVINGS in kWh or Therms

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<thead>
<tr>
<th>Sector</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<td>TOTAL</td>
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3. Statewide Summary of Benefits by Sector

**BENEFITS in Dollars**

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<thead>
<tr>
<th>Sector</th>
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<th>2014</th>
<th>2015</th>
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<td><strong>TOTAL</strong></td>
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E. Bill Impacts

- Continued sensitivity to bill impacts
- Analysis of rate and bill impacts associated with the implementation of the Plan to ensure that impacts are equitable
- Summary of updates to bill impact model

[Each PA to provide consistent sample residential and C&I rate class bill impacts using new model developed in DPU working group]
F. Statewide Programs

- Strategic Overview of Residential, Low-Income, and C&I Programs and Program Consolidation
- Consistent Messaging
- Same Delivery Mechanism for Gas and Electric
  - Differences (if any) would be based on unique circumstances or reflect pilots and will be noted
- Review of New Technologies
- Long-term Goals
- Pre-Weatherization
1. *Program Descriptions*

   a. Residential Program Descriptions

      **[Residential Program 1]**

      [short description of program, including enhancements from 2012; descriptions reflect continuing discussions at RMC and C&I MC]

      **[Residential Program 2]**

      [short description of program, including enhancements from 2012; descriptions reflect continuing discussions at RMC and C&I MC]
2. Low-Income Program Descriptions

[Low-Income Program 1]

[short description of program, including enhancements from 2012; descriptions reflect continuing discussions at RMC and C&I MC]

[Low-Income Program 2]

[short description of program, including enhancements from 2012; descriptions reflect continuing discussions at RMC and C&I MC]
3. *C&I Program Descriptions*

[C&I Program 1]

[short description of program, including enhancements from 2012; descriptions reflect continuing discussions at RMC and C&I MC]

[C&I Program 2]

[short description of program, including enhancements from 2012; descriptions reflect continuing discussions at RMC and C&I MC]
G. Pilots & Hard-to-Measure Efforts

[Discussions ongoing on potential 2013-2015 efforts]
H. Public Education and Marketing Activities

[Discussions in marketing working group ongoing on potential 2013-2015 efforts]
I. **Evaluation and Monitoring**

[Evaluation working group discussing EM&V process, research areas, and plan]

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1. **EM&V Studies Expected to be Completed or Commenced in 2013-2015**

[To the extent able, list core studies, understanding that this will not be the final list]

<table>
<thead>
<tr>
<th>STUDY</th>
<th>DESCRIPTION</th>
<th>EXPECTED START DATE/STATUS</th>
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<tbody>
<tr>
<td>Residential New Construction</td>
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<tr>
<td>Residential Retrofit &amp; Low Income</td>
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<td>Residential Lighting &amp; Appliances</td>
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<tr>
<td>Non-Residential Small Business</td>
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<td>Large Commercial &amp; Industrial</td>
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<td>Special &amp; Cross Cutting</td>
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- Based on TRM developed for 2011 Annual Report
- Description of changes from 2010-2012 will not be available for April 30th filing
- New TRM will not be part of the April 30th filing

[Draft TRM to consultants by August 1, 2012]
K. Performance Incentives

- Will seek simplified/enhanced mechanism and model
  - To be simple enough for parties to understand achievement
- PAs to continue to collect performance incentives annually
- Not applicable to Cape Light Compact

[Mechanism and model to be included; discussions will occur to seek to reach consensus with PAs and EEAC]

1. Electric Performance Incentive Pool

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<thead>
<tr>
<th></th>
<th>2013 Target</th>
<th>2014 Target</th>
<th>2015 Target</th>
<th>Total 2013-2015</th>
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<tr>
<td>Lifetime Energy Savings (kWh)</td>
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<td>Performance Incentive ($ million)</td>
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<td>Threshold to Begin Earning Incentives</td>
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<td>Program Costs ($ million)</td>
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2. Gas Performance Incentive Pool

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<td>Lifetime Energy Savings (therms)</td>
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<td>Program Costs ($ million)</td>
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<td><strong>L. Cost Recovery</strong></td>
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<td>• Utilize current mechanisms that are well established and understood by customers</td>
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<td>• Calculation of Lost Base Revenue, where applicable</td>
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<td>• Calculation of EERF</td>
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M. Mid-Term Revisions

- To be calculated on three-year basis, consistent with DPU Order in Cape Light Compact, D.P.U. 10-106

- Reviewing possible stipulated trigger adjustments consistent with three-year plans
  
  - For example, stipulate to mid-term modifications at sector level

- Consider certain dollar limits to mitigate concerns

- Seek to limit/reduce MTMs
III  GREEN COMMUNITIES ACT – DEPARTMENT OF PUBLIC UTILITIES

A. Acquisition of All Available Cost-Effective Energy Efficiency

B. Allocation of Funds
   1. Minimum Requirement for Low Income

C. Minimization of Administrative Cost
   1. Statewide planning, economies of scale

D. Competitive Procurement Process

E. Demand Response

F. Energy Efficiency Reconciliation Factor

IV  GREEN COMMUNITIES ACT – ENERGY EFFICIENCY ADVISORY COUNCIL

A. Additional Benefits
   1. Reduction in Peak Load
   2. Economic Development and Job Growth/Retention
      i. Workforce Development Study- initial results

V  APPENDICES- FOR APRIL 30, 2012 SUBMISSION

A. Green Communities Act Excerpt - G.L. c. 25 Section 21 related to April 30 Filing

B. Additional Appendices for 10-31-12 Filing- Glossary, TRM, EEAC Resolutions, Others
Appendix A  Green Communities Act Excerpt - G.L. c. 25 Section 21

(b)(1) Every 3 years, on or before April 30, the electric distribution companies and municipal aggregators with certified efficiency plans shall jointly prepare an electric efficiency investment plan and the natural gas distribution companies shall jointly prepare a natural gas efficiency investment plan. Each plan shall provide for the acquisition of all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply and shall be prepared in coordination with the energy efficiency advisory council established by section 22. Each plan shall provide for the acquisition, with the lowest reasonable customer contribution, of all of the cost effective energy efficiency and demand reduction resources that are available from municipalities and other governmental bodies.

(2) A plan shall include: (i) an assessment of the estimated lifetime cost, reliability and magnitude of all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply; (ii) the amount of demand resources, including efficiency, conservation, demand response and load management, that are proposed to be acquired under the plan and the basis for this determination; (iii) the estimated energy cost savings that the acquisition of such resources will provide to electricity and natural gas consumers, including, but not limited to, reductions in capacity and energy costs and increases in rate stability and affordability for low-income customers; (iv) a description of programs, which may include, but which shall not be limited to: (A) efficiency and load management programs; (B) demand response programs; (C) programs for research, development and commercialization of products or processes which are more energy-efficient than those generally available; (D) programs for development of markets for such products and processes, including recommendations for new appliance and product efficiency standards; (E) programs providing support for energy use assessment, real time monitoring systems, engineering studies and services related to new construction or major building renovation, including integration of such assessments, systems, studies and services with building energy codes programs and processes, or those regarding the development of high performance or sustainable buildings that exceed code; (F) programs for the design, manufacture, commercialization and purchase of energy-efficient appliances and heating, air conditioning and lighting devices; (G) programs for planning and evaluation; (H) programs providing commercial, industrial and institutional customers with greater flexibility and control over demand side investments funded by the programs at their facilities; and (I) programs for public education regarding energy efficiency and demand management; provided, however, that not more than 1 per cent of the fund shall be expended for items (C) and (D) collectively, without authorization from the advisory council; (v) a proposed mechanism which provides performance incentives to the companies based on their success in meeting or exceeding the goals in the plan; (vi) the budget that is needed to support the programs; (vii) a fully reconciling funding mechanism which may include, but which shall not be limited to, the charge authorized by section 19; (viii) the estimated amount of reduction in peak load that will be reduced from each option and any estimated economic benefits for such projects, including job retention, job growth or economic development; and (ix) data showing the percentage of all monies collected that will be used for direct consumer benefit, such as incentives and technical assistance to carry the plan. With the approval of the council, the plan may also include a mechanism to prioritize projects that have substantial benefits in reducing peak load, reducing the energy consumption or costs of municipalities or other governmental bodies, or that have economic development, job creation or job retention benefits.