



# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 09-121

January 28, 2010

Petition of Boston Gas Company, Colonial Gas Company, Essex Gas Company, each d/b/a National Grid, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-122

Petition of New England Gas Company – Fall River Service Area, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-123

Petition of New England Gas Company – North Attleboro Service Area, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-124

Petition of The Berkshire Gas Company, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-125

Petition of Bay State Gas Company, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-126

Petition of NSTAR Gas Company, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-127

Petition of Fitchburg Gas and Electric Light Company, d/b/a Unitil (gas division), pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2010 through 2012.

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D.P.U. 09-128

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## EXECUTIVE SUMMARY

In today's Order, the Department approves the Three-Year Plans for energy efficiency of the Commonwealth's gas distribution companies ("Program Administrators") commencing a new era of prudently managing energy consumption, addressing the challenge of climate change, and fostering growth in jobs and economic output within the state. The Three-Year Plans stem from the requirements of the Green Communities Act, passed by the Legislature and signed into law by Governor Patrick in July 2008. The Three-Year Plans were developed through a comprehensive effort involving our state's energy industry stakeholders and directed by the Department of Energy Resources. The Three-Year Plans detail benefits to Massachusetts residents and businesses including billions of dollars of net energy savings, a significant number of new energy sector jobs, and lower energy bills that flow directly from energy efficiency program implementation.

The Three-Year Plans approved today are consistent with the directives of the Green Communities Act, which enhance in four important ways the Commonwealth's long and successful history (dating back to the 1980s) of delivering energy efficiency services. First, the Act establishes a statewide framework that each Program Administrator will work within to deliver energy efficiency services, improving the effectiveness and efficiency of these services. Second, the Act establishes an Energy Efficiency Advisory Council, comprised of eleven voting members representing the full spectrum of stakeholder perspectives, to work with the Program Administrators in developing a statewide energy efficiency plan. Third, the Act mandates comprehensive three-year energy efficiency plans, rather than the five-year plans that had previously been required. Finally and most importantly, the Act requires that Program Administrators acquire all available cost-effective energy efficiency and demand reduction resources in the Commonwealth.

The Three-Year Plans highlight significant benefits associated with implementation of the proposed energy efficiency programs. On a statewide basis, including the natural gas efficiency programs also approved today, the Three-Year Plans are expected to provide net benefits of approximately \$3.9 billion, resulting in almost three dollars in benefits for every dollar spent, over the lifetime of the efficiency measures installed. Total lifetime energy savings associated with the proposed energy efficiency programs will cost roughly 4.6 cents/kWh for electric efficiency programs, and 31 cents/therm for natural gas efficiency programs, well below the cost of the traditional energy resources that would otherwise need to be purchased by consumers. In addition, the energy efficiency programs in the Three-Year Plans are expected to reduce statewide carbon dioxide emissions by roughly 15 million tons and create nearly 3,900 local jobs throughout the lifetime of the measures installed in Massachusetts.

In this Order, the Department approves each Program Administrator's proposed budget and energy savings target for the years 2010 through 2012, and finds that the proposed energy

efficiency programs are cost-effective. Consistent with the Act's mandate that the Program Administrators acquire all available cost-effective energy efficiency resources, the proposed energy savings represent considerable increases over those energy savings achieved in prior years.

In addition to approving the proposed program budgets and savings targets, the Department makes several other findings and directives:

- We find that each Program Administrator may implement its proposed Energy Efficiency Surcharge, and that the estimated bill impacts associated with these charges are modest and well within the range of what we consider to be reasonable.
- We approve the performance incentive mechanism proposed by the Program Administrators, with several important exceptions. First, we impose additional caps on the incentives. Second, we require the Program Administrators to resubmit their performance metrics to the Department for further review, with modifications to make them consistent with the principles outlined in our Energy Efficiency Guidelines.
- We approve the evaluation, measurement, and verification plans proposed by the Program Administrators. However, we direct them to evaluate their assumptions regarding non-electric benefits, avoided transmission and distribution costs, and savings associated with oil heat efficiency measures in order to develop more up-to-date and well-documented estimates for future planning purposes.
- We direct the Program Administrators to submit more complete information on outside funding sources in order for the Department to assess and approve their proposed outside funding sources for 2011 and 2012.
- We will convene a working group to make recommendations with regard to the timing, format and review of Annual Reports, midterm modification filings, and Energy Efficiency Surcharge filings.

The Three-Year Plans that we approve today, along with the additional directives and modifications outlined in this Order, create a solid foundation for Program Administrators to undertake an aggressive and sustained effort to achieve all cost-effective energy efficiency opportunities in the Commonwealth.

## I. INTRODUCTION

On July 2, 2008, An Act Relative to Green Communities, Acts of 2008, chapter 169 (“Green Communities Act” or “Act”) was signed into law. The Green Communities Act mandates significant changes to the energy efficiency programs developed and administered by the Commonwealth’s electric and gas distribution companies and municipal aggregators. Specifically, all electric and gas distribution companies and municipal aggregators must develop energy efficiency plans that provide for the acquisition of all available energy efficiency and demand reduction resources that are cost-effective or less expensive than supply. G.L. c. 25, § 21. To accomplish this goal, electric and gas distribution companies and municipal aggregators are required to develop three-year energy efficiency plans and submit such plans to the Department of Public Utilities (“Department”) for review.

Consistent with the Act, on October 30, 2009, Boston Gas Company, Colonial Gas Company, Essex Gas Company, each d/b/a National Grid (“National Grid”), New England Gas Company – Fall River Service Area (“NEGC-FR”), New England Gas Company – North Attleboro Service Area (“NEGC-NA”), The Berkshire Gas Company (“Berkshire”), Bay State Gas Company (“Bay State”), NSTAR Gas Company (“NSTAR Gas”), Fitchburg Gas and Electric Light Company, d/b/a Unitil (gas division) (“Unitil”), and Blackstone Gas Company (“Blackstone”) (together, “Program Administrators”) filed with the Department individual three-year gas energy efficiency plans for calendar years 2010 through 2012

(“Three-Year Plans”).<sup>1</sup> The Program Administrators filed their Three-Year Plans pursuant to G.L. c. 25, §§ 19-21, G.L. c. 25A § 11G, and Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines Consistent with An Act Relative to Green Communities, D.P.U. 08-50 (2008); D.P.U. 08-50-A (2009); D.P.U. 08-50-B (2009) (“Guidelines”). The Program Administrators each seek approval of: (1) their individual Three-Year Plans, including the proposed program budgets and cost-effectiveness; (2) recovery of costs associated with implementing the energy efficiency programs; and (3) a proposed performance incentive mechanism.<sup>2</sup>

Pursuant to notice duly issued, the Department held a joint public hearing<sup>3</sup> on November 30, 2009. Comments were received from the Massachusetts Energy Consumers Alliance; District Council 35 of the International Union of Painters and Allied Trades; Laborers International Union of North America; Boston Climate Action Network; Community Labor United (“CLU”); and Low-Income Weatherization and Fuel Assistance Program Network, the Massachusetts Energy Directors Association, and the Low-Income Energy Affordability Network (together, “LEAN”) (Tr. A at 9-30).

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<sup>1</sup> The Department docketed these matters as follows: (1) D.P.U. 09-121 for National Grid; (2) D.P.U. 09-122 for NEGC-FR; (3) D.P.U. 09-123 for NEGC-NA; (4) D.P.U. 09-124 for Berkshire; (5) D.P.U. 09-125 for Bay State; (6) D.P.U. 09-126 for NSTAR Gas; (7) D.P.U. 09-127 for Unitil; and (8) D.P.U. 09-128 for Blackstone.

<sup>2</sup> Blackstone is not requesting approval of a performance incentive mechanism.

<sup>3</sup> The Department held one joint public hearing on all of the Program Administrators’ filings. These cases, however, are not consolidated and remain separate proceedings.

On October 30, 2009, the Attorney General of the Commonwealth of Massachusetts (“Attorney General”) filed a notice of intervention pursuant to G.L. c. 12, §11E in each Three-Year Plan docket. On November 6, 2009, the Department granted intervenor status to the Massachusetts Department of Energy Resources (“DOER”) and LEAN in each Three-Year Plan docket.<sup>4</sup> On November 6, 2009, the Department also granted intervenor status to: (1) Environment Northeast (“ENE”) in D.P.U. 09-121, and D.P.U. 09-125, and (2) CLU in D.P.U. 09-121 and D.P.U. 09-126.<sup>5</sup> On November 6, 2009, the Department granted limited participant status to ENE in D.P.U. 09-126, and Associated Industries of Massachusetts (“AIM”) in D.P.U. 09-121, D.P.U. 09-125, and D.P.U. 09-126.<sup>6</sup> On November 18, 2009, the Department granted limited participant status to PowerOptions and The Energy Consortium

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<sup>4</sup> Boston Gas Company, Colonial Gas Company, and Essex Gas Company, d/b/a National Grid, D.P.U. 09-121, Stamp-Approval (November 6, 2009); New England Gas Company – Fall River, D.P.U. 09-122, Stamp-Approval (November 6, 2009); New England Gas Company – North Attleboro, D.P.U. 09-123, Stamp-Approval (November 6, 2009); The Berkshire Gas Company, D.P.U. 09-124, Stamp-Approval (November 6, 2009); Bay State Gas Company, D.P.U. 09-125, Stamp-Approval (November 6, 2009); NSTAR Gas Company, D.P.U. 09-126, Stamp-Approval (November 6, 2009); Fitchburg Gas and Electric Light Company d/b/a Unitil, D.P.U. 09-127, Stamp-Approval (November 6, 2009); Blackstone Gas Company, D.P.U. 09-128, Stamp-Approval (November 6, 2009).

<sup>5</sup> D.P.U. 09-121, Stamp-Approvals (November 6, 2009); D.P.U. 09-125, Stamp-Approvals (November 6, 2009); D.P.U. 09-126, Stamp-Approvals (November 6, 2009).

<sup>6</sup> D.P.U. 09-121, Stamp-Approval (November 6, 2009); D.P.U. 09-125, Stamp-Approval (November 6, 2009); D.P.U. 09-126, Stamp-Approvals (November 6, 2009).

(“TEC”) in D.P.U. 09-121 and D.P.U. 09-126.<sup>7</sup> On November 18, 2009, the Department granted limited participant status to the City of Boston in D.P.U. 09-121. D.P.U. 09-121, Stamp-Approval (November 18, 2009).

The Department held evidentiary hearings on December 1, 2009, through December 15, 2009.<sup>8</sup> The Attorney General, DOER, and LEAN filed initial briefs in each Three-Year Plan docket. ENE filed an initial brief in D.P.U. 09-121, D.P.U. 09-125, and D.P.U. 09-126. CLU filed an initial brief in D.P.U. 09-121 and D.P.U. 09-126. AIM filed an initial brief in D.P.U. 09-121, D.P.U. 09-125, and D.P.U. 09-126. In addition, each Program Administrator filed an initial brief in their respective docket. The Attorney General, DOER, and LEAN filed reply briefs in each Three-Year Plan docket. In addition, each Program Administrator filed a reply brief in their respective docket. The evidentiary record for D.P.U. 09-121 consists of 211 exhibits and 17 responses to record requests. The evidentiary record for D.P.U. 09-122 consists of 176 exhibits and 18 responses to record requests, plus all supplemental responses. The evidentiary record for D.P.U. 09-123 consists of 173 exhibits and 18 responses to record requests, plus all supplemental responses. The evidentiary record for D.P.U. 09-124 consists of 194 exhibits and 16 responses to record

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<sup>7</sup> D.P.U. 09-121, Stamp-Approvals (November 18, 2009); D.P.U. 09-126, Stamp-Approvals (November 18, 2009).

<sup>8</sup> With the agreement of the parties, the Department held joint evidentiary hearings on December 1, 2, 3, and 11, 2009, on common issues related to the statewide three-year gas and electric energy efficiency plans. The Department also held company-specific evidentiary hearings on each Program Administrator’s individual filing on December 4, 2009 through December 15, 2009.

requests, plus all supplemental responses. The evidentiary record for D.P.U. 09-125 consists of 189 exhibits and 17 responses to record requests, plus all supplemental responses. The evidentiary record for D.P.U. 09-126 consists of 210 exhibits and 20 responses to record requests, plus all supplemental responses. The evidentiary record for D.P.U. 09-127 consists of 128 exhibits and 22 responses to record requests. The evidentiary record for D.P.U. 09-128 consists of 56 exhibits and 22 responses to record requests, plus one supplemental response.

## II. GREEN COMMUNITIES ACT

### A. Introduction

The goal of the Green Communities Act is to significantly enhance the development of energy efficiency and renewable energy in Massachusetts. Green Communities Act, Preamble. As noted above, the Green Communities Act requires all Program Administrators to develop energy efficiency plans that will “provide for the acquisition of all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply.” G.L. c. 25, § 21(b)(1). To accomplish this goal, the Green Communities Act establishes an Energy Efficiency Advisory Council (“Council”)<sup>9</sup> and directs Program Administrators to prepare, in

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<sup>9</sup> The Council’s eleven voting members represent the following interests: residential consumers; the low-income weatherization and fuel assistance program network; the environmental community; businesses, including large commercial and industrial end-users; the manufacturing industry; energy efficiency experts; organized labor; the Commonwealth of Massachusetts Department of Environmental Protection; the Attorney General; the Commonwealth of Massachusetts Executive Office of Housing and Economic Development; and DOER. G.L. c. 25, § 22(a). The Council membership also includes one non-voting member from each Program Administrator,

coordination with the Council, a three-year, statewide energy efficiency plan (“Statewide Plan”). The Statewide Plan is subsequently disaggregated into individual Program Administrator Three-Year Plans before undergoing regulatory review by the Department.

G.L. c. 25, §§ 21, 22.<sup>10</sup>

The Green Communities Act establishes a coordinated process for the preparation through the review of the Three-Year Plans. The Act delineates separate yet complementary responsibilities for the Council and the Department with the Program Administrators participating throughout the process. The Council process shapes the development of the Statewide Plan and is more fully described below. Ultimately, the Department is charged with ensuring that electric and gas resource needs are first met through all available energy efficiency and demand reduction resources that are cost-effective or less expensive than supply in order to mitigate capacity and energy costs for all customers. G.L. c. 25, § 21(a).

B. Energy Efficiency Advisory Council

Gas Program Administrators, working with the Council, must prepare a three-year gas Statewide Plan designed to achieve the Act’s goal of acquiring all available cost-effective

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one from the heating and oil industry, and one from energy efficiency businesses. G.L. c. 25, § 22(a).

<sup>10</sup> Given the significant changes related to the delivery of energy efficiency mandated by the Green Communities Act, the Department opened an investigation to update the energy efficiency guidelines that were established in Investigation to Establish Methods and Procedures to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100 (2000) (“D.T.E. 01-100 Guidelines”). D.P.U. 08-50; D.P.U. 08-50-A; D.P.U. 08-50-B. On October 26, 2009, the Department issued its revised Guidelines. D.P.U. 08-50-B.

energy efficiency and demand reduction resources. G.L. c. 25, § 21(b)(1). To this end, the

Green Communities Act prescribes that the Statewide Plan include the following components:

- An assessment of lifetime cost, reliability and magnitude of the resources that are cost-effective or less expensive than supply;
- The amount of resources that are proposed to be acquired under the plan;
- The estimated energy cost savings, including reductions in energy and capacity costs, increases in rate stability, and affordability for low-income consumers that will accrue to energy and gas consumers;
- Program descriptions;
- A proposed mechanism that provides distribution companies with performance incentives based on success in meeting or exceeding the plan's goals;
- The budget needed to support the programs;
- A fully reconciling funding mechanism;
- The estimated peak-load reduction and any estimated economic benefits for such projects, including job retention, job growth, or economic development; and
- Data reflecting the percent of funds collected that will be used for direct consumer benefit (e.g., incentives and technical assistance to carry the plan).

G.L. c. 25, § 21(b)(2). In addition, the Statewide Plan may include, with Council approval, a mechanism to prioritize projects that have substantial benefits in reducing peak load, reducing energy consumption or costs of municipalities or governmental bodies, or that have economic development, job creation or job retention benefits. G.L. c. 25, § 21(b)(2). As noted above, the Statewide Plan must describe its energy efficiency programs; these programs may include, but are not limited to, the following:

- Efficiency and load management programs;

- Demand response programs;
- Programs for research, development, and commercialization of products or processes which are more energy-efficient than those generally available;
- Programs for the development of markets for such products and processes, including recommendations for new appliance and product efficiency standards;
- 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 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;
- Programs for the design, manufacture, commercialization and purchase of energy-efficient appliances and heating, air conditioning and lighting devices;
- Programs for planning and evaluation;
- Programs providing commercial, industrial and institutional customers with greater flexibility and control over demand-side investments funded by the programs at their facilities; and
- Programs for public education regarding energy efficiency and demand management.

G.L. c. 25, § 21(b)(2).

The Statewide Plan must be submitted to the Council every three years, by April 30; the Council then has three months to review the Statewide Plan and submit its approval or comments on the Statewide Plan to the Program Administrators. G.L. c. 25, § 21(c). If not approved, Program Administrators may change the Statewide Plan to reflect the Council's input. G.L. c. 25, § 21(c). After the Council process, the Program Administrators must, by October 31, submit their respective Three-Year Plans to the Department together with the

Council's approval or comments and a statement of any unresolved issues. G.L. c. 25, § 21(d)(1).

C. Department of Public Utilities

1. Introduction

Once the Three-Year Plans have been filed with the Department, the Green Communities Act requires the Department to conduct a public hearing to allow interested persons to be heard on the plans. G.L. c. 25, § 21(d)(1). The Department must, within 90-days of the filing date, approve, modify or reject and require the resubmission of the Three-Year Plan. G.L. c. 25, § 19(d)(2). In approving a Program Administrator's Three-Year Plan, the Department must ensure that the Program Administrator has identified and will capture all energy efficiency and demand reduction resources that are cost-effective or less expensive than supply. G.L. c. 25, § 19(d)(2).

2. Program Cost-Effectiveness

Specifically, the Department must screen the energy efficiency programs contained within the Three-Year Plans for cost-effectiveness to ensure that programs are designed to obtain energy savings and system benefits with value greater than program costs. G.L. c. 25, § 21(b)(3). In D.P.U. 08-50-A, the Department reaffirmed that the Total Resource Cost ("TRC") test is the appropriate test for evaluating the cost-effectiveness of energy efficiency programs.<sup>11</sup> D.P.U. 08-50-A at 14.

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<sup>11</sup> The TRC test includes all benefits and costs associated with the energy system, as well as all benefits and costs associated with the energy efficiency program participants. D.P.U. 08-50, at 15. Because the TRC test includes the avoided cost of supply as one

3. Program Authorization and Delivery

In authorizing energy efficiency programs, the Department is charged with ensuring that: (1) the programs are delivered cost-effectively, capturing all available energy efficiency opportunities; (2) Program Administrators have minimized administrative costs to the fullest extent practicable; and (3) Program Administrators will use competitive procurement processes to the fullest extent practicable. G.L. c. 25, §§ 19(a), (b).

4. Program Funding

a. Funding Source

Consistent with the Green Communities Act, the Department's Guidelines specify that gas Program Administrators fund energy efficiency plan implementation through their local distribution adjustment clause ("LDAC") tariff and any other funding revenue sources that may be available. Guidelines § 3.2.2; G.L. c. 25, § 19(b). Further, the Guidelines require that a Program Administrator's Three-Year Plan present information regarding rate and average bill impacts consistent with criteria articulated in D.P.U. 08-50-A. Guidelines § 3.2.2.2.

b. Funding Allocation

Under the Green Communities Act, the Department must ensure that energy efficiency funds are allocated to all customer sectors<sup>12</sup> in proportion to each sector's contribution to the

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of the most significant program benefits, this test satisfies the Act's requirement that, among other things, energy efficiency programs be less expensive than supply. D.P.U. 08-50-A at 14.

<sup>12</sup> For purposes of this Order, we refer to groups of customer classes as "sectors." Energy efficiency program sectors include residential, low-income, and commercial and industrial classes.

funds, provided, however, that the low-income sector is allocated at least ten percent of the funds for electric energy efficiency programs and 20 percent of the funds for gas energy efficiency programs. G.L. c. 25, § 19(c).

c. Funding Mechanism

Once the amount of funding and its allocation have been established, the Department must approve a fully reconciling funding mechanism for the Three-Year Plan. G.L. c. 25, § 21(d)(2). This mechanism—known as the Energy Efficiency Surcharge (“EES”)—is calculated as prescribed in the Guidelines and collected through the LDAC in accordance with established Department practice. Guidelines §§ 2(9), 3.2.2.

III. ENERGY EFFICIENCY ADVISORY COUNCIL RESOLUTIONS

A. Introduction

As required by the Green Communities Act, the Council worked with the Program Administrators in developing demand resource program plans and budgets. G.L. c 25, § 22(b). Throughout the process, the Council issued several resolutions related to the development of the Three-Year Plans, including: (1) All Available Cost-Effective Electric and Gas Savings Assessment Resolution (“Assessment Resolution”); (2) Evaluation, Measurement, and Verification Resolution (“Evaluation Resolution”); (3) Statewide Savings Targets and Performance Incentive Resolution (“Savings and Incentive Resolution”); (4) Three-Year Plan Resolution; and (5) Pilot Budget Resolution (see Exh. Common 2, at 10-12). Each resolution is discussed below.

B. Assessment Resolution

On July 14, 2009, the Council approved a resolution memorializing its estimate of the savings it expects can be achieved from all available cost-effective energy efficiency in Massachusetts, over the course of the Three-Year Plans (Exh. Common 2, App. E at 322-323). The Council agreed that approximately 2.0 percent in therm savings could be achieved over the three-year plan period for gas energy efficiency programs (Exh. Common 2, App. E at 322-323). Further, the Council agreed that a detailed potential study or set of targeted studies will be performed in 2011 and that an updated assessment of all available cost-effective energy efficiency will be prepared in connection with the three-year plans for 2013 through 2015 (Exh. Common 2, App. E at 322-323).

C. Evaluation, Measurement, and Verification Resolution

On September 8, 2009, the Council approved a resolution establishing statewide principles and policies for evaluating, monitoring, and verifying the costs, savings, and spending associated with the Program Administrators' energy efficiency programs (Evaluation Resolution at 1). The Evaluation Resolution establishes an oversight role for the Council over evaluation, monitoring, and verifying ("EM&V") activities to ensure that objective, independent, consistent, and credible information on energy efficiency programs will be presented to the Department (Evaluation Resolution at 1).

D. Statewide Savings Targets and Performance Incentive Resolution

On October 13, 2009, the Council approved a resolution establishing statewide:

(1) term savings targets; (2) total available performance incentives; (3) program costs per annual therm saved; and (4) outside funding targets (Savings and Incentive Resolution at 1).

E. Three-Year Plan Resolution

On October 27, 2009, the Council approved a resolution memorializing its position that the Statewide Plan is consistent with all requirements of the Green Communities Act (Three-Year Plan Resolution at 3). Specifically, the Council resolved that: (1) the Statewide Plan has a greater focus on customers and long-term goals than previous Program Administrator energy efficiency plans; (2) it expects to work with the Program Administrators during 2010 on strategies for outreach, education, and marketing of the energy efficiency programs and to incorporate best practices into midterm modifications for 2011 and 2012; (3) Program Administrators should be allowed to earn performance incentives; (4) the statewide savings targets the Council previously approved are appropriate; (5) Program Administrators should keep program costs as low as possible; (6) Program Administrators should minimize bill impacts by minimizing upfront financing barriers; (7) Program Administrators should develop an open, clear, and supportive process for hiring and training workers and contractors in the industry; and (8) there will be a number of midterm modifications to program design, savings, and costs for 2011 and 2012 (Three-Year Plan Resolution at 1-3).

F. Pilot Budget Resolution

On November 10, 2009, the Council approved a resolution with respect to the Program Administrators' proposed energy efficiency pilot program budgets (Pilot Budget Resolution at 1). The Council anticipates that one or more pilot programs undertaken during 2010 could continue in 2011 as standalone programs or as integrated elements of existing programs (Pilot Budget Resolution at 1). The Council, therefore, approved the expenditure of funds for the proposed pilots for 2010 and 2011, with the expectation that further information about current and future pilots will be available in 2010 (Pilot Budget Resolution at 1).

IV. ENERGY EFFICIENCY SAVINGS GOALS

A. Introduction

The Green Communities Act requires that the each Program Administrator's Three-Year Plan provide for the acquisition of all available cost-effective energy efficiency resources. G.L. c. 25, §§ 19(b), 21(a). The Green Communities Act further requires that the Program Administrators work with the Council to prepare a Statewide Plan that is designed to achieve the Act's all cost-effective energy efficiency mandate. G.L. c. 25, § 21(b)(1). In its Savings and Incentive Resolution, the Council established statewide energy savings goals, expressed both as total therms saved and percent of total statewide sales.

B. Savings Goals in Statewide Plan

The Statewide Plan submitted by the Program Administrators includes statewide gas energy savings goals for each proposed program over the three-year period, 2010 through 2012 (Exh. Common 2, at 24-27). The savings goals included in the Statewide Plan are a

compilation of the savings goals included in each Program Administrator's Three-Year Plan, as discussed below. The Program Administrators indicate that these savings goals were developed in consideration of the following factors: (1) the language of the Green Communities Act that calls for a sustained statewide energy efficiency effort, which the Program Administrators interpret as requiring a longer-term, rather than a shorter term effort;<sup>13</sup> (2) the statewide goals and savings goals set forth in the Council's Savings and Incentives Resolution; (3) the Department's directives in D.P.U. 08-50-A at 56-57, regarding bill and average rate impacts; (4) the assessment of all available cost-effective electric and gas savings presented by the Council's technical consultants at the Council's meeting on June 23, 2009;<sup>14</sup> (5) a number of studies and analyses on the technical, achievable, and economic potential of energy efficiency;<sup>15</sup> and (6) the Program Administrators' own experience implementing energy efficiency programs (Exh. Common 2, at 31-35).

The statewide savings goals are summarized by energy efficiency program in Table 1: Statewide Program Energy Savings, in Section XV. The savings goals for program year 2010 represent a 63 percent increase over the savings goals for program year 2008 and a 40 percent increase over the savings goals for program year 2009 (Exh. Common 2, at 25). In program year 2012, the savings goals represent a 196 percent and a 154 percent increase over program years 2008 and 2009, respectively (Exh. Common 2, at 25).

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<sup>13</sup> G.L. c. 25, § 22(b).

<sup>14</sup> This assessment is included in Appendix E to the Statewide Plan.

<sup>15</sup> A bibliography of these studies is included in Appendix C to the Statewide Plan.

C. Program Administrator Savings Goals

The Program Administrators include individual savings goals over the three-year period, 2010 through 2012. The Program Administrators' individual savings goals are summarized by customer sector in Table 2: Program Administrator Energy Savings, in Section XV, below. For each of the three years, National Grid, Bay State, NSTAR Gas, and NEGC-NA have each established individual savings goals that meet or exceed the statewide savings goals set by the Council (Exh. Common 28 Supp. (December 21, 2009)). NEGC-FR and Unitil have established savings goals that are less than the goals established in the Council's Savings and Incentive Resolution for 2010, 2011, and 2012, and Berkshire's established savings goals are less than the goals established in the Council's resolution for 2011 and 2012 (Exhs. NEGC-FR-2, at 1; Unitil-1, Tab 8, at 3-4; Berkshire-2, at 1).

D. Position of the Parties

1. Unitil

Unitil proposes an energy savings goal of 0.58 percent of its retail sales for 2010, whereas the statewide target is 0.60 percent, 0.77 percent of its retail sales for 2011, whereas the statewide target is 0.90 percent, and 1.05 percent of its retail sales for 2012, whereas the statewide target is 1.15 percent (Exh. Unitil-1, Tab 8, at 3-4). Unitil argues that there are a number of circumstances unique to its service territory that affect its ability to reach the statewide targets (Exh. Unitil-1, Tab 8, at 3). In light of these circumstances, Unitil argues that its proposed savings goal is appropriate because it represents an aggressive effort to meet the charge of acquiring all cost-effective energy efficiency (Exh. Unitil-1, Tab 8, at 3).

First, Unitil states that its inability to reach the statewide target is based, in part, on savings in its 2009 energy efficiency plan. Unitil argues that, because its 2009 savings are lower than those of other Program Administrators, it will take longer for it to meet statewide targets (Exh. Unitil-1, Tab 8, at 3-4). Unitil states, however, that even though it starts at a lower savings level than the statewide average, it increases program savings at a much higher rate of annual increase than the Statewide Plan (Exh. Unitil-1, Tab 8, at 4).

Second, Unitil argues that it has a relatively higher percentage of low-income customers and lower percentage of commercial and industrial (“C&I”) customers as compared to the statewide average and, therefore, its costs to achieve savings are higher (Exh. Unitil-1, Tab 8, at 5). Unitil argues that statewide average cost to achieve savings for the low-income sector is the highest, whereas the cost to achieve savings for the C&I sector is the lowest (Exh. Unitil-1, Tab 8, at 5). In addition, Unitil argues that, due to the small size of its service territory, it has higher fixed costs associated with (1) administering the programs from an upper-level, planning and design perspective, and (2) implementing the programs from an on-the-ground perspective (Exh. Unitil-1, Tab 8, at 5).

Finally, Unitil argues that its savings goals are lower than the statewide target because of current economic conditions in its service territory (Exh. Unitil-1, Tab 8, at 6). Unitil states that its service area has one of the lowest median income levels and highest low-income program eligibility levels, in the state (Exh. Unitil-1, Tab 8, at 6). Unitil argues that customers experiencing economic hardships tend to have less interest in energy efficiency investments (Exh. Unitil-1, Tab 8, at 6). According to Unitil, lower growth, high and rising

levels of bad debt, and increasing costs for supporting low-income programs and rate discounts create upward pressure on relative rate levels which can exacerbate rate impact concerns (Exh. Unitil-1, Tab 8, at 6).

2. Berkshire and New England Gas Company

NEGC-FR proposes an energy savings goal of 0.48 percent of its retail sales for 2010, whereas the statewide target is 0.60 percent for 2010<sup>16</sup> (Exh. NEGC-FR-2, at 1). For 2011, NEGC-FR proposes an energy savings goal of 0.58 percent of retail sales and Berkshire proposes an energy savings goal of 0.87 percent of retail sales, whereas the statewide target is 0.90 percent (Exhs. NEGC-FR-2, at 1; Berkshire-2, at 1). For 2012, NEGC-FR proposes an energy savings goal of 0.71 percent of retail sales and Berkshire proposes an energy savings goal of 0.99 percent of retail sales, whereas the statewide target is 1.15 percent (Exh. NEGC-FR-2, at 1; Berkshire-2, at 1).

Berkshire and NEGC-FR argue that there are a number of circumstances unique to their service territories that affect their ability to reach the statewide targets (Exh. NEGC-FR-2, at 1; Berkshire-2, at 1-2). NEGC-FR argues that it has a relatively high percentage of low-income customers (Exh. NEGC-FR-2, at 1-2). Both NEGC-FR and Berkshire contend that they have a lower percentage of C&I customers as compared to the statewide average and they have lost C&I customers without replacing the load (Exhs. NEGC-FR-2, at 1-2; Berkshire-2, at 2). NEGC-FR further explains that new construction, a significant source for

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<sup>16</sup> Berkshire's 2010 energy savings goal of 0.76 percent exceeds the Council's statewide target of 0.60 percent (Exh. Berkshire-2, at 1).

energy savings, has declined nearly 80 percent from a year ago (Exh. NEGC-FR-2, at 2). In addition, NEGC-FR and Berkshire argue that, with the residential sector experiencing economic difficulties, they are concerned that significant budget ramp-ups and aggressive savings targets would create inappropriate bill impacts for their residential customers (Exh. NEGC-FR-2, at 2-3; Berkshire-2, at 2).

E. Analysis and Findings

The Green Communities Act requires that the Department ensure that each Program Administrator's Plan provides for the acquisition of all cost-effective energy efficiency and demand reduction resources; that is, a Program Administrator must meet its resource needs first through cost-effective energy efficiency and demand reduction resources in order to mitigate capacity and energy costs for all customers. G.L. c. 25, § 21(a). Pursuant to the Green Communities Act, Program Administrators must work with the Council to prepare a Statewide Plan that is designed to achieve the Act's goal of acquiring all available cost-effective energy efficiency and demand resources. G.L. c. 25, § 21(b)(1).

In its Savings and Incentive Resolution, the Council established statewide savings goals. In evaluating the savings goals proposed by the Program Administrators, the Department gives appropriate deference to the Council, in light of its statutory mandate to work with the Program Administrators to develop plans that achieve the goal of acquiring all available cost-effective energy efficiency and demand resources. G.L. c. 25, § 21(b)(1). For each of the three years, National Grid, Bay State, NSTAR Gas, and NEGC-NA have established individual savings goals that meet or exceed the statewide savings goals set by the Council.

Berkshire has established an individual savings goal for 2010 that meets or exceeds the statewide savings goals set by the Council. Accordingly, we find that such goals are reasonable.

NEGC-FR and Unitil have established savings goals that fall short of the goals established in the Council's Savings and Incentive Resolution for 2010, 2011, and 2012, and Berkshire's savings goals fall short of goals established in the Council's resolution for 2011 and 2012. In its Savings and Incentive Resolution and Three-Year Plan Resolution, the Council acknowledged that flexibility is important for individual Program Administrators that face particular and documented challenges in achieving energy efficiency savings. The Council stated that a Program Administrator may propose a target that departs from the statewide target, so long as it provides detailed justification for the deviation. The Council subsequently approved the adjusted savings goals of Berkshire, NEGC-FR, and Unitil in its Three-Year Plan Resolution.

Although Berkshire, NEGC-FR, and Unitil have proposed savings goals that are less than the statewide goal, we find that each has adequately demonstrated that the economic conditions and median income in its service territory prevent it from establishing savings goals consistent with those of other Program Administrators (Exhs. Unitil-1, Tab 8, at 4-6; NEGC-FR-2, at 1-3; Berkshire-2, at 1-2). No party objected to Berkshire, NEGC-FR, and Unitil's proposed savings goals and the Council approved these Program Administrators' adjusted savings goals (Three-Year Plan Resolution at 2). Accordingly, we find that such goals are reasonable.

## V. ENERGY EFFICIENCY PROGRAMS

### A. Program Budgets

#### 1. Statewide Budgets

The Statewide Plan includes statewide budgets for the energy efficiency activities the Program Administrators will undertake during the years 2010 through 2012. These activities can be characterized as (1) programs, (2) pilot programs, and (3) hard-to-measure initiatives.<sup>17</sup>

Table 3: Statewide Gas Energy Efficiency Budgets, in Section XV, summarizes the activities and associated budgets.

Most activities shown in Table 3<sup>18</sup> will be undertaken on a statewide basis by all Program Administrators. However, some activities are only offered by Program Administrators in their individual service territories and not on a statewide basis.<sup>19</sup>

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<sup>17</sup> Hard-to-measure initiatives are programs with energy savings that are not immediate or difficult to quantify, including, but not limited to: (1) programs for research, development, and commercialization of efficiency products; (2) programs to support new appliance and product efficiency standards; (3) programs to integrate efficiency products with building energy codes or high performance sustainable buildings that exceed code; and (4) programs for public education regarding energy efficiency. Guidelines § 2(11).

<sup>18</sup> Although each individual Program Administrator has updated its budget since submitting the Statewide Plan, the statewide budget has not been updated. Thus, the statewide budget numbers shown in Table 3 do not equal the sum of the individual Program Administrator budgets shown in Table 6.

<sup>19</sup> For the programs listed in Table 4, the OPower program is offered by National Grid and NSTAR Gas (Exhs. NG-2, at 1-3; NSTAR-6-B). The Residential Deep Energy Retrofit Program is offered by all Program Administrators except NEGC-FR and NEGC-NA (Exh. Common 28-Exhibit 2, at 1-46). The C&I Deep Energy Retrofit Program is offered by National Grid, NSTAR Gas, Bay State, and Berkshire only (Exh. Common 28-Exhibit 2, at 1-46). Finally, the Residential Building Practices and

2. Program Administrator Budgets

a. Budget Summary

Each Program Administrator's budget is comprised of program implementation costs, a before-tax performance incentive and, where applicable, recovery of LBR as approved by the Department (Exhs. NG-5, at 1; NEGC-FR-5, at 1; NEGC-NA-5, at 1; Berkshire-5, at 1; Bay State-5, at 1; NSTAR Gas-3, at 1; Unitil-1, Tab 5, at 37). Table 6: Program Administrator Budget, in Section XV, identifies each Program Administrator's total budget for the period 2010 through 2012. The Program Administrators have presented their budgets in real dollars with a base year of 2010 (Exhs. NEGC-FR-6 (November 13, 2009); NEGC-NA-6 (November 13, 2009); Tr. 4 (National Grid) at 732; Tr. 4 (Berkshire) at 638; Tr. 4 (Bay State) at 639; Tr. 4 (NSTAR Gas) at 807; Tr. 4 (Unitil) at 638). Bay State, NEGC-FR, and NEGC-NA also provided their budgets in nominal dollars.<sup>20</sup>

b. Program Implementation Costs

Program implementation costs include costs associated with: (1) program planning and administration ("PP&A"); (2) marketing and advertising; (3) participant incentives; (4) sales, technical assistance, and training; and (5) evaluation and market research (Exh. Common 2, at 66-71). See Guidelines § 3.3.3. Pursuant to the Green Communities Act, the Department

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Demonstration Program, Energy Analysis: Internet Audits initiative, Community Based Pilot Program, and the Business Energy Analyzer initiative are offered only by National Grid (Exh. Common 28, Exh. 2, at 1-46).

<sup>20</sup> Exhs. NEGC-FR, Table IV.C, Gas PA Budgets (December 21, 2009); NEGC-NA, Table IV.C, Gas PA Budgets (December 21, 2009); Bay State, Table IV.C, Gas PA Budgets (December 21, 2009).

must ensure that Program Administrators have minimized administrative costs (i.e., PP&A costs) to the fullest extent practicable. G.L. c. 25, §§ 19(a), (b). PP&A costs are identified by the Program Administrators as costs associated with developing program plans, daily program administration, and regulatory activities (Exh. Common 2, at 279). Table 7: PP&A Costs, summarizes each Program Administrator's percentage of total program implementation costs that is comprised of PP&A costs for the period 2010 through 2012.

c. RCS/MassSAVE

The Program Administrators included all costs associated with the Residential Energy Conservation Services/MassSAVE ("RCS/MassSAVE") program<sup>21</sup> in their Three-Year Plan budgets (D.P.U. 09-121, Exh. DPU 1-1; D.P.U. 09-122, Exh. DPU 1-1; D.P.U. 09-123, Exh. DPU 1-1; D.P.U. 09-124, Exh. DPU 1-2; D.P.U. 09-125, Exh. DPU 1-2; D.P.U. 09-126, Exh. DPU 1-1; D.P.U. 09-127, Exh. DPU 1-1). The Program Administrators state that they have included this information in order to present a full picture of their energy efficiency efforts and spending and because the RCS/MassSAVE program is an integral component of their overall residential energy efficiency offerings (D.P.U. 09-121, Exh. DPU 1-1; D.P.U. 09-122, Exh. DPU 1-1; D.P.U. 09-123, Exh. DPU 1-1; D.P.U. 09-124, Exh. DPU 1-2; D.P.U. 09-125, Exh. DPU 1-2; D.P.U. 09-126, Exh. DPU 1-1; D.P.U. 09-127, Exh. DPU 1-1; Tr. 3 (Joint) at 574).

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<sup>21</sup> RCS/MassSAVE is a program that provides residential customers with information and recommendations on making their home more energy efficient (Exh. Common 2, at 116-117). See G.L. c. 164 App., § 2-7 et seq. The Program also helps customers initiate the process of installing the energy upgrades (Exh. Common 2, at 116-120).

3. Competitive Procurement

Pursuant to the Green Communities Act, the Department must ensure that Program Administrators use competitive procurement processes to the fullest extent practicable.

G.L. c. 25, §§ 19(a), (b).

4. Positions of the Parties

a. Program Budgets

The Program Administrators, DOER, ENE, and LEAN argue that the Three-Year Plan budgets meet the requirements of the Guidelines and the Green Communities Act and, therefore, should be approved by the Department (National Grid Brief at 27; NEGC-FR Brief at 27; NEGC-NA Brief at 27; Berkshire Brief at 27; Bay State Brief at 27; NSTAR Gas Brief at 27; Unitil Brief at 27; Blackstone Brief at 21; ENE Brief at 9; see LEAN Brief at 5; DOER Brief at 4-5). The Program Administrators contend that the Three-Year Plan program budgets appropriately incorporate a graduated ramp-up of spending in order to ensure that (1) a delivery infrastructure is in place so that high quality services can be provided to customers on a sustainable basis, and (2) to provide for smoother bill impacts (National Grid Brief at 23; NEGC-FR Brief at 23; NEGC-NA Brief at 23; Berkshire Brief at 23; Bay State Brief at 23; NSTAR Gas Brief at 23; Unitil Brief at 23; Blackstone Brief at 17).

The Attorney General also recommends that the Department approve the Program Administrators' Three-Year Plan budgets (Attorney General Brief at 4). The Attorney General

states, however, that the Department should require rigorous tracking and monitoring of budgets (Attorney General Brief at 31).<sup>22</sup>

b. Program Planning and Administration Costs

The Program Administrators argue that they have minimized PP&A costs while recognizing the need to maximize program quality and maintain adequate oversight (National Grid Brief at 26; NEGC-FR Brief at 26; NEGC-NA Brief at 25-26; Berkshire Brief at 25; Bay State Brief at 26; NSTAR Gas Brief at 26; Unitil Brief at 25; Blackstone Brief at 20).

Accordingly, the Program Administrators contend that they have minimized administrative costs to the fullest extent practicable, consistent with the requirements of G.L. c. 25, § 19(a) (National Grid Brief at 25; NEGC-FR Brief at 25; NEGC-NA Brief at 25; Berkshire Brief at 25; Bay State Brief at 25-26; NSTAR Gas Brief at 25; Unitil Brief at 25; Blackstone Brief at 19-20). In addition, the Program Administrators state that they intend to work with the Attorney General, DOER, and other interested parties in developing consistent PP&A cost categories (Exh. Common 2, at 279).

c. Competitive Procurement

The Program Administrators argue that they will use competitive procurement processes to the fullest extent possible and in a manner that minimizes costs to ratepayers while maximizing the associated return on investment in the competitive procurement contracts

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<sup>22</sup> The Attorney General's argument that the Program Administrators should be required to track and report on RCS funds separately from the energy efficiency funds collected through the EES will be discussed in Section VI, below (Attorney General Brief, App. A through H ¶ 1).

(National Grid Brief at 26-27; NEGC-FR Brief at 26-27; NEGC-NA Brief at 26; Berkshire Brief at 26; Bay State Brief at 26-27; NSTAR Gas Brief at 26-27; Unitil Brief at 26; Blackstone Brief at 20-21). The Program Administrators state that their procurement practices are appropriate and, therefore, consistent with the Green Communities Act (National Grid Brief at 27; NEGC-FR Brief at 27; NEGC-NA Brief at 27; Berkshire Brief at 27; Bay State Brief at 27; NSTAR Gas Brief at 27; Unitil Brief at 27; Blackstone Brief at 21).

d. Low-Income Program Budgets

Each Program Administrator argues that it has complied with the requirement in G.L. c. 25, § 19(c) that at least 20 percent of the amount expended for gas energy efficiency programs be spent on low-income programs (National Grid Brief at 42; NEGC-FR Brief at 41; NEGC-NA Brief at 41; Berkshire Brief at 41; Bay State Brief at 41; NSTAR Gas Brief at 41; Unitil Brief at 41; Blackstone Brief at 34).

e. Pilot Program Budgets

The Program Administrators, with the exception of NEGC, argue that the proposed 2010 statewide pilot program budget of 2.3 percent of the Statewide Plan budget is consistent with the Green Communities Act<sup>23</sup> (National Grid Brief at 51 n.21; Berkshire Brief at 50-51

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<sup>23</sup> NEGC-FR and NEGC-NA do not propose to offer pilot programs because of certain conditions in their service areas, including: (1) reduced energy consumption, particularly in the manufacturing sector; (2) high unemployment; and (3) growth in the number of low-income customers. NEGC-FR and NEGC-NA note, however, that they will continue to monitor the pilot efforts of other Program Administrators (NEGC-FR Brief at 50, citing D.P.U. 09-122, Exh. AG 1-10; Tr. 4 (NEGC) at 694; NEGC-NA Brief at 50, citing D.P.U. 09-123, Exh. AG 1-10; Tr. 4 (NEGC) at 694-695). In addition, NEGC-FR and NEGC-NA plan to participate in the working group related to the Deep Energy Retrofit Pilot Program. NEGC-FR and NEGC-NA state that if they

n.22; Bay State Brief at 50-51 n.23; NSTAR Gas Brief at 51 n.22; Unitil Brief at 51 n.18).

These Program Administrators explain that, pursuant to the Green Communities Act, if more than one percent of the Statewide Plan budget is expended on “ ‘programs for research, development and commercialization of products or processes which are more energy-efficient than those generally available’ ” and “ ‘programs for development of markets for such products and processes, including recommendations for new appliance and product efficiency standards[,]’ ” the Council must explicitly authorize the pilot budget (National Grid Brief at 51 n.21; Berkshire Brief at 50-51 n.22; Bay State Brief at 50-51 n.23; NSTAR Gas Brief at 51 n.22; Unitil Brief at 51 n.18; quoting G.L. c. 25, § 21(b)(2)). The Program Administrators state that the Council approved the statewide and individual Program Administrator pilot budgets in its Pilot Budget Resolution (National Grid Brief at 51 n.21; Berkshire Brief at 50-51 n.22; Bay State Brief at 50-51 n.23; NSTAR Gas Brief at 51 n.22; Unitil Brief at 51 n.18).

B. Program Cost-Effectiveness

1. Introduction

The Department is required to find that each energy efficiency program contained in the Three-Year Plans is cost-effective. G.L. c. 21(d)(2); see also G.L. c. 25, § 21(b)(3) (Council and Department must periodically review the cost-effectiveness of programs; if a program is not cost-effective, it must be modified or terminated). Program cost-effectiveness ensures that

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are able to identify opportunities to offer the Deep Energy Retrofit, they will seek a midcourse modification in order to offer that program in the future (Tr. 4 (NEGC) at 694).

programs are designed to obtain energy savings and system benefits with value greater than program costs. G.L. c. 25, § 21(b)(3). For each energy efficiency program, each Program Administrator submitted a projected benefit-cost ratio for 2010 through 2012 using the TRC test (Exh. Common 2, at 28-29). Total resource costs are comprised of the following:

(1) program implementation costs; (2) evaluation costs; (3) before-tax performance incentives; and (4) participant costs (Exh. Common 2, at 29). The Program Administrators allocated costs associated with pilot programs and hard-to-measure initiatives to the appropriate residential, low-income, or C&I sector level for the purpose of evaluating the cost-effectiveness of those programs<sup>24</sup>

The Program Administrators include the following benefits in the TRC test:

- avoided gas energy benefits, calculated as the product of the program's energy savings (as measured in therms) and an avoided energy cost factor;<sup>25</sup>
- avoided electric energy benefits, calculated as the product of the program's energy savings (as measured in kilowatt-hours ("kWh")) and an avoided energy cost factor;<sup>26</sup>

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<sup>24</sup> Exhs. Common 2, at 15-16; Berkshire-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Exh. Bay State-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Exh. NEGC-FR-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Exh. NEGC-NA-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Exh. NSTAR Gas-3, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Exh. NG-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Exh. Unitil-6, Table IV.D, Cost-Effectiveness Summary Table (January 21, 2010).

<sup>25</sup> The avoided gas supply cost factors were developed in the Avoided Energy Supply Cost in New England: 2009 Report ("Avoided Cost Study") (Exhs. Common 2, at 77; Common 20).

<sup>26</sup> Energy savings and the avoided energy cost factor were each divided into four time periods: winter peak, winter off-peak, summer peak, and summer off-peak (Exh. Common 1, at 106).

- avoided generation capacity benefits, calculated as the product of the program's reduction in peak demand (as measured in kWh) and an avoided capacity cost factor;<sup>27</sup>
- non-gas, non-electric resource benefits, calculated as the product of the program's savings in water and sewerage and avoided cost factors for each of these resources; and
- non-resource benefits.<sup>28</sup>

(Exhs. Common 2, 77-78; Common 2, App. D, at 300-301).

## 2. Benefit-Cost Ratios

Tables 9a, 9b, 9c, 9d, 9e, 9f, and 9g: Program Administrator Cost-Effectiveness, in Section XV, summarizes each Program Administrator's projected three-year benefit-cost ratio by program and sector. The benefit-cost ratios for all Program Administrators range from 2.0 to 3.58 for 2010 through 2012.<sup>29</sup>

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<sup>27</sup> Capacity savings and the avoided capacity factor were each divided into summer and winter periods (Exh. Common 1, at 106-107).

<sup>28</sup> The calculation of some non-resource benefits vary for each Program Administrator (Tr. 3, at 420-422). To address such variances, the Program Administrators state that they intend to conduct studies on non-resource benefits (Exh. Common 2, at 257).

<sup>29</sup> Exhs. NG-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NEGC-FR, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NEGC- NA, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Berkshire, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Bay State, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NSTAR Gas, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Unitil, Table IV.D, Cost-Effectiveness Summary Table (January 21, 2010).

### 3. Non-Resource Benefits

Unitil and National Grid<sup>30</sup> included non-resource benefits in the cost-effectiveness analyses of their low-income programs (Exhs. NG-6, Cost-Effectiveness, Benefits Summary Table (December 21, 2009); Unitil, Cost-Effectiveness, Benefits Summary Table (January 21, 2010)). Unlike the electric Program Administrators who have historically included non-resource benefits in their low-income programs, National Grid first included non-resource benefits in program year 2009, and Unitil first proposed to include these benefits for program year 2010<sup>31</sup> (Exhs. AG-Unitil-1-24, DPU-National Grid-2-4; Tr. 4 (Unitil) at 693). Bay State, Berkshire, and NEGC did not include non-resource benefits in their Three-Year Plans, stating that, although non-resource benefits do exist, they are very difficult to quantify and their low-income programs are cost-effective without these benefits (see Tr. 4 (Bay State) at 737-738; Tr. 4 (Berkshire) at 707-708).

The Program Administrators state that the sources for the non-resource benefits were compiled by the National Consumer Law Center in 1999, and are described in a memorandum dated March 15, 2000 (Exhs. AG-National Grid-1-24(f), (g); AG-Unitil-1-24(b); Tr. 3,

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<sup>30</sup> National Grid calculated its non-resource benefits based on its 2008/2009 peak cost of gas adjustment factors (“GAFs”) and not the currently-effective GAFs (Tr. 4 (National Grid) at 715). In addition, National Grid based the dollar per-therm low-income discount calculation for Colonial Gas Company- Cape, Colonial Gas Company - Lowell, Essex Gas Company, and Boston Gas Company solely on Boston Gas Company data (Tr. 4 (National Grid) at 716).

<sup>31</sup> Unitil relied on National Grid’s calculation of non-resource benefits, which was based on National Grid’s GAF, and did not conduct an analysis based on its own GAF (Tr. 4 (Unitil) at 693-702).

at 461). The assumptions underlying the sources have not been updated for the Three-Year Plans (Exhs. AG-National Grid-1-24(f), (g); AG-Unitil-1-24(b); Tr. 3, at 461). The Program Administrators indicate that they do, however, plan to review the assumptions underlying the non-resource benefits for both the residential and low-income sectors in 2010 as part of an EM&V study (Exh. Common 2, at 257; Tr. 3, at 461-462).

4. Position of the Parties

a. Program Administrators

The Program Administrators argue that the proposed energy efficiency programs are cost-effective and meet the requirements of the TRC test and Green Communities Act (National Grid Brief at 21; NEGC-FR Brief at 21; NEGC-NA Brief at 21; Berkshire Brief at 21; Bay State Brief at 21; NSTAR Gas Brief at 21; Unitil Brief at 20). In response to the Attorney General's concerns about the accuracy of program benefits, the Program Administrators argue that they have committed to review non-resource benefits in the course of their EM&V activities (National Grid Reply Brief at 16; NEGC-FR Reply Brief at 15; NEGC-NA Reply Brief at 15; Berkshire Reply Brief at 15; Bay State Reply Brief at 15; NSTAR Gas Reply Brief at 11-12; Unitil Reply Brief at 12). The Program Administrators argue that the Council is a part of the EM&V process and, therefore, there is an adequate forum for peer review of future non-resource benefits research ((National Grid Reply Brief at 16; NEGC-FR Reply Brief at 15; NEGC-NA Reply Brief at 15; Berkshire Brief at 21; Berkshire Reply Brief at 15; Bay State Reply Brief at 15; NSTAR Reply Brief at 11-12; Unitil Reply Brief at 12).

b. Attorney General

The Attorney General agrees that the programs proposed in the Statewide Plan, in total, are cost-effective but she makes several recommendations to ensure the accuracy of program benefits used in the TRC test (Attorney General Brief at 10-11). Specifically, the Attorney General recommends that the Program Administrators provide support for non-resource benefits with actual claimed results, recent studies, actual field validations, and independent third party audits (Attorney General Brief at 26-27). In addition, the Attorney General recommends that the Program Administrators be required to file progress reports on these activities whenever energy efficiency reports are filed (Attorney General Brief at 27).

c. Other Intervenors

DOER, ENE, and LEAN argue that the proposed energy efficiency programs are cost-effective and meet the requirements of the TRC test and Green Communities Act (ENE Brief at 7, DOER Brief at 5; LEAN Brief at 4).

C. Analysis and Findings

1. Program Budgets

a. Introduction

A Program Administrator's budget is comprised of energy efficiency program implementation costs, performance incentives and, where applicable, recovery of LBR as approved by the Department. Guidelines § 3.3.1. In authorizing energy efficiency program budgets, the Department is charged with ensuring that (1) Program Administrators have minimized administrative costs to the fullest extent practicable; (2) sufficient funding is

allocated to low-income programs; and (3) competitive procurement processes are used to the fullest extent practicable. G.L. c. 25, §§ 19(a) – (c). Performance incentives are discussed in Section VIII, below.

b. Program Planning and Administration Costs

The Green Communities Act requires the Department to ensure that Program Administrators minimize administrative costs to the fullest extent practicable. G.L. c. 25, § 19(b). Program Administrators are required to include in their Three-Year Plans a detailed description and supporting documentation of the steps taken to minimize administrative costs. Guidelines § 3.3.6. The Program Administrators argue that, in setting program costs, they sought to balance the need to minimize PP&A costs with the need to maximize program quality and oversight (National Grid Brief at 26; NEGC-FR Brief at 26; NEGC-NA Brief at 25-26; Berkshire Brief at 25; Bay State Brief at 26; NSTAR Gas Brief at 26; Unitil Brief at 25; Blackstone Brief at 20).

As shown in Table 7, each Program Administrator's PP&A costs decrease as a percentage of its total budget over the three-year period, 2010 through 2012. With increasing EM&V activities as discussed in Section IX below, we fully expect that program quality and oversight will increase although PP&A costs as a percentage of total budgets will decline. Accordingly, we find that each Program Administrator's Three-Year Plan is designed to minimize administrative costs to the fullest extent practicable, without sacrificing program performance. G.L. c. 25, § 19(b).

During the Department's review of the Program Administrators' future energy efficiency Annual Reports, we will determine whether actual administrative costs were minimized to the fullest extent practicable. Consistent cost categories will enable the Department to more effectively compare administrative costs on a statewide level. Accordingly, the Department directs the Program Administrators to develop consistent statewide PP&A cost categories.<sup>32</sup> The Program Administrators must report on their progress towards meeting this requirement and, if necessary, identify any unresolved issues in their next Annual Reports.

c. RCS/MassSave

As noted above, each Program Administrator's budget includes the RCS/MassSAVE program in order to provide a comprehensive presentation of all energy efficiency programs<sup>33</sup> Conflicting statutory deadlines require the Department to review the budget and surcharge for the RCS/MassSAVE program separate from the Three-Year Plans. See G.L. c. 164 App., §§ 2-1 through 2-10. Although the Department does not approve the RCS/MassSAVE budgets and resulting surcharge in the Three-Year Plans dockets,<sup>34</sup> it is appropriate for the

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<sup>32</sup> As discussed above, the Program Administrators state that they intend to develop consistent PP&A cost categories (Exh. Common 2, at 279).

<sup>33</sup> D.P.U. 09-121, Exh. DPU 1-1; D.P.U. 09-122, Exh. DPU 1-1; D.P.U. 09-123, Exh. DPU 1-1; D.P.U. 09-124, Exh. DPU 1-2; D.P.U. 09-125, Exh. DPU 1-2; D.P.U. 09-126, Exh. DPU 1-1; D.P.U. 09-127, DPU 1-1.

<sup>34</sup> The 2010 RCS/MassSAVE budgets were approved in the following dockets: Bay State Gas Company, D.P.U. 09-105, Stamp-Approval (December 30, 2009); The Berkshire Gas Company, D.P.U. 09-106, Stamp-Approval (December 30, 2009); Blackstone Gas Company, D.P.U. 09-107, Stamp-Approval (December 30, 2009); Boston Gas

Program Administrators to include the RCS/MassSAVE program in their Three-Year Plans for illustrative purposes in order to ensure that they contain a comprehensive presentation of all energy efficiency programs.

d. Low-Income Program Budgets

The Green Communities Act requires at least 20 percent of funds expended on gas energy efficiency programs be spent on comprehensive low-income residential demand side management and education programs. G.L. c. 25 § 19(c). As shown in Table 8:

Minimization Allocation of Low-Income, each Program Administrator proposes a low-income program budget that exceeds the statutory minimum of 20 percent. Accordingly, we find that each Program Administrator has met the requirements of G.L. c. 25, § 19(c).

e. Presentation of Budgets in Real Dollars

As noted above, Program Administrators presented their budgets for 2011 and 2012 in real dollars using a base year of 2010.<sup>35</sup> Bay State, NEGC-FR, and NEGC-NA also provided

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Company, Colonial Gas Company, and Essex Gas Company, each d/b/a National Grid, D.P.U. 09-108, Stamp-Approval (December 30, 2009); Fitchburg Gas and Electric Light Company, d/b/a Unitil, D.P.U. 09-109, Stamp-Approval (December 30, 2009); NSTAR Gas Company, D.P.U. 09-110, Stamp-Approval (December 30, 2009); New England Gas Company – Fall River, D.P.U. 09-111, Stamp-Approval (December 30, 2009); New England Gas Company – N. Attleboro, D.P.U. 09-112, Stamp-Approval (December 30, 2009).

<sup>35</sup> Exhs. NEGC-FR-6 (November 13, 2009); NEGC-NA-6 (November 13, 2009); Tr. 4 (National Grid) at 732; Tr. 4 (Berkshire) at 638; Tr. 4 (Bay State) at 639; Tr. 4 (NSTAR Gas) at 807; Tr. 4 (Unitil) at 638.

their budgets in nominal dollars.<sup>36</sup> In reviewing a Program Administrator's recovery of energy efficiency expenditures, the Department will compare actual expenditures to the budgets proposed in the Three-Year Plans. However, when the Program Administrators present expenditures for 2011 and 2012, they will provide the expenditures in 2011 and 2012 dollars. In order to accurately compare proposed budgets to actual expenditures, it is necessary to review budgets and expenditures with the same base year. Therefore, the Department directs National Grid, Berkshire, NSTAR Gas, and Unitil to also provide budget information in nominal dollars as part of their 2010 Annual Reports.

f. Competitive Procurement

The Department must ensure that energy efficiency programs use competitive procurement processes to the fullest extent practicable. G.L. c. 25, § 19(b). Based on the percentage of costs that the Program Administrators project they will incur, the Program Administrators contend that they are using competitive procurement processes to the fullest extent practicable, in a manner that minimizes costs to the ratepayers while maximizing the associated return on investment in the competitive procurement contracts (National Grid Brief at 26-27; NEGC-FR Brief at 26-27; NEGC-NA Brief at 26; Berkshire Brief at 26; Bay State Brief at 26-27; NSTAR Gas Brief at 26-27; Unitil Brief at 26). Each Program Administrator

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<sup>36</sup> Exhs. NEGC-FR, Table IV.C, Gas PA Budgets (December 21, 2009); NEGC-NA, Table IV.C, Gas PA Budgets (December 21, 2009); Bay State, Table IV.C, Gas PA Budgets (December 21, 2009).

has competitively procured a high percentage of program activities.<sup>37</sup> The Department, therefore, finds that each Three-Year Plan uses competitive procurement processes to the fullest extent practicable consistent with the requirements of G.L. c. 25, § 19(b).

g. Pilot Programs

As described in Section XV, Table 3: Statewide Program Budgets, and Table 4: Statewide Pilot Budgets, the Program Administrators' total pilot budget equals 2.3 percent of the total Statewide Plan budget for 2010. Where the Program Administrators' combined pilot program budgets exceed one percent of the Statewide Plan budget for programs relating to research, development, and commercialization of products or processes which are more energy-efficient than those generally available, and programs for development of markets for such products and processes, including recommendations for new appliance and product efficiency standards, the Program Administrators must obtain Council approval of pilot budgets. G.L. c. 25, § 21(b)(2).

On November 10, 2009, the Council approved budgets for the pilot programs proposed by the gas Program Administrators for 2010 and 2011, noting that these pilot projects will

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<sup>37</sup> Exhs. National Grid-6, Competitive Procurement Process, Competitive Procurement Table (December 21, 2009); NEGC-FR-6, Competitive Procurement Process, Competitive Procurement Table (December 21, 2009); NEGC-NA-6, Competitive Procurement Process, Competitive Procurement Table (December 21, 2009); Berkshire-6, Competitive Procurement Process, Competitive Procurement Table (December 21, 2009); Bay State-6, Competitive Procurement Process, Competitive Procurement Table (December 21, 2009); NSTAR Gas-3, Competitive Procurement Process, Competitive Procurement Table (December 21, 2009); Unitil-6, Competitive Procurement Process, Competitive Procurement Table (January 21, 2010).

provide information and insight that will inform future program opportunities (Pilot Budget Resolution at 1). The Council will address the proposed pilot program budgets for 2012 at a later date as it anticipates that further information about current and future pilots will be provided later in 2010 that will inform subsequent pilot budgets (Pilot Budget Resolution at 1).

The Green Communities Act states that the Three-Year Plans shall include programs for research and market development and commercialization. G.L. c. 25, §21(b)(2). As the Program Administrators reach the goal of acquiring all cost-effective energy efficiency resources, pilot programs will play an important role in developing innovative cost-effective programs. At a combined 2.3 percent of the 2010 Statewide Plan budget and 2.2 percent of the 2011 Statewide Plan budget, the Department finds that the Program Administrators' 2010 and 2011 pilot program budgets are of a sufficient size to carry out energy efficiency research and development activities. Accordingly, the Department approves the Program Administrators' proposed budget for pilot activities related to research and development for 2010 and 2011.

As noted above, NEGC-FR and NEGC-NA do not propose to offer pilot programs due to current conditions in their service territories which make it difficult to secure participants for programs (Tr. 4 (NEGC) at 694). The Department finds that, given these conditions, it is reasonable for NEGC-FR and NEGC-NA to not offer pilot programs at this time. However, NEGC-FR and NEGC-NA should continue to monitor the pilot programs of other Program Administrators and participate in the Deep Energy Retrofit Working Group so that they may offer appropriate pilot programs in the future.

Finally, the Department agrees with the Council that pilot performance in 2010 will help determine the appropriate budget levels for 2012. Accordingly, the Department directs the Program Administrators to provide further information regarding proposed 2012 pilot budgets at the time the Program Administrators file their 2010 Annual Reports.

2. Cost-Effectiveness

a. Introduction

The Department is required to review the energy efficiency programs proposed in the Three-Year Plans for cost-effectiveness. G.L. c. 25, § 21(b)(3). Such review ensures that programs are designed to capture energy savings and system benefits with values greater than program costs. G.L. c. 25, § 21(b)(3).

In D.P.U. 08-50-A at 14, the Department reaffirmed that the TRC test is the appropriate test for evaluating the cost-effectiveness of energy efficiency programs. Specifically, because the TRC test includes the avoided cost of supply as one of the most significant program benefits, this test satisfies the Act's requirement that energy efficiency programs be less expensive than supply. D.P.U. 08-50-A at 14.

Under the TRC test, screening for cost-effectiveness should be performed at the program level, with the exception of hard-to-measure and pilot programs. D.P.U. 08-50-A at 20; Guidelines § 3.4. An energy efficiency program will be found cost-effective if program

benefits are equal to or greater than program costs, as expressed in present value terms.

Guidelines § 3.4.<sup>38</sup>

Hard-to-measure and pilot programs are not screened individually for cost-effectiveness. Guidelines § 3.4. Instead, the costs and benefits of hard-to-measure and pilot programs are included in the total program costs and benefits of the relevant customer sector. Guidelines § 3.4.3.2. If a hard-to-measure or pilot program causes the sector's benefit-cost ratio to fall below one, the hard-to-measure or pilot program will be deemed not cost-effective. D.P.U 08-50-A at 30.

b. Non-Resource Benefits

The Attorney General argues that the Program Administrators based their non-resource benefits, in part, on stale information and recommends that the Department require the Program Administrators to use updated studies to support the quantification of non-resource benefits (Attorney General Brief at 27). The assumptions underlying the sources on which the non-resource benefits are based date back as far as 1997 and have not been updated for the Three-Year Plans (Exhs. NG-AG-1-24(f), Unitil-AG-1-24(b); Tr. 3, at 461). Although the Program Administrators have indicated that they plan to review these assumptions for both the residential and low-income sectors, National Grid and Unitil rely on these non-resource benefits to support the cost-effectiveness of the low-income programs proposed in their

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<sup>38</sup> The Department directed Program Administrators to use a discount rate equal to the twelve-month average of the historical yields from the ten-year Treasury note, using the previous calendar year to determine the twelve-month average Treasury note yield. D.P.U. 08-50-A at 20-23.

Three-Year Plans (Tr. 3, at 461-462, 480). Although the Department accepts that non-resource benefits are real and can be quantified, the non-resource benefits National Grid and Unitil relied on are not current and need to be further evaluated and updated. The Department will allow National Grid and Unitil to include these benefits in the TRC test for program year 2010.<sup>39</sup> However, the non-resource benefits, as currently presented, may not be included in the TRC test for 2011 and 2012.

Regarding Unitil's reliance on National Grid's calculation of non-resource benefits, the Department directs Unitil, on a going forward basis, to use its own service-territory specific data when calculating non-resource benefits, as specified in RR-DPU-12 (Tr. 4 (Unitil) at 693-702). In addition, the Department directs National Grid, on a going forward basis, to calculate non-resource benefits using its current GAF and based on the weighted average dollar per-therm low-income discount rate for all four National Grid companies (i.e., Boston Gas Company, Colonial Gas Company – Cape and Lowell, and Essex Gas Company), as presented in DPU-RR-13.

c. Program Cost-Effectiveness

Each Program Administrator included in its cost-effectiveness analyses all energy system and program participant costs and benefits identified in the Guidelines at § 3.4.4.1.<sup>40</sup>

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<sup>39</sup> The details of the EM&V process for these non-resource benefits will be discussed below in Section IX.

<sup>40</sup> Exhs. NG-6, Table IV.D, Cost Summary Table (December 21, 2009); NEGC-FR, Table IV.D, Cost Summary Table (December 21, 2009); NEGC-NA, Table IV.D, Cost Summary Table (December 21, 2009); Berkshire, Table IV.D, Cost Summary Table (December 21, 2009); Bay State, Table IV.D, Cost Summary Table

In addition, each Program Administrator included in its analyses its proposed before-tax performance incentive. See KeySpan Energy Delivery New England d/b/a National Grid, D.P.U. 07-104, at 19.<sup>41</sup> Accordingly, the Department finds that the cost-effectiveness analyses performed by NEGC-FR, NEGC-NA, Berkshire, Bay State, and NSTAR Gas of the programs proposed in their Three-Year Plans are consistent with Section 3.4 of the Guidelines for 2010, 2011, and 2012.<sup>42</sup> The Department also finds that National Grid and Unitil's cost-effectiveness analyses are consistent with Section 3.4 of the Guidelines for 2010 and for all programs that do not include non-resource benefits for 2011 and 2012.<sup>43</sup>

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(December 21, 2009); NSTAR-3, Table IV.D, Cost Summary Table (December 21, 2009); Unitil, Table IV.D, Cost Summary Table (January 21, 2010).

<sup>41</sup> Exhs. NG-6, Table IV. H, Performance Incentives Summary Table (December 21, 2009); NEGC-FR, Table IV.H, Performance Incentives Summary Table (December 21, 2009); NEGC-NA, Table IV.H, Performance Incentives Summary Table (December 21, 2009); Berkshire, Table IV.H, Performance Incentives Summary Table (December 21, 2009); Bay State, Table IV.H, Performance Incentives Summary Table (December 21, 2009); NSTAR-3, Table IV.H, Performance Incentives Summary Table (December 21, 2009); Unitil, Table IV.H, Performance Incentives Summary Table (January 21, 2010).

<sup>42</sup> The Department notes, however, that none of the gas Program Administrators included the free ridership and spillover effects in their cost-effectiveness analyses as required by Boston Gas Company, Colonial Gas Company, and Essex Gas Company, d/b/a National Grid, D.P.U. 08-109, at 16 (2009). This issue will be discussed below in Section IX.3.

<sup>43</sup> In Section IX, the Department directs the Program Administrators to undertake studies during 2010 that evaluate non-resource benefits to ensure that updated values will be developed in time for inclusion in the cost effectiveness analyses for program year 2011.

The Department further finds that each Program Administrator has demonstrated that each proposed energy efficiency program in its Three-Year Plan has a pre-implementation benefit-cost ratio of greater than one.<sup>44</sup> Therefore, consistent with G.L. c. 25, § 21(b)(3), the Department finds that each proposed program included in the Three-Year Plans, with the exception of the programs that include non-resource benefits for 2011 and 2012, as estimated in the pre-implementation phase, is cost-effective. The cost-effectiveness of each proposed program included in the Three-Year Plans that includes non-resource benefits for 2011 and 2012 will be assessed after the updated non-resource benefits are available.

d. Hard-to-Measure and Pilot Programs

Each Program Administrator, with the exception of NEGC,<sup>45</sup> has included hard-to-measure and pilot program costs and benefits in the cost-effectiveness analyses of the relevant customer sectors, as required by the Section 3.4.3.2 of the Guidelines.<sup>46</sup> With these

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<sup>44</sup> Exhs. NG-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NEGC-FR, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NEGC-NA, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Berkshire, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Bay State, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NSTAR-3, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Unitil, Table IV.D, Cost-Effectiveness Summary Table (January 21, 2010).

<sup>45</sup> As discussed in Section V.A.e (Budget), NEGC-FR and NEGC-NA do not propose to offer pilot programs at this time.

<sup>46</sup> Exhs. NG-6, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NEGC-FR, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); NEGC-NA, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Berkshire, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Bay State, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009);

inclusions, the benefit-cost ratios remain greater than one for each customer sector. The Department, therefore, approves the implementation of each proposed hard-to-measure and pilot program.<sup>47</sup>

## VI. FUNDING

### A. Program Administrator Proposals

#### 1. Energy Efficiency Surcharge

The Program Administrators propose to recover their costs, along with any applicable performance incentives and, where applicable, LBR associated with the Three-Year Plans,<sup>48</sup> through the EES component<sup>49</sup> of each Program Administrator's LDAC (Exh. Common 2, at 272). Each Program Administrator proposes to apply the EES to its therm sales to recover from firm ratepayers any program costs and associated expenditures (Exh. Common 2, at 272). All of the Program Administrators except Unitil propose to collect performance incentives through the LDAC after the filing of Annual Reports (Tr. 4 (Bay State) at 714; Tr. 4 (Berkshire) at 743; Tr. 4 (National Grid) at 656-657; Tr. 4 (NEGC) at 650; RR-DPU-NSTAR Gas-5). Unitil proposes to collect performance incentives as soon as its

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NSTAR-3, Table IV.D, Cost-Effectiveness Summary Table (December 21, 2009); Unitil, Table IV.D, Cost-Effectiveness Summary Table (January 21, 2010).

<sup>47</sup> In Section V.C.g, above, the Department approved the budget for pilot programs.

<sup>48</sup> The Department has stated that it will investigate National Grid's proposal to recover LBR in a separate proceeding. D.P.U. 07-104-A at 10; D.P.U. 09-GAF-P5, Letter Order at 2 (2009).

<sup>49</sup> The EES was previously known as the conservation charge.

Three-Year Plan budget is approved and to reconcile its actual performance incentive dollars after the fact (Tr. 4 (Unitil) at 652, 735-736).

The Program Administrators state that all costs associated with the MassSave/RCS program will continue to be recovered through the RCS surcharge, which is reviewed in a separate docket.<sup>50</sup> The Program Administrators explain that, although a separate RCS surcharge and filing are required by statute,<sup>51</sup> information about the RCS budget is included in the Three-Year Plans in order to provide a comprehensive and coordinated presentation of all energy efficiency programs being offered from 2010 through 2012.<sup>52</sup>

## 2. Outside Funding

Section 3.2.2.1 of the Guidelines requires a gas Program Administrator's Three-Year Plan to include a description of all other sources of funding<sup>53</sup> the Program Administrator considered to fund its energy efficiency programs. The Program Administrators do not propose to rely on any outside funding sources for 2010 (see Exh. Common 2, at 62-63). The Program Administrators have set statewide target levels of outside funding for energy

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<sup>50</sup> D.P.U. 09-121, Exh. DPU 1-1; D.P.U. 09-122, Exh. DPU 1-1; D.P.U. 09-123, Exh. DPU 1-1; D.P.U. 09-124, Exh. DPU 1-2; D.P.U. 09-125, Exh. DPU 1-2; D.P.U. 09-126, Exh. DPU 1-1; D.P.U. 09-127, DPU 1-1.

<sup>51</sup> G.L. c. 164 App., §§ 2-1 through 2-10.

<sup>52</sup> Exh. D.P.U. 09-121, Exh. DPU 1-1; D.P.U. 09-122, Exh. DPU 1-1; D.P.U. 09-123, Exh. DPU 1-1; D.P.U. 09-124, Exh. DPU 1-2; D.P.U. 09-125, Exh. DPU 1-2; D.P.U. 09-126, Exh. DPU 1-1; D.P.U. 09-127, Exh. DPU 1-1.

<sup>53</sup> Other funding revenue refers to revenue received by a gas Program Administrator in excess of revenue from the LDAC. Guidelines § 3.2.2.1.

efficiency programs at \$20 million in 2011 and \$40 million in 2012 (Exh. Common 2, at 62-63).<sup>54</sup> The Program Administrators propose to use 60 percent of outside funding to directly offset program costs and the remaining 40 percent to provide capital to customers, which customers would repay through on-bill financing or other mechanisms (Exh. Common 2, at 63). The Program Administrators state that they will continue to participate in informal working sessions that DOER has convened to discuss possible outside funding approaches and initiatives (Exh. Common 2, at 61). If the outside funding target levels are not reached by September 1, 2010, the Program Administrators state that they will refile their 2011 and 2012 goals and budgets (Exh. Common 2, at 63).

B. Positions of the Parties

1. Program Administrators

The Program Administrators contend that the cost recovery structure proposed in their Three-Year Plans complies with the Green Communities Act, the Department's directives in D.P.U. 08-50-B, and established Department practice (National Grid Brief at 37-38; NEGC-FR Brief at 36-37; NEGC-NA Brief at 36-37; Berkshire Brief at 36-37; Bay State Brief at 36-37; NSTAR Gas Brief at 37-38; Unitil Brief at 36-37). In addition, the Program Administrators state that they are committed to accessing other sources of funding, such as on-bill financing and outside funding (National Grid Brief at 38-39; NEGC-FR Brief at 38;

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<sup>54</sup> Source of outside funding may include: (1) traditional lending sources, such as banks; (2) non-traditional sources, such as retailers and other private entities; and/or (3) funding obtained through the sale of tax-exempt bonds or other government initiatives (Exh. Common 2, at 61).

NEGC-NA Brief at 38; Berkshire Brief at 38; Bay State Brief at 38; NSTAR Gas Brief at 38; Unitil Brief at 38).

The Program Administrators argue that the anticipated levels of outside funding for 2011 and 2012 proposed in the Statewide Plan are ambitious but realistic (National Grid Brief at 40; NEGC-FR Brief at 39; NEGC-NA Brief at 39; Berkshire Brief at 39; Bay State Brief at 39; NSTAR Gas Brief at 39; Unitil Brief at 39). If these targets are not reached by September 1, 2010, the Program Administrators propose to re-file their 2011 and 2012 savings goals and budgets based on actual levels of outside funding (Exh. Common 2, at 63; National Grid Brief at 39-40; NEGC-FR Brief at 39; NEGC-NA Brief at 39; Berkshire Brief at 39; Bay State Brief at 39; NSTAR Gas Brief at 39; Unitil Brief at 39). The Program Administrators state that all reporting related to outside funding will be addressed through the existing quarterly and annual reporting required by the Green Communities Act and in midterm modification filings (National Grid Reply Brief at 17; NEGC-FR Reply Brief at 16; NEGC-NA Reply Brief at 16; Berkshire Reply Brief at 16; Bay State Reply Brief at 16; NSTAR Gas Reply Brief at 4 n.2; Unitil Reply Brief at 4 n.2).

In response to the Attorney General's argument that the Program Administrators should separately report on the use of RCS funds, NSTAR Gas and Unitil argue that this reporting requirement is unnecessary because the Green Communities Act establishes a sufficient reporting process for the use of energy efficiency funds (NSTAR Reply Brief at 4 n.2; Unitil Reply Brief at 4 n.2). National Grid, NEGC, Berkshire, and Bay State contend that the Attorney General's concerns are already met because they track and report all energy

efficiency costs separately, by program, including RCS (National Grid Reply Brief at 17; NEGC-FR Reply Brief at 16; NEGC-NA Reply Brief at 16; Berkshire Reply Brief at 15-16; Bay State Reply Brief at 15-16).

2. Attorney General

The Attorney General recommends that the Department require the Program Administrators to track and report on RCS funds separate and apart from the energy efficiency funds collected through the EES (Attorney General Brief, App. A through H ¶ 1). The Attorney General explains that this will ensure that RCS funds are used solely to fund MassSave audits and not for other energy efficiency programs (Attorney General Brief, App. A through H ¶ 1).

The Attorney General also recommends that the Department require the Program Administrators to document and report on their ability to obtain outside funding for 2011 and 2012 (Attorney General Brief, App. A through G ¶ 2). According to the Attorney General, the Program Administrators should identify the method for seeking and pursuing particular sources of outside funding (Attorney General Brief, App. A through G ¶ 2). In addition, the Attorney General argues that the Program Administrators should provide data, including “traditional” bill impact analyses, to document how the acquisition of outside funding will affect cost recovery through the EES (Attorney General Brief, App. A through G ¶ 2).

3. DOER

DOER states that, despite the current economic downturn, it is cautiously optimistic that the Program Administrators will succeed in securing access to outside funds for energy

efficiency programs in 2011 and 2012 (DOER Brief at 13). DOER contends that, regardless of the source, the level of outside funding will have an impact on the EES (DOER Brief at 13). If the Program Administrators are unable to access sufficient additional outside funding, DOER notes that program budgets could change by greater than 20 percent, thereby requiring the filing of petitions for midterm modifications with the Department (DOER Brief at 13-14). DOER supports the use of midterm modifications as a Department-approved mechanism for the Program Administrators to amend budget levels (DOER Reply Brief at 14).

4. ENE

ENE contends that the Program Administrators have committed to working with the Council to identify and secure outside funding sources (ENE Brief at 13). ENE, therefore, recommends that the Department support the Program Administrators' efforts to procure outside funding (ENE Brief at 13).

C. Analysis and Findings

1. Energy Efficiency Surcharge

The Green Communities Act requires the individual Three-Year Plans to include a fully reconciling funding mechanism. G.L. c. 25, § 21(b)(2)(vii); see also G.L. c. 25, § 21(d)(2). Further, the Guidelines state that a gas Program Administrator shall collect funds for the implementation of its energy efficiency plan, including LBR, where allowed, and performance incentives, through its LDAC tariff. Guidelines § 3.2.2.

As noted above, the Program Administrators have proposed to recover all costs associated with the Three-Year Plans through the LDAC (Exh. Common 2, at 272). All

Program Administrators except Unitil propose to collect performance incentives through the LDAC after they file their Annual Reports (Tr. 4 (Bay State) at 714; (Berkshire) Tr. 4 (Berkshire) at 743; Tr. 4 (National Grid) at 656; Tr. 4 (NSTAR Gas) at 788-789; Tr. 4 (NEGC) at 650; RR-DPU-NSTARGas-5). Unitil proposes to collect projected performance incentives as soon as its Three-Year Plan budget is approved, and to reconcile its actual performance incentive dollars after the fact (Tr. 4 (Unitil) at 735).

To recover performance incentives and LBR, a Program Administrator has the burden to demonstrate that implementation of its energy efficiency measures resulted in actual savings and benefits. D.P.U. 08-50-A at 49 (“Performance incentives should be based on clearly-defined goals and activities that can be sufficiently monitored, quantified and verified after the fact.”); Keyspan Energy Delivery New England d/b/a National Grid, D.P.U. 07-104, at 20 (2008). A Program Administrator cannot collect performance incentives and LBR until it has shown that actual savings and benefits resulted from its Three-Year Plan, which will be verified in the Annual Report. Although the Program Administrators’ proposal to fund costs related to the implementation of the Three-Year Plans through the LDAC is consistent with the Green Communities Act and the Department’s Guidelines,<sup>55</sup> Program Administrators cannot include the LBR and performance incentives in the EES until they have been approved by the Department (i.e., once the Annual Report has been approved). Accordingly, we do not accept Unitil’s proposal to collect projected performance incentives as soon as its budget has been approved.

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<sup>55</sup> See G.L. c. 25, §§ 19(b), 21(b)(2)(vii); Guidelines § 3.2.2.

The Department finds that each Program Administrator may recover the funds necessary to implement the proposed budgets included herein through an EES.<sup>56</sup> The Program Administrators may, however, only recover performance incentives and LBR through the LDAC once the incentives and LBR have been reviewed and approved in their Annual Report dockets.

Regarding the Attorney General's recommendation that the Program Administrators track and report RCS/MassSAVE funds separately from funds collected through the EES, as stated in D.P.U. 08-50-A, conflicting statutory and regulatory guidelines require that RCS proposals will continue to be filed and reviewed on an annual basis in separate dockets. D.P.U. 08-50-A at 66, citing G.L. c. 164, App. § 2-7(b). As part of our investigation of the RCS filings, the Department is required to annually review and reconcile the RCS income and expenses incurred by the gas companies during the preceding year in carrying out the RCS program. D.P.U. 08-50-A at 66, citing G.L. c. 164, App. § 2-7(f), ¶ 4, 220 C.M.R. § 7.09. The RCS filings contain information on the amounts collected and expended on the RCS program during the prior year. G.L. c. 164, App. § 2-7(f), ¶ 4. Therefore, during the RCS proceedings, all interested persons will have an opportunity to review the amount of funds collected and spent on the RCS program. In addition, the Department and interested parties will review spending on all other energy efficiency programs each year through the Annual Reports. We find that these processes adequately address the Attorney General's concerns, as

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<sup>56</sup> As noted below, the Department directs the Program Administrators to submit documentation regarding their efforts to secure outside funding for 2011 and 2012, consistent with the requirements of the Green Communities Act and Guidelines.

they will ensure that funds collected through the RCS surcharge are spent only on the RCS program.

## 2. Outside Funding

The Green Communities Act requires that funding of the electric Three-Year Plans include other funding as approved by the Department after consideration of the availability of other private or public funds. G.L. c. 25, § 19(a)(3)(ii). Although the Green Communities Act does not contain a similar requirement for the gas Three-Year Plans, the Department's Guidelines require, among other things, gas Program Administrators to include in their Three-Year Plans a description of all other sources of funding the Program Administrators considered to fund their energy efficiency programs.<sup>57</sup> Guidelines § 3.2.2.1.

As noted above, the Program Administrators do not propose to include any sources of outside funding in their budgets for 2010 (see Exh. Common 2, at 59-64). For 2011 and 2012, the Program Administrators project that statewide, they will secure outside funding in the amount of \$20 million and \$40 million, respectively (Exh. Common 2, at 62-63).

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<sup>57</sup> Specifically, the Guidelines require gas Program Administrators to include a detailed description of all other funding revenue sources that it considered as part of their Three-Year Plans, including, but not limited to: (1) other funding sources identified by the gas Program Administrator; (2) whether or not the gas Program Administrator attempted to access those other funding revenue sources; (3) if the gas Program Administrator chose not to access those other funding revenues, the reason behind that decision; (4) a statement of the amount of the other funding revenues available; (5) whether the other funding revenue source is a recurring source; (6) any conditions placed on the use of the other funding revenue sources; and (7) whether receiving other funding revenue allowed the gas Program Administrator to seek less money from ratepayers. Guidelines § 3.2.2.1.

Although the Program Administrators did not identify new sources of outside funding for 2010, the Department notes that the Program Administrators have been pursuing private investment sources but were unable to develop and execute outside funding arrangements for 2010 because there was insufficient time prior to the filing of the Three-Year Plans (Exh. Common 2, at 62-64). Despite being unable to obtain outside funding, the Department concludes that the Program Administrators took sufficient action to identify outside funding for program year 2010.

Specifically, for years 2011 and 2012, the Program Administrators have: (1) identified a targeted amount of outside funding for program years (Exh. Common 2, at 62-64; Tr. 2, at 230); (2) described potential outside funding sources being considered; (3) detailed, in theory, conditions that could be placed on the use of the funding sources; and (4) presented an assumption that 60 percent of outside funding is planned to directly offset program costs so they could seek less money to fund energy efficiency from ratepayers (Exh. Common 2, at 61-64; Tr. 2, at 227-228, 230, 240, 250-251).

The Department recognizes that the Program Administrators have not yet had the opportunity to fully explore all sources of outside funding and that DOER has convened informal working sessions to discuss possible outside funding approaches and initiatives (Exh. Common 2, at 61). The Program Administrators have indicated that they plan to continue to participate actively in the outside funding working group established by DOER (Exh. Common 2, at 61). Once funding sources are more adequately identified the Program

Administrators state they will file the updated savings goals and program budgets with the Council by September 30, 2010 (Exh. Common 2, at 63; Tr. 2, at 257).

As will be discussed in Section X, below, to provide the Department with sufficient information to assess proposed outside funding levels for 2011 and 2012, the Department directs the Program Administrators to submit documentation regarding their efforts to secure such funding for these years, as required by Section 3.2.2.1 of the Guidelines, at the time of the filing of their next Annual Reports. The Department fully expects that the gas Program Administrators will aggressively pursue all potential sources of outside funding for 2011 and 2012 before proposing to collect costs from ratepayers and report to the Department on their efforts as required by Guidelines.<sup>58</sup>

## VII. BILL IMPACTS

### A. Introduction

In Section VI.C, above, the Department found that the manner in which each Program Administrator calculated its EES (which will provide funding for its energy efficiency budget beyond that provided by outside funding sources) is consistent with the requirements of the Green Communities Act and the Department's Guidelines. G.L. c. 25, §§ 19(b), 21(b)(2)(vii); Guidelines § 3.2.2.

In D.P.U. 08-50-A, the Department set forth the considerations that would guide its review of rate and bill impacts arising from the funding of gas efficiency programs through a

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<sup>58</sup> In addition, as discussed in Section XIII.3, below, the Department directs the Program Administrators to propose a performance metric designed to incent them to aggressively pursue all potential sources of outside funding.

mechanism such as an EES. D.P.U. 08-50-A at 56-60. To fulfill the goals stated in D.P.U. 08-50-A and to provide a consistent method by which each Program Administrator would determine and present the rate and bill impacts, the Department convened a bill impact working group (“Bill Impact Working Group”) to develop the appropriate models and templates (“Bill Impact Model”). On September 29, 2009, the Bill Impact Working Group submitted its report to the Department. In D.P.U. 08-50-B, the Department approved the Bill Impact Model. D.P.U. 08-50-B at 18-19.

B. Bill Impact Model

The Bill Impact Model compares the rate and bill impacts that result from two scenarios: (1) energy efficiency programs that are funded through “current” funding levels and (2) energy efficiency programs that are funded through current funding levels plus “incremental” funding through the EES.<sup>59</sup> The difference between the incremental and current scenarios represents the rate and bill impact associated with implementation of the EES.

The Bill Impact Model calculates rate and bill impacts for three categories in each of the residential, low-income, and C&I customer classes: (1) a non-participant, who is a customer that does not participate in an energy efficiency program; (2) a participant, who is a customer that participates in an energy efficiency program; and (3) a “rate class total,” that indicates the effects of efficiency savings across the customer class as a whole (Tr. 1, at 54).

Under the Bill Impact Model, both program participants and non-participants experience the same rate impacts that result from implementation of the EES—an increase in

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<sup>59</sup> Tr. 1, at 31.

rates equal to the value of the surcharge (Tr. 1, at 45-55). Program participants, however, experience an additional bill reduction through savings that result from the energy efficiency measures installed through a program (Tr. 1, at 45-55). The bill impacts estimates for program participants are primarily dependent on the participant savings assumptions in the Bill Impact Model. The rate class total incorporates the cumulative effect across all customers of the savings experienced by participants (Tr. 1, at 94-99). The Bill Impact Model calculates rate and bill impacts for each customer category during the three-year period, 2010 through 2012, based on the costs and savings that occur during the period.

C. Program Administrator Proposals

The Program Administrators state that they have prepared and filed their respective bill impacts in accordance with the D.P.U. 08-50-B and the Bill Impact Model.<sup>60</sup> Each Program Administrator has presented bill impacts based on its EES calculated (1) with and without outside funding as a funding source during the three-year period,<sup>61</sup> and (2) with and without LBR recovery as a budget item during the three-year period, as necessary.<sup>62</sup> Under all scenarios, each Program Administrator determined its EES based on the total budget included in its Three-Year Plan.

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<sup>60</sup> Exhs. NG-7; NEGC-FR-7; NEGC-NA-7; Berkshire-7; Bay State-7; NSTAR Gas-4; Unutil-1, Tab 7.

<sup>61</sup> Exhs. NG-7; NEGC-FR-7; NEGC-NA-7; Berkshire-7; Bay State-7; NSTAR Gas-4; Unutil-1, Tab 7.

<sup>62</sup> National Grid was the only Program Administrator to provide bill impacts with and without LBR recovery (Exhs. NG-7 (November 13, 2009)).

D. Positions of the Parties

1. Program Administrators

The Program Administrators contend that the model used to develop bill impacts is the result of a collaborative effort of the Bill Impact Working Group and complies with all Department directives in D.P.U. 08-50-A (National Grid Brief at 29-30; NEGC-FR Brief at 30; NEGC-NA Brief at 30; Berkshire Brief at 29; Bay State Brief at 30; NSTAR Gas Brief at 30; Unitil Brief at 29). The Program Administrators argue that the bill impacts resulting from the Three-Year Plans are acceptable and should be approved by the Department (National Grid Brief at 35; NEGC-FR Brief at 34; NEGC-NA Brief at 34; Berkshire Brief at 34; Bay State Brief at 34; NSTAR Gas Brief at 35; Unitil Brief at 34).

The Program Administrators state that they have submitted multiple iterations of the bill impact model using different assumptions in order to provide the Department with a diverse and comprehensive data set for analysis and consideration (National Grid Reply Brief at 15; NEGC-FR Reply Brief at 15; NEGC-NA Reply Brief at 14; Berkshire Reply Brief at 14; Bay State Reply Brief at 14; NSTAR Gas Reply Brief at 10; Unitil Reply Brief at 10).

Regarding the Attorney General's request that Program Administrators also submit a traditional bill impact analysis, the Program Administrators argue that the model approved in D.P.U. 08-50-B (which does not include a traditional bill impact analysis) provides a reasonable estimate of bill impacts (National Grid Reply Brief at 15; NEGC-FR Reply Brief at 14; NEGC-NA Reply Brief at 14; Berkshire Reply Brief at 14; Bay State Reply Brief at 14; NSTAR Gas Reply Brief at 10; Unitil Reply Brief at 10). The Program Administrators

contend that the Bill Impact Model complies with all Department directives in D.P.U. 08-50-A and it would be unnecessarily costly and burdensome to present multiple bill impact analyses (National Grid Reply Brief at 15; NEGC-FR Reply Brief at 14-15; NEGC-NA Reply Brief at 14-15; Berkshire Reply Brief at 14; Bay State Reply Brief at 14; NSTAR Gas Reply Brief at 10-11; Unitil Reply Brief at 10-11).

The Program Administrators state that they will likely be required to file a bill impact analysis as part of their LDAF filings, which include the EES, thereby satisfying the Attorney General's request for midterm bill impact updates (National Grid Reply Brief at 15-16; NEGC-FR Reply Brief at 14-15; NEGC-NA Reply Brief at 14-15; Berkshire Reply Brief at 14; Bay State Reply Brief at 14; NSTAR Gas Reply Brief at 11; Unitil Reply Brief at 11).

## 2. Attorney General

The Attorney General states that as a member of the Bill Impact Working Group, she endorsed the Bill Impact Model the group developed (Attorney General Brief at 21-22). She argues, however, that certain issues became apparent only when the model was applied using each Program Administrator's data (Attorney General Brief at 23 n.8). The Attorney General states that there have been many iterations of the Bill Impact Model submitted in the Three-Year Plan proceedings and that each iteration raises issues with respect to the model's design and application (Attorney General Brief at 22). Specifically, the Attorney General argues that the Bill Impact Model produces inaccurate results due to the method used to determine current and incremental usage levels (Attorney General Brief at 23 n.7). Additionally, she argues that assuming energy savings to a point where a participant's bill

impact is zero produces results that provide little value to the Department, intervenors, or customers (Attorney General Brief at 23 n.7).

The Attorney General requests that the Department reconvene the Bill Impact Working Group and require the Program Administrators to further refine the Bill Impact Model in order to provide a revised bill impact analysis (Attorney General Brief at 23). Specifically, the Attorney General requests that Program Administrators be required to conduct a “traditional” bill impact analysis and file annual bill impact updates (Attorney General Brief at 23-26).

The Attorney General states that the Bill Impact Model is very different from the bill impact analysis that is generally required for companies to secure a rate adjustment (Attorney General Brief at 21). The Attorney General argues that such an analysis will be informative because it will capture changes in rates solely due to the implementation of the Three-Year Plans (Attorney General Brief at 24).

In addition, the Attorney General argues that the bill impact analysis should be expanded to show customers the effects that specific energy efficiency measures have on a typical customer’s bill (Attorney General Brief at 23 n. 6). Finally, the Attorney General states that each Program Administrator should be required to file an annual report which documents the manner in which it informed its customers about the impact its Three-Year Plan would have on their bills and the manner in which participation could eliminate or mitigate those bill impacts (Attorney General Brief at 23-26, App. A through G).

### 3. DOER

DOER contends that the model developed by the Bill Impact Working Group provides the Council and the Department with the proper tools to consider customer bill impacts (DOER Reply Brief at 5). DOER argues that the role of the Department is not to determine whether a precise bill impact is acceptable but rather to determine whether potential bill impacts are adequately balanced by the benefits realized through energy savings (DOER Brief at 16; DOER Reply Brief at 3-4).

DOER contends that bill impacts for participants will be mitigated by the level of savings participants can achieve (DOER Brief at 15). DOER argues that the Council and other stakeholders are committed to keeping energy efficiency program cost drivers in check and that these entities have demonstrated collective efforts to keep potential bill impacts under control (DOER Reply Brief at 4-5).

DOER argues the expanded bill impact analysis suggested by the Attorney General should not be required because it is overly burdensome and will provide no new insight with respect to bill impacts for customers (DOER Reply Brief at 3). DOER reports that the common understanding of the Bill Impact Working Group was that the Bill Impact Model was for the Department's use and was not intended as a tool for customers (DOER Reply Brief at 2-3). Similarly, DOER argues that annual bill impact analyses, traditional or otherwise, need not be conducted unless the Department determines that such information is required to assess the need for a midterm plan modification (DOER Reply Brief at 4).

4. ENE

ENE asserts that increase of expenditures on energy efficiency as a result of the gas Three-Year Plans will have a small impact on customer bills and produce substantial customer benefits (ENE Brief at 9). ENE argues that although customers will see an increase in bills due to higher energy efficiency budgets, they will also see direct benefits (ENE Brief at 9). ENE urges the Department to also consider other benefits not included in the bill impact analysis, such as the creation of local energy jobs over the period of the Three-Year Plans (ENE Brief at 9).

5. AIM

AIM argues that not every customer in Massachusetts will benefit from the expanded energy efficiency programs but the majority of customers will see overall bill increases as a result of the Three-Year Plans (AIM Brief at 3). AIM contends that high energy costs inhibit the ability of Massachusetts businesses to remain competitive and that any increases will economically harm the commercial, industrial, municipal and institutional sectors of the economy (AIM Brief at 4). AIM recommends that the Department fully analyze the economic effects of the Three-Year Plans to carefully balance higher electric rates with the promotion of societal goals (AIM Brief at 4).

AIM argues that the Bill Impact Model used by the Program Administrators relies on assumptions and, as such, should only be used by the Department as a guide for reviewing bill impacts (AIM Brief at 5). In particular, AIM argues that the Program Administrators' bill impact analysis understates actual impacts on customers (AIM Brief at 5). AIM states that the

bill impact analysis fails to recognize economic and other factors that drive participation in energy efficiency programs (AIM Brief at 5). AIM explains that some C&I customers will be unable to participate because there are no applicable programs or they have previously invested in energy efficiency measures (AIM Brief at 5).

Finally, AIM urges the Department to look at the cumulative costs to ratepayers as a result of all mandates of the Green Communities Act and not to analyze these costs in an isolated or segmented fashion (AIM Brief at 9). AIM contends that the cumulative impact of bill increases from the Three-Year Plans and other energy charges will have a significant impact on customers (AIM Brief at 9).

E. Analysis and Findings

1. Green Communities Act

The Green Communities Act requires the Program Administrators to jointly develop, in coordination with the Council, a Statewide Plan that provides for the acquisition of all available energy efficiency and demand reduction resources that are cost-effective. G.L. c. 25, § 21(b). Similarly, the Green Communities Act requires the Department to ensure that each Program Administrator's Three-Year Plan provides for the acquisition of all cost-effective energy efficiency and demand reduction resources that are available. G.L. c. 25, §§ 19(b), 21(a), 21(d)(2). In recognition of the fact that the acquisition of all cost-effective energy efficiency could require funding above current levels, the Green Communities Act provides that Program

Administrators may collect revenue from ratepayers through a mechanism such as the EES.<sup>63</sup> G.L. c. 25, § 19(b).

The requirement to provide for the acquisition of all available cost-effective energy efficiency resources is not discretionary.<sup>64</sup> Program Administrators must take all reasonable steps, and the Department must ensure that they take these steps, to acquire all cost-effective energy efficiency resources. The Green Communities Act does, however, provide some discretion regarding the rate at which Program Administrators will acquire these resources, stating that such acquisition should be achieved through a sustained effort. G.L. c. 25, § 22(b). Determining a reasonable pace for a sustained acquisition requires the Program Administrators and the Council (in developing the Three-Year Plans) and the Department (in reviewing the Three-Year-Plans) to strike an appropriate balance between several factors, including: (1) identifying the potential level of cost-effective resource currently available;<sup>65</sup>

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<sup>63</sup> In our review of funding sources such as the EES, the Department considers the effect of any resulting *rate* increases on consumers. Yet the impact on consumers is a function not only of the rate or tariff approved by the Department but also of the quantity of electricity consumed. The product of the rate and the quantity of electricity consumed provides the *bill* impact to consumers, which is the best measure of the ultimate impact on consumers of a change in rates. Consequently, while the Department notes rate changes in decisions related to changes in distribution company tariffs, we typically estimate changes in average customer bills to more accurately assess the impact of tariff changes on consumers.

<sup>64</sup> The requirement that Program Administrators acquire all available cost-effective energy efficiency resources appears in four separate sections of the Green Communities Act—G.L. c. 25, §§ 19(b), 21(a), 21(b)(1), 21(b)(2).

<sup>65</sup> See Assessment Resolution.

(2) exploring ways in which this level can be increased;<sup>66</sup> (3) assessing the capability of the energy efficiency vendor and contractor industry to support increased program activity; and (4) assessing the capacity of the Program Administrators to administer increases in program activity efficiently and effectively.

The Program Administrators have submitted rate and bill impact analyses in a manner consistent with the Bill Impact Model developed by the Bill Impact Working Group and approved by the Department in D.P.U. 08-50-B at 57-60 (RR-DPU-2). In the sections below, the Department first addresses several concerns related to the Bill Impact Model and then considers the bill impacts resulting from the model.

## 2. Bill Impact Model

The Bill Impact Model provides a useful starting point for understanding the impacts that energy efficiency programs are likely to have on customers' bills. However, the bill impact analyses provided by the Program Administrators for the first time in these proceedings suffer from two very important limitations. First, they do not properly account for bill impacts over the long-term. The analyses include only the costs, savings, and bill impacts associated with program years 2010 through 2012. In D.P.U. 08-50-A at 57, the Department found that the bill impact estimates should account for the impacts over the long-term (e.g., for the average life of efficiency measures) in order to capture the full effect of energy efficiency savings and costs. D.P.U. 08-50-A at 57. Subsequently, in D.P.U. 08-50-B at 18, the

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<sup>66</sup> Pilot programs play an important role in developing innovative cost-effective programs, leading to increased levels of available cost-effective energy efficiency. See G.L. c. 25, § 21(b)(2).

Department accepted the Bill Impact Model proposed by the Bill Impact Working Group but noted that it did not account for long-term savings and, therefore, “will understate the benefits of energy efficiency and, thereby, understate the effect that energy efficiency will have on lowering customer bills over the long-term.” As noted below, given these limitations, our review of the bill impacts in the current dockets focuses on the short-term bill impacts but we acknowledge the fact that they understate the long-term benefits of energy efficiency.

Second, the bill impact analyses provided by the Program Administrators do not provide a clear indication of the impact on program participants. One of the challenges of such an analysis is finding ways to indicate the bill impacts associated with programs that achieve deeper savings per participant versus those that serve more participants but with fewer savings per participant. In their initial filings and in response to several Department record requests, the Program Administrators have presented several analytical approaches for how to indicate the bill impacts on program participants. Each of the approaches suffers from some limitation in terms of fully understanding the bill impacts on program participants. Consequently, we do not limit our review of bill impacts to any one of the analytical approaches provided by the Program Administrators.

In order to ensure that future bill impact analyses provide the most meaningful depiction of rate and bill impacts, the Department will reconvene the Bill Impact Working Group to refine the Bill Impact Model to address the two issues discussed above. We encourage all interested stakeholders to actively participate in the working group in order to address any concerns they may have with the Bill Impact Model. We direct the Bill Impact

Working Group to submit a revised Bill Impact Model to the Department for review by June 1, 2010.<sup>67</sup>

3. Bill Impacts

a. Introduction

We focus our evaluation on bill impacts, which, as noted above, provide a more meaningful indication of the effects of energy efficiency than rate impacts alone. This is because an analysis of bill impacts captures the effects of energy efficiency program savings as well as their costs. In D.P.U. 08-50-A at 58, we noted that, while energy efficiency programs will typically increase rates, average bills should be lower than they would otherwise be without energy efficiency programs. In addition, customers are typically more concerned about their total bill than their individual rates, because it is the total bill that represents their ultimate cost.

b. Findings

In considering the net impact of energy efficiency investment on consumers, the Department must take into account both the bill impacts and the benefits that the accompanying increase in energy efficiency activity will bring to ratepayers. On a statewide basis, the Three-Year Plans are expected to provide net benefits (over the lifetime of the measures installed) of approximately \$701 million, resulting in almost two dollars in benefits for

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<sup>67</sup> The Department will issue a procedural notice to schedule the next meeting of the Bill Impact Working Group.

Massachusetts natural gas customers for every dollar spent (Exh. Common 2, at 82).<sup>68</sup> We estimate that the total lifetime energy savings associated with the proposed energy efficiency programs will cost roughly \$0.31 per therm – well below the cost of energy supply resources that would otherwise need to be purchased by consumers. While we do not rely on these points to make our findings here, the Department recognizes the significant additional benefits that flow to Massachusetts residents from energy efficiency program investments. For example, the energy efficiency programs in the Three-Year Plans are expected to reduce statewide carbon dioxide emissions by 5,269,604 short tons over the life of the savings and create 778 local jobs in Massachusetts (Exh. Common 2, at 14, 22). These programs clearly achieve several of the goals embodied in the Green Communities Act and create a solid foundation for future energy efficiency activities as the Program Administrators undertake a sustained effort to achieve all cost-effective energy efficiency over time.

Based on our review, and in consideration of the significant benefits provided by energy efficiency resources, the Department concludes that the bill impacts associated with the Three-Year Plans are well within the range of what we consider to be reasonable (RR-DPU-2). In addition, if the bill impact analyses were to properly account for the long-term savings of the energy efficiency programs, then the bill impacts would be significantly more modest than those provided by the Program Administrators. Unlike many other activities that cause increases in rates, energy efficiency will result in customer benefits in terms of reduced consumption and reduced costs. These benefits will persist for the operating lives of the

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<sup>68</sup> In other words, the projected benefit-cost ratio for the programs is approximately 2.46.

energy efficiency measures installed. The energy efficiency measures installed by the gas Program Administrators have an average measure life of 15.6 years (Exh. Common 2, App. D at 301). Consequently, the Program Administrator's three-year bill impact analysis ignores 12.6 years worth of customer benefits, on average. Accounting for these benefits would indicate that the bill impacts are even more modest than those presented by the Program Administrators in these dockets. As noted above, given the significant deficiency in bill impact analyses, we direct the Program Administrators to resolve this issue through the Bill Impact Working Group.

Furthermore, in D.P.U. 08-50-A at 59-60, we noted that one of the primary concerns regarding energy efficiency program impacts is that they might create an inequity between program participants and non-participants. Here, however, we find that equity concerns between program participants and non-participants are likely to be mitigated by several factors. The proposed energy efficiency programs are designed to be available to all customer classes and all customer types, offering ample opportunities for any customer who wants to reduce his or her bill to participate in the energy efficiency programs. Over the course of the Three-Year Plan, a significant number of customers are expected to participate in the proposed energy efficiency programs.<sup>69</sup> Customers that do not participate during these three years may have

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<sup>69</sup> The Program Administrators expect to serve approximately 920,000 customers across the state during the course of the Three-Year Plans (Exh. Common 2, at 94). While this estimate of program participants may include some customers that are counted more than once, as well as some participants that may experience only relatively small levels of energy savings, it indicates the extent to which programs are expected to reach a large number of customers in Massachusetts (Tr. 1, at 89, 100).

participated in past years, or may participate in future years. If Program Administrators are successful in their pursuit of all cost-effective energy efficiency, then they should eventually provide some form of efficiency savings to the vast majority of customers – leaving a very small subset of customers that could be considered non-participants.

Finally, we note that the Global Warming Solutions Act (“GWSA”) requires the creation of enforceable limits on greenhouse gas emissions in Massachusetts for the years 2020, 2030, 2040, and 2050. G.L. c. 21N § 3. The GWSA also calls for interim greenhouse gas emission targets before 2020. G.L. c. 21N § 6C. Energy efficiency is widely accepted as one of the lowest-cost options for reducing greenhouse gas emissions and, in fact, typically reduces consumer energy costs while mitigating greenhouse gases. Consequently, the Department recognizes that accelerated energy efficiency investment is likely to help minimize costs associated with meeting the greenhouse gas reduction targets contained in the GWSA, thereby mitigating any bill impacts that might result from meeting such targets.

#### 4. Other Issues

The Attorney General requests that the Department expand the Bill Impact Model to accommodate additional bill impact analyses that are designed to capture changes in rates solely due to the implementation of programs contained in the Three-Year Plans (Attorney General Brief at 24). The Department will consider whether such bill impact analyses may provide results that are useful in supporting the Department’s review of bill impacts as part of the Bill Impact Working Group.

Further, the Attorney General requests: (1) that the bill impact analyses be expanded to show customers the effects that specific energy efficiency measures have on a typical customer's bill; and (2) that Program Administrators be required to file an annual report that documents the manner in which they informed their customers about the impact of their Three-Year Plans (Attorney General Brief at 23-26, App. A through G ¶ 3).

The Bill Impact Model is primarily for the Department's use in assessing rate and bill impacts from the Three-Year Plans. The Bill Impact Model should also provide value to the Council in understanding the overall impact of the Three-Year Plans. While customer education is an important component of any successful energy efficiency strategy, the Bill Impact Working Group is not the appropriate forum to develop tools for the purposes of customer education. Instead, the Attorney General may propose to develop such tools within the Council process.

The Attorney General also requests that Program Administrators be required to file with the Department annual bill impact updates (Attorney General Brief at 23-26). Program Administrators are required to file updated rate and bill impacts with each Three-Year Plan, as well as any proposed midterm modifications to the Three-Year Plans. These two filing requirements should be sufficient to provide the Department with the information needed to review and approve energy efficiency program funding requests. Accordingly, we will not require the Program Administrators to file additional annual bill impact updates.

## VIII. PERFORMANCE INCENTIVES

### A. Introduction

The Green Communities Act states that the Three-Year Plans may include a proposed mechanism that provides performance incentives to the distribution companies based on their success in meeting or exceeding the goals in the plan. G.L. c. 25, § 21(b)(2)(v). The Program Administrators jointly proposed a statewide performance incentive mechanism for each year of their Three-Year Plans.<sup>70</sup>

### B. Statewide Performance Incentive Mechanism

#### 1. Statewide Incentive Pool and Allocation to Program Administrators

The Program Administrators propose a target statewide incentive pool equal to \$4 million in 2010, \$4.5 million in 2011, and \$5.5 million in 2012,<sup>71</sup> based on the assumption that the savings targets included in the Program Administrators' Three-Year Plans would, on a statewide basis, be equal to the targets established by the Council (Exh. Common 29 Supp. (December 21, 2009) at 5).<sup>72</sup> The actual statewide incentive pool is dependent on the actual savings targets included in the Three-Year Plans; if, on a statewide basis, the Program

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<sup>70</sup> The Program Administrators filed draft performance incentive proposals on October 31, 2009, November 13, 2009, and December 15, 2009. The Program Administrators did not file a final performance incentive proposal until December 21, 2009.

<sup>71</sup> The target incentive pool for each program year is equal to approximately 4.7 percent, before taxes, of the statewide budgets for that year (Exh. Common 29 Supp. (December 21, 2009) at 6).

<sup>72</sup> See Section IV, above, for a discussion of the savings targets established by the Council.

Administrators' savings targets are greater or less than the savings targets established by the Council, the actual incentive pool will be correspondingly adjusted (Exh. Common 29 Supp. (December 21, 2009) at 6-7). The actual statewide pool is allocated to each Program Administrator based on its contribution to the actual statewide savings targets (Exh. Common 29 Supp. (December 21, 2009) at 6-7). The Council endorsed the statewide incentive pool and allocation method in the Savings and Incentive Resolution, the Three-Year Plan Resolution, and in a resolution on October 13, 2009 (Exh. Common 29 Supp. (December 21, 2009) at App. B).

Based on the savings targets included in the Program Administrators' Three-Year Plans, the actual statewide incentive pool in 2010 was increased to approximately \$4.3 million (Exh. Common 29 Supp. (December 21, 2009) at 7). Table A: Actual Incentive Levels, below, summarizes the actual statewide pool and the amount allocated to each Program Administrator.

Program Administrator	2010	2011	2012	2010-2012
National Grid	\$2,315,549	\$2,732,938	\$3,271,459	\$8,319,946
NEGC-FR	\$89,925	\$80,337	\$91,778	\$262,040
NEGC-NA	\$13,243	\$11,085	\$11,174	\$35,502
Berkshire	\$147,957	\$125,341	\$134,994	\$408,292
Bay State	\$903,687	\$773,764	\$836,201	\$2,513,652
NSTAR	\$832,247	\$754,045	\$1,140,825	\$2,727,117
Unitil	\$41,647	\$41,450	\$53,968	\$137,065
Total Statewide	\$4,344,255	\$4,518,960	\$5,540,399	\$14,403,614

<sup>73</sup> Source: Exh. Common 29 Supp. at 7.

The Program Administrators propose a cap on the total performance incentive a Program Administrator can earn for program year 2010, set at 125 percent of the design incentive listed in Table A (Exh. Common 29 Supp. (December 21, 2009) at 5). The Program Administrators state that they have not yet determined whether a cap on performance incentives will be proposed for program years 2011 and 2012 (Exh. Common 29 Supp. (December 21, 2009) at 5). In addition, for each year of the Three-Year Plans, each Program Administrator must achieve at least 75 percent of its design incentive level before it can earn a performance incentive (Exh. Common 29 Supp. (December 21, 2009) at 10).

2. Proposed Incentive Mechanism

a. Introduction

The proposed performance incentive mechanism has three components: (1) a savings mechanism, which is based on the total benefits a Program Administrator can achieve through implementation of its energy efficiency programs; (2) a value mechanism, which is based on the net benefits a Program Administrator can achieve through implementation of its programs; and (3) performance metrics (Exh. Common 29 Supp. (December 21, 2009) at 8). The proposed allocation of the statewide incentive pool to these components is shown in Table B: Statewide Allocation to Components, below.

Table B: Statewide Allocation to Components <sup>74</sup>			
Component	2010	2011	2012
Savings Mechanism	45 %	50 %	55 %
Value Mechanism	35 %	30 %	30 %
Performance Metrics	20 %	20 %	15 %
Total	100 %	100 %	100 %

b. Savings Mechanism

The savings mechanism provides an incentive for Program Administrators to pursue energy efficiency programs that maximize total benefits (Exh. Common 29 Supp. (December 21, 2009) at 11). The savings mechanism includes a payout rate, to be applied uniformly across all Program Administrators, which determines the incentive amount a Program Administrator can receive for each dollar of benefit achieved from implementation of its programs. The Program Administrators calculated the savings payout rate for each program year by dividing (1) the percentage of the statewide incentive pool allocated to the savings mechanism by (2) the projected statewide benefits (Exh. Common 29 Supp. (December 21, 2009) at 11). The savings mechanism payout rates for each year of the Three-Year Plans are listed in Table C: Statewide Payout Rates, below.<sup>75</sup>

<sup>74</sup> Source: Exh. Common 29 Supp. (December 21, 2009) at 9.

<sup>75</sup> If the results of an evaluation study lead to changes in the value of projected benefits at the planned target level of savings, the Program Administrators state that they may seek to modify the savings payout rate (Exh. Common 29 Supp. (December 21, 2009) at 11).

Table C: Statewide Payout Rates <sup>76</sup>		
Year	Savings Mechanism Payout Rate (\$/dollar value of benefits)	Value Mechanism Payout Rate (\$/dollar value of net benefits)
2010	0.0073925	0.010301
2011	0.0061	0.0064
2012	0.0062	0.0058

In order for a Program Administrator to earn an incentive under the savings mechanism, the Program Administrator must achieve a threshold performance of at least 75 percent of the design level of total benefits (Exh. Common 29 Supp. (December 21, 2009) at 11). The saving mechanism does not have a cap (Tr. 3, at 610-611).<sup>77</sup>

### 3. Value Mechanism

The value mechanism provides an incentive for Program Administrators to pursue energy efficiency programs that maximize net benefits (i.e., programs that are most cost-effective) (Exh. Common 29 Supp. (December 21, 2009) at 13). The value mechanism is similar to the savings mechanism in that it has a statewide payout rate. The payout rate for the value mechanism, however, is based on the lifetime value of the net benefits that result from implementing the Three-Year Plans, rather than total benefits (Exh. Common 29 Supp. (December 21, 2009) at 13).<sup>78</sup> The Program Administrators calculated the value mechanism

<sup>76</sup> Source: Exh. Common 29 Supp. at 12, 13-14.

<sup>77</sup> The only restriction that applies to the dollars a Program Administrator can earn through the savings mechanism is a cap on the total incentive amount it can earn, set at 125 percent of the design incentive level for program year 2010 (see Section VIII.B.2, above).

<sup>78</sup> Because recovery of performance incentives is included in a Program Administrator's budget, it is an input in the calculation of net benefits. Performance incentives are

payout rate by dividing (1) the percentage of the statewide incentive pool allocated to the value mechanism by (2) the sum of each Program Administrator's dollar values of net benefits (Exh. Common 29 Supp. (December 21, 2009) at 13). Table C, above, summarizes the statewide value mechanism payout rates for each year of the Three-Year Plans. To earn an incentive under the value mechanism, the Program Administrator must achieve at least 75 percent of the design level net benefits (Exh. Common 29 Supp. (December 21, 2009) at 14). The value mechanism does not have a cap (Tr. 3, at 610).<sup>79</sup>

#### 4. Performance Metrics

The performance metrics provide an incentive for the Program Administrators to undertake specific efforts that are expected to provide benefits beyond those captured in the calculation of total benefits or net benefits (Exh. Common 29 Supp. (December 21, 2009) at 16). For 2010, four performance metrics are associated with residential energy efficiency programs; three performance metrics are associated with low-income programs; five performance metrics are associated with C&I programs; and one performance metric is associated with EM&V (Exh. Common 29 Supp. (December 21, 2009), App. A). Table D: Performance Metrics, below, summarizes each of the performance metrics. Each performance metric has a design level (100 percent of the performance incentive for the metric), an

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excluded from the calculation of the value mechanism payout rate in order to avoid circular references (Exh. Common 29 Supp. (December 21, 2009) at 13).

<sup>79</sup> As with the savings mechanism, the only restriction that applies to the dollars a Program Administrator can earn through the value mechanism is a cap on the total incentive amount it can earn, set at 125 percent of the design incentive level for program year 2010 (see Section VIII.B.2, above).

exemplary level (125 percent of the performance incentive for the metric), and most have a threshold level (75 percent of the performance incentive for the metric) (Exh. Common 29 Supp. (December 21, 2009) at App. A).

Table D: Performance Metrics <sup>80</sup>	
Sector/Performance Metric	Description
<b>Residential</b>	
MassSAVE/Weatherization: Deeper Savings	Achieve an increase in the number of customers installing major measures, and an overall increase in savings per customer installing major measures.
MassSAVE: Increase Direct Install Bulb Penetration	Facilitate direct install lighting efforts across Program Administrators, availability of specialty bulbs, and the number of direct install bulbs per customer.
Community Initiatives	Develop, implement, and report on at least three community-based initiatives.
MassSAVE: Explore Inclusion of Energy Professionals	Explore/implement opportunities to increase the number of energy professionals providing vendor services throughout the Commonwealth.
<b>Low-income</b>	
Low-income Best Practices Working Group	Implement 2009 best practices in coordination with LEAN, and explore the adoption/implementation of new cost-effective measures.
Low-income Auditor Training & Contractor Recruitment/Support	Assist LEAN with funding and logistical support for auditor training, and contractor recruitment and training.
Low-Income 1-4 Retrofit: Deep Energy Retrofit	Advance low-income deep energy retrofit opportunities in the Commonwealth. Formulate best practices, identify opportunities, and try to implement a deep energy retrofit.
<b>Commercial &amp; Industrial</b>	
Small Business Electric and Gas Integration	Identify and add electric and gas measures to the Direct Install Program, and install the new measures through the Direct Install Program.
Targeted Customer Segments	Complete, and increase the number commitments through, technical assessment studies.
Combined Heat & Power	Complete technical assessment studies for Combined Heat & Power.
Retrofit: Depth of Savings	Implement efforts to capture deep savings through both gas and electric measures, including assessments and commitments.
New Construction: Comprehensiveness and Depth of Savings	Achieve deep gas and electric savings in new construction or substantial renovation projects.
<b>Evaluation, Measurement, &amp; Verification</b>	
Omnibus Metric	Conduct studies with contractors in major research areas identified in the EM&V section of the statewide efficiency plan.

<sup>80</sup>

Source: Exh. Common 29 Supp. (December 21, 2009), App. A.

C. Program Administrator Performance Incentives

1. Calculation of Incentives by Component

The performance incentive dollars derived from the savings mechanism at the design level for each Program Administrator are calculated as the product of the statewide savings mechanism payout rate and the Program Administrator's expected benefits (Exh. Common 29 Supp. (December 21, 2009) at 11-12). Similarly, the performance incentive dollars derived from the value mechanism at the design level for each Program Administrator are calculated as the product of the statewide value mechanism payout rate and the Program Administrator's expected net benefits (Exh. Common 29 Supp. (December 21, 2009) at 13-14). After each Program Administrator's available performance incentive dollars are allocated to the savings and value mechanisms, the remaining performance incentive dollars are allocated to the performance metric category (Tr. 3, at 535). As shown in Table E: Weighting of Each Component by Program Administrator, below, this leads to a variation across Program Administrators regarding the percent of the design incentive to be earned through each of the three components (Exh. Common 29 Supp. (December 21, 2009) at 10).

Table E: Weighting of Each Component by Program Administrator <sup>81</sup>			
Program Administrator/ Component	2010	2011	2012
Statewide			
Savings Mechanism	45 %	50 %	55 %
Value Mechanism	35 %	30 %	30 %
Performance Metrics	20 %	20 %	15 %
National Grid			
Savings Mechanism	44 %	46 %	50 %
Value Mechanism	30 %	25 %	24 %
Performance Metrics	25 %	29 %	26 %
NEGC-FR			
Savings Mechanism	39 %	44 %	47 %
Value Mechanism	32 %	28 %	28 %
Performance Metrics	29 %	29 %	26 %
NEGC-NA			
Savings Mechanism	40 %	45 %	49 %
Value Mechanism	36 %	32 %	30 %
Performance Metrics	24 %	23 %	21 %
Berkshire			
Savings Mechanism	50 %	57 %	63 %
Value Mechanism	45 %	39 %	39 %
Performance Metrics	4 %	4 %	-2 %
Bay State			
Savings Mechanism	48 %	57 %	63 %
Value Mechanism	44 %	38 %	38 %
Performance Metrics	8 %	5 %	-2 %
NSTAR Gas			
Savings Mechanism	41 %	55 %	62 %
Value Mechanism	35 %	38 %	38 %
Performance Metrics	23 %	7 %	0 %
Unitil			
Savings Mechanism	55 %	65 %	73 %
Value Mechanism	43 %	50 %	51 %
Performance Metrics	1 %	-15 %	-23 %

<sup>81</sup> Source: Exh. Common 28 Supp. (December 22, 2009).

2. Unitil and Bay State

Unitil's application of the statewide value payout rate leads to a negative incentive amount for the performance metric component (Exh. Common 28 Supp. (December 22, 2009)). To cure this anomaly, Unitil proposes to apply a value payout rate that differs from the statewide rate and which would keep its percent allocation to the performance metric component at one percent, consistent with its November 13, 2009 filing (Exh. Common 29 Supp. (December 21, 2009) Cover Letter at 1).

LEAN raised concerns that the application of the statewide payout rates for Bay State leads to a smaller amount of potential shareholder incentive dollars being allocated to the low-income performance metrics (Exh. Common 29 Supp. (December 21, 2009) at 20; Tr. 3, at 532-533). To address LEAN's concerns, Program Administrators, a Council advisor, and LEAN negotiated adjusted Bay State's savings and value payout rates for low-income for 2010 (Tr. 3, at 532-533). The revised savings mechanism payout rates after the proposed Bay State adjustment for 2010 is listed in Table F: Adjusted Savings Mechanism Payout Rates, below. The value mechanism payout rates after the proposed Unitil adjustments for 2010 are listed in Table G: Adjusted Value Mechanism Payout Rates, below.

Table F: Adjusted Savings Mechanism Payout Rates <sup>82</sup>		
Year	National Grid, NEGC, Berkshire, Bay State, NSTAR, Unitil Payout Rate (\$/dollar value of benefits)	Bay State Low-Income Payout Rate (\$/dollar value of benefits)
2010	0.0073925	0.0045507

Table G: Adjusted Value Mechanism Payout Rates <sup>83</sup>			
Year	National Grid, NEGC, Berkshire, Bay State, NSTAR (\$/dollar value of net benefits)	Unitil Payout Rate (\$/dollar value of net benefits)	Bay State Low-Income Payout Rate (\$/dollar value of net benefits)
2010	0.010301	0.0081007	0.0085497

3. Modifications as a Result of EM&V studies

As proposed, the actual incentive earned by each Program Administrator would be based on its performance during each year and the results of EM&V studies, as approved by the Department in each Program Administrator’s Annual Report (Exh. Common 29 (December 21, 2009) Supp. at 18). The Program Administrators propose that the impact of EM&V results on actual performance incentives earned be limited to plus or minus 25 percent of planned savings at the sector level (Exh. Common 27, at 18-19).

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<sup>82</sup> Source: Exh. Common 29 Supp. (December 21, 2009), at 12-13.

<sup>83</sup> Source: Exh. Common 29 Supp. (December 21, 2009), at 13-14.

D. Position of the Parties

1. Program Administrators

The Program Administrators argue that the Department should approve the performance incentive proposal because it is consistent with the Department's directives on energy efficiency performance incentives (National Grid Reply Brief at 11-12; NEGC-NA Brief at 70; NEGC-FR Brief at 70; Berkshire Brief at 70; Bay State Brief at 70; NSTAR Gas Reply Brief at 6-9; Unitil Reply Brief at 6-9). In response to the Attorney General's recommendation that the gas Program Administrators continue to refine the performance incentive model to resolve the negative performance incentives that resulted when the model was applied to certain companies, Unitil and NSTAR Gas argue that the Attorney General's concerns have been resolved with the updated model filed on December 21, 2009, and do not need to be further refined (Unitil Reply Brief at 9; NSTAR Gas Reply Brief at 9). Bay State, Berkshire, National Grid, and NEGC note that there are no longer anomalous results in the performance incentive model for 2010, and that any anomalous results for 2011 and 2012 will be addressed through subsequent adjustments to the model (National Grid Reply Brief at 17; NEGC-NA Reply Brief at 16; NEGC-FR Reply Brief at 16; Berkshire Reply Brief at 16; Bay State Reply Brief at 16).

In response to the Attorney General's arguments in opposition to the statewide performance metric structure, the Program Administrators note generally that the statewide metrics were developed collaboratively after extensive negotiation among the Council's consultants (National Grid Reply Brief at 12-13; NEGC-NA Reply Brief at 12; NEGC-FR

Reply Brief at 12; Berkshire Reply Brief at 11; Bay State Reply Brief at 11; NSTAR Gas Reply Brief at 6; Unitil Reply Brief at 6). The Program Administrators further note that there are core benefits and objectives to having statewide metrics such as cross-Program Administrator cooperation and integration and the advancement of key statewide initiatives (National Grid Reply Brief at 12-13; NEGC-NA Reply Brief at 12; NEGC-FR Reply Brief at 12; Berkshire Reply Brief at 11; Bay State Reply Brief at 11; NSTAR Gas Reply Brief at 6; Unitil Reply Brief at 6).

As to the Attorney General's concern that the statewide performance metrics create the possibility that a Program Administrator may earn performance incentives based on another Program Administrator's work, the Program Administrators contend that each of the metrics are " 'based on clearly defined goals and activities that can be sufficiently monitored, quantified and verified after the fact' " in compliance with D.P.U. 08-50-A.<sup>84</sup> The Program Administrators also contend that their eligibility to earn a metric is contingent upon filing with the Council and the Department sufficient information documenting their individual role in achieving a particular incentive component (National Grid Reply Brief at 11-12; NEGC-NA Reply Brief at 10-11; NEGC-FR Reply Brief at 10-11; Berkshire Reply Brief at 10-11; Bay State Reply Brief at 10-11; NSTAR Gas Reply Brief at 8-9; Unitil Reply Brief at 8-9).

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<sup>84</sup> National Grid Reply Brief at 11, 11 n.11, quoting D.P.U. 08-50-A at 49; NEGC-NA Reply Brief at 11, 11 n.10, quoting D.P.U. 08-50-A at 49; NEGC-FR Reply Brief at 11, 11 n.10, quoting D.P.U. 08-50-A at 49; Berkshire Reply Brief at 10, 10 n.8, quoting D.P.U. 08-50-A at 49; Bay State Reply Brief at 10, 10 n.9, quoting D.P.U. 08-50-A at 49; NSTAR Gas Reply Brief at 6-7, quoting D.P.U. 08-50-A at 49; Unitil Reply Brief at 7, quoting D.P.U. 08-50-A at 49.

Further, the Program Administrators maintain that they are required to provide quarterly reports to the Council regarding the progress of their Three-Year Plans, which will allow the Council to monitor the contributions of individual Program Administrators toward achieving performance metrics (National Grid Reply Brief at 12, citing G.L. c. 25, § 22(d); NEGC-NA Reply Brief at 11, citing G.L. c. 25, § 22(d); NEGC-FR Reply Brief at 11, citing G.L. c. 25, § 22(d); Berkshire Reply Brief at 11, citing G.L. c. 25, § 22(d); Bay State Reply Brief at 11, citing G.L. c. 25, § 22(d); NSTAR Gas Reply Brief at 8-9, citing G.L. c. 25, § 22(d); Unitil Reply Brief at 7-8, citing G.L. c. 25, § 22(d)). The Program Administrators also note that the Department has ultimate authority to allow or deny a performance incentive and that each Program Administrator will submit to the Department an Annual Report that will document its individual role in the achievement of all metrics (National Grid Reply Brief at 11-12; NEGC-NA Reply Brief at 11; NEGC-FR Reply Brief at 11; Berkshire Reply Brief at 10-11; Bay State Reply Brief at 10-11; NSTAR Gas Reply Brief at 8, 8 n.5; Unitil Reply Brief at 8, 8 n.5). In addition, NSTAR Gas and Unitil argue that the magnitude of the proposed programs requires the direct involvement of each Program Administrator to oversee the programs, company employees, and third-party vendors (NSTAR Gas Reply Brief at 8, citing Exh. AG 3-6; Unitil Reply Brief at 8, citing Exh. AG 4-6).

Several of the Program Administrators assert that documentation of each Program Administrator's individual contribution will be required regardless of whether the metric is residential, low-income, or C&I (National Grid Reply Brief at 11 n.10; NEGC-NA Reply Brief at 10 n.9; NEGC-FR Reply Brief at 10 n.10; Berkshire Reply Brief at 10 n.7; Bay State

Reply Brief at 10 n.8). They contend that the Attorney General's argument that the Program Administrators will not need to document their individual roles to receive incentives for C&I metrics is misplaced because she fails to recognize that the C&I metrics have company-specific thresholds to attain (National Grid Reply Brief at 11 n.10; NEGC-NA Reply Brief at 10 n.9; NEGC-FR Reply Brief at 10 n.10; Berkshire Reply Brief at 10 n.7; Bay State Reply Brief at 10 n.8).

In response to the Attorney General's opposition to the specific EM&V metric, Bay State, Berkshire, NEGC, and National Grid assert that this performance metric is not designed to encourage Program Administrators to perform activities that they are already required to perform or reward them for doing so (National Grid Reply Brief at 13; NEGC-NA Reply Brief at 12; NEGC-FR Reply Brief at 12; Berkshire Reply Brief at 12; Bay State Reply Brief at 12). Rather, the Program Administrators claim that this metric provides an incentive to achieve exemplary performance in areas that might otherwise not receive the same focus as achieving savings and value, particularly where the benefits associated with those efforts may not be realized in the short term (National Grid Reply Brief at 13; NEGC-NA Reply Brief at 12; NEGC-FR Reply Brief at 12; Berkshire Reply Brief at 12; Bay State Reply Brief at 12; see NSTAR Gas Reply Brief at 7; Unitil Reply Brief at 7). Bay State, Berkshire, NEGC, and National Grid maintain that the fact that EM&V efforts are already in progress in no way negates the value of the metric; rather, these efforts demonstrate the Program Administrators' commitment to EM&V (National Grid Reply Brief at 13; NEGC-NA Reply Brief at 12-13; NEGC-FR Reply Brief at 12-13; Berkshire Reply Brief at 12; Bay State Reply Brief at 12).

## 2. Attorney General

Consistent with her vote at the Council, the Attorney General supports the overall pool of performance incentive dollars available for 2010 through 2012, the threshold earning level, and performance incentive cap for 2010 (Attorney General Brief at 16-17). Although she generally supports the three-part performance incentive mechanism as a reasonable manner in which to incent the Program Administrators, the Attorney General recommends that the Department require the gas Program Administrators to continue to address certain anomalous results of the performance incentive model (Attorney General Brief at 16, 19-20).

Specifically, the Attorney General argues that the gas Program Administrators should work to resolve the negative performance incentives that resulted when the performance incentive mechanism was applied to certain Program Administrators and, if necessary, the Department should further investigate this issue (Attorney General Brief at 20). The Attorney General contends that further review would allow the Department and interested stakeholders an opportunity to better understand how customer money is being spent to implement the Three-Year Plans and for performance incentives (Attorney General Brief at 20).

Next, the Attorney General recommends that the Department not approve the performance metrics as filed and require the Program Administrators to further refine the metrics (Attorney General Brief at 19). Given that the performance metrics were being developed while evidentiary hearings were taking place and were not finalized until after the close of evidentiary hearings, the Attorney General notes that the Department and intervenors

were put in the position of having to analyze incomplete metrics (Attorney General Brief at 17).

The Attorney General further argues that the performance metrics do not conform to the Department's directives on performance incentives in D.P.U. 08-50-A or to the principles that the Program Administrators developed to support the performance incentive mechanism (Attorney General Brief at 17-18, citing D.P.U. 08-50-A at 49-50; Exh. Common 2, at 261). Specifically, the Attorney General states that in D.P.U. 08-50-A at 49-50, the Department emphasized the importance of performance incentives that require action on the part of Program Administrators towards meeting the goals of the Green Communities Act (Attorney General Brief at 17). The Attorney General claims that many of the performance metrics require little or no affirmative action by Program Administrators (Attorney General Brief at 17-18, citing Exh. Common 29, at 25-26; Tr. 3, at 585-587). As an example, the Attorney General notes that some metrics do not require energy efficiency installations in order for a Program Administrator to earn an incentive (Attorney General Brief at 18). The Attorney General also contends that, because the performance metrics are statewide, it is possible for a Program Administrator to earn a performance incentive based on the work of another Program Administrator without doing any work itself towards achieving that objective (Attorney General Brief at 18). In addition, the Attorney General notes that Program Administrators are not required to document their individual roles in the achievement of the statewide C&I metrics (Attorney General Brief at 18).

With regard to the proposed EM&V metric, the Attorney General argues that this metric rewards the Program Administrators for undertaking activities of which they have previously committed to undertake in the gas Statewide Plan (Attorney General Brief at 19). Given that the Program Administrators are already implementing the new EM&V process, the Attorney General contends that it is unnecessary to spend ratepayer money to incent them to carry out their required EM&V obligations (Attorney General Brief at 19, citing Tr. 1, at 161-162). Before ratepayer money is expended on such metrics, the Attorney General argues that further refinement is necessary (Attorney General Brief at 19).

### 3. DOER

DOER recommends the Department approve the performance incentive mechanism and total pool of incentive dollars (DOER Brief at 12). DOER notes that the Council and Program Administrators negotiated at length the performance incentive mechanism and incentive amount (DOER Brief at 10). Although the Council did not adopt a formal resolution approving the final performance incentive mechanism that was submitted to the Department, DOER argues that the Council's adoption of the incentive levels and savings targets is strong evidence that the Council viewed the incentives as sufficient to incent Program Administrators to devote the effort and resources necessary to attain energy savings targets of the Three-Year Plans (DOER Brief at 10-11). In addition, DOER argues that the performance incentive proposal is in line with the Council-approved targets and incentives, regardless of whether the Council has approved the performance mechanism or the specific formulas used to determine the incentives (DOER Brief at 11, citing Tr. 3, at 527-530). Therefore, in accordance with the Council's

adoption of the incentive levels and savings targets, DOER recommends that the Department approve the performance incentive mechanism (DOER Brief at 12).

4. ENE

ENE recommends that the Department approve the performance incentive mechanism because it is consistent with the Department's principles set forth in D.P.U. 08-50-A and with the Council's recommendations (ENE Brief at 11-12). Specifically, ENE supports the proposed performance incentive structure because it establishes an economic incentive that focuses on the ultimate result of the Three-Year Plans—savings and benefits—rather than on dollars spent (ENE Brief at 11). Further, to ensure that Program Administrators receive performance incentives for activities only where they “ ‘play[] a distinct and clear role’ ” in delivering savings and other defined benefits, ENE recommends that the Department ensure that the Program Administrators collect incentives after goals have been met and verified through EM&V (ENE Brief at 11, quoting D.P.U. 08-50-A at 49).

E. Analysis and Findings

1. Introduction

The Green Communities Act provides that the Statewide Plan shall include a proposed mechanism that provides incentives to Program Administrators based on their success in meeting or exceeding the goals in the plan. G.L. c. 25, § 21(b)(2). The Program Administrators' proposed performance incentive mechanism includes the following: (1) a statewide incentive pool; (2) three components (savings, value, and performance metrics) and an allocation of the statewide incentive pool to these components; (3) statewide payout rates for

the savings and value components; (4) an allocation of the statewide incentive pool to the individual Program Administrators; and (5) incentive thresholds and caps.

The Council endorsed, in concept, a performance incentive as well as the following aspects of the Program Administrators' proposed incentive mechanism: (1) the statewide incentive pool; (2) the division of the incentive mechanism into the savings, value and performance metrics components; (3) the allocation of the statewide pool to each component; (4) the uniform payout rates calculated for the savings and value components, and (5) the allocation of the statewide pool to each Program Administrator based on energy savings. (Exh. Common 29 Supp. (December 21, 2009), App. B). The final performance incentive mechanism proposal was submitted on December 21, 2009. As this filing was made after the Council's last resolution on performance incentives, the Council did not have an opportunity to review or approve this proposal.

Section 3.6.2 of the Guidelines sets forth the principles by which the Department will review a proposed performance incentive mechanism. Pursuant to the Guidelines, such mechanisms must: (1) be designed to encourage Program Administrators to pursue all available cost-effective energy efficiency; (2) be designed to encourage energy efficiency programs that will best achieve the Commonwealth's energy goals; (3) be based on clearly-defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact; (4) be available only for activities where the Program Administrator plays a distinct and clear role in bringing about the desired outcome; (5) be as consistent as possible across all electric and gas Program Administrators; and (6) avoid any perverse incentives. Guidelines § 3.6.2. Further,

the amount of funds available for performance incentives should be kept as low as possible (in consideration of the Department's other principles) in order to minimize the costs to electricity and gas customers. Guidelines § 3.6.3.

2. Proposed Mechanism

a. Statewide Incentive Pool

As noted above, the Department's Guidelines require that the amount of funds available for a performance incentive mechanism be kept as low as possible in order to minimize the cost to electric and gas customers. Guidelines § 3.6.3. In previous years, the Department has approved design performance incentive levels that equaled, on an after-tax level, the product of (1) the average yield of the three-month United States Treasury bill, and (2) total program implementation costs of each Program Administrator's energy efficiency budget (RR-DPU-9; Att. RR-DPU-9A). D.T.E. 98-100, § 5.2. The Program Administrators propose a target statewide incentive pool equal to \$4 million in 2010, \$4.5 million in 2011, and \$5.5 million in 2012. These amounts are equal to approximately 4.7 percent, before taxes, of the statewide budgets for each year (Exh. Common 29 Supp. (December 21, 2009) at 5-6).<sup>85</sup>

In light of the fact that (1) the proposed statewide incentive pool, as a percentage of Program Administrators' budgets, is in line with the design performance incentive levels that

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<sup>85</sup> These amounts are based on the assumption that the savings targets included in the Program Administrators' Three-Year Plans would, on a statewide basis, be equal to the targets established by the Council (Exh. Common 29 Supp. at 5). The actual statewide pool may deviate from the target level if, on a statewide basis, the Program Administrators' savings targets are greater or less than the savings targets established by the Council (Exh. Common 29 Supp. (December 21, 2009) at 5).

the Department previously has approved, and (2) the Council has endorsed the statewide incentive pool, the Department finds that the Program Administrators have kept the amount of performance incentive funds as low as possible (in consideration of the Department's other principles), consistent with the Green Communities Act and Department Guidelines.

Accordingly, the Department approves Program Administrators' proposed statewide incentive pool.

b. Components

The proposed performance incentive mechanism contains three components by which Program Administrators can earn incentive payments: (1) a savings mechanism, which provides an incentive for Program Administrators to pursue energy efficiency programs that maximize total benefits; (2) a value mechanism, which provides an incentive for Program Administrators to pursue energy efficiency programs that maximize net benefits; and (3) performance metrics, which provide an incentive for Program Administrators to undertake specific efforts that are expected to provide benefits beyond those captured in the savings and value components (Exh. Common 29 Supp. (December 21, 2009) at 8). The allocation of the statewide pool to each component is summarized in Table B, above.

The Department has previously approved incentive mechanisms, in electric energy efficiency dockets, that included these same components, with a similar allocation of the total incentive amount to each component. see, e.g., Fitchburg Gas and Electric Light Company, d/b/a Unitil, D.P.U. 08-126 (2009); Massachusetts Electric Company and Nantucket Electric Company, d/b/a National Grid, D.P.U. 08-129; NSTAR Electric Company, D.P.U. 08-117;

and Western Massachusetts Electric Company, D.P.U. 08-118. In addition, the Council has endorsed the proposed components and the allocation of incentive dollars to each component (Exh. Common 29 Supp. (December 21, 2009), App. B). For these reasons, the Department finds that the gas Program Administrators' proposal is reasonable, and consistent with the Green Communities Act and Department precedent. Accordingly, the Department approves the proposed design of the incentive mechanism with a savings, value and performance metrics component as well as the allocation of the statewide incentive pool to each component.

c. Savings and Value Payout Rates

The Program Administrators' proposed incentive mechanism includes the application of statewide payout rates (i.e., uniform across all Program Administrators) for the savings and value components. The Program Administrators calculated the savings and value payout rates for each program year by dividing (1) the percentage of the statewide incentive pool allocated to each component by (2) the projected statewide total and net benefits, respectively (Exh. Common 29 Supp. (December 21, 2009) at 11). The savings and value mechanism payout rates for each year of the Three-Year Plans are listed in Table C, above.

One of the fundamental underpinnings of the Green Communities Act is the move toward statewide uniformity with regard to the provision of energy efficiency services, as evidenced by the Act's requirement that Program Administrators work together and in collaboration with the Council to develop a Statewide Plan. That is, even though Program Administrators will continue to administer these programs individually, the Green

Communities Act mandates that program implementation should occur as consistently and seamlessly as possible across the Commonwealth.

Section 3.6.2 of the Guidelines provides that an incentive mechanism should encourage energy efficiency program designs that will best achieve the energy goals of the Commonwealth, in particular the goals enunciated in the Green Communities Act. The proposed statewide payout rates for the savings and value components will ensure that, across the Commonwealth, Program Administrators will receive the same incentive payment for each dollar of total and net benefits achieved, thus providing Program Administrators with the same incentive to pursue energy efficiency opportunities that maximize total benefits, versus those that maximize net benefits. As such, we find that the application of statewide payout rates for the savings and value components is consistent with the goal of the Green Communities Act to move toward statewide implementation. In addition, the Council has endorsed the proposed payout rates for the savings and value components (Exh. Common 29 Supp., App. B). For these reasons, the Department finds that the Program Administrators' proposed payout rates for the savings and value components are reasonable, and consistent with the Green Communities Act and Department precedent. Accordingly, the Department approves the statewide savings and value payout rates, as proposed.

d. Allocation of Statewide Pool to Program Administrators

Under the Program Administrators' proposal, the statewide incentive pool is allocated to each Program Administrator based on its contribution to the statewide savings targets, as expressed in therms (Exh. Common 29 Supp. (December 21, 2009) at 6). This proposed

allocation of performance incentives from the statewide pool, which is based on therm savings, results in two outcomes that raise concern as they contradict the intent of the Green Communities Act to move toward statewide implementation. First, the proposed allocation method results in significant differences across Program Administrators in the percent of design incentive dollars that are allocated to the savings, value, and performance metric components (see Table E, above). Similarly, the proposed method results in an allocation across the three components for some Program Administrators that, on a percentage basis, differs significantly from the statewide percentages endorsed by the Council. Second, the proposed allocation method requires Unitil to adopt a payout rate for the value component that differs from the statewide payout rate in 2010, in order to avoid a negative incentive level for its performance metrics component. Third, the proposed allocation method requires Bay State to adopt a low-income payout rate for the savings and value components that differs from the statewide payout rates in 2010, in order to address LEAN's concerns that the amount of incentive dollars being allocated to the low-income performance metrics was too low.

The Department notes that the Council endorsed the proposed method of allocating the statewide pool to each Program Administrator.<sup>86</sup> Notwithstanding the concerns discussed above, the Department accepts the proposed method of allocating the statewide pool to each

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<sup>86</sup> Based on the fact that (1) the Council endorsed the allocation method in its December 15, 2009 Resolution, and (2) the Program Administrators did not submit their final incentive filing until December 21, 2009, it is not known whether the Council was aware of the results discussed above at the time of its endorsement. The Department observes that, in its December 15, 2009 Resolution, the Council noted a modification for Bay State but not a modification for Unitil (Exh. Common 27 Supp., App. C).

Program Administrator for program year 2010. However, the Department directs the Program Administrators to work with the Council to develop a revised allocation method for 2011 and 2012 that addresses the issues discussed above. In particular, the revised allocation method should, to the extent possible, result in (1) uniform statewide payout rates for the savings and value components, and (2) an allocation of incentive dollars across the three components for each Program Administrator that, on a percentage basis, approximates the statewide allocation across the three components, as endorsed by the Council and approved by the Department above.<sup>87</sup>

e. Unitil and Bay State

As discussed above, Unitil's application of the statewide savings and value payout rates would result in a negative incentive amount to be collected through the performance metric component. To cure this anomaly, Unitil proposes to apply a value payout rate that differs from the statewide rate in 2010<sup>88</sup> (Exh. Common 29 (December 21, 2009) Cover Letter at 1). In Bay State's case, LEAN raised concerns that using the statewide payout rates led to a smaller amount of potential shareholder incentive dollars being allocated to the low-income performance metrics (Exh. Common 29 Supp. (December 21, 2009) at 20; Tr. 3, at 532-533).

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<sup>87</sup> For example, the statewide pool could be allocated based on each Program Administrator's contribution to total statewide benefits instead of statewide therm savings.

<sup>88</sup> Unitil proposes to apply a value payout rate calculated as the rate that would result in a value incentive amount that, when combined with its saving incentive, would keep its percent allocation to the performance metric component at 1 percent, consistent with the performance metric component filing made by Unitil on November 13, 2009 (Exh. Common 29 (December 21, 2009), Cover Letter at 1).

To address LEAN's concerns, Program Administrators, a Council advisor, and LEAN negotiated adjusted Bay State's savings and value payout rates for low-income for 2010 (Tr. 3, at 532-533).

The Department has approved the Program Administrators' proposal to allocate the statewide incentive pool on a per-therms saved basis for program year 2010. Consistent with this approval, the Department also approves Unitil's use of a revised payout rate for its value component during 2010, in order to avoid the anomaly of a negative performance metrics incentive. The Department also approves Bay State's use of a revised low-income payout rate for its savings and value components in 2010, in order to address LEAN's concern that the amount of incentive dollars being allocated to the low-income performance metrics was too low. The Department expects, however, that the revised allocation method developed by the Program Administrators for 2011 and 2012 will resolve these issue for Unitil and Bay State.

3. Performance Metrics<sup>89</sup>

a. Introduction

The Program Administrators propose 16 performance metrics. Each of the proposed performance metrics is summarized in Table D, above. The Department evaluates each proposed performance metric using the design principles established in D.P.U. 08-50-A at 49-50, as memorialized in Section 3.6.2 of the Guidelines. The following principles are of particular importance in this analysis:

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<sup>89</sup> Because the proposed Multifamily Retrofit: Deeper Savings metric is a draft metric for 2011, the Department will not address it in this Order.

- Performance incentive mechanisms should be designed in such a way as to encourage energy efficiency program designs that will best achieve the Commonwealth's energy goals, particularly with regard to the goals stated in the Green Communities Act;
- Performance incentives should be based on clearly-defined goals and activities that can be sufficiently monitored, quantified and verified after the fact; and
- Performance incentives should be available only for activities where the distribution company plays a distinct and clear role in bringing about the desired outcome.

Guidelines § 3.6.2.

Performance metrics help the Program Administrators achieve all cost-effective energy efficiency and, as such, are a valuable component of the performance incentive mechanism. Consistent with our previous support of performance metrics in the electric energy efficiency plans, the Department supports the inclusion of performance metrics in the performance incentive mechanism for gas energy efficiency plans.<sup>90</sup>

As discussed below, the Department also supports the principles or concepts that are advanced by many of the proposed performance metrics. Nonetheless, the Department has identified some aspects of the performance metrics that are inconsistent with the design principles outlined in Section 3.6.2 of the Guidelines.

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<sup>90</sup> See, e.g., Fitchburg Gas and Electric Light Company, d/b/a Unatil, D.P.U. 08-30, at 22-23 (2008); Massachusetts Electric Company and Nantucket Electric Company, d/b/a National Grid, D.P.U. 08-8, at 38-39 (2008); NSTAR Electric Company, D.P.U. 08-10, at 28-29 (2008); D.P.U. 08-129, at 38-39; D.P.U. 08-117, at 37-38; D.P.U. 08-118, at 35-37; D.P.U. 08-126, at 35-36; Western Massachusetts Electric Company, D.P.U. 08-47, at 26-27 (2009).

b. Distinct and Clear Role

As noted above, performance incentives should be available only for activities where the distribution company plays a distinct and clear role in bringing about the desired outcome. Guidelines § 3.6.2. All of the proposed performance metrics, with the exception of the “C&I Retrofit: Depth of Savings” performance metric, establish statewide goals. By design, the statewide goals do not require each Program Administrator to take specific action to achieve the statewide goal in order to receive a performance incentive through that performance metric.

In light of the statewide approach to energy efficiency encouraged by the Green Communities Act, the Department recognizes that it may be appropriate to design performance metrics to promote cooperation across Program Administrators and integration and the advancement of statewide initiatives. The Department finds, however, that allowing a Program Administrator to be rewarded for the actions of other Program Administrators – when said Program Administrator plays no part in those actions – is not consistent with the intent of the Green Communities Act or the Department’s Guidelines. Guidelines § 3.6.2.

With the exception of the C&I Retrofit: Depth of Savings metric, because they are presented as statewide metrics, all proposed performance metrics allow for a Program Administrator to potentially earn incentives based solely on the activity of another Program Administrator (Exh. Common 29, at 30-32). The Department will not accept performance metrics that allow a Program Administrator to be rewarded solely on the efforts of other Program Administrators. In order for a Program Administrator to receive performance

incentive dollars associated with a performance metric, the Program Administrator must have actively participated in the achievement of the goals of the metric.

As such, the Department concludes that all of the proposed performance metrics, except for the “C&I Retrofit: Depth of Savings” performance metric, are in conflict with the “clear and distinct” principle of the Department’s Guidelines. Guidelines § 3.6.2. Such metrics by design do not require each Program Administrator to have a distinct and clear role in determining the outcome of the performance metric.<sup>91</sup>

c. Verifiable Goals

The Department’s Guidelines require that performance incentives be based on clearly-defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact. Guidelines § 3.6.2. In order to satisfy this design principle, each goal of a performance metric must to be well and clearly documented, easily understood, and objectively verifiable. If the goals of a performance metric are not clearly defined or cannot be verified after the fact, the Department will be unable to determine if the goals were achieved when reviewing the Annual Reports.

We find that the following proposed performance metrics violate this principle set forth in Section 3.6.2 of the Guidelines: (1) MassSAVE: Increase DI Bulb penetration; (2) Community Initiatives; (3) MassSAVE: Explore inclusion of Energy Professionals;

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<sup>91</sup> As part of their Annual Reports, the Program Administrators propose to detail each Program Administrator’s level of individual involvement in achieving the statewide goals (Exh. Common 29 Supp. (December 21, 2009) at 18-19). Nonetheless, as discussed below, the individual goals for each Program Administrator must be clearly identified in advance, so that performance can be verified.

(4) Low-income Best Practices Working Group; (5) Low-income Auditor Training & Contractor Recruitment/Support; (6) Low-income 1-4 Retrofit: Deep Energy Retrofit; (7) Small Business Electric and Gas Integration; and (8) New Construction –

Comprehensiveness and depth of savings. These performance metrics include goals that are not well defined and are open to interpretation. For example, the design level for the proposed “Low-income Best Practices Working Group” performance metric has as a goal the following: “[e]xplore and consider adoption of new cost-effective program measures. . .”

(Exh. Common 29 Supp. (December 21, 2009), App. A). We find that this goal is neither measurable nor quantifiable and, as such, this proposed performance metric is not objectively verifiable.

d. Baseline Information

The Guidelines require all performance incentive mechanisms to be designed in such a way as to encourage energy efficiency program designs that will best achieve the Commonwealth’s energy goals, particularly with regard to the goals stated in the Green Communities Act. Guidelines § 3.6.2. The intent of performance metrics is to focus the Program Administrators on outcomes or plan development that would not otherwise be achieved (Exh. Common 29 Supp. (December 21, 2009) at 16). By their nature, performance metrics are not to maintain the status quo or to incent the Program Administrators to do something that would have otherwise happened.

Baseline information identifying the status quo is essential for the Department to determine if the performance metrics are meaningful, require the Program Administrators to

take proper action, and appropriately incent each Program Administrator to pursue the stated goal. Without this information, the Department cannot determine if the metric is consistent with our design Guidelines or the Commonwealth's energy goals. The Department will not approve performance metrics that do not provide baseline information indicating how they will advance the Commonwealth's energy efficiency goals.

The following proposed performance metrics either violate the Guidelines or are inadequately described so as to make it impossible to determine compliance with the Guidelines: (1) MassSAVE/Weatherization: Deeper Savings; (2) MassSAVE: Increase DI Bulb penetration; and (3) MassSAVE: Explore inclusion of Energy Professionals. For example, the design and exemplary levels for the "MassSAVE: Increase DI bulb penetration" performance metric specify direct install targets for the average number of bulbs installed per customer of 15 and 17, respectively (Exh. Common 29 Supp. (December 21, 2009), App. A). However, the Program Administrators fail to include information specifying the current average number of direct install bulbs installed per customer. While the overall goal of increasing direct installations is consistent with the Department's Guidelines and the Green Communities Act, the Department is unable to determine whether the design of this metric is consistent with the Green Communities Act as it lacks sufficient detail about the status quo.

e. Other Issues

The Attorney General objects to the proposed EM&V "Omnibus Metric" as she contends it merely incents the Program Administrators to uphold their previously-agreed-to obligations with respect to EM&V (Attorney General Brief at 20). The goals of this proposed

performance metric are substantially the same as the EM&V design filed as part of the Statewide Plan. For example, one of the two requirements in the exemplary level is to complete the EM&V studies described in the Statewide Plan. As proposed, it is difficult to see how this proposed metric is designed to incent Program Administrators to take action which wouldn't otherwise be taken. Program Administrators should not receive an incentive through a performance metric that requires no additional action or even a performance metric that requires no substantial action.

f. Conclusion

As discussed above, while the Department supports the inclusion of performance metrics as an important part of the performance incentive mechanism, and also supports the goals that are advanced by the proposed performance metrics, we conclude that the majority of the proposed metrics violate the design principles specified in our Guidelines. Guidelines § 3.6. As noted above, performance metrics were not finalized at the time the Three-Year Plan filings were made and the final proposed metrics were not available until after the close of evidentiary hearings (Exh. Common 29 Supp. (December 21, 2009), App. A). Therefore, we find that the proposed performance metrics were not subject to adequate review by the Department or intervenors. Accordingly, the Department does not approve the proposed performance metrics as filed.<sup>92</sup> Within 45 days of the date of this Order, the

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<sup>92</sup> The Department strongly supports the language in the proposed “New Construction – Comprehensiveness and depth of savings” performance metric that requires “[i]n order to reach exemplary, you must achieve design” (Exh. Common 29 Supp. (December 21, 2009), App. A). The exemplary level of a metric should not be met

Department directs the Program Administrators to work with the Council and refile revised performance metrics for consideration by the Department. Program Administrators should clearly demonstrate how their revised proposal satisfies all concerns raised herein. Our objective is to establish performance metrics for 2010 that achieve the desired outcomes of the performance metrics filed by the Program Administrators but are also consistent with our Guidelines and the Green Communities Act.

As noted in Section VI.C.2, above, the Department expects that the Program Administrators will aggressively pursue all potential sources of outside funding before proposing to collect costs from ratepayers. As part of the Program Administrators' revised performance metrics proposal, we direct the Program Administrators to include a performance metric that appropriately encourages the aggressive pursuit of outside funding. Such metric should be carefully designed to comply with all design principles specified in our Guidelines.

#### 4. Incentive Caps

After review of the Program Administrators' proposed performance incentive mechanism, the Department concludes that a cap on the overall performance incentive is appropriate. We find that the performance incentive mechanism merits a cap in order to protect ratepayers from the potential of a higher-than-anticipated performance incentive. As filed, the performance incentive mechanism has a cap of 125 percent for 2010. Although not

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without first achieving the threshold or design level. Accordingly, language should be included in all proposed performance incentives that requires the Program Administrator to achieve subordinate levels in order to achieve the exemplary level.

proposed by the Program Administrators, the Department will require the same 125 percent cap for the performance incentive mechanism for both 2011 and 2012.

In addition, the Department concludes that a cap on the savings and value components of the performance incentive mechanism is also appropriate. Performance metrics inherently have a cap (i.e., the exemplary level) but, as proposed, the savings and value mechanisms do not have a cap (Exh. Common 29 Supp. (December 21, 2009) at 11-15). In order to ensure that each Program Administrator gives appropriate attention to each component, the Department will impose a 125 percent cap on the total performance incentive that can be earned through the savings mechanism, as well as a 125 percent cap on the total that can be earned through the value mechanism.

#### 5. Conclusion

For the reasons discussed above, the Department accepts the: (1) statewide incentive pool; (2) structure of the performance incentive mechanism with three components; (3) savings mechanism proposal; (4) value mechanism proposal; (5) allocation method for 2010; and (6) EM&V contingencies. The Department does not, however, accept the: (1) proposed allocation method for 2011 and 2012; and (2) the proposed performance metrics. As a result of the statewide pool allocation issues identified herein, the Department directs the Program Administrators to work with the Council to develop a revised allocation method for 2011 and 2012. In addition, the Department directs the Program Administrators to work with the Council and refile new or revised performance metrics for review within 45 days of the date of this Order. Further, the Department will require a 125 percent cap on: (1) overall

performance incentives; and (2) each of the components of the performance incentive mechanism.

## IX. EVALUATION, MEASUREMENT, AND VERIFICATION

### A. Introduction

EM&V is the systematic collection and analysis of information to document the impact of energy efficiency programs in terms of costs and benefits and to improve their effectiveness (Exh. Common 2, at 249). The Statewide Plan presents a new EM&V process that is consistent with the Council's Evaluation Resolution which vests EM&V responsibilities with both the Program Administrators and the Council, with the Council having an active oversight role regarding the form and implementation of the EM&V plans (Exh. Common 2, at 20). Further, the Program Administrators, with guidance from the Council and its consultants, have embarked on a collaborative effort to establish, to the maximum extent possible, one uniform statewide EM&V plan ("Statewide Evaluation Plan")<sup>93</sup> (Exh. Common 2, at 242-243).

The Statewide Evaluation Plan includes the following EM&V studies: (1) measurement and verification; (2) impact evaluation; (3) market evaluation; (4) process evaluation; (5) market characterization or assessment; and (6) evaluation of pilots (Exh. Common 2, at 249-250). Of these studies, one or more, as appropriate, will be used to assess the effectiveness of energy efficiency measures and/or programs within the following market

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<sup>93</sup> This is a departure from prior practice where Program Administrators conducted their own evaluation plans, often initiating their own EM&V studies independent of one another (Exh. Common 2, at 243). In certain circumstances, however, the Program Administrators state that service territory-specific evaluation studies may still be warranted (Exh. Common 2, at 243).

research areas: (1) residential retrofit and low-income; (2) residential retail products; (3) residential new construction; (4) non-residential large retrofit and new construction; (5) non-residential small retrofit; and (6) special and cross-sector studies (Exh. Common 2, at 245-246). The Program Administrators state that this proposed approach is designed to result in consistent and efficient EM&V efforts with a minimum of overlap (Exh. Common 2, at 245).

Within the proposed performance incentive mechanism (see Section VIII, above) the Program Administrators have proposed an EM&V performance metric that has an exemplary goal tied to the completion of a residential non-electric benefit study by September 15, 2010 (Exh. Common 29 Supp. (December 21, 2009), at 34). Similarly, the Program Administrators also expect to evaluate non-electric benefits and non-electric non-resource benefits for both the residential and the low-income sectors (Exh. Common 2, at 257; Tr. 3, at 461-462).

The Program Administrators have developed a transition plan to phase out certain existing EM&V strategies while the new initiatives are implemented (Exh. Common 2, at 246-247). For example, Program Administrators must negotiate new contracts for EM&V work, coordinate and prioritize new study schedules, resolve differences in program tracking systems and approaches, and meet their commitments to provide appropriate evaluation of the programs from the 2009 energy efficiency plans (Exh. Common 2, at 247-248).

The Program Administrators state that they will issue requests for proposals in early 2010 for the various evaluation studies in each of the research areas described above (Exh. Common 2, at 250-258). Each Program Administrator plans to allocate four percent of

its total program budget for evaluation and market research during each year of its Three-Year Plan, though actual budget levels could be higher or lower based on research needs (Exh. Common 2, at 249).<sup>94</sup>

Gas Program Administrators currently do not account for free ridership<sup>95</sup> or spillover effect<sup>96</sup> in their cost-effectiveness analyses (Tr. 1, at 153-154; Tr. 4 (National Grid) at 758-759; Tr. 4 (Berkshire) at 703-704; Tr. 4 (Unitil) at 704-705; Tr. 4 (NEGC) at 696-697; Tr. 4 (Bay State) at 728-729; Tr. 4 (NSTAR) at 768-770). The gas Program Administrators state, however, that they will conduct EM&V studies to account for these effects in compliance with the Department's directive in D.P.U. 08-109 (Exh. Common 2, at 257; Tr. 1, at 153-154; Tr. 4 (National Grid) at 758-759; Tr. 4 (Berkshire) at 703-704; Tr. 4 (Unitil) at 704; Tr. 4 (NEGC) at 696-697; Tr. 4 (Bay State) at 728-729; Tr. 4 (NSTAR) at 768-770).

## B. Positions of the Parties

### 1. Program Administrators

National Grid and NSTAR contend that the new EM&V provisions, developed in conjunction with the Council, are crucial to the success of their respective Three-Year Plans

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<sup>94</sup> Gas Program Administrators developed their 2010 budgets using a three percent assumption (Exh. Common 2, at 249 n.21).

<sup>95</sup> A free rider is a participant in a utility-sponsored energy efficiency program that would have installed energy efficiency measures regardless of program incentives. D.P.U. 08-109, at 15 n.20.

<sup>96</sup> Spillover effect is defined as savings from energy efficiency measures installed by an individual who was influenced to do so by a utility-sponsored energy efficiency program but did not receive any direct financial or technical assistance from the utility. D.P.U. 08-109, at 15 n.21.

(National Grid Reply Brief at 4; NEGC-FR Reply Brief at 4; NEGC-NA Reply Brief at 3; Berkshire Reply Brief at 3; Bay State Reply Brief at 3-4; NSTAR Gas Reply Brief at 5; Unitil Reply Brief at 5). The Program Administrators, however, question the added value of the Attorney General's requested annual reports that outline EM&V activities. The Program Administrators argue that EM&V is already subject to stringent reporting requirements such as in Annual Reports to the Department, quarterly reports to the Council, and in any midterm modification filings (National Grid Reply Brief at 7-8; NEGC-FR Reply Brief at 5-6; NEGC-NA Reply Brief at 5-6; Berkshire Reply Brief at 5-7; Bay State Reply Brief at 5-7; NSTAR Gas Reply Brief at 3-5; Unitil Reply Brief at 3-5). The Program Administrators contend that these existing reports sufficiently address the Attorney General's concerns regarding the reporting and evaluation of pilot programs (National Grid Reply Brief at 8-9; NEGC-FR Reply Brief at 7-8; NEGC-NA Reply Brief at 7-8; Berkshire Reply Brief at 7-8; Bay State Reply Brief at 7-8; NSTAR Gas Reply Brief at 4-6; Unitil Reply Brief at 4-6). The Program Administrators also oppose the Attorney General's recommendation for third-party independent audits of accounting and financial accuracy, program delivery, and installation issues on the basis that such audits would be duplicative, unnecessary, and would usurp the oversight role of the Department (National Grid Reply Brief at 10; NEGC-FR Reply Brief at 9-10; NEGC-NA Reply Brief at 9-10; Berkshire Reply Brief at 8-9; Bay State Reply Brief at 8-9).

## 2. Attorney General

The Attorney General stresses the significance of the Evaluation Resolution regarding the establishment of a transparent and objective EM&V strategy; she maintains that this will provide consistency across the EM&V efforts of all Program Administrators while promoting public confidence in the process (Attorney General Brief at 11-12, citing Exh. Common 2, at 242). Despite her general support, the Attorney General argues that there is an added need for rigorous data collection and the development of unique EM&V strategies for pilot programs, neither of which the Program Administrators have established (Attorney General Brief at 13). The Attorney General requests that the Department require Program Administrators to provide preliminary EM&V findings and all other necessary information to verify participant savings in all targeted programs when they file their 2010 midterm modifications and in each year thereafter (Attorney General Brief at 12-13). In addition, the Attorney General suggests that the Department require a third-party independent audit of the Program Administrators 2010 plan year, to be conducted in 2011, that focuses on financial accuracy, program delivery, and installation issues (Attorney General Brief, App. A through G ¶ 5).

## C. Analysis and Findings

### 1. Introduction

The Department's Guidelines require each Three-Year Plan to include an evaluation plan describing how the Program Administrator will evaluate the energy efficiency programs

during the course of its plan.<sup>97</sup> The Department's Guidelines are intended to create a collaboratively-developed (between the Council and the Program Administrators), statewide EM&V strategy:

The evaluation plan should include at least the following information: (a) how the evaluation plan is consistent with any statewide evaluation plans; (b) how the activities of the evaluation plan will be coordinated with the activities of other Program Administrators; (c) how the electric and gas evaluation efforts have been integrated; and (d) how the Program Administrator incorporated directives or resolutions from the Council in forming its evaluation plans. A Program Administrator should fully document and justify all areas where its evaluation plan deviates from either (a) any statewide evaluation plan, or (b) any directives or resolutions from the Council. If this information is not available at the time of the filing of the Energy Efficiency Plan, the Program Administrator shall state when such information will be available for filing.

Guidelines § 3.5.2.

The EM&V strategy proposed in the Statewide Plan is consistent with the Green Communities Act and with the directives contained in the Guidelines (see Exh. Common 2, at 241-258). Although this strategy is a good first step, EM&V is an ongoing process and its importance to the success of the Three-Year Plans and to the implementation of energy efficiency in Massachusetts cannot be overstated. As ratepayers in Massachusetts are asked to support rapidly expanding budgets for energy efficiency, a sound EM&V strategy is essential to guide future investment decisions and to retain the public's confidence that programs are cost-effective. The reliability of program benefits, as supported by sound EM&V efforts, is of growing importance because of the Act's mandate to provide for the acquisition of all available

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<sup>97</sup> The Green Communities Act states that energy efficiency plans may include programs for planning and evaluation. G.L. c. 25, § 21(b)(2).

energy efficiency and demand reduction resources that are cost-effective. G.L. c. 25, § 21(b)(1). Consistent and reliable EM&V studies will ensure that program investments continue to provide net benefits to ratepayers.

2. Non-Resource Benefits

The Attorney General urges the Department to require that the Program Administrators support non-gas non-resource benefits included in their cost-effectiveness analyses with actual claimed results, recent studies, actual field validations, and independent third-party audits (Attorney General Brief at 27). The Program Administrators indicated that they intend to evaluate non-gas benefits, including non-resource benefits, during the course of the Three-Year Plans (Exh. Common 2, at 257; Tr. 3, at 461-462).

In Section V.C, above, the Department expressed concern regarding the reliability of non-gas non-resource benefits, noting that the Program Administrators themselves accept that at least some of the categories of non-resource benefits claimed in their Three-Year Plans are lacking in recent and thoroughly-reviewed support documentation (see Tr. 3, at 461, 481-482; Tr. 4 (Bay State) at 737-738; Tr. 4 (Berkshire) at 707-708). As such, the Department directs the Program Administrators to undertake studies during 2010 that evaluate non-resource benefits, including all underlying assumptions, to ensure that updated and more reliable values will be developed. The Department further directs the Program Administrators to report their findings on this matter in their 2009 Annual Reports.

### 3. Reporting Requirements and Third-Party Audits

Historically, Program Administrators have submitted the results of their EM&V studies as part of their Annual Reports to the Department. The Attorney General recommends that, in light of the importance of EM&V activities, the Department require that Program Administrators submit mid-year reports on EM&V activities and pilot programs (Attorney General Brief at 12-13).

The Department finds that the existing reporting requirements provide an adequate framework for review of EM&V activities and we will not establish additional reporting requirements beyond the Annual Reports at this time. Instead, as discussed in D.P.U. 08-50-B at 3, we will convene a working group to address issues associated with the Program Administrators' Annual Reports, including establishing a template for the reports and a procedure for their review.<sup>98</sup> While the specific contents of Annual Reports will be a matter of discussion for the working group, the Department expects that, at a minimum, they will include: (1) an overview of specific EM&V studies completed to date; (2) key findings that have materially impacted the initial projected benefits of energy efficiency programs; (3) a description of other evaluation studies that are in progress or will soon be initiated; (4) complete evaluation reports for the existing pilots; and (5) Program Administrator-specific findings and updates.

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<sup>98</sup> The Annual Report Working Group will address the timing, content, and procedural issues related to the Annual Reports, the midterm modifications,

The Attorney General recommends that the Department require third-party audits of the 2010 financial and accounting practices, program delivery, and installation issues (Attorney General Brief at App. A through G ¶ 5). The Department accepts the validity of the Attorney General's concerns and recognizes that third-party audits have the ability to generate useful information for all stakeholders, in addition to providing another level of transparency and integrity in the review of energy efficiency programs. This request for an audit is similar to a request made by the Attorney General during the investigation of National Grid's five-year energy efficiency plan. See KeySpan Energy Delivery New England, d/b/a National Grid, D.P.U. 07-104, at 22 (2008). In D.P.U. 07-104, the Department directed National Grid to propose an external audit in its compliance filing on energy efficiency programs and to work with the Attorney General in developing the parameters, design, scope, scheduling, and implementation of the proposed audit. D.P.U. 07-104, at 22. The results of the audit required in D.P.U. 07-104 have not yet been published, although they are likely to provide valuable information that may inform decisions regarding the conduct of future audits and evaluation studies. Also, the new strategy for EM&V, along with the new oversight role of this area by the Council and its consultants will provide a framework for completion of evaluation studies related to process, program impact, and measurement and verification, each of which may allay the Attorney General's concerns.<sup>99</sup> The Program Administrators, the Council, and its consultants should be afforded the opportunity to demonstrate the robustness of the proposed

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<sup>99</sup> The various types of evaluation functions are outlined in Exh. Common 2, at 249.

EM&V framework with regard to evaluation of process, program delivery, and installation issues.

Accordingly, the Department will not require the additional third-party audits requested by the Attorney General at this time. However, if it proves necessary, the Department may in the future direct the Program Administrators to conduct audits of their programs and operations, once we have had a chance to observe how successfully the new EM&V framework is operating. As always, the Department encourages the Attorney General and all interested parties to articulate specific areas of concern so that any audits required in the future are implemented efficiently and effectively.

#### 4. Free Ridership and Spillover

In D.P.U. 08-109, at 16, the Department directed all gas Program Administrators to account for the effects of free ridership and spillover when calculating the cost-effectiveness of energy efficiency programs. As noted above, none of the Program Administrators included free ridership or spillover in their Three-Year Plans, however, they state that they will conduct EM&V studies to account for these effects on a going forward basis (Exh. Common 2, at 257; Tr. 1, at 153-154; Tr. 4 (National Grid) at 758-759; Tr. 4 (Berkshire) at 703-704; Tr. 4 (Unitil) at 704-705; Tr. 4 (NEGC) at 696-697; Tr. 4 (Bay State) at 728-729; Tr. 4 (NSTAR Gas) at 768-770). The Department directs gas Program Administrators to conduct an EM&V study to account for free ridership and spillover and to provide an update on the status of such this study (i.e., whether an request for proposals has been issued) in their 2009 Annual Reports. The Program Administrators should apply the data resulting from the study

consistently across all Program Administrators. The Program Administrators are further directed to include information obtained from the study in their cost-effectiveness analyses in their next three-year plans.

## X. MIDTERM MODIFICATIONS

### A. Introduction

In D.P.U. 08-50-A, the Department sought to balance the need for Program Administrators to make improvements to energy efficiency programs during the course of the Three-Year Plans, with the need for adequate regulatory review and stakeholder input of significant changes to the Program Administrators' planning assumptions and parameters. D.P.U. 08-50-A at 40-41. The Department concluded that the following changes to an energy efficiency plan are significant and will require Department approval: (1) the addition of a new program or the termination of an existing program; (2) a change in a program budget of greater than 20 percent; (3) a program modification that leads to an adjustment in savings goals that is greater than 20 percent; or (4) a program modification that leads to a change in performance incentives of greater than 20 percent. D.P.U. 08-50-A at 63-64. A Program Administrator that seeks to make such a modification is required to first submit its proposal to the Council for review and then submit it to the Department at the time it makes its Annual Report filing. D.P.U. 08-50-A at 41. Any such request must be accompanied with (1) a justification for why the modification is appropriate, and (2) a description of how the modification was reviewed and decided upon by the Council. D.P.U. 08-50-A at 64.

The Program Administrators request a clarification or adjustment to the Department's requirement that modifications to the Three-Year Plan be presented to the Department as part of the Annual Report filings (Exh. Common 2, at 275-276, citing D.P.U. 08-50-A at 64). The Program Administrators ask that they be allowed to submit proposed modifications to the Department through a proposal separate from the Annual Reports, if the proposed modifications are time sensitive or necessary to address potential lost opportunities (Exh. Common 2, at 275-276). The Program Administrators also recommend that the Council and the Department each adopt a 45-day deadline for a decision on any such proposal (Exh. Common 2, at 276).

The Program Administrators state that there are a number of shifting or unknown factors that could trigger a request for midterm modification (Exh. Common 2, at 273-274). First, with respect to performance incentives, the Program Administrators state that there are several issues that have yet to be determined or are subject to change, including: (1) the level of performance incentives allocated to low-income performance metrics; (2) a cap on incentives for 2011 and 2012; (3) the payout rates for the savings and value mechanisms may change depending on the outcome of EM&V studies or updates to the Avoided Cost Study; and (4) potential annual updates due to savings and costs adjustments (Exh. Common 29 (Supp.) (December 21, 2010) at 5, 11-14, 18, 20). Second, the Program Administrators note that there could be a request for a midterm modification in the event that targets for outside funding are not achieved by the dates identified in the Statewide Plan (Exh. Common 2, at 276). The Program Administrators anticipate that they will seek Department approval to modify savings

goals and budgets for 2010 and 2011, on or around September 30, 2010 and September 30, 2011, respectively, in order to reflect the actual outside funding levels obtained (Exh. Common 2, at 276-277).

B. Positions of the Parties

1. Program Administrators

The Program Administrators argue that it is appropriate for the Department to modify the standard for midterm modifications set forth in D.P.U. 08-50-A and D.P.U. 08-50-B (Exh. Common-2, at 275; National Grid Brief at 73; NEGC-FR Brief at 72; NEGC-NA Brief at 72; Berkshire Brief at 72; Bay State Brief at 72; NSTAR Gas Brief at 72; Unitil Brief at 73; Blackstone Brief at 49). Although the Program Administrators believe that the standard for midterm modifications set forth in D.P.U. 08-50-A at 64 is appropriate, the Program Administrators anticipate that there could be exceptional circumstances necessitating the filing of a proposal separate from the Annual Reports (National Grid Brief at 72-73; NEGC-FR Brief at 72; NEGC-NA Brief at 72; Berkshire Brief at 72; Bay State Brief at 72; NSTAR Gas Brief at 72; Unitil Brief at 73; Blackstone Brief at 49). Accordingly, the Program Administrators request that the Department allow a limited exception or clarification to the standard for midterm modifications that will allow proposed program modifications outside of the Annual Reports for modifications that are time sensitive or will address potential lost opportunities.<sup>100</sup>

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<sup>100</sup> National Grid Brief at 73, citing Exh. Common 2, at 275; NEGC-FR Brief at 72, citing Exh. Common 2, at 275; NEGC-NA Brief at 72, citing Exh. Common 2, at 275; Berkshire Brief at 72, citing Exh. Common 2 at 275; Bay State Brief at 72, citing Exh. Common 2, at 275; NSTAR Gas Brief at 72, citing Exh. Common 2,

The Program Administrators state that such proposals would be made infrequently and only to address situations in which delay would entail excessive costs or lost opportunities (National Grid Brief at 73; NEGC-FR Brief at 72; NEGC-NA Brief at 72; Berkshire Brief at 72; Bay State Brief at 72; NSTAR Gas Brief at 73; Unitil Brief at 73; Blackstone Brief at 49).

The Program Administrators ask that the Department reject the Attorney General's recommendation that they be required to file annual updates to track the progress of the Three-Year Plans (National Grid Reply Brief at 3, 9; NEGC-FR Reply Brief at 3, 9; NEGC-NA Reply Brief at 3, 8; Berkshire Reply Brief at 3, 8; Bay State Reply Brief at 3, 8; NSTAR Gas Reply Brief at 3; Unitil Reply Brief at 3). The Program Administrators argue that the periodic reporting and process for midterm modifications as proposed in the Three-Year Plans are consistent with the Green Communities Act and D.P.U. 08-50, and that the additional reports and processes that the Attorney General recommends would be duplicative and inconsistent with established regulatory directives (National Grid Reply Brief at 4-5; NEGC-FR Reply Brief at 4; NEGC-NA Reply Brief at 4; Berkshire Reply Brief at 4; Bay State Reply Brief at 4; see NSTAR Gas Reply Brief at 3, 5-6; Unitil Reply Brief at 3, 5-6).

The Program Administrators note that the Green Communities Act requires the Program Administrators to provide quarterly reports to the Council on the implementation of the Three-Year Plans, which the Council will use to create an annual report to be filed with the

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at 275; Unitil Brief at 73, citing Exh. Common 2, at 275; Blackstone Brief at 49, citing Exh. Common 2, at 275.

Department and the Legislature (National Grid Reply Brief at 6-7, citing G.L. c. 25, § 22(d); NEGC-FR Reply Brief at 6, citing G.L. c. 25, § 22(d); NEGC-NA Reply Brief at 6, citing G.L. c. 25, § 22(d); Berkshire Reply Brief at 5, citing G.L. c. 25, § 22(d); Bay State Reply Brief at 5-6, citing G.L. c. 25, § 22(d); NSTAR Gas Reply Brief at 5, citing G.L. c. 25, § 22; Unitil Reply Brief at 5, citing G.L. c. 25, § 22). The Program Administrators argue that when developing the standards for midterm modifications, the Department considered the requirements of the Green Communities Act and the Council's role in overseeing the Three-Year Plans.<sup>101</sup> Further, the Program Administrators contend that the Department made clear in D.P.U. 08-50-B that only significant modifications would require Department approval.<sup>102</sup> Given the Council's intensive oversight and participation as well as the framework for midterm modifications established in D.P.U. 08-50-A, the Program Administrators argue that they should not be required to submit additional reports or updates for Department review and approval unless a significant modification or matter related to an Annual Report is at issue (National Grid Reply Brief at 8; NEGC-FR Reply Brief at 7-8;

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<sup>101</sup> National Grid Reply Brief at 7, citing D.P.U. 08-50-A at 64; NEGC-FR Reply Brief at 7, citing D.P.U. 08-50-A at 64, Exh. AG 1-17; NEGC-NA Reply Brief at 6-7, citing D.P.U. 08-50-A at 64, Exh. AG 1-17; Berkshire Reply Brief at 6, citing D.P.U. 08-50-A at 64, Exh. AG 1-17; Bay State Reply Brief at 5-6, citing D.P.U. 08-50-A at 64, Exh. AG 1-17; see NSTAR Gas Reply Brief at 11 citing Exh. AG 1-17; Unitil Reply Brief at 11, citing Exh. AG 1-17.

<sup>102</sup> National Grid Reply Brief at 7, citing D.P.U. 08-50-B, Guidelines § 3.8.1-3.8.3; NEGC Fall River Reply Brief at 7, citing D.P.U. 08-50-B, Guidelines § 3.8.1-3.8.3; NEGC North Attleboro Reply Brief at 7, citing D.P.U. 08-50-B, Guidelines § 3.8.1-3.8.3; Berkshire Reply Brief at 6, citing D.P.U. 08-50-B, Guidelines § 3.8.1-3.8.3; Bay State Reply Brief at 6-7, citing D.P.U. 08-50-B, Guidelines § 3.8.1-3.8.3; see NSTAR Gas Reply Brief at 4 n.3; Unitil Reply Brief at 4 n.3

NEGC-NA Reply Brief at 7; Berkshire Reply Brief at 7; Bay State Reply Brief at 7; see NSTAR Gas Reply Brief at 4 n.3; Unitil Reply Brief at 4 n.3). The Program Administrators accept that certain circumstances will require the review of new information by the Department but they argue that all periodic reports or program adjustments should not require Department oversight (National Grid Reply Brief at 8; NEGC-FR Reply Brief at 8; NEGC-NA Reply Brief at 8; Berkshire Reply Brief at 7; Bay State Reply Brief at 7-8; see NSTAR Gas Reply Brief at 4 n.3; Unitil Reply Brief at 4 n.3).

The Program Administrators also argue that mandated annual comprehensive reporting on pilot programs, education and marketing, and EM&V as suggested by the Attorney General would place an undue administrative burden on the Program Administrators and the Department and would be inconsistent with the Act's mandate that Program Administrators minimize administrative costs to the fullest extent practicable.<sup>103</sup> Specifically with regard to the Attorney General's argument that preliminary EM&V studies should be submitted as part of a yearly update filed prior to the Annual Reports, several Program Administrators argue that preliminary EM&V information could be incomplete or inaccurate (National Grid Reply Brief at 9; NEGC-FR at 8; NEGC-NA Reply Brief at 8; Berkshire Reply Brief at 8; Bay State Reply Brief at 8). Because preliminary EM&V reports often undergo significant revisions before being finalized, these Program Administrators argue that they should not be required to submit

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<sup>103</sup> National Grid Reply Brief at 8-9, citing G.L. c. 25, § 19(a); NEGC-FR Reply Brief at 8, citing G.L. c. 25, § 19(a); NEGC-NA Reply Brief at 8, citing G.L. c. 25, § 19(a); Berkshire Reply Brief at 7-8, citing G.L. c. 25, § 19(a); Bay State Reply Brief at 8, citing G.L. c. 25, § 19(a); see NSTAR Gas Reply Brief at 3; Unitil Reply Brief at 3.

EM&V information to the Council and Department until such information is complete (National Grid Reply Brief at 9; NEGC-FR at 8; NEGC-NA Reply Brief at 8; Berkshire Reply Brief at 8; Bay State Reply Brief at 8).

2. Attorney General

Due to the rapid increase in energy efficiency budgets and corresponding increase in ratepayer funding of energy efficiency associated with the Three-Year Plans, the Attorney General recommends that the Department require the Program Administrators to file annual updates to track the progress of the Three-Year Plans (Attorney General Brief at 29). The Attorney General states that the information provided through these updates should include but not be limited to: (1) bill impacts; (2) information on implementation of community initiatives; (3) pilot programs; (4) outreach, education, and marketing; and (5) EM&V analyses (Attorney General Brief at 29). The Attorney General argues that this information will help the Department and stakeholders identify issues as they arise, instead of waiting to address any implementation problems through the Annual Reports when it may be too late to benefit from the information (Attorney General Brief at 29). Given that the Program Administrators are statutorily required to provide the Council with quarterly reports on their progress in implementing the Three-Year Plans, the Attorney General contends that filing an annual update with the Department would not be unduly burdensome (Attorney General Brief at 30, citing G.L. c. 25, § 22(d)). Finally, the Attorney General notes that, although annual updates presently are necessary in order to ensure that forecasted savings and benefits are accruing to

ratepayers, such updates may be unnecessary in the future as the process of developing the Three-Year Plans matures (Attorney General Brief at 30).

### 3. DOER

DOER did not take a specific position on: (1) the Attorney General's recommendation that the Program Administrators file annual updates to track the progress of the Three-Year Plans; or (2) the Program Administrators' proposal to make midterm modifications outside of Annual Reports. However, DOER notes its support of the Department's directives on midterm modifications as set forth in D.P.U. 08-50-B and recommends that the Department give deference to the findings of the Council when assessing a Program Administrator's request to modify its Three-Year Plan (DOER Brief at 12). DOER argues that proposed midterm modifications are likely to be rare and could occur under the following circumstances: (1) a failure to obtain adequate outside funding; (2) a significant increase in bill impacts; (3) a shortfall in attaining savings targets; and (4) where EM&V studies reveal that critical data assumptions are not being met (DOER Brief at 12-14).

#### C. Analysis and Findings

In D.P.U. 08-50-A at 63-64, the Department determined that Program Administrators must obtain Department approval of significant modifications to the Three-Year Plans after first presenting such proposals to the Council for review.<sup>104</sup> The Department stated that any such request should be included as part of a Program Administrator's Annual Report to the

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<sup>104</sup> The procedure for such midterm modifications, including a definition of what constitutes a significant modification, is contained in the Guidelines at §§ 3.8, 3.8.2, 3.8.4.

Department and must be accompanied by (1) a justification for why the modification is appropriate, and (2) a description of how the modification was reviewed and decided upon by the Council. D.P.U. 08-50-A at 64. The Program Administrators request that the Department revise or clarify the Guidelines to permit proposed modifications to the Three-Year Plans that are time sensitive or necessary to address potential lost opportunities to be presented to the Department separate from their Annual Report filings (Exh. Common 2, at 275-276, citing D.P.U. 08-50-A at 64).

In D.P.U. 08-50-A at 41, the Department found that requiring midterm modifications to be presented at the same time as the Annual Report filings allowed Program Administrators a certain level of flexibility to propose program planning improvements, while also ensuring that the Department is able to review such proposals in an efficient manner. For the majority of proposed midterm modifications, we continue to expect that such filings will be made at the time the Annual Report filings are made.<sup>105</sup> Nevertheless, we agree with the Program Administrators that there may be certain midterm modification proposals that are time sensitive or necessary to address lost opportunities, such that it will be necessary to file the request at a time other than when the Annual Report filings are made. A Program Administrator may seek

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<sup>105</sup> The Department's Order in D.P.U. 08-50-A at 41 indicated that proposed midterm modifications should be included as part of the Program Administrator's Annual Report and the Department would consider such proposals as part of our review of the Annual Reports. See also Guidelines § 3.8.1. Midterm modification proposals should still be submitted at the same time as the Annual Reports; however, such proposals should be filed separately from the Annual Reports. This will provide the Department with an opportunity to review the nature of the proposed modification in order to determine whether to review the proposal with the Annual Report or in a separate docket.

an exception to any provision of the Guidelines with the burden on the Program Administrator to demonstrate the compelling nature of such request. Guidelines § 5. Accordingly, if a Program Administrator seeks to submit proposed modifications to the Department through a proposal, filed separate from the Annual Reports, it should invoke Section 5 for an exception to the filing requirements of Guidelines. Consistent with the Section 5 of the Guidelines, the Program Administrator should demonstrate the compelling nature of the request (e.g., demonstrate that the proposed modifications are time sensitive or necessary to address potential lost opportunities).

The Program Administrators ask that the Council and the Department each adopt a 45-day deadline for review of midterm modifications (Exh. Common 2, at 276). The Department declines to adopt this recommendation and, instead, will determine actual procedural schedules on a case-by-case basis where we will have sufficient information on the scope of the proposal and will be better able to assess the appropriate process and time required for review.<sup>106</sup>

As noted in Sections VIII (Performance Incentives), IX (EM&V), and V (Budget - pilot programs), the individual Three-Year Plans are incomplete for 2011 and 2012 with respect to (1) performance incentives, (2) EM&V studies, and (3) pilot program budgets.<sup>107</sup> Each of

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<sup>106</sup> As part of the Annual Report Working Group, the Department will consider whether to adopt model procedural schedules for review of the Annual Reports and/or proposed midterm modifications. See Guidelines § 3.7.3.

<sup>107</sup> The budget for pilot programs is incomplete for 2012 only (Pilot Budget Resolution at 1).

these areas will require supplemental filings from the Program Administrators. Further, the Program Administrators state that they anticipate that they will seek Department approval to modify savings goals and budgets for 2010 and 2011 in order to reflect the actual outside funding levels obtained (Exh. Common 2, at 276-277). Consistent with the procedure for filing midterm modifications, such updates should be made at the time the Annual Report filings are made. In D.P.U. 08-50-A at 64-65, the Department announced that the Annual Report Working Group will be formed to address the content and timing of Annual Reports. We will also address the timing of the filing of midterm modifications and other plan updates as part of the Annual Report Working Group.

Apart from the Annual Reports, the Attorney General argues that the Program Administrators should be required to file various annual updates on: (1) bill impacts, (2) implementation of community initiatives, (3) pilot programs, (4) outreach, education, and marketing and (5) EM&V activities (Attorney General Brief at 29). The Program Administrators, however, object to filing such information as they argue it would be unduly burdensome (Bay State Reply Brief at 4; National Grid Reply Brief at 4-5; see NSTAR Gas Reply Brief at 3, 5-6; Unitil Reply Brief at 3, 5-6).

The Program Administrators are currently required to submit additional information on their Three-Year Plans through Annual Reports and when they propose significant midterm modifications. D.P.U. 08-50-B at 39-40, citing D.P.U. 08-50, at 37-39; Guidelines § 3.8. As part of the Annual Report Working Group, the Attorney General will have an opportunity to address what information should be updated annually during the course of the Three-Year

Plans and when such updates should be made (i.e., as a part of or separate from the Annual Reports). At a minimum, we note that Program Administrators are required to provide quarterly reports on implementation of their Three-Year Plans to the Council. G.L. c. 25, § 22(d).<sup>108</sup> The Department directs the Program Administrators to provide a copy of these quarterly reports to the Department for informational purposes.

## XI. BLACKSTONE GAS COMPANY

### A. Introduction

Blackstone Gas Company serves approximately 1300 residential and 135 C&I customers in Blackstone and portions of Bellingham and Wrentham, Massachusetts (Exh. Common 2, at 44; Tr. 4 (Blackstone) at 636). As such, Blackstone is the smallest gas distribution company to be included in the Statewide Plan (Exh. Common 2, at 44; Tr. 4 (Blackstone) at 636). The inclusion of Blackstone in the Statewide Plan reflects the spirit of the Green Communities Act to expand energy efficiency efforts (Exh. Common 2, at 44).

Blackstone has not previously offered any energy efficiency programs other than the RCS program pursuant to G.L. c. 164 App., §§ 2-1 et seq., and, thus, has no prior operational history or background (Exh. Common 2, at 44; Tr. 4 (Blackstone) at 659). Due to

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<sup>108</sup> The Green Communities Act requires that Program Administrators provide quarterly reports to the Council on the implementation of their respective Three-Year Plans. G.L. c. 25, § 22(d). The quarterly reports must include a description of each Program Administrator's progress in implementing its Three-Year Plan, a summary of the savings secured to date, and other information as determined by the Council. G.L. c. 25, § 22(d). Additionally, the Council must provide an annual report to the Department on the implementation of the Statewide Plan, which includes descriptions of the programs, expenditures, cost-effectiveness, and savings and other benefits during the previous year. G.L. c. 25, § 22(d).

its small customer base, Blackstone will be coordinating with the other Program Administrators to implement its energy efficiency programs (Exh. Common 2, at 44). In addition, Blackstone has obtained membership in GasNetworks to address managing vendor agreements for the purchase of goods and/or services related to gas energy efficiency programs<sup>109</sup> (Exh. Common 2, at 44; RR-DPU-16).

B. Three-Year Plan Proposal

1. Services Agreement with National Grid

Blackstone plans to enter into a three-year services agreement with Boston Gas Company, d/b/a National Grid (“National Grid”),<sup>110</sup> to provide administrative services and to coordinate Blackstone’s Three-Year Plan with GasNetworks and the Low-Income Efficiency Network<sup>111</sup> (“Services Agreement”) (Exhs. DPU 1-4; AG 1-1; AG 1-1 Att.). The price for these services will be an annual fee \$1,500 plus all expenses incurred by National Grid in connection with the performance of services (Exh. Att. AG 1-1, Article II, § 1).

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<sup>109</sup> Blackstone states that membership in GasNetworks will enable it to take advantage of research in energy efficiency and administration of programs that it would otherwise be unable to do by itself due to its size. By joining in with a larger group of utilities, Blackstone states it will be able to offer benefits to its customers that otherwise would be too expensive (Tr. (Blackstone) at 663).

<sup>110</sup> National Grid is the electric distribution company in Blackstone’s service territory. Blackstone selected National Grid after first inquiring as to whether NSTAR Gas was interested in providing energy efficiency services on its behalf. Due to Blackstone’s small size, NSTAR Gas stated that it was not interested in such an arrangement (Exh. DPU 1-4).

<sup>111</sup> Blackstone states that it has fully negotiated the terms of the Services Agreement that has been provided during this proceeding and will execute the Services Agreement when the Department approves Blackstone’s Three-Year Plan (Blackstone Brief at 56).

The terms of the Services Agreement include:

- The National Grid program manager will attend monthly GasNetworks meetings for the purpose of presenting any feedback the National Grid program manager receives from the Blackstone program manager about the energy efficiency programs offered under the Services Agreement<sup>112</sup> (Exh. Att. AG 1-1, Exh. A ¶ 1; Tr. (Blackstone) at 662).
- The GasNetworks fulfillment vendor will be responsible for billing Blackstone for customers that participate in the energy efficiency programs. In addition, all invoices will be provided for the purpose of confirming accuracy (Exh. Att. AG 1-1, Exh. A ¶ 2).
- National Grid's program manager will provide Blackstone with a monthly tracking update of program participation and spending to compare to Blackstone's total program budget (Exh. Att. AG 1-1, Exh. A ¶ 3).
- The fulfillment vendor will be responsible for performing quality control for five percent of the total number of Blackstone customers who receive rebates under the programs (Exh. Att. AG 1-1, Exh. A ¶ 4).
- In order for Blackstone to provide approximately 20 percent of its total energy efficiency budget to low-income programs, National Grid will coordinate with LEAN on behalf of Blackstone (Exh. Att. AG 1-1, Exh. A ¶ 5). National Grid will coordinate with Action, Inc. and LEAN to report to Blackstone when its program services to low-income customers totals to 20 percent of Blackstone's budget (Exh. Att. AG 1-1, Exh. A ¶ 6).
- National Grid will coordinate with Blackstone in preparation of the budget, tables, and quarterly and annual filings required by D.P.U. 08-50 (Exh. Att. AG 1-1, Exh. A ¶ 7).

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<sup>112</sup> The Services Agreement designates a program manager from National Grid as well as from Blackstone (Exh. Att. AG 1-1, Art. VIII, § 10). The responsibilities of Blackstone's program manager will be to coordinate all aspects of the services between Blackstone and National Grid (Exh. Att. AG 1-1, Art. I, § 2, ¶ 3; Tr. (Blackstone) at 662).

## 2. Programs

Blackstone proposes to offer the GasNetworks residential, low-income, and C&I prescriptive rebate measures (Exhs. Blackstone-9, Blackstone-10, Blackstone-11; Tr. 4 (Blackstone) at 636-637). The Company projects 22 participants for the residential programs, two participants for the low-income program, and 27 participants for the C&I programs (Exhs. Blackstone-9, Blackstone-10, Blackstone-11; Tr. 4 (Blackstone) at 637).

## 3. Budget

Blackstone proposes a total budget of \$134,450 for the Three-Year Plan: \$45,150 for 2010, \$45,150 in 2011, and \$45,150 in 2012 (RR-DPU-11 Att.). This amount includes \$12,336 in LBR for measures installed in program years 2010 through 2012, and does not include performance incentives because Blackstone is not proposing to collect performance incentives at this time (Exhs. Blackstone-8; DPU 1-5; Tr. 4 (Blackstone) at 648). Blackstone states that it has allocated 20 percent of its budget to the low-income sector (Exh. Blackstone-8; Tr. 4 (Blackstone) at 660).

Blackstone estimates it will incur approximately \$60,000 in start-up and implementation costs over the three years, and proposes to recover \$20,000 of this amount in each year of the Three-Year Plan<sup>113</sup> (Tr. 4 (Blackstone) at 648; RR-DPU-11 Att.; see also Exh. AG 1-2). In

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<sup>113</sup> The breakdown of the start-up costs is as follows: \$10,000 for consulting services; \$2,200 for required regulatory publications; \$300 dollars in printing and mailing costs; and an estimated \$45,000 in legal fees for Blackstone's counsel attending Council meetings, participating in the development of the Statewide Plan, preparing and obtaining approval of the GasNetworks membership application, negotiating the Services Agreement with National Grid, and preparing Blackstone's Three-Year Plan filing (Exh. AG 1-2).

addition, Blackstone has indicated that it plans to spend \$2,475 on PP&A, which is 5.48 percent of the total budget for each year of the Three-Year Plan (RR-DPU-11 Att.).

#### 4. Cost-Effectiveness

Blackstone conducted a benefit-cost analysis for each year of the Three-Year Plan (Exh. Blackstone-13; Tr. 4 (Blackstone) at 639). Blackstone analyzed cost-effectiveness by measure, and its benefit-cost ratios range from 1.39 to 15.78 for the residential sector, 1.51 to 3.12 for the low-income sector, and from 0.11 to 4.15 for the C&I sector (RR-DPU-14 (rev.)). Blackstone's energy efficiency program has an overall benefit-cost ratio of 1.66 (RR-DPU-14 (rev.)).

#### 5. Bill Impacts

Blackstone submitted bill impacts showing the impact of its Three-Year Plan on customers in all rate classes (Exh. Blackstone-14). In addition, Blackstone examined the effect of its Three-Year Plan on a participant during the peak period for residential, low-income, and C&I rate classes (Exh. Blackstone-15). Participants in the residential programs would save an average of 19.7 Ccfs<sup>114</sup> per month with an average peak monthly bill savings of \$26.49 per month (Exh. Blackstone-15). Participants in the low-income programs would save an average of 21.6 Ccfs per month with an average peak monthly bill savings of \$23.91 (Exh. Blackstone-15). Participants in the C&I programs would save an average of 27.1 Ccfs per month with an average peak monthly bill savings of \$36.17 (Exh. Blackstone-15).

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<sup>114</sup> Ccf represents 100 cubic feet.

6. Funding

Blackstone proposes to recover all program costs, start-up and implementation costs, and LBR through the EES (Tr. 4 (Blackstone) at 644). Blackstone intends to collect LBR for the life of the measures installed in the Three-Year Plan (RR-DPU-13). Blackstone does not include a proposal for outside funding in its Three-Year Plan, and states that the only source of funding is the EES (Tr. 4 (Blackstone) at 644-645).

C. Positions of the Parties

1. Blackstone

Blackstone argues that the Services Agreement it entered into with National Grid will enable it to provide its customers with energy efficiency prescriptive rebates in a cost-effective manner (Blackstone Brief at 56). Given its size and the fact that most of its customers are residential, Blackstone considered the creation of an energy efficiency department within the company to not be cost-effective (Blackstone Brief at 56). Blackstone contends that, because National Grid will be providing administrative services and coordinating with GasNetworks and LEAN on behalf of Blackstone under the terms of the Services Agreement, Blackstone's Three-Year Plan is cost-effective (Blackstone Brief at 56).

With respect to the Attorney General's concerns, Blackstone states that it will keep separate and track RCS/MassSAVE funds from the funds collected through the EES, as requested (Blackstone Reply Brief at 1). As to the Attorney General's argument that Blackstone should report on the development and implementation of its education, outreach, and marketing campaign, as well as report on the progress of Blackstone's Three-Year Plan

through quarterly progress reports, Blackstone first notes that it intends to reach out to the local community and municipalities to inform them of their energy efficiency offerings (Blackstone Reply Brief at 1). Blackstone next argues that the Green Communities Act already requires it to provide quarterly reports to the Council on the implementation of its Three-Year Plan, which the Council will use to create an annual report to be filed with the Department and the Legislature (Blackstone Reply Brief at 1-2). Blackstone contends, therefore, that there is no need to change this existing framework for reporting at this time (Blackstone Reply Brief at 2).

Regarding the start-up costs, because Blackstone does not have any existing energy efficiency programs in place, Blackstone argues that the legal and consulting costs incurred were necessary to prepare the Three-Year Plan, negotiate the Services Agreement with National Grid, and prepare the GasNetworks member application (Blackstone Brief at 56). According to Blackstone, it is not already recovering these costs in its base rates, so there is no legitimacy to the Attorney General's objection to the recovery of such costs in the EES (Blackstone Reply Brief at 2). Blackstone also states that it will provide support for all start-up costs including consulting, publication, transcripts, and legal costs in its Annual Report (Blackstone Reply Brief at 2).

## 2. Attorney General

The Attorney General argues that Blackstone should be required to track and report on RCS/MassSAVE funds separate and apart from the energy efficiency funds collected through the EES (Attorney General Brief, App. H ¶ 1). The Attorney General explains that this will

ensure that RCS/MassSAVE funds are used solely to fund RCS/MassSAVE audits and not for other energy efficiency programs (Attorney General Brief, App. H ¶ 1).

The Attorney General argues that the Department should require Blackstone to report on the development and implementation of Blackstone-specific education, outreach, and marketing campaign, and report on the success or failure of these campaigns, including but not limited to customer surveys and the effect of this success or failure on the Three-Year Plan (Attorney General Brief, App. H ¶ 2). The Attorney General also argues that the Department should not authorize the provision of any programs that are not cost-effective (i.e., the prescriptive steam traps measure) (Attorney General Brief, App. H ¶ 3, citing Tr. 4 (Blackstone) at 642).

The Attorney General next argues that the Department should require Blackstone to determine if it is entitled to any portion of outside funds that the other gas Program Administrators may obtain in 2011 and 2012 (Attorney General Brief, App. H ¶ 4, citing Tr. 4 (Blackstone) at 644-645). The Attorney General states that Blackstone should be directed to report on its proportional share and amend its budgets to incorporate these funds (Attorney General Brief, App. H ¶ 4, citing Tr. 4 (Blackstone) at 644-645).

Regarding Blackstone's budget, the Attorney General maintains that if the Department authorizes the recovery of start-up costs, Blackstone should be on notice that it must substantiate its actual expenditures (Attorney General Brief, App. H ¶ 5). Further, Attorney General argues that Blackstone should be required to disaggregate the start-up costs into costs

due to legal and non-legal activities, and disallow recovery of actual legal fees through the EES (Attorney General Brief, App. H ¶ 6, citing Tr. 4 (Blackstone) at 645-645; see RR-AG-2).

Finally, the Attorney General argues that the Department should require Blackstone to file quarterly progress reports, including but not limited to reports about bill impacts, actual participation in the energy efficiency programs, actual measures installed, and the actual experience of Blackstone under the Services Agreement (Attorney General Brief, App. H ¶ 7).

D. Analysis and Findings

1. Services Agreement with National Grid

As noted above, Blackstone intends to enter into a Services Agreement with National Grid for three years to implement its energy efficiency programs. This contract will allow Blackstone to participate in the Statewide Plan and GasNetworks meetings through a National Grid representative, which will allow Blackstone the benefit of a company with greater experience in delivering energy efficiency. Given that this is Blackstone's first energy efficiency plan and that Blackstone has no experience delivering energy efficiency programs, the Department finds that implementation of its Three-Year Plan through the Services Agreement is appropriate because it will reduce costs to customers while allowing Blackstone to gain experience with energy efficiency.

2. Three-Year Plan Budget

A Program Administrator's budget is comprised of energy efficiency program implementation costs, performance incentives and, where applicable, recovery of LBR as approved by the Department. Guidelines § 3.3.1. For Blackstone's Three-Year Plan, it

proposes a total Three-Year Plan budget of \$135,450, which includes \$60,000 for start-up and implementation costs, \$12,336 for LBR, and \$7,425 for PP&A (Exhs. Blackstone-8; DPU 1-5; Tr. 4 (Blackstone) at 648; RR-DPU-11 Att.). Blackstone does not propose to collect performance incentives (Exhs. Blackstone-8; DPU 1-5; Tr. 4 (Blackstone) at 648). In authorizing energy efficiency program budgets, the Department is charged with ensuring that (1) Program Administrators have minimized administrative costs to the fullest extent practicable; (2) sufficient funding is allocated to low-income programs; and (3) competitive procurement processes are used to the fullest extent practicable. G.L. c. 25, §§ 19(a) – (c).

Blackstone has allocated at least 20 percent of its budget to low-income programs and, therefore, the Department finds that Blackstone has complied with the requirements of G.L. c. 25, § 19(c). Further, the Department finds that Blackstone has met the requirements of G.L. c. 25, § 19(b) regarding competitive procurement. Blackstone did not competitively procure the Services Agreement, however, the cost to competitively procure the services provided by National Grid would have exceeded the cost of the Services Agreement. Moreover, as we found above, Blackstone's energy efficiency program coordinator, National Grid, has met the competitive procurement requirements of the Act. Therefore, the Department finds that Blackstone has complied with G.L. c. 25, § 19(b).

Blackstone plans to spend \$2,475 each year from 2010 to 2012 on PP&A, which is 5.48 percent of the total annual budget (RR-DPU-11 Att.). By having National Grid coordinate its energy efficiency programs at a reasonable cost pursuant to the Services

Agreement, we find that Blackstone has minimized its PP&A costs to the fullest extent practicable in compliance with G.L. c. 25, § 19(b).

With respect to start-up costs, the Department recognizes that Blackstone has not provided energy efficiency programs prior to this Three-Year Plan and, therefore, set-up and implementation costs are necessary for Blackstone to provide these programs. Blackstone has incurred approximately \$60,000 in start-up costs that it seeks to include as part of its Three-Year Plan budget. A large amount of these start-up costs are for charges from Blackstone's counsel for various activities (both legal and non-legal) related to its Three-Year Plan. Because Blackstone has only five employees whose jobs are dedicated to the operation of the distribution system, counsel for Blackstone performed a significant amount of non-legal work in order to get the program up and running (Tr. 4 (Blackstone) at 669-670). While she does not object to the inclusion of non-legal costs in the budget, the Attorney General argues that Department should not permit Blackstone to include legal costs in its plan budget as Blackstone already recovers an amount for this category of costs as part of its base distribution rates approved by the Department in its last rate case (see Attorney General Brief, App. H ¶ 6, citing Tr. 4 (Blackstone) at 645-646; RR-AG-2).

As Blackstone explained during the evidentiary hearing, very few of the costs are purely legal costs (Tr. 4 (Blackstone) at 670). Because Blackstone only has five employees, counsel was serving primarily as a consultant (Tr. 4 (Blackstone) at 670). We do not, however, expect start-up costs to be part of Blackstone's next three-year plan budget because these costs are associated with getting Blackstone's new energy efficiency program up and

running (i.e., negotiating the Service Agreement and obtaining membership in GasNetworks) (Tr. 4 (Blackstone) at 646, 666-667). Given the unique constraints due to Blackstone's small size and that these costs incurred were start-up costs that will not be incurred again in the future, the Department finds these costs to have been reasonably incurred and permits them to be collected through the EES. The Attorney General requests that Blackstone be put on notice that it must substantiate its actual expenditures (Attorney General Brief, App. H ¶ 5). We agree, and direct Blackstone to include detailed information and documentation of its actual expenditures, including start-up costs, in its 2010 plan year and subsequent Annual Reports.

### 3. Cost-Effectiveness

As described above, the Department is required to review the energy efficiency programs proposed in the Three-Year Plans for cost-effectiveness. G.L. c. 25, § 21(b)(3). Blackstone analyzed the cost-effectiveness of its Three-Year Plan at (1) the measure level, and (2) the plan level (i.e., the cost-effectiveness of all measures combined).<sup>115</sup> With the exception of the prescriptive steam traps measure as discussed below, all measures proposed by Blackstone in its Three-Year Plan have benefit-cost ratios of greater than one (RR-DPU-14 (rev.)).

As an individual measure, the prescriptive steam traps measure has a benefit-cost ratio of 0.11 (RR-DPU-14). Programs may contain measures that are necessary to the effectiveness

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<sup>115</sup> The Department directed Program Administrators to analyze the cost-effectiveness of their Three-Year Plans at the program level, as required by the Green Communities Act. D.P.U. 08-50-A at 19-20; G.L. c. 25, § 21(b)(3). In the future, the Department directs Blackstone to evaluate cost-effectiveness at the program level.

of the overall program but individually may not be cost-effective. However, when such a measure is combined with other measures as part of an energy efficiency program, the overall program is cost-effective. In D.P.U. 08-50-A at 19-20, the Department recognized that it may be appropriate for an energy efficiency program to include individual measures that are not cost-effective on their own that may be integral to the success of a program that is cost-effective or would be considered a lost opportunity if not installed.

While the steam traps measure is not cost-effective on its own, when delivered as part of the C&I retrofit program along with the programmable thermostat and boiler reset controls measures, the program is cost-effective (Exh. NG-2, App. NG-2-1; RR-DPU-14 (rev.); Tr. 4 (Blackstone) at 642). Accordingly, the Department finds that the programs proposed in Blackstone's Three-Year Plan are cost-effective. See G.L. c. 25, § 21(b)(3).

#### 4. Bill Impacts

Blackstone filed bill impacts showing the impact of its Three-Year Plan on customers in all rate classes. Because this is Blackstone's first energy efficiency plan, however, it did not participate of the Bill Impact Working Group, which was organized to develop a consistent method by which each Program Administrator would determine and present rate and bill impacts. Accordingly, Blackstone's bill impact presentation was not consistent with the Bill Impact Model.

After review, the Department finds that Blackstone's bill impacts are reasonable (Exh. Blackstone-4). In all future three-year plan or midterm modification filings, the

Department directs Blackstone to submit bill impacts consistent with the Bill Impact Model approved in D.P.U. 08-50-B at 17-20 or as subsequently modified by the Department.

5. Funding

a. Lost Base Revenues

The Guidelines state that a gas Program Administrator shall collect funds for the implementation of its energy efficiency plan, including LBR where allowed, through its LDAC tariff. Guidelines § 3.2.2. Consistent with the Guidelines, Blackstone proposes to recover its costs and LBR associated with its Three-Year Plan through the EES component of its LDAC, M.D.T.E. No. 85 (RR-DPU-18 Att.).

As stated in Section VI on Funding, Blackstone cannot include LBR in the EES until actual savings have been reviewed and approved by the Department. D.P.U. 07-104, at 20; D.P.U. 08-50-A at 49. The Department will review the actual savings in the Company's Annual Report.

b. Outside Funding

The Department's Guidelines require gas Program Administrators to include in their Three-Year Plans a description of all other sources the Program Administrators considered to fund their energy efficiency programs. Guidelines § 3.2.2.1. Blackstone does not propose to rely on any outside funding for 2010. The Department recognizes that the Program Administrators have not yet had the opportunity to fully explore all sources of outside funding and that DOER has convened informal working sessions to discuss possible outside funding approaches and initiatives (Exh. Common 2, at 61). The Department, however, directs

Blackstone to file updated information regarding outside funding levels for 2011 and 2012 at the time the other Program Administrators file their 2009 Annual Reports.<sup>116</sup> Consistent with the recommendation made by the Attorney General, as Blackstone is part of the Statewide Plan, Blackstone should determine whether it is entitled to any portion of the outside funding being proposed in the Statewide Plan for 2011 and 2012 and adjust its budget, if applicable. The Department expects that Blackstone will aggressively pursue all potential sources of outside funding for 2011 and 2012 before proposing to collect costs from ratepayers and report to the Department on their efforts as required by Guidelines.

c. Residential Energy Conservation Services

Blackstone has agreed to track and report on RCS/MassSAVE funds separately from the funds collected through the EES (Blackstone Reply Brief at 1). In addition, as stated in Section V, above, all interested persons will have an opportunity to review spending on the RCS program during Blackstone's RCS proceeding, and spending on all other energy efficiency programs through the Annual Report. Accordingly, we will require no further annual reports on RCS/MassSAVE.

6. Midterm Modifications

Blackstone must comply with the directives contained in Section X, above.

7. EM&V

Blackstone must comply with the directives contained in Section IX, above.

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<sup>116</sup> The filing date for the 2009 Annual Reports will be addressed in the Annual Report Working Group.

8. Statewide Education and Marketing

The Attorney General argues that Blackstone should be required to report on the development of company-specific statewide education, outreach, and marketing initiatives (Attorney General Brief, App. H ¶ 2). Blackstone has stated that it will be included on the GasNetworks website once its Three-Year Plan is approved, which will improve education and awareness of Blackstone's energy efficiency program (Tr. 4 (Blackstone) at 664). Blackstone has also indicated that it will explore other methods of reaching out to customers, such as bill inserts (Tr. 4 (Blackstone) at 640-641). Given its small customer base and the relative bill impact of traditional forms of education, outreach, and marketing on customers, it may not be appropriate for Blackstone to engage in certain of the statewide initiatives. However, Blackstone should take advantage of its membership in GasNetworks and participate in appropriate statewide outreach initiatives. The Department directs Blackstone to seek methods of education, outreach, and marketing that are at reasonable cost and to provide the Department with an update on its efforts at the time the other Program Administrators file their 2009 Annual Report.

9. Conclusion

For the reasons stated above, the Department approves Blackstone's Three-Year Plan budget and proposal to recover costs associated with its Three-Year Plan, including LBR, through its LDAC.

## XII. OTHER ISSUES

### A. Community Labor United

#### 1. Introduction

CLU is a non-profit organization that advocates for equitable energy efficiency programs; it has intervened in the following proceedings: National Grid and NSTAR Gas (D.P.U. 09-121, Petition to Intervene at 1-2; D.P.U. 09-126, Petition to Intervene at 1-2). CLU's stated goals are to provide low- and moderate-income families and communities of color with access to energy efficiency funds and pathways to employment in the energy efficiency industry (D.P.U. 09-121, Petition to Intervene at 1-2; D.P.U. 09-126, Petition to Intervene at 1-2). CLU contends that the Three-Year Plans filed by National Grid and NSTAR Gas are inconsistent with the Council's approval of the Program Administrators' respective Three-Year Plans, because they fail to specify in sufficient detail how they will capture all energy efficiency and demand reduction resources with regard to: (1) on-bill financing; (2) community-driven outreach; (3) jobs; (4) equity metrics; and (5) representation on working groups (CLU Brief at 3-4, citing G.L. c. 25, § 21(b)(1)). Each argument is addressed below.

#### 2. On-Bill Financing

##### a. Positions of the Parties

##### i. CLU

CLU argues that the Three-Year Plans must minimize bill impacts on low- to moderate-income customers and customers of color (CLU Brief at 4). CLU argues that an

on-bill financing option is necessary to provide moderate income households with equal access to deep energy retrofits (CLU Brief at 4-6, 17-18).

As support, CLU relies on the Act's requirement that the Statewide Plan 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" (CLU Brief at 4, citing G.L. c. 25, § 21(b)(1)). CLU also relies on the Council's pronouncement that "minimizing bill impacts on customers is an essential consideration and that it is important to minimize upfront financing barriers to implementation for non-low-income customers" (CLU Brief at 4, citing Three-Year Plan Resolution at 2). Accordingly, CLU states that the Program Administrators, in their respective Three-Year Plans, must detail the steps each is taking to implement on-bill financing options (CLU Brief at 6).

ii. Program Administrators and LEAN

As a threshold matter, National Grid and NSTAR Gas note that the Statewide Plan, unanimously supported by the Council, was explicitly incorporated in their Three-Year Plans and forms their core (National Grid Reply Brief at 18, citing Exh NG-1; NSTAR Gas Reply Brief at 14, citing Exh. Common 2). These Program Administrators dismiss any suggestion that their Three-Year Plans fundamentally differ from the Council-supported Statewide Plan (National Grid Reply Brief at 18, citing, Exh NG-1; NSTAR Gas Reply Brief at 13).

Regarding on-bill financing, National Grid and NSTAR Gas respond that the development of on-bill financing options is currently the focus of the Council's on-bill finance

working group of which the Program Administrators are members and in which CLU may participate, if it so chooses (National Grid Reply Brief at 19, citing Exh. AG-1-3; NSTAR Gas Reply Brief at 14, citing Exh. AG-1-3). Further, the Program Administrators note that, in preparation for the implementation of on-bill financing options, the Statewide Plan allocates 40 percent of anticipated outside funding to provide capital to customers, which would be repaid through on-bill or other mechanisms (National Grid Reply Brief at 19-20, citing Exhs. Common-2 at 63, AG-1-3; NSTAR Gas Reply Brief at 14-15 citing Exhs. Common-2 at 63, AG-1-6).

LEAN, responding to CLU's argument that a lack of on-bill financing will provide moderate income households with unequal access to deep energy retrofits, observes that deep energy retrofits are scheduled to be tested in several pilot efforts to determine whether they can be installed cost-effectively (LEAN Reply Brief at 2). Accordingly, LEAN argues that CLU's argument is premature because cost-effectiveness issues should be resolved before any particular financing mechanism is considered (LEAN Reply Brief at 2).

b. Analysis and Findings

Each Program Administrator's Three-Year Plan incorporates by reference and is, therefore, consistent with the Statewide Plan.<sup>117</sup> The Council, in its Three-Year Resolution recognizes the importance of on-bill financing as a means to minimize bill impacts and provides guidance on how to attain this goal:

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<sup>117</sup> The Council, including CLU's nominee, unanimously approved the Statewide Plan.

We recognize that minimizing bill impacts on customers is an essential consideration and that it is important to minimize upfront financing barriers to implementation to non-low-income customers. For these reasons, it will be crucial for [Program Administrators], the [Council], and all stakeholders to work together to identify and bring in outside funding for the programs; to continue to work together to ensure that savings are being delivered efficiently and cost-effectively; as well as to keep a close eye on program costs.

(Three-Year Plan Resolution at 2). While this provision expresses the Council's goal regarding on-bill financing, it does not condition the Council's approval of the Statewide Plan or, by extension, the current Three-Year Plans on requiring an on-bill financing component at this time.

The Council's on-bill finance working group is currently pursuing the development of on-bill financing options (National Grid Reply Brief at 19, citing Exh. AG 1-3; NSTAR Gas Reply Brief at 14, citing Exh. AG 1-7).<sup>118</sup> Participation in this working group by Council members, the Program Administrators and interested stakeholders, including CLU, is consistent with the goals expressed in the Council's Three-Year Plan Resolution and is the appropriate forum to address CLU's concerns.

3. Community-Driven Outreach

a. Positions of the Parties

i. CLU

CLU maintains that the Three-Year Plans lack sufficient detail on how Program Administrators will implement community-driven outreach (CLU Brief at 7). CLU bases its

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<sup>118</sup> We note that we construe the Council's Resolution to provide a forum not only for the examination of possible on-bill financing but also exploration of other possible options that would lead to the stated goal of minimizing upfront financial barriers.

assertion that such detail is required on (1) the Council's recognition in the Three-Year Plan Resolution that community mobilization has the potential to promote higher energy savings, and (2) the Statewide Plan's suggestion of a "neighborhood approach to energy efficiency services" (CLU Brief at 7-8, citing Three-Year Plan Resolution at 1, Exh. Common 2, at 99, 104). From this, CLU observes that the Three-Year Resolution and Statewide Plan make community mobilization a priority (CLU Brief at 8). Accordingly, CLU argues that the Department should require each Program Administrator, working with community organizations, to carry out at least one pilot program in 2010 and then to adopt the best practices from these pilots for community mobilization that will serve traditionally underserved communities and individuals equitably (CLU Brief at 7-8).

ii. Program Administrators and LEAN

National Grid NSTAR Gas assert that their respective Three-Year Plans sufficiently address community-driven outreach efforts (National Grid Reply Brief at 20-21; NSTAR Gas Reply Brief at 16). In support they state that they have, consistent with the Council's March 24, 2009 resolution,<sup>119</sup> taken note of the importance of education, marketing, and community outreach, to achieving the significant goals of the Statewide Plan (National Grid Reply Brief at 20; NSTAR Gas Reply Brief at 16). National Grid and NSTAR Gas also note that they have formed partnerships with the Green Justice Coalition<sup>120</sup> to explore the potential for a

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<sup>119</sup> In this resolution, the Council set forth its priorities to guide the development, implementation and evaluation of Program Administrators' energy efficiency plans.

<sup>120</sup> The Green Justice Coalition was both convened and is staffed by CLU; it consists of 42 community groups, labor unions, and environmental and faith-based organizations

community-outreach pilot program (National Grid Reply Brief at 20-21; NSTAR Gas Reply Brief at 16). LEAN argues that community-outreach programs have been scheduled only for a limited number of pilot programs because past experience has shown that this is not a proven strategy (LEAN Reply Brief at 2).

b. Analysis and Findings

CLU argues that the Department should require the Program Administrators to carry out a pilot community mobilization program in 2010 and incorporate the best practices from the pilot in future community mobilization programs to reach underserved communities and individuals (CLU Brief at 8). In relevant part, the Statewide Plan provides that the Program Administrators will

explore a new pilot collaborative with community-based organizations that have long-standing relationships with homeowners, tenants and small businesses in economically marginalized communities, to assess the feasibility of a community mobilization outreach model that implements a neighborhood approach to energy efficiency services

(Exh. Common 2, at 104). Further, in its Three-Year Plan Resolution, the Council states that it anticipates that, if “executed faithfully, the 2010-2012 efficiency plans will. . . address long-standing challenges like . . . community mobilization” (Three-Year Plan Resolution at 1). Similar to the on-bill financing provisions above, these provisions express worthy goals. They are not, however, components of the Council-approved Statewide Plan with which the Three-Year Plans are required to comply. Nonetheless, National Grid and NSTAR Gas

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working to promote a sustainable, equitable, and clean energy economy in Massachusetts (CLU Petition to Intervene at 2).

represent that they have initiated a partnership with the Green Justice Coalition to explore a community-outreach pilot program, as advocated by CLU (National Grid Reply Brief at 20-21; NSTAR gas Reply Brief at 16). The Goals of the Green Justice Coalition partnership and of the Council resolution are consistent. CLU's participation in this partnership is the appropriate forum to address its concerns.

4. Job Creation

a. Positions of the Parties

i. CLU

CLU argues that the proposed Three-Year Plans fail to provide sufficient detail on how Program Administrators will ensure that economic development, job creation or job retention benefits will accrue to low- and moderate-income neighborhoods (CLU Brief at 8, 13). In support of its argument that such detail is required, CLU asserts that G.L. c. 25, § 21(b)(2) and the Council's Three-Year Plan Resolution emphasize that the Three-Year Plans must include an analysis of their economic and workforce development impacts and describe issues regarding job creation and job tracking (CLU Brief at 8-9, 10-11). Additionally, CLU asserts that the Statewide Plan "emphasize[s] the importance of developing 'a diverse and well-trained workforce capable' of providing energy efficiency program services while maintaining high quality and safety standards" (CLU Brief at 9, citing Exh. Common 2, at 20, 105). Thus, CLU proposes that the Department require Program Administrators to develop and implement a mechanism to ensure that workers from underrepresented communities are hired and given

access to an equitable share of the economic benefits that will flow from expanded public and ratepayer energy efficiency investments (CLU Brief at 12).

ii. Program Administrators and LEAN

National Grid and NSTAR Gas acknowledge the importance of the Act's directive that energy efficiency plans include estimates of any job retention, job growth or economic development benefits associated with the plans (National Grid Reply Brief at 21, citing G.L. c. 25, § 21(b)(2)(viii); NSTAR Gas Reply Brief at 17, citing G.L. c. 25, § 21(b)(2)(viii)). To further this policy goal, the Program Administrators state that they encourage and expect their respective vendors and other entities performing energy efficiency services related to their programs to be responsible for and ensure that their staffs receive the necessary training and skills required to perform at exemplary levels in terms of industry knowledge, building science knowledge, quality workmanship and performance (National Grid Reply Brief at 21-22, citing Exh. Common-2 at 103; NSTAR Gas Reply Brief at 17-18, citing Exh. CLU-1-16). Moreover, National Grid and NSTAR Gas state that they: (1) will cooperate with DOER and other state agencies interested in job training and workforce development over the three-year term of the plans; (2) will partner with training programs to ensure that the experience of trainers and curriculum allow for the continued quality delivery of existing programs; and (3) support and allocate funds for workforce growth and training initiatives in their Three-Year Plans (National Grid Reply Brief at 22, citing Exh. Common-2, at 232-234, 284; NSTAR Gas Reply Brief at 18, citing Exh. CLU-1-16). Accordingly, the Program Administrators assert that their respective Three-Year Plans account for the

development of an adequate and well-trained workforce to meet growing customer needs resulting from the aggressive savings goals (National Grid Reply Brief at 22; NSTAR Gas Reply Brief at 17-18).

LEAN takes issue with CLU's suggestion that the Department take on a supervisory role over wages and labor practices of energy efficiency workers (LEAN Reply Brief at 3). LEAN asserts that the supervision of energy efficiency workers' wages and oversight of fair labor practices resides with existing authorities, including the United States Department of Labor (LEAN Reply Brief at 3). LEAN argues that it is not the Department's role, or even the role of the Program Administrators, to mandate a wage for energy efficiency workers (LEAN Reply Brief at 3).

b. Analysis and Findings

The Green Communities Act requires that Program Administrators submit plans to the Council that include "any estimated economic benefits for such [energy efficiency] projects, including job retention, job growth or economic development. . . ." G.L. c. 25, § 21(b)(2)(viii). The Statewide Plan states that "the program designs reflect comprehensive strategies that provide for. . . an expanded, diverse, and well-trained workforce. . . ." (Exh. Common 2, at 105). In approving the Statewide Plan, the Council stated that it expects that Program Administrators "will continue to strive . . . to support training and career development to create a sufficient, skilled, and more diversified workforce" (Three-Year Resolution at 2). To this end, the Program Administrators represent that they will cooperate and partner with DOER and other state agencies to further job training and workforce

development over the three-year term and have allocated funds for these initiatives in their respective Three-Year Plans (National Grid Reply Brief at 22, citing Exh. Common-2, at 232-234, 284; NSTAR Gas Reply Brief at 18, citing Exh. CLU 1-16).

The Statewide Plan reflects comprehensive strategies for an expanded, diverse, and well-trained workforce and the Council, as stated in its Three-Year Plan Resolution, fully expects the Program Administrators to pursue these initiatives. The record reflects a commitment on behalf of the Program Administrators to partner with the appropriate entities in pursuit of this goal. The Department finds that the issues relating to job creation have been appropriately addressed by: (1) the Council's approval of the Statewide Plan and its incorporation in the Three-Year Plans and (2) the commitment of the Program Administrators to pursue job training and workforce development programs that include the communities and individuals identified by CLU.

5. Equity Metrics

a. Positions of the Parties

i. CLU

CLU maintains that the Three-Year Plans fail to sufficiently detail how the Program Administrators will track equity impacts associated with the public and ratepayer investments in energy efficiency programs (CLU Brief at 13). In support of its position that such tracking is required, CLU argues that because the Green Communities Act requires the Department to “ensure that program costs are collected, allocated and distributed in a cost-effective, fair and equitable manner,” the proposed Three-Year Plans must, therefore, track the collection,

allocation, and distribution of program costs and determine whether this has been done in a fair and equitable manner (CLU Brief at 13, citing G.L. c. 25, § 21(d)(2)). To accomplish this end, CLU asserts that the Three-Year Plans need to include a means to verify the fairness and equity of the plans as implemented and proposes that Program Administrators be required to collect information about race, ethnicity, foreign language, and age of participants and workers, education of participants, and gender of workers (CLU Brief at 13-16, 20-21).

ii. Program Administrators and LEAN

National Grid and NSTAR Gas take exception to CLU's criticism that the Three-Year Plans fail to provide sufficient detail regarding their tracking of equity impacts (National Grid Reply Brief at 22; NSTAR Gas Reply Brief at 18). National Grid asserts that the Statewide Plan satisfies the mandates of the Green Communities Act and the Department's Orders in D.P.U. 08-50-A and D.P.U. 08-50-B and address equity issues to the extent appropriate under the Act (National Grid Reply Brief at 22). National Grid and NSTAR Gas argue that the equity issues raised by CLU (i.e., specifics related to wages, tracking customer racial and ethnic data, and new equity metrics) are not required by the Green Communities Act and, in some instances, may impinge on the jurisdictions of other agencies such as the United States Department of Labor (National Grid Reply Brief at 22-23; NSTAR Gas Reply Brief at 18). National Grid and NSTAR Gas state that CLU should pursue its equity tracking interests through its continued participation in the Council process and, in particular, through the Council's sub-committee on equity issues (National Grid Reply Brief at 22-23; NSTAR Gas Reply Brief at 18-19).

LEAN contends that CLU's proposal to track demographic data (i.e., race, ethnicity, language age, gender, and education) is overbroad, assumes discrimination for which there is no evidence, and could slow down the delivery of efficiency services to the communities about which CLU is concerned (LEAN Reply Brief at 3-4). LEAN also notes that the Council's sub-committee on equity issue is the appropriate forum to discuss such issues and explore questions of data collection (LEAN Reply Brief at 4).

b. Analysis and Findings

The Green Communities Act provides that the Department "shall approve a fully reconciling funding mechanism . . . to ensure that program costs are collected, allocated and distributed in a cost-effective, fair and equitable manner." G.L. c. 25, § 21(d)(2). Further, the Green Communities Act specifies that, once the program costs have been collected, these program funds are to be allocated to the low-income, residential and commercial and industrial classes in proportion to each class' contribution to the funds.<sup>121</sup> G.L. c. 25, § 19(c); see also Guidelines § 3.2.2.1. Finally, Program Administrators are required to propose and the Department is required to review a fully reconciling funding mechanism that collects and allocates costs as specified above. G.L. c. 25, §§ 21(b)(2), 21(d)(2).

We find nothing in the Green Communities Act that would obligate Program Administrators to gather data and report on the income, race, ethnicity, age, foreign language, geography, or residency of the households and communities that are receiving energy

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<sup>121</sup> The Green Communities Act further provides that at least ten percent of the electric funds be allocated to the low-income sector and 20 percent of gas funds be allocated to the low-income sector. G.L. c. 25, § 19(c).

efficiency benefits and the individuals, including their wages, employed as a result of the energy efficiency programs (see CLF Brief at 15-16). We note that the Council has convened a sub-committee on equity issues and encourage CLU to pursue its equity tracking issues in that forum.

6. Representation on Working Groups

a. Positions of the Parties

i. CLU

CLU asserts that the Three-Year Plans fail to provide sufficient detail on how representatives of low- to moderate-income customers, communities of color, and workers will be represented at the Program Administrators' "best practices" and other working groups (CLU Brief at 16). To remedy this, CLU suggests that the Department require that the following stakeholder groups be included in working groups going forward: (1) residents of low- and moderate-income communities; (2) residents of environmental justice communities; (3) tenants; (4) workers and unions; (5) and environmental justice advocates (CLU Brief at 16-17).

ii. Program Administrators and LEAN

National Grid, NSTAR Gas, and LEAN state that the "best practices" working group is not a Program Administrator-sponsored group, rather the group was established by LEAN and continues to be managed by LEAN (National Grid Reply Brief at 23-24; NSTAR Gas Reply Brief at 20; LEAN Reply Brief at 4). The Program Administrators and LEAN note that this working group includes representatives from the various Program Administrators, LEAN, the

Weatherization Assistance Program (“WAP”), the Department of Housing and Community Development, and the various Community Action Program agencies (National Grid Reply Brief at 24; NSTAR Gas Reply Brief at 20; LEAN Reply Brief at 4). Further, The Program Administrators and LEAN observe that CLU testified that it admires LEAN’s work in serving WAP-eligible customers (National Grid Reply Brief at 24, citing Tr. 2, at 281; NSTAR Gas Reply Brief at 20-21, citing Tr. 2, at 281; LEAN Reply Brief at 4, citing Tr. 2, at 281).

Because of CLU’s expressed approval of the efforts taken to serve WAP-eligible customers, the Program Administrators and LEAN state that it is not clear what legitimate concerns CLU has with the best practices working group (National Grid Reply Brief at 24; NSTAR Gas Reply Brief at 21; LEAN Reply Brief at 4).

b. Analysis and Findings

The working groups convened by the Department under the auspices of D.P.U. 08-50 have been widely noticed and open to the participation of all interested persons. The dedication of the participants has been welcome and appreciated. We encourage the active participation of all stakeholders, including CLU, in the future working groups to be convened by the Department (i.e., Bill Impact Working Group, Annual Report Working Group). We encourage the Council and all stakeholders to work with CLU and permit its participation in any working group for which it has expressed an interest. We recognize that the value of the recommendations produced by any working group depend, in part, on the diverse nature of its membership.

B. New England Gas Company

NEGC submitted two separate Three-Year Plans, one for each of its service areas. For administrative efficiency, the Department finds that it is appropriate for NEGC to submit one filing that includes both of its service areas for all future Three-Year Plans, Annual Reports, and any midterm modifications.

XIII. SUMMARY AND CONCLUSION

The Green Communities Act requires the Department to ensure that each Program Administrator's Three-Year Plan provides for the acquisition of all available energy efficiency and demand reduction resources that are cost-effective. G.L. c. 25, § 21. In this Order, the Department finds that each Program Administrator's Three-Year Plan includes goals regarding the acquisition of cost-effective energy efficiency resources that are reasonable and consistent with the statewide goals established by the Council. The Department further finds that each Program Administrator (1) calculated the cost-effectiveness of the programs included in its Three-Year Plan consistent with the Guidelines, and (2) demonstrated the cost-effectiveness of its programs<sup>122</sup> (see Section V.C.2). Based on the above, and in consideration of the other findings contained in this Order, the Department finds that each Program Administrator's Three-Year Plan appropriately provides for the acquisition of all energy efficiency and demand reduction resources that are cost-effective or less expensive than supply.

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<sup>122</sup> To ensure the reliability of the benefits included in the cost-effectiveness analyses, the Department directed the Program Administrators to develop improved values for (1) non-resource benefits, and (2) free ridership and spillover effects (see Sections V.C.2.b, IX.C.4).

The Green Communities Act also requires the Department to make specific findings regarding the budget included in each Program Administrator's Three-Year Plan. G.L. c. 25, §§ 19(a), 19(c), 21(b)(2). Consistent with these requirements, in this Order the Department finds that each Program Administrator's Three-Year Plan: (1) is designed to minimize administrative costs to the fullest extent practicable,<sup>123</sup> (2) includes a budget for low-income programs that exceeds the statutory minimum of twenty percent; (3) uses competitive procurement to the fullest extent practicable; and (4) includes a sufficient budget for pilot programs for 2010 and 2011 to carry out energy efficiency research and development activities (see Sections V.C.1.b through V.C.1.g).<sup>124</sup> Accordingly, subject to the findings and conditions contained herein, the Department approves the proposed budgets for the Three-Year Plans.

The Green Communities Act identifies the sources through which energy efficiency programs can be funded and requires each Program Administrator to allocate dollars from these funding sources to customer classes in proportion to their contribution to those funds. G.L. c. 25, §§ 19(a), (c). With regard to outside funding, the Department concludes that the Program Administrators took sufficient action regarding the identification of outside funding for program year 2010.

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<sup>123</sup> To enable the Department to more effectively compare administrative costs on a statewide level, the Department directed the Program Administrators to develop consistent statewide program planning and administrative cost categories (see Section V.C.1.b).

<sup>124</sup> The Department will address proposed pilot program budgets for 2012 after we receive additional information (see Section V.C.1.g).

The Green Communities Act allows the Program Administrators to collect additional funding from ratepayers to implement energy efficiency programs. G.L. c. 25, § 19(b). The Department finds that: (1) the bill impacts associated with each Three-Year Plan are well within the range of what we consider to be reasonable, particularly when taking into consideration the significant benefits provided by energy efficiency resources; and (2) each Program Administrator took sufficient action regarding the identification of outside funding during 2010 (see Sections VI.C.2, VII). Accordingly, the Department finds that each Program Administrator may recover additional funds necessary to implement the proposed budgets approved herein through an EES (see Section VI.C.1). For 2011 and 2012, we direct the Program Administrators to submit documentation regarding their efforts to secure outside funding for those years, in compliance with the Green Communities Act (see Section VI.C.2).

Finally, the Green Communities Act provides that Program Administrators may earn a performance incentive based on their success in meeting or exceeding specified goals. G.L. c. 25, § 21(b)(2). In this Order, the Department approves most aspects of the performance incentive mechanism proposed by the Program Administrators. However, the Department directs the Program Administrators to work further with the Council to develop (1) a revised method of allocating the statewide incentive pool to each Program Administrator for program years 2011 and 2012,<sup>125</sup> and (2) revised performance metrics that are consistent with the principles included in the Guidelines (see Section VIII). In addition, the Department

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<sup>125</sup> The Department accepted the proposed allocation method for 2010 (see Section VIII.E.2.d).

directs the Program administrators to include a cap of 125 percent on (1) the total incentive each Program Administrator can receive during 2011 and 2012, and (2) the incentive each Program Administrator can receive through each component of the mechanism for the years 2010 through 2012 (see Section VIII.E.4).

Based on the above findings and subject to the conditions contained herein, we conclude that each Program Administrator's Three-Year Plan is consistent with the Green Communities Act, the Guidelines, and Department precedent. Accordingly, subject to the modifications and directives included herein, the Department approves each Program Administrator's Three-Year Plan.

#### XIV. ORDER

Accordingly, after due notice, hearing, and consideration, it is:

ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by Boston Gas Company, Colonial Gas Company, and Essex Gas Company, each d/b/a National Grid is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by New England Gas Company – Fall River Service Area is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by New England Gas Company – North Attleboro Service Area is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by The Berkshire Gas Company is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by Bay State Gas Company is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by NSTAR Gas Company is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by Fitchburg Gas and Electric Light Company, d/b/a Unitil (gas division) is APPROVED, subject to the exceptions and conditions contained herein, and it is

FURTHER ORDERED: That the energy efficiency plan for calendar years 2010 through 2012 filed by Blackstone Gas Company is APPROVED, subject to the exceptions and conditions contained herein, and it is



## XV. TABLES

A. Table 1: Statewide Program Energy Savings

Table 1: Statewide Energy Savings Goals, by Program (Annual Therms)								
Class/Program	2010		2011		2012		2010-2012	
	Therms	%	Therms	%	Therms	%	Therms	%
<b>Residential Programs</b>								
New Construction & Major Renovations	587,146	9%	692,177	8%	855,061	8%	2,134,385	8%
Heating and Water Heating	3,313,362	51%	4,649,730	50%	5,299,721	47%	13,262,815	49%
Weatherization Program	1,144,567	18%	1,588,558	17%	1,878,102	17%	4,611,227	17%
Multifamily Retrofit	355,271	5%	490,127	5%	683,524	6%	1,528,923	6%
O Power	1,096,850	17%	1,800,000	20%	2,640,000	23%	5,536,850	20%
<b>Residential Total</b>	<b>6,499,797</b>	<b>100%</b>	<b>9,223,192</b>	<b>100%</b>	<b>11,359,009</b>	<b>100%</b>	<b>27,081,998</b>	<b>100%</b>
<b>Low-Income Programs</b>								
Single Family Retrofit	520,011	57%	588,854	54%	799,834	57%	1,908,699	56%
Multi-Family Retrofit	392,091	43%	494,910	46%	605,971	43%	1,492,973	44%
<b>Low-Income Total</b>	<b>912,361</b>	<b>100%</b>	<b>1,084,023</b>	<b>100%</b>	<b>1,406,063</b>	<b>100%</b>	<b>3,402,448</b>	<b>100%</b>
<b>Commercial &amp; Industrial Programs</b>								
New Construction & Major Renovation	1,965,768	32%	2,519,121	29%	3,255,026	27%	7,739,916	29%
C&I Retrofit	3,990,243	65%	5,872,581	67%	8,175,745	69%	18,038,570	67%
C&I Direct Install	221,348	4%	383,990	4%	486,980	4%	1,092,318	4%
<b>Commercial &amp; Industrial Total</b>	<b>6,181,754</b>	<b>100%</b>	<b>8,780,086</b>	<b>100%</b>	<b>11,922,146</b>	<b>100%</b>	<b>26,883,987</b>	<b>100%</b>
<b>Grand Total</b>								
Residential Total	6,499,797	48%	9,223,192	48%	11,359,009	46%	27,081,998	47%
Low-Income Total	912,361	7%	1,084,023	6%	1,406,063	6%	3,402,448	6%
Commercial & Industrial Total	6,181,754	45%	8,780,086	46%	11,922,146	48%	26,883,987	47%
<b>GRAND TOTAL</b>	<b>13,593,912</b>	<b>100%</b>	<b>19,087,301</b>	<b>100%</b>	<b>24,687,219</b>	<b>100%</b>	<b>57,368,432</b>	<b>100%</b>

<sup>1</sup> Blackstone's savings are included in the sector level totals.

Sources: Exhs. Common 28 Supp. (December 21, 2009); Blackstone-9, Blackstone-10; Blackstone-11.

B. Table 2: Program Administrator Energy Savings

<b>Table 2: Program Administrator Energy Savings Goals, by Sector (Annual Therms)</b>				
<b>Program Administrator/Class</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2010-2012</b>
<b>National Grid</b>				
Residential	3,834,151	6,377,204	7,887,597	18,098,952
Low-Income	401,942	495,964	659,282	1,557,188
Commercial & Industrial	3,005,785	4,665,902	6,025,986	13,697,674
<b>Total</b>	<b>7,241,878</b>	<b>11,539,070</b>	<b>14,572,864</b>	<b>33,353,813</b>
<b>NEGC-FR</b>				
Residential	98,721	111,134	120,948	330,803
Low-Income	27,986	31,698	35,323	95,007
Commercial & Industrial	154,534	196,367	252,560	603,461
<b>Total</b>	<b>281,241</b>	<b>339,199</b>	<b>408,831</b>	<b>1,029,271</b>
<b>NEGC-NA</b>				
Residential	12,438	12,958	13,980	39,375
Low-Income	3,988	4,031	4,724	12,743
Commercial & Industrial	24,991	29,814	31,071	85,875
<b>Total</b>	<b>41,417</b>	<b>46,802</b>	<b>49,774</b>	<b>137,993</b>
<b>Berkshire</b>				
Residential	208,196	239,306	274,869	722,371
Low-Income	42,915	50,498	57,597	151,010
Commercial & Industrial	211,626	239,412	268,874	719,911
<b>Total</b>	<b>462,737</b>	<b>529,217</b>	<b>601,339</b>	<b>1,593,292</b>
<b>Bay State</b>				
Residential	1,001,640	1,209,046	1,390,762	3,601,448
Low-Income	216,010	246,014	277,723	739,748
Commercial & Industrial	1,608,632	1,811,942	2,056,412	5,476,986
<b>Total</b>	<b>2,826,282</b>	<b>3,267,003</b>	<b>3,724,898</b>	<b>9,818,183</b>
<b>NSTAR Gas</b>				
Residential	1,321,467	1,238,099	1,622,235	4,181,801
Low-Income	209,984	243,312	356,164	809,460
Commercial & Industrial	1,071,401	1,702,333	3,103,456	5,877,190
<b>Total</b>	<b>2,602,852</b>	<b>3,183,744</b>	<b>5,081,855</b>	<b>10,868,451</b>

<b>Table 2: Program Administrator Energy Savings Goals, by Sector (Annual Therms) (continued)</b>				
Program Administrator/Class	2010	2011	2012	2010-2012
<b>Unitil</b>				
Residential	20,584	32,845	46,020	99,449
Low-Income	9,278	12,246	14,991	36,515
Commercial & Industrial	100,390	129,922	179,393	409,704
<b>Total</b>	<b>130,252</b>	<b>175,013</b>	<b>240,404</b>	<b>545,668</b>
<b>Blackstone</b>				
Residential	2,600	2,600	2,600	7,800
Low-Income	259	259	259	777
Commercial & Industrial	4,395	4,395	4,395	13,185
<b>Total</b>	<b>7,254</b>	<b>7,254</b>	<b>7,254</b>	<b>21,762</b>
<b>Grand Total</b>				
Residential	6,499,797	9,223,192	11,359,009	27,081,998
Low-Income	912,361	1,084,023	1,406,063	3,402,448
Commercial & Industrial	6,181,754	8,780,086	11,922,146	26,883,987
<b>GRAND TOTAL</b>	<b>13,593,912</b>	<b>19,087,301</b>	<b>24,687,219</b>	<b>57,368,432</b>

Sources: Exhs. Common 28 Supp. (December 21, 2009); Blackstone-9, Blackstone-10; Blackstone-11.

C. Table 3: Statewide Program Budgets

Table 3: Statewide Program Budgets, by Sector (\$) <sup>1</sup>								
Class/Program	2010		2011		2012		2010-2012	
	\$	%	\$	%	\$	%	\$	%
<b>Residential Programs</b>								
New Construction & Major Renovation	5,355,506	11%	6,202,615	9%	7,506,710	10%	19,064,831	10%
Heating and Water Heating	16,778,022	35%	22,977,467	35%	26,243,228	33%	65,998,718	34%
MassSAVE	3,656,673	8%	4,619,149	7%	5,960,164	8%	14,235,986	7%
Weatherization	13,563,805	28%	19,301,673	29%	22,646,403	29%	55,511,882	29%
Multifamily Retrofit	2,643,579	5%	3,580,213	5%	487,687	1%	6,711,479	3%
O Power	2,643,579	5%	1,970,866	3%	3,249,978	4%	7,864,423	4%
Programs Total	44,641,164	92%	58,651,983	89%	66,094,170	84%	161,522,896	84%
Pilot Programs Total	1,434,880	3%	1,677,164	3%	1,350,148	2%	4,462,192	2%
Hard-to-Measure Initiatives Total	1,312,781	3%	1,543,381	2%	1,779,969	2%	4,636,131	2%
<b>Residential Total<sup>2</sup></b>	<b>48,597,292</b>	<b>100%</b>	<b>65,567,132</b>	<b>100%</b>	<b>78,419,467</b>	<b>100%</b>	<b>192,583,893</b>	<b>100%</b>
<b>Low-Income Programs</b>								
Single Family Retrofit	11,852,996	71%	14,954,073	70%	19,714,279	71%	46,521,349	71%
Multifamily Retrofit	4,059,973	24%	5,607,237	26%	6,835,339	25%	16,502,550	25%
Programs Total	15,912,969	96%	20,561,310	96%	26,549,618	96%	63,023,899	96%
Hard-to-Measure Initiatives Total	631,235	4%	765,501	4%	942,834	3%	2,339,569	4%
<b>Low-Income Total<sup>2</sup></b>	<b>16,642,313</b>	<b>100%</b>	<b>21,431,516</b>	<b>100%</b>	<b>27,629,985</b>	<b>100%</b>	<b>65,675,856</b>	<b>100%</b>
<b>Commercial &amp; Industrial Programs</b>								
New Construction & Major Renovation	7,798,265	34%	9,987,464	32%	13,021,411	30%	30,807,141	32%
C&I Retrofit	11,377,596	49%	15,822,584	51%	23,198,938	54%	50,399,119	52%
C&I Direct Install	606,025	3%	1,009,088	3%	1,292,577	3%	2,907,690	3%
Workforce Development	128,018	1%	128,187	0%	127,194	0%	383,399	0%
Programs Total	19,909,904	86%	26,947,323	87%	37,640,120	88%	84,497,349	87%
Pilot Program Total	560,779	2%	864,338	3%	862,625	2%	2,287,742	2%
Hard-to-Measure Initiatives Total	809,326	3%	977,976	3%	1,160,477	3%	2,947,779	3%
<b>Commercial &amp; Industrial Total<sup>2</sup></b>	<b>23,132,413</b>	<b>100%</b>	<b>31,081,850</b>	<b>100%</b>	<b>42,814,724</b>	<b>100%</b>	<b>96,803,483</b>	<b>100%</b>
<b>Grand Total</b>								
Residential Total	48,597,292	55%	65,567,132	56%	78,419,467	53%	192,583,893	54%
Low-Income Total	16,642,313	19%	21,431,516	18%	27,629,985	19%	65,675,856	18%
Commercial & Industrial Total	23,132,413	26%	31,081,850	26%	42,814,724	29%	96,803,483	27%
<b>GRAND TOTAL</b>	<b>88,372,017</b>	<b>100%</b>	<b>118,080,499</b>	<b>100%</b>	<b>148,864,177</b>	<b>100%</b>	<b>355,063,230</b>	<b>100%</b>

<sup>1</sup> Due to Program Administrator revisions, the Grand Total will not equal the Statewide total

<sup>2</sup> LBR is included at the sector level

Source: Exh. Common 2, at 66-71.

D. Table 4: Statewide Pilot Budgets

<b>Table 4: Statewide Pilot Program Budgets, by Sector (\$) <sup>1</sup></b>				
Class/Pilot Program	2010	2011	2012	2010-2012
<b>Residential</b>				
Deep Energy Retrofit	882,283	1,037,689	676,297	2,596,269
Building Practices and Demonstration	196,420	262,366	273,900	732,686
Energy Analysis: Internet Audit Program	229,797	250,729	273,571	754,097
Community Based Pilots	126,380	126,380	126,380	379,140
<b>Total Residential Pilots Budget</b>	<b>1,434,880</b>	<b>1,677,164</b>	<b>1,350,148</b>	<b>4,462,192</b>
<b>% of Total Residential Budget</b>	<b>3.0%</b>	<b>2.6%</b>	<b>1.7%</b>	<b>2.3%</b>
<b>Commercial &amp; Industrial</b>				
Business Energy Analyzer	234,495	356,550	511,205	1,102,250
Deep Energy Retrofit	326,284	507,788	351,420	1,185,492
<b>Total C&amp;I Pilots Budget</b>	<b>560,779</b>	<b>864,338</b>	<b>862,625</b>	<b>2,287,742</b>
<b>% of Total C&amp;I Budget</b>	<b>2.4%</b>	<b>2.8%</b>	<b>2.0%</b>	<b>2.4%</b>
<b>Grand Total</b>				
Residential Total	1,434,880	1,677,164	1,350,148	4,462,192
C&I Total	560,779	864,338	862,625	2,287,742
<b>GRAND TOTAL</b>	<b>1,995,659</b>	<b>2,541,502</b>	<b>2,212,773</b>	<b>6,749,934</b>
<b>% of Total Budget</b>	<b>2.3%</b>	<b>2.2%</b>	<b>1.5%</b>	<b>1.9%</b>

<sup>1</sup> Due to Program Administrator revisions, the Grand Total will not equal the Statewide total

Source: Exh. Common 2, at 66-71.

E. Table 5: Statewide Hard-to-Measure Initiative Budgets

<b>Table 5: Statewide Hard-to-Measure Initiative Budgets, by Sector (\$) <sup>1</sup></b>				
Class/Initiative	2010	2011	2012	2010-2012
<b>Residential</b>				
Workforce Development	106,163	109,338	108,802	324,303
Statewide Marketing & Education	364,010	446,085	518,201	1,328,296
EEAC Consultants	490,298	632,726	796,166	1,919,190
DOER Assessment	352,310	355,232	356,800	1,064,342
<b>Total Residential Initiatives</b>	<b>1,312,781</b>	<b>1,543,381</b>	<b>1,779,969</b>	<b>4,636,131</b>
<b>% of Total Residential Budget</b>	<b>2.7%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>2.4%</b>
<b>Low-Income</b>				
Statewide Marketing & Education	170,698	209,644	263,755	644,097
Low-Income Energy Affordability Network Funding	317,782	412,657	535,089	1,265,528
DOER Assessment	142,755	143,200	143,990	429,945
<b>Total Low-Income Initiatives</b>	<b>631,235</b>	<b>765,501</b>	<b>942,834</b>	<b>2,339,570</b>
<b>% of Total Low-Income Budget</b>	<b>3.8%</b>	<b>3.6%</b>	<b>3.4%</b>	<b>3.6%</b>
<b>Commercial &amp; Industrial</b>				
Statewide Marketing & Education	191,343	254,102	342,283	787,728
EEAC Consultants	307,003	411,129	503,015	1,221,147
DOER Assessment	310,980	312,745	315,179	938,904
<b>Total Commercial &amp; Industrial Initiatives</b>	<b>809,326</b>	<b>977,976</b>	<b>1,160,477</b>	<b>2,947,779</b>
<b>% of Total C&amp;I Budget</b>	<b>3.5%</b>	<b>3.1%</b>	<b>2.7%</b>	<b>3.0%</b>
<b>Grand Total</b>				
Residential Total	1,312,781	1,543,381	1,779,969	4,636,131
Low-Income Total	631,235	765,501	942,834	2,339,570
C&I Total	809,326	977,976	1,160,477	2,947,779
<b>GRAND TOTAL</b>	<b>2,753,342</b>	<b>3,286,858</b>	<b>3,883,280</b>	<b>9,923,480</b>
<b>% of Total Budget</b>	<b>3.1%</b>	<b>2.8%</b>	<b>2.6%</b>	<b>2.8%</b>

<sup>1</sup> Due to Program Administrator revisions, the Grand Total will not equal the Statewide total

Source: Exh. Common 2, at 66-71.

F. Table 6: Program Administrator Budget, by Sector

<b>Table 6: Program Administrator Budgets, by Sector</b>				
Program Administrator	2010	2011	2012	2010-2012
	\$	\$	\$	\$
<b>National Grid</b>				
Residential	26,155,050	38,165,992	44,519,426	108,840,467
Low-Income	9,813,591	13,244,099	17,079,683	40,137,373
C&I	12,594,318	18,170,587	23,700,789	54,465,694
<b>Total</b>	<b>48,562,958</b>	<b>69,580,678</b>	<b>85,299,898</b>	<b>203,443,534</b>
<b>NEGC-FR</b>				
Residential	879,866	932,972	984,560	2,797,398
Low-Income	344,691	388,923	425,248	1,158,862
C&I	503,652	567,186	657,376	1,728,214
<b>Total</b>	<b>1,728,209</b>	<b>1,889,081</b>	<b>2,067,184</b>	<b>5,684,475</b>
<b>NEGC-NA</b>				
Residential	94,171	98,930	107,371	300,471
Low-Income	43,591	44,145	50,344	138,080
C&I	77,804	85,367	79,451	242,622
<b>Total</b>	<b>215,565</b>	<b>228,442</b>	<b>237,166</b>	<b>681,174</b>
<b>Berkshire</b>				
Residential	1,755,135	1,984,589	2,239,621	5,979,345
Low-Income	501,050	584,077	652,065	1,737,193
C&I	813,882	902,609	1,035,462	2,751,953
<b>Total</b>	<b>3,070,067</b>	<b>3,471,275</b>	<b>3,927,149</b>	<b>10,468,491</b>
<b>Bay State</b>				
Residential	8,226,001	9,595,509	10,910,031	28,731,542
Low-Income	2,949,131	3,426,841	3,939,144	10,315,116
C&I	4,750,607	5,374,939	6,266,377	16,391,922
<b>Total</b>	<b>15,925,739</b>	<b>18,397,289</b>	<b>21,115,551</b>	<b>55,438,579</b>
<b>NSTAR Gas</b>				
Residential	9,131,650	11,215,488	14,668,004	35,015,142
Low-Income	3,162,044	3,692,308	5,292,740	12,147,092
C&I	4,062,072	5,031,089	9,619,253	18,712,414
<b>Total</b>	<b>16,355,766</b>	<b>19,938,885</b>	<b>29,579,997</b>	<b>65,874,648</b>

<b>Table 6: Program Administrator Budgets, by Sector (continued)</b>				
Program Administrator	2010	2011	2012	2010-2012
	\$	\$	\$	\$
<b>Unitil</b>				
Residential	232,412	328,118	401,340	961,870
Low-Income	141,431	179,325	212,995	533,751
C&I	314,976	420,884	561,390	1,297,250
<b>Total</b>	<b>688,819</b>	<b>928,326</b>	<b>1,175,725</b>	<b>2,792,871</b>
<b>Blackstone</b>				
Residential	29,330	25,936	25,936	81,202
Low-Income	9,878	8,686	8,686	27,250
C&I	5,942	5,528	5,528	16,998
<b>Total</b>	<b>45,150</b>	<b>40,150</b>	<b>40,150</b>	<b>125,450</b>
<b>Grand Total<sup>1</sup></b>				
Residential	46,503,614	62,347,534	73,856,289	182,707,437
Low-Income	16,965,408	21,568,404	27,660,905	66,194,718
C&I	23,123,252	30,558,189	41,925,627	95,607,068
<b>GRAND TOTAL</b>	<b>86,592,274</b>	<b>114,474,126</b>	<b>143,442,821</b>	<b>344,509,222</b>

<sup>1</sup> Due to Program Administrator revisions, the Grand Total will not equal the Statewide total

Sources: Exhs. National Grid, D.P.U. 08-50 Table Update Supp. II, IV.C. Gas PA Budgets; NEGC-FR, D.P.U. 08-50 Table Update Supp. II, IV.C. Gas PA Budgets; NEGC-NA, D.P.U. 08-50 Table Update Supp. II, IV.C. Gas PA Budgets; Berkshire, D.P.U. 08-50 Table Update Supp. II, IV.C. Gas PA Budgets; Bay State, D.P.U. 08-50 Table Update Supp. II, IV.C. Gas PA Budgets; Unitil, D.P.U. 08-50 Table Update Supp. II, IV.C. Gas PA Budgets; Blackston, Supp. at 1-3

G. Table 7: Program Administrator Program Planning & Administration Costs

<b>Table 7: Program Administrator Program Planning &amp; Administration Costs, by Sector</b>						
Program Administrator/Class	2010		2011		2012	
	PP&A Costs	% of Budget	PP&A Costs	% of Budget	PP&A Costs	% of Budget
<b>National Grid</b>						
Residential	2,154,214	10%	2,571,617	8%	2,949,804	8%
Low-Income	1,734,701	19%	2,434,051	19%	3,007,781	19%
Commercial & Industrial	1,965,337	18%	2,297,338	14%	2,668,154	12%
<b>Total</b>	<b>5,854,251</b>	<b>14%</b>	<b>7,303,007</b>	<b>12%</b>	<b>8,625,739</b>	<b>11%</b>
<b>NEGC-FR</b>						
Residential	164,396	25%	146,197	20%	150,414	19%
Low-Income	41,538	13%	42,537	12%	43,715	11%
Commercial & Industrial	155,505	37%	159,345	33%	164,160	30%
<b>Total</b>	<b>361,438</b>	<b>26%</b>	<b>348,078</b>	<b>22%</b>	<b>358,290</b>	<b>21%</b>
<b>NEGC-NA</b>						
Residential	7,681	10%	10,901	14%	11,408	13%
Low-Income	2,475	6%	2,903	7%	2,937	6%
Commercial & Industrial	17,234	27%	18,719	26%	18,741	28%
<b>Total</b>	<b>27,390</b>	<b>15%</b>	<b>32,523</b>	<b>17%</b>	<b>33,086</b>	<b>17%</b>
<b>NEGC total</b>						
Residential	172,077	14%	157,098	11%	161,822	10%
Low-Income	44,013	9%	45,440	8%	46,652	8%
Commercial & Industrial	172,738	31%	178,064	28%	182,902	26%
<b>Total</b>	<b>388,828</b>	<b>17%</b>	<b>380,602</b>	<b>15%</b>	<b>391,376</b>	<b>14%</b>
<b>Berkshire</b>						
Residential	180,545	15%	181,745	13%	177,552	11%
Low-Income	59,242	13%	61,140	11%	59,984	10%
Commercial & Industrial	107,786	19%	108,510	17%	103,901	15%
<b>Total</b>	<b>347,574</b>	<b>15%</b>	<b>351,395</b>	<b>14%</b>	<b>341,437</b>	<b>12%</b>
<b>Bay State</b>						
Residential	781,758	11%	823,595	10%	825,248	9%
Low-Income	270,542	9%	293,001	9%	297,212	8%
Commercial & Industrial	601,044	14%	623,009	13%	632,832	11%
<b>Total</b>	<b>1,653,344</b>	<b>12%</b>	<b>1,739,605</b>	<b>10%</b>	<b>1,755,292</b>	<b>9%</b>

<b>Table 7: Program Administrator Program Planning &amp; Administration Costs, by Sector (continued)</b>						
Program Administrator/Class	2010		2011		2012	
	PP&A Costs	% of Budget	PP&A Costs	% of Budget	PP&A Costs	% of Budget
<b>NSTAR Gas</b>						
Residential	920,428	13%	1,011,367	12%	1,203,749	11%
Low-Income	312,047	10%	352,240	10%	436,533	8%
Commercial & Industrial	642,151	22%	706,975	19%	823,582	11%
<b>Total</b>	<b>1,874,626</b>	<b>15%</b>	<b>2,070,582</b>	<b>13%</b>	<b>2,463,864</b>	<b>10%</b>
<b>Unitil</b>						
Residential	31,104	17%	41,138	15%	37,565	11%
Low-Income	22,468	17%	27,196	16%	31,706	16%
Commercial & Industrial	23,895	10%	31,661	10%	46,166	11%
<b>Total</b>	<b>77,467</b>	<b>14%</b>	<b>99,995</b>	<b>13%</b>	<b>115,437</b>	<b>12%</b>
<b>Grand Total<sup>1</sup></b>						
Residential	4,240,125	11%	4,786,559	9%	5,355,741	9%
Low-Income	2,443,012	15%	3,213,068	16%	3,879,869	15%
Commercial & Industrial	3,512,952	18%	3,945,558	15%	4,457,536	12%
<b>GRAND TOTAL</b>	<b>10,196,090</b>	<b>14%</b>	<b>11,945,185</b>	<b>12%</b>	<b>13,693,145</b>	<b>11%</b>

<sup>1</sup> Due to Program Administrator revisions, the Grand Total will not equal the Statewide total

Sources: Exhs. National Grid, D.P.U. 08-50 Table Update Supp. Filing II, IV.C. Gas PA Budgets; NEGC-FR, D.P.U. 08-50 Table Update Supp. Filing II, IV.C. Gas PA Budgets; NEGC-NA, D.P.U. 08-50 Table Update Supp. Filing II, IV.C. Gas PA Budgets; Berkshire, D.P.U. 08-50 Table Update Supp. Filing II, IV.C. Gas PA Budgets; Bay State, D.P.U. 08-50 Table Update Supp. Filing II, IV.C. Gas PA Budgets; Unitil, D.P.U. 08-50 Table Update Supp. Filing II, IV.C. Gas PA Budgets.

H. Table 8: Minimization Allocation of Low-Income

<b>Table 8: Minimization Allocation of Low Income</b>								
Program Administrator/Class	2010		2011		2012		2010-2012	
	\$	%	\$	%	\$	%	\$	%
<b>National Grid</b>								
Residential	22,276,315	52%	32,770,909	53%	37,596,288	50%	92,643,512	52%
Low-Income	9,288,224	<b>22%</b>	12,582,361	<b>20%</b>	16,251,347	<b>22%</b>	38,121,932	<b>21%</b>
Commercial & Industrial	11,093,272	26%	16,471,138	27%	21,483,106	29%	49,047,516	27%
<b>Total</b>	<b>42,657,811</b>	<b>100%</b>	<b>61,824,408</b>	<b>100%</b>	<b>75,330,741</b>	<b>100%</b>	<b>179,812,960</b>	<b>100%</b>
<b>NEGC-FR</b>								
Residential	668,971	47%	746,846	47%	788,376	45%	2,204,193	46%
Low-Income	322,663	<b>23%</b>	365,972	<b>23%</b>	399,670	<b>23%</b>	1,088,305	<b>23%</b>
Commercial & Industrial	421,426	30%	482,408	30%	552,984	32%	1,456,818	31%
<b>Total</b>	<b>1,413,060</b>	<b>100%</b>	<b>1,595,226</b>	<b>100%</b>	<b>1,741,030</b>	<b>100%</b>	<b>4,749,316</b>	<b>100%</b>
<b>NEGC-NA</b>								
Residential	73,210	41%	78,979	41%	85,270	43%	237,459	42%
Low-Income	40,590	<b>23%</b>	41,365	<b>22%</b>	47,250	<b>24%</b>	129,205	<b>23%</b>
Commercial & Industrial	63,913	36%	71,727	37%	66,190	33%	201,830	36%
<b>Total</b>	<b>177,713</b>	<b>100%</b>	<b>192,071</b>	<b>100%</b>	<b>198,710</b>	<b>100%</b>	<b>568,494</b>	<b>100%</b>
<b>Berkshire</b>								
Residential	1,228,232	54%	1,424,618	55%	1,593,398	55%	4,246,248	55%
Low-Income	466,461	<b>21%</b>	539,358	<b>21%</b>	594,612	<b>21%</b>	1,600,431	<b>21%</b>
Commercial & Industrial	560,080	25%	627,599	24%	691,827	24%	1,879,506	24%
<b>Total</b>	<b>2,254,773</b>	<b>100%</b>	<b>2,591,575</b>	<b>100%</b>	<b>2,879,837</b>	<b>100%</b>	<b>7,726,185</b>	<b>100%</b>
<b>Bay State</b>								
Residential	7,089,194	50%	8,441,089	50%	9,689,987	50%	25,220,270	50%
Low-Income	2,870,871	<b>20%</b>	3,357,528	<b>20%</b>	3,887,227	<b>20%</b>	10,115,626	<b>20%</b>
Commercial & Industrial	4,242,672	30%	4,971,175	30%	5,820,889	30%	15,034,736	30%
<b>Total</b>	<b>14,202,737</b>	<b>100%</b>	<b>16,769,792</b>	<b>100%</b>	<b>19,398,103</b>	<b>100%</b>	<b>50,370,632</b>	<b>100%</b>
<b>NSTAR Gas</b>								
Residential	6,891,558	54%	8,530,897	53%	10,895,002	46%	26,317,457	50%
Low-Income	3,026,796	<b>24%</b>	3,612,439	<b>23%</b>	5,210,005	<b>22%</b>	11,849,240	<b>23%</b>
Commercial & Industrial	2,929,126	23%	3,808,047	24%	7,674,929	32%	14,412,102	<b>27%</b>
<b>Total</b>	<b>12,847,480</b>	<b>100%</b>	<b>15,951,383</b>	<b>100%</b>	<b>23,779,936</b>	<b>100%</b>	<b>52,578,799</b>	<b>100%</b>

Table 8: Minimization Allocation of Low Income (continued)								
Program Administrator/Class	2010		2011		2012		2010-2012	
	\$	%	\$	%	\$	%	\$	%
<b>Unitil</b>								
Residential	178,691	33%	272,699	36%	342,917	36%	794,307	35%
Low-Income	129,898	<b>24%</b>	168,225	<b>22%</b>	202,034	<b>21%</b>	500,157	<b>22%</b>
Commercial & Industrial	238,550	44%	308,316	41%	420,493	44%	967,359	43%
<b>Total</b>	<b>547,139</b>	<b>100%</b>	<b>749,240</b>	<b>100%</b>	<b>965,444</b>	<b>100%</b>	<b>2,261,823</b>	<b>100%</b>
<b>Blackstone</b>								
Residential	29,330	65%	25,936	65%	25,936	65%	81,202	65%
Low-Income	9,878	<b>22%</b>	8,686	<b>22%</b>	8,686	<b>22%</b>	27,250	<b>22%</b>
Commercial & Industrial	5,942	13%	5,528	14%	5,528	14%	16,998	14%
<b>Total</b>	<b>45,150</b>	<b>100%</b>	<b>40,150</b>	<b>100%</b>	<b>40,150</b>	<b>100%</b>	<b>125,450</b>	<b>100%</b>
<b>Grand Total<sup>1</sup></b>								
Residential	38,435,501	52%	52,291,973	52%	61,017,174	49%	151,744,648	51%
Low-Income	16,155,381	<b>22%</b>	20,675,934	<b>21%</b>	26,600,831	<b>21%</b>	63,432,146	<b>21%</b>
Commercial & Industrial	19,554,981	26%	26,745,938	27%	36,715,946	30%	83,016,865	28%
<b>GRAND TOTAL</b>	<b>74,145,863</b>	<b>100%</b>	<b>99,713,845</b>	<b>100%</b>	<b>124,333,951</b>	<b>100%</b>	<b>298,193,659</b>	<b>100%</b>

<sup>1</sup> Due to Program Administrator revisions, the Grand Total will not equal the Statewide total

Sources: Exhs. National Grid, D.P.U. 08-50 Table Update Supp. Filing II, V.B. Allocation of Funds: Low-Income; NEGC-FR, D.P.U. 08 50 Table Update Supp. Filing II, V.B. Allocation of Funds: Low-Income; NEGC-NA, D.P.U. 08-50 Table Update Supp. Filing II, V.B. Allocation of Funds: Low-Income; Berkshire, D.P.U. 08-50 Table Update Supp. Filing II, V.B. Allocation of Funds: Low-Income; Bay State, D.P.U. 08-50 Table Update Supp. Filing II, V.B. Allocation of Funds: Low-Income; Unitil, D.P.U. 08-50 Table Update Supp. Filing II, V.B. Allocation of Funds: Low-Income; Blackstone, Supp. Filing at 1-3.

I. Table 9a: Program Administrator Cost-Effectiveness 2010-2012: National Grid

<b>National Grid Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.1</b>	<b>\$154,556,791</b>	<b>\$301,324,476</b>	<b>\$146,767,684</b>
New Construction & Major Renovations	1.6	\$9,628,231	25,721,223	16,092,992
Heating and Water Heating	2.7	\$121,771,898	191,514,872	69,742,974
MassSAVE	N/A*	-\$6,868,472	0	6,868,472
Weatherization Program	1.6	\$20,436,005	55,653,385	35,217,380
Multifamily Retrofit	2.7	\$13,691,206	21,699,806	8,008,601
O Power	1.4	\$2,021,394	6,735,189	4,713,796
Deep Energy Retrofit	N/A*	-\$2,186,500	0	2,186,500
Building Practices and Demonstration Program	N/A*	-\$732,686	0	732,686
Energy Analysis: Internet Audit Program	N/A*	-\$754,097	0	754,097
Workforce Development	N/A*	-\$397,890	0	397,890
EEAC Consultants	N/A*	-\$419,108	0	419,108
DOER Assessment	N/A*	-\$1,008,817	0	1,008,817
<b>Low Income</b>	<b>2.57</b>	<b>\$37,496,941</b>	<b>\$77,333,281</b>	<b>\$39,836,340</b>
Low-Income Single Family Retrofit	2.64	\$25,739,428	55,648,222	29,908,794
Low-Income MultiFamily Retrofit	2.47	\$12,922,089	21,685,059	8,762,971
Statewide Marketing & Education	N/A*	-\$162,755	0	162,755
LEAN Funding	N/A*	-\$734,233	0	734,233
DOER Assessment	N/A*	-\$267,588	0	267,588
<b>Commercial &amp; Industrial</b>	<b>1.9</b>	<b>\$103,294,246</b>	<b>\$217,367,414</b>	<b>\$114,073,167</b>
C&I New Construction & Major Renovation	2.7	\$48,268,705	76,466,326	28,197,621
C&I Retrofit	1.6	\$51,777,523	132,107,393	80,329,870
C&I Direct Install	5.4	\$7,177,035	8,793,694	1,616,659
Workforce Development	N/A*	-\$60,000	0	60,000
Business Energy Analyzer	N/A*	-\$1,102,250	0	1,102,250
Deep Energy Retrofit	N/A*	-\$704,870	0	704,870
Statewide Marketing & Education	N/A*	-\$481,418	0	481,418
EEAC Consultants	N/A*	-\$838,058	0	838,058
DOER Assessment	N/A*	-\$742,421	0	742,421
<b>GRAND TOTAL</b>	<b>2.0</b>	<b>\$295,347,978</b>	<b>\$596,025,171</b>	<b>\$300,677,192</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. NG-6 Supp. (December 21, 2009), Table IV.C.1

J. Table 9b: Program Administrator Cost-Effectiveness 2010-2012: NEGC-FR

<b>NEGC Fall River Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.13</b>	<b>\$4,088,941</b>	<b>\$7,722,863</b>	<b>\$3,633,922</b>
New Construction & Major Renovations	1.01	10,598	718,521	707,923
Heating and Water Heating	2.97	2,430,937	3,662,667	1,231,730
MassSAVE	N/A*	-354,582	0	354,582
Weatherization Program	2.45	1,252,360	2,115,694	863,334
Multifamily Retrofit	3.24	847,933	1,225,981	378,048
Workforce Development	N/A*	-4,377	0	4,377
Statewide Marketing & Education	N/A*	-70,186	0	70,186
EEAC Consultants	N/A*	-7,364	0	7,364
DOER Assessment	N/A*	-16,378	0	16,378
<b>Low Income</b>	<b>2.35</b>	<b>\$1,546,659</b>	<b>\$2,693,523</b>	<b>\$1,146,864</b>
Low-Income Single Family Retrofit	2.46	799,912	1,346,761	546,849
Low-Income MultiFamily Retrofit	2.46	799,912	1,346,761	546,849
Statewide Marketing & Education	N/A*	-30,860	0	30,860
LEAN Funding	N/A*	-14,114	0	14,114
DOER Assessment	N/A*	-8,192	0	8,192
<b>Commercial &amp; Industrial</b>	<b>2.98</b>	<b>\$4,411,297</b>	<b>\$6,638,063</b>	<b>\$2,226,766</b>
C&I New Construction & Major Renovation	2.83	3,070,847	4,744,560	1,673,713
C&I Retrofit	3.56	892,154	1,240,440	348,286
C&I Direct Install	4.85	518,368	653,063	134,695
Workforce Development	N/A*	-4,783	0	4,783
Statewide Marketing & Education	N/A*	-41,547	0	41,547
EEAC Consultants	N/A*	-7,364	0	7,364
DOER Assessment	N/A*	-16,378	0	16,378
<b>GRAND TOTAL</b>	<b>2.43</b>	<b>\$10,046,896</b>	<b>\$17,054,449</b>	<b>\$7,007,552</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. NEGC-Fall River-6 Supp. (December 21, 2009), Table IV.C.1

K. Table 9c: Program Administrator Cost-Effectiveness 2010-2012: NEGC-NA

<b>NEGC North Attleboro Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.44</b>	<b>\$524,831</b>	<b>\$888,257</b>	<b>\$363,425</b>
New Construction & Major Renovations	1.24	10,955	57,102	46,147
Heating and Water Heating	3.42	365,897	517,299	151,402
MassSAVE	N/A*	-34,836	0	34,836
Weatherization Program	2.60	193,318	313,856	120,538
Workforce Development	N/A*	-319	0	319
Statewide Marketing & Education	N/A*	-7,448	0	7,448
EEAC Consultants	N/A*	-784	0	784
DOER Assessment	N/A*	-1,953	0	1,953
<b>Low Income</b>	<b>2.67</b>	<b>\$228,145</b>	<b>\$364,695</b>	<b>\$136,550</b>
Low-Income Single Family Retrofit	2.80	117,287	182,347	65,060
Low-Income MultiFamily Retrofit	2.80	117,287	182,347	65,060
Statewide Marketing & Education	N/A*	-3,664	0	3,664
LEAN Funding	N/A*	-1,788	0	1,788
DOER Assessment	N/A*	-978	0	978
<b>Commercial &amp; Industrial</b>	<b>3.26</b>	<b>\$772,978</b>	<b>\$1,114,657</b>	<b>\$341,679</b>
C&I New Construction & Major Renovation	3.18	616,477	899,323	282,846
C&I Retrofit	4.23	133,172	174,447	41,275
C&I Direct Install	4.85	32,459	40,887	8,428
Workforce Development	N/A*	-546	0	546
Statewide Marketing & Education	N/A*	-5,847	0	5,847
EEAC Consultants	N/A*	-784	0	784
DOER Assessment	N/A*	-1,953	0	1,953
<b>GRAND TOTAL</b>	<b>2.81</b>	<b>\$1,525,954</b>	<b>\$2,367,608</b>	<b>\$841,654</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. NEGC-North Attleboro 6 Supp. (December 21, 2009), Table IV.C.1

L. Table 9d: Program Administrator Cost-Effectiveness 2010-2012: Berkshire

<b>Berkshire Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.21</b>	<b>\$9,073,735</b>	<b>\$16,594,293</b>	<b>\$7,520,557</b>
New Construction & Major Renovations	1.73	597,522	1,413,750	816,228
Heating and Water Heating	2.72	5,911,242	9,345,241	3,433,999
MassSAVE	N/A*	-565,751	0	565,751
Weatherization Program	2.58	3,216,367	5,251,093	2,034,726
Multifamily Retrofit	2.23	322,413	584,209	261,796
O Power	N/A*	-84,907	0	84,907
Deep Energy Retrofit	N/A*	-169,694	0	169,694
Workforce Development	N/A*	-23,295	0	23,295
Statewide Marketing & Education	N/A*	-47,116	0	47,116
EEAC Consultants	N/A*	-51,013	0	51,013
DOER Assessment	N/A*	-32,032	0	32,032
<b>Low Income</b>	<b>2.22</b>	<b>\$2,010,916</b>	<b>\$3,652,657</b>	<b>\$1,641,741</b>
Low-Income Single Family Retrofit	1.95	555,291	1,137,379	582,087
Low-Income MultiFamily Retrofit	2.52	1,515,382	2,515,278	999,895
Statewide Marketing & Education	N/A*	-15,887	0	15,887
LEAN Funding	N/A*	-31,990	0	31,990
EEAC Consultants	N/A*	-11,881	0	11,881
<b>Commercial &amp; Industrial</b>	<b>4.24</b>	<b>\$11,147,003</b>	<b>\$14,585,543</b>	<b>\$3,438,540</b>
C&I New Construction & Major Renovation	3.57	3,691,492	5,130,340	1,438,848
C&I Retrofit	5.10	7,559,411	9,404,308	1,844,897
C&I Direct Install	6.71	43,306	50,894	7,588
Workforce Development	N/A*	-26,830	0	26,830
Deep Energy Retrofit	N/A*	-67,785	0	67,785
Statewide Marketing & Education	N/A*	-18,659	0	18,659
EEAC Consultants	N/A*	-20,844	0	20,844
DOER Assessment	N/A*	-13,089	0	13,089
<b>GRAND TOTAL</b>	<b>2.76</b>	<b>\$22,231,654</b>	<b>\$34,832,492</b>	<b>\$12,600,838</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. Berkshire-6 Supp. (December 21, 2009), Table IV.C.1

M. Table 9e: Program Administrator Cost-Effectiveness 2010-2012: Bay State

<b>Bay State Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.08</b>	<b>\$44,531,372</b>	<b>\$85,887,022</b>	<b>\$41,355,650</b>
New Construction & Major Renovations	1.79	9,703,096	22,058,622	12,355,526
Heating and Water Heating	3.42	26,408,114	37,298,931	10,890,818
MassSAVE	N/A*	-2,598,684	0	2,598,684
Weatherization Program	1.85	10,811,850	23,564,996	12,753,146
Multifamily Retrofit	2.05	1,519,252	2,964,472	1,445,220
O Power	N/A*	-90,444	0	90,444
Deep Energy Retrofit	N/A*	-268,565	0	268,565
Workforce Development	N/A*	-130,936	0	130,936
Statewide Marketing & Education	N/A*	-275,035	0	275,035
EEAC Consultants	N/A*	-338,095	0	338,095
DOER Assessment	N/A*	-209,181	0	209,181
<b>Low Income</b>	<b>1.73</b>	<b>\$7,581,282</b>	<b>\$17,896,397</b>	<b>\$10,315,116</b>
Low-Income Single Family Retrofit	1.54	3,939,552	11,269,122	7,329,570
Low-Income MultiFamily Retrofit	2.81	4,271,268	6,627,276	2,356,008
Statewide Marketing & Education	N/A*	-351,812	0	351,812
LEAN Funding	N/A*	-201,041	0	201,041
DOER Assessment	N/A*	-76,685	0	76,685
<b>Commercial &amp; Industrial</b>	<b>4.15</b>	<b>\$83,020,554</b>	<b>\$109,359,892</b>	<b>\$26,339,337</b>
C&I New Construction & Major Renovation	3.62	36,780,249	50,820,612	14,040,362
C&I Retrofit	5.06	45,869,387	57,173,823	11,304,436
C&I Direct Install	8.45	1,203,772	1,365,457	161,685
Workforce Development	N/A*	-108,652	0	108,652
Deep Energy Retrofit	N/A*	-365,304	0	365,304
Statewide Marketing & Education	N/A*	-74,698	0	74,698
EEAC Consultants	N/A*	-175,685	0	175,685
DOER Assessment	N/A*	-108,515	0	108,515
<b>GRAND TOTAL</b>	<b>2.73</b>	<b>\$135,133,208</b>	<b>\$213,143,311</b>	<b>\$78,010,103</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. Bay State-6 Supp. (December 21, 2009), Table IV.C.1

N. Table 9f: Program Administrator Cost-Effectiveness 2010-2012: NSTAR

<b>NSTAR Gas Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.04</b>	<b>\$43,698,157</b>	<b>\$85,892,873</b>	<b>\$42,194,716</b>
New Construction & Major Renovations	1.69	4,795,273	11,786,886	6,991,613
Heating and Water Heating	3.26	27,609,668	39,833,998	12,224,330
MassSAVE	N/A*	-3,777,482	0	3,777,482
Weatherization Program	1.87	12,505,752	26,911,331	14,405,579
Multifamily Retrofit	2.27	3,873,799	6,917,168	3,043,369
O Power	1.05	20,783	443,490	422,707
Deep Energy Retrofit	N/A*	-244,931	0	244,931
Workforce Development	N/A*	-150,000	0	150,000
Statewide Marketing & Education	N/A*	-310,000	0	310,000
EEAC Consultants	N/A*	-456,000	0	456,000
DOER Assessment	N/A*	-168,705	0	168,705
<b>Low Income</b>	<b>1.74</b>	<b>\$9,028,345</b>	<b>\$21,175,438</b>	<b>\$12,147,094</b>
Low-Income Single Family Retrofit	2.10	8,898,677	16,980,591	8,081,914
Low-Income MultiFamily Retrofit	1.13	489,528	4,194,847	3,705,319
Statewide Marketing & Education	N/A*	-45,000	0	45,000
LEAN Funding	N/A*	-253,000	0	253,000
DOER Assessment	N/A*	-61,860	0	61,860
<b>Commercial &amp; Industrial</b>	<b>4.44</b>	<b>\$88,897,487</b>	<b>\$114,766,405</b>	<b>\$25,868,917</b>
C&I New Construction & Major Renovation	3.81	14,678,360	19,898,225	5,219,865
C&I Retrofit	4.79	74,024,739	93,564,030	19,539,290
C&I Direct Install	4.74	1,028,848	1,304,150	275,302
Workforce Development	N/A*	-150,000	0	150,000
Deep Energy Retrofit	N/A*	-406,850	0	406,850
Statewide Marketing & Education	N/A*	-96,000	0	96,000
EEAC Consultants	N/A*	-131,000	0	131,000
DOER Assessment	N/A*	-50,610	0	50,610
<b>GRAND TOTAL</b>	<b>2.77</b>	<b>\$141,623,989</b>	<b>\$221,834,716</b>	<b>\$80,210,727</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. NSTAR Gas-6 Supp. (December 21, 2009), Table IV.C.1

O. Table 9g: Program Administrator Cost-Effectiveness 2010-2012: Unutil

<b>Unutil Total Resource Cost Test, 2010-2012</b>				
<b>Sector</b>	<b>B/C Ratio</b>	<b>Net Benefits</b>	<b>Benefits</b>	<b>Costs</b>
<b>Residential</b>	<b>2.28</b>	<b>\$1,382,034</b>	<b>\$2,462,871</b>	<b>\$1,080,836</b>
New Construction & Major Renovations	1.53	106,564	309,414	202,850
Heating and Water Heating	2.88	919,242	1,408,564	489,323
MassSAVE	N/A*	-21,592	0	21,592
Weatherization Program	2.35	427,823	744,892	317,069
Deep Energy Retrofit	N/A*	-18,098	0	18,098
Workforce Development	N/A*	-11,728	0	11,728
Statewide Marketing & Education	N/A*	-4,546	0	4,546
EEAC Consultants	N/A*	-7,815	0	7,815
DOER Assessment	N/A*	-7,815	0	7,815
<b>Low Income</b>	<b>2.57</b>	<b>\$797,273</b>	<b>\$1,303,649</b>	<b>\$506,376</b>
Low-Income Single Family Retrofit	2.64	809,611	1,303,649	494,038
Statewide Marketing & Education	N/A*	-2,297	0	2,297
LEAN Funding	N/A*	-9,550	0	9,550
DOER Assessment	N/A*	-490	0	490
<b>Commercial &amp; Industrial</b>	<b>4.48</b>	<b>\$7,404,052</b>	<b>\$9,531,259</b>	<b>\$2,127,207</b>
C&I New Construction & Major Renovation	3.58	991,250	1,376,050	384,800
C&I Retrofit	4.72	6,068,263	7,698,151	1,629,888
C&I Direct Install	6.54	387,195	457,058	69,863
Workforce Development	N/A*	-28,956	0	28,956
Statewide Marketing & Education	N/A*	-8,309	0	8,309
EEAC Consultants	N/A*	-2,696	0	2,696
DOER Assessment	N/A*	-2,696	0	2,696
<b>GRAND TOTAL</b>	<b>3.58</b>	<b>\$9,583,360</b>	<b>\$13,297,779</b>	<b>\$3,714,420</b>

\*Program Administrators are not required to conduct benefit-cost ratios for these programs.

Source: Exh. Unutil-1, Tab 6 Supp. (January 21, 2010), Table IV.C.1.

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.