

Program Descriptions

1. Strategic Overview of Residential, Low-Income, and C&I Programs

The Commonwealth of Massachusetts is facing an unprecedented opportunity to build upon the past twenty years of effective energy efficiency delivery strategies for residential, commercial, industrial and municipal customers. Indeed, the passing of the Green Communities Act establishes the direction that Program Administrators will adopt going forward to address the new legislation that requires energy delivery suppliers to meet future energy needs through cost-effective energy and demand reduction resources. The strategies to promote greater energy savings and peak demand reductions will build upon existing programs to date, with the intent to move to larger scale delivery of renewable, peak demand and energy efficiency solutions.

The depth of existing programs will significantly expand over the next three years and new initiatives will be introduced to increase participation and savings. Existing programs addressing potential energy and demand savings in both existing buildings and new construction, which have a history of producing significant savings, will be ramped up and new initiatives will be developed and introduced to meet the mandate to increase energy savings. The platform for increasing savings cost effectively is based on pursuing the following principles: 1) integrating gas and electric programs into a portfolio of fuel-neutral programs to the extent reasonable; 2) striving for seamless delivery from the customer's perspective; 3) deeper penetration of energy efficiency and automated load management measures in existing programs combined with the introduction of innovative and targeted approaches and options; and 4) developing an expanded, trained workforce capable of providing consistent program messaging and services, while maintaining high quality levels.

2. *Consistent Messaging*

A critical component of integration and seamless delivery is consistent messaging. A statewide website (marketing portal) and marketing approach to make customers aware of program offerings will minimize the market confusion that can result from competing advertising campaigns that may overlap in the mass media. In addition, individual Program Administrators will undoubtedly want to, and should, continue to implement their own complementary marketing initiatives to reinforce and support the overall statewide marketing strategy as well as address unique local conditions and/or sub-markets in their service areas. These individual activities will be undertaken in consultation with, and with the support of, all other Program Administrators in order to avoid inadvertent inconsistent messaging.

3. *Increased Savings Targets*

Meeting targeted 2010 through 2012 savings goals will require expanding existing programs and strategies to achieve deeper, more comprehensive savings; introducing and promoting new initiatives and technologies; and increasing marketing for all program offerings. Initiatives and approaches that will be expanded in 2010 include, but are not limited to, municipal initiatives; whole house and building assessment; advanced lighting solutions; and initiatives targeting specific markets, such as the residential “deep retrofit” pilot and the “Office of the Future” approach which targets commercial buildings, as well as an emphasis on increased automation of loads to provide customers with flexible supply opportunities. Each of these initiatives is described in more detail in the program descriptions.

4. *Review of New Technologies*

There is a steady flow of new technologies being developed and offered to increase the efficiency of energy use for residential, commercial, and industrial customers. Before incorporating new or unfamiliar technologies in their program offerings, the Program Administrators are responsible for performing a thorough review to ensure that such products or device will provide cost effective energy savings for their customers. To address the need for these reviews, the Program Administrators have established a Standing Technical Committee (“STC”).

The STC consists of key technical staff from each Program Administrator as well as the Consultants. The committee reviews technical issues of statewide interest. It provides documented technical interpretations and technology assessments to the program implementers and is the authority for consistent program interpretation of technical matters for all of the participating Program Administrators. The STC has developed a set of protocols for the content of their review and procedures for documenting and disseminating their conclusions and technical interpretations.

Requests for program consideration of a new or unfamiliar technology that come from a vendor or customer are forwarded to the technical committee by the receiving Program Administrator. This group can undertake or direct such tasks as:

- Research and analysis of specific measures that are candidates for inclusion in the programs.
- When appropriate and agreed to by the respective Program Administrators, development of common program implementation materials or procedures including: technical specifications, technical study/commissioning protocols, equipment baseline reference sheets, inspection forms, and other technical and administrative support materials, for use by the respective Program Administrator staff and contractors.

- Recommendation of new items or changes to existing items on prescriptive offering lists, adjustments to savings estimations, and additions or modifications to the list of acceptable measures on an annual or cycle basis, and through a procedure to be determined.
- As-needed assignments to collect data and/or to produce recommendations which would allow the Program Administrators to address unanticipated program implementation issues.

5. *Community-Based Efforts*

When thoughtfully designed and executed, community-based efforts can be a key tool in effecting deep, comprehensive penetrations of energy efficiency in a neighborhood, city, or town. The Program Administrators seek to harness the power of communities to achieve broad-based participation in the Commonwealth's programs.

Over the years, both here in Massachusetts and elsewhere, much has been learned about why some community efforts succeed and others fail. The guiding principles of a successful community-based marketing initiative must include at a minimum the following attributes:

- **Community Engagement**

Successful community-based partnerships fully connect communities and Program Administrators; they focus on grass-roots community outreach by providing focused energy education and resources linked to local motivation and empowerment to manage and reduce energy consumption. These partnerships develop and deliver comprehensive and individualized initiatives. The keys to success are understanding and addressing the unique needs and characteristics of partner communities to achieve all cost-effective energy savings including both gas and electric opportunities and to reduce greenhouse gas emission.

Successful partnerships involve all sectors within the community and may include such activities as:

- Facilitating collaboration among students, teachers, parents, Program Administrators and the greater community to provide energy education fostering long-term energy savings.
- Assisting school systems in developing comprehensive, standards-based curricula, resources, materials and professional development for educators, school facility audits and special events.
- Connecting local businesses with their serving utilities to address the specific challenges each business faces in reducing energy usage, lowering utility bills, cutting greenhouse gas emissions, and educating their tenants, management and facility operations personnel.

In successful programs, the Program Administrator promotes a portfolio of opportunities that addresses all the community's expressed needs--services for new construction, home energy services, and ENERGY STAR products for existing buildings, as well as information and facilitation of renewable energy, including information about combined heat and power, net metering, and interconnection of generators. The Program Administrator provides energy saving tips on everything from heating and air conditioning to water heating and lighting, from cooking to refrigeration.

- **Community Commitment**

Community marketing achieves deeper penetration by adding a “pull” component to the traditional “push” of energy efficiency programs. Successful efforts are truly driven by the community and its recognized leaders, with the Program Administrator providing program

project management and technical support in addition to guidance on overall energy savings goals. Without full community ownership, the program will achieve no more success than one driven by a traditional marketing effort.

With this in mind, Program Administrators will seek a significant commitment from local leaders both inside and outside of government. For a community to drive a program, it must own it as well. The paramount goal and measure of success for a community-based initiative is to achieve higher levels of cost-effective energy efficiency penetration than traditional delivery strategies. Therefore, the same cost-effectiveness criteria will be applied to community-based initiatives as to other initiatives.

- **Selection of Communities**

Proven elements of success have been competition and exclusivity. Thus, the Program Administrators will issue a competitive solicitation to select the communities with the greatest opportunities for success, based on the quality of thought and levels of commitment displayed in their submissions. Because community-based efforts require a substantial and focused effort by both the Program Administrator and the community, the Program Administrators must focus their energies by limiting their initiatives to a few communities at any given time. Thus, the communities selected will be those that display the criteria established above, where local leverage can bring expectations of success beyond current program delivery models.

6. *Workforce Development*

Additional staffing resources, both internal and external, will be needed to achieve mandated saving levels. Expanding outreach to customers will be an important factor in

increasing participation and the number of completed projects. As the number of participants and projects increase, additional professional contractors will be required for providing technical review of applications, on-site energy analysis, technical and design assistance for comprehensive projects, and project commissioning services.

Program Administrators will support workforce development through a number of initiatives including:

- Working with colleges and universities to educate them on industry needs and develop appropriate coursework
- Supporting co-op programs
- Working with vendors on cross-training initiatives

7. Long-term Goals

The long-term goal is to provide a consistent set of statewide programs and strategies that can be delivered to customers in a seamless fashion, regardless of whether the customer is served by a combined gas/electric Program Administrator, by different gas and electric Program Administrator, or has facilities or projects in multiple utility service areas. Program Administrators will explore ways to accommodate this goal, potentially including providing services under contract to other Program Administrators (particularly in unique circumstances).

For this Plan, the intent is to establish goals and budgets based on current programs and initiatives in progress. The PA-specific plans submitted in October 2009 will contain more detail on market approaches and will address areas of success as well as the ability to expand customer markets and potential and fill gaps requiring new strategies.

Achieving the multiple goals set forth in the Act will take time. In each of the next three years, Program Administrators expect to see increased consistency in participation requirements; available core services and measures; conditions, exclusions and limits; and incentive amounts and/or calculations.

8. *Residential and Low-Income Program Descriptions*

Residential New Construction

| | |
|--|---|
| Primary Objective | To capture lost opportunities, encourage the construction of energy-efficient homes, and drive the market to one in which new homes are moving towards net-zero energy. |
| Program Inception | The program was initially offered in 1998. |
| 2010-2012 Program Goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | Joint |
| Program Design | The Program Administrators continue their strong commitment to a comprehensive whole-house approach for the Massachusetts New Homes with ENERGY STAR [®] Program. The Massachusetts program is a proud participant of the national ENERGY STAR new homes program and benefits from the regional, as well as national advertising |

**Program Design
(cont.)**

efforts that ENERGY STAR Homes implements. The program is committed to achieving both a broader market penetration of energy-efficient homes from 2010 to 2012 as well as moving builders toward deeper energy savings where possible. The Program Administrators strive to retain 75% of the participating builders and recruit additional homebuilders and contractors working in the major renovations market.

Homebuilders must target ENERGY STAR certification for all homes considered for the program. However, the program will also provide incentives for an enhanced CODE Plus (a level above Massachusetts State Code but shy of the ENERGY STAR certification standards) as an avenue for broader reach as an entrée to ENERGY STAR. Direct installation of quality ENERGY STAR-qualified compact fluorescent lights (“CFLs”) in appropriate hard wired sockets, on-site training, and a final verification inspection is required for all homes participating in the program. The list of available lighting products has been expanded to include almost every type of bulb including candelabra based lighting. The Joint Management Committee (“JMC”) will also cross-promote with the lighting program to introduce solid state lighting into this program.

All projects consisting of four units or fewer will be designated as single family, and all projects five units or more will be classified as multi-family. Buildings that are five stories or fewer that are permitted under the residential use class are eligible to participate in the program and to be certified as an ENERGY STAR-qualified Home.

Mixed-use (residential/C&I) buildings may participate if they are permitted in the commercial use class as long as: (1) the entire structure is five stories or fewer and (2) each residential unit has its own heating, cooling, and hot water systems separate from the other units. Homes that exceed these requirements will be treated under the Multi-Family program because of their mixed use nature. The Mid-Rise New Construction Program will encompass more than three stories for those that cannot be treated under the Massachusetts New Homes with ENERGY STAR Program. Additional qualifications for program participation are: **ENERGY STAR Certification:**

- ENERGY STAR compliance with a Home Energy Rating System (“HERS”) Index of 85 or less for ENERGY STAR Tier I and a minimum modeled improvement over the current Massachusetts Baseline Home/User Defined Reference Home (“UDRH”) of at least 30% and 60% respectively for ENERGY STAR Tiers II and III. Three tiers of ENERGY STAR certification will be offered in the 2010 program. The criteria for each tier are listed in the Financial Incentives section.
- Meeting the envelope leakage and duct leakage criteria
- Successful completion of a Thermal Bypass Inspection Checklist (“TBC”) and potentially five additional checklists as introduced by EPA for Version III of the national ENERGY HOMES standard in 2010 with potential Version III adoption.

| | |
|--------------------------------------|---|
| <p>Program Design (cont.)</p> | <ul style="list-style-type: none"> • Meeting the EPA’s ENERGY STAR homes qualifications and/or the most rigorous standard available at the time (see www.energystar.gov/index.cfm?c=new_homes.hm_index). • Program required percentage of CFL installations, and increased emphasis of direct installation of all available hard-wired sockets. <p>Code Plus Certification:</p> <ul style="list-style-type: none"> • Meeting envelope leakage and duct leakage criteria • Program required percentage of CFL installations |
| <p>Target Market</p> | <ul style="list-style-type: none"> • Homebuilders • Contractors • Architects/Designers • Trade allies • HERS Raters • Homebuyers • Realtors • Developers • Low Income and Affordable Housing Developers • Code Officials • Consumers (in the market for new homes and or major renovations) |
| <p>Marketing Approach</p> | <p>The program will continue to educate homebuilders, consumers, and trade partners regarding the energy-saving benefits and value of ENERGY STAR-qualified homes. Marketing efforts will focus on: homebuilder recruitment, continued training and support, public relations and the implementation of large scale multi-media advertising campaigns geared toward homebuilders, consumers, and trade ally groups. The program will continue to support development of leads through building permit lists in cities and towns throughout the Commonwealth. These lists will be provided to market-based raters to use as prospecting tools. Hosting, sponsoring, and attending various trade show exhibitions and homebuilder conferences remain crucial to marketing the program.</p> <p>The program’s multi-media advertising campaign will include vehicles such as: strategic television partnerships</p> |

| | |
|--|--|
| <p>Marketing Approach (cont.)</p> | <p>with local affiliate or cable programming providers, radio live reads and on-air interviews, print advertising in builder and trade publications, direct marketing via email/fax lists, and a very heavy online advertising presence which includes comprehensive social media outlets. The program will participate in the new statewide consolidated website that will further promote the program and aid in cross-program promotion. There will continue to be heavy emphasis on “earned media” and editorial PR involvement to ensure market penetration and an increased program capture rate. In addition, individual Program Administrators will use targeted marketing as needed to meet program participation and spending goals.</p> |
| <p>Target End Uses</p> | <ul style="list-style-type: none"> • Energy-efficient building shell • Proper duct and air sealing techniques • Quality Installation of HVAC equipment • Increased use of energy-efficient lighting • Energy efficient water and heating upgrades • Increased Indoor Air Quality |
| <p>Recommended Technologies</p> | <ul style="list-style-type: none"> • ENERGY STAR-qualified heating and cooling systems, lighting, appliances and windows • Increased levels of insulation using better materials, i.e., blown in and/or foam board • Improved construction techniques to minimize air leakage, duct leakage, infiltration, and heat loss • Improved HVAC installation techniques and guidelines • Incorporate mechanical ventilation • Renewable ready-PV/Solar Thermal. Solar Thermal will likely be needed in order to achieve Tier 3 described below. |
| <p>Financial Incentives</p> | <p>Incentive levels may be adjusted to respond to market conditions. Current levels are shown in the table below. In addition, free ENERGY STAR-qualified CFL products are provided for each home. Participating homes are currently eligible for the following incentives which the program processes in addition to base incentives.</p> |

This program will coordinate with other programs such as lighting and products to ensure that the program offers all available incentives that encourage deeper energy savings.

2010 Incentives

| Package | Requirements | Single-Family Incentive ^[1] | Multi-family Incentive ^[2] | | |
|----------------|---|--|---------------------------------------|---------------|------------|
| | | | 5-99 units | 100-199 units | 200+ units |
| CODE Plus | 6 ACH CFM 50, 8 percent duct leakage | \$325 | \$225.00 | \$225.00 | \$225.00 |
| ENERGY STAR I | ENERGY STAR compliance with a minimum HERS Index of 85 or less | \$750 | \$650.00 | \$500.00 | \$350.00 |
| ENERGY STAR II | ENERGY STAR compliance with a minimum HERS Index of 85 or less and 30% improvement or better over the Massachusetts Baseline Home | \$1,250 | \$1,150.00 | \$850.00 | \$550.00 |

| | | | | | |
|---|---|------------|---------------------------|---------------------------|---------------------------|
| ENERGY STAR III | ENERGY STAR compliance with a minimum HERS Index of 85 or less and 60% improvement or better over the Massachusetts Baseline Home | \$8,000.00 | \$4,000.00 ^[3] | \$3,000.00 ^[3] | \$2,000.00 ^[3] |
| ^[1] Starting in 2010 the program will define a single-family home as a structure that contains one to four units. | | | | | |
| ^[2] Starting in 2010 the program will define a multi-family home as a structure that contains five or more units. | | | | | |
| ^[3] ENERGY STAR III Multifamily projects will be reviewed for final fee structure; listed are the maximum incentives paid by Program Administrators. | | | | | |

| | |
|---------------------------|--|
| Delivery Mechanism | <p>The program is administered by the Program Administrator in each service territory and coordinated regionally through the JMC. The JMC, through a competitive bid process, choose an implementation contractor to oversee the day-to-day operations of the program statewide. The contractor is responsible for tracking and reporting program activity to the respective JMC Program Administrator. The contractor will also conduct quality assurance/quality control of field activities and advise the JMC on necessary program changes and enhancements. Throughout the planned timeframe, the JMC plans to continuously strive towards a market-based network of trained contractors who offer energy-efficiency and rating services to homebuilders for a fee. The Program Administrator may consider continuing to support rater fees for low income projects in their service territories.</p> <p>The program recognizes the new emphasis on training necessary to make this program successful, as well as to support workforce development efforts through the Green Jobs Act. The program will support training of increased frequency and greater depth in the fundamentals of building science and the latest available</p> |
|---------------------------|--|

| | |
|--|---|
| | <p>technologies, including those for air sealing and insulation. The program vendor will be a HERS provider of last resort to help new raters become established as part of the open market structure. The program will also provide trainings (by raters or the vendor) as well as potential classroom trainings. Through this effort, we can commit to training more than 50% of the builders in the Program.</p> |
| <p>Joint Program Administrator Enhancements Planned for 2010-2012</p> | <ul style="list-style-type: none"> • With the advent of a new version (“Version III”) of the ENERGY STAR Homes Program, the JMC will consider adoption of that program, which may require changes in 2010. • There are ongoing discussions on Version III with regard to the verification process of quality HVAC installations. The discussions center on the testing requirements and the seasonal limitations in Massachusetts; the program will make every effort to work with the ENERGY STAR Homes Program and CoolSmart to increase quality installation and provide achievable, verifiable savings to the Program. • The Program Administrators are currently working together to identify a way to provide complete support to Multi-Family structures of five stories or fewer. It is under consideration to allow master metered electric buildings to participate in the program, as they are ineligible currently. • The 2009 major renovation pilot projects being conducted by the Program Administrators will provide further understanding for the JMC to garner greater savings by administering a Major Renovation Program during 2010-2012. A plan for a consistent unified program – either within RCS/MassSAVE or within new construction will be part of the October filing. • Support code amendments that add to energy efficiency and explore with all entities the possibility of offering incentives to municipalities that adopt “stretch code” revisions in their communities. The JMC will provide stretch code training support to towns and builders participating in the program where it has been adopted. Further details will be provided in an appendix on codes and standards. • The program will promote building science technologies which help interested homebuilders construct zero energy homes. • Support workforce development efforts through Green Jobs Act by encouraging new raters to enter into the marketplace. |

| | |
|--|---|
| | will look towards deeper energy savings to promote near zero energy homes |
|--|---|

Residential Major Renovation Pilot

| | |
|--|--|
| Primary Objective | To capture lost opportunities and encourage energy-efficient additions and renovations to existing homes. |
| Initially Offered | This pilot was originally offered in 2009. |
| 2010-2012 Program goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Program Administrator-Specific Elements | Joint |
| Program Design | This pilot program is designed to help residents that want to build an addition on their existing home. Because of the unique nature of major renovations (those affecting over 500 square feet of the existing home), this pilot combines elements of the Residential New Construction Program (for the addition) and Residential Conservation Services (for the existing portion) to provide a comprehensive whole-house approach. |
| Target Market | <ul style="list-style-type: none"> • Builders • Architects • Designers • Trade allies • Homeowners • Home improvement specialists • Others involved in the addition to and renovation of existing single-family homes or three-story or fewer multi-family buildings |
| Marketing | Marketing strategies include direct builder and customer outreach, website information and meeting |

| | |
|---------------------------------|--|
| Approach | presentations, home and trade show exhibits, participation in builders' conferences, and other public relations activities. Energy-efficiency outreach and training to educate builders, architects, and industry players also are planned. In addition, individual Program Administrators will use targeted marketing as needed to meet program participation and spending goals. |
| Target End Uses | <ul style="list-style-type: none"> • Energy-efficient building shell measures • Proper duct and air sealing techniques • HVAC quality installation • Mechanical ventilation to both the new-construction components and the existing home |
| Recommended Technologies | <ul style="list-style-type: none"> • ENERGY STAR qualified heating and cooling systems, lighting, appliances, and windows • Increased levels of insulation • Improved construction techniques to minimize air leakage, duct leakage, infiltration, and heat loss • Improved HVAC installation techniques • In partnership with the Massachusetts Renewable Energy Trust, renewable technologies including solar water heating and photovoltaics, where practical |
| Financial Incentives | All participants will be eligible to receive weatherization incentives up to \$2,000 for both the new and existing portions. Additional incentives are available for heating systems and other rebates are offered in coordination with other programs. Incentive levels may be adjusted to respond to market conditions. |
| Delivery Mechanism | <p>The Program Administrators plan to include this pilot as an offering under the Massachusetts New Homes with ENERGY STAR Program, which is administered by the Program Administrator in each service territory and coordinated regionally through the JMC.</p> <p>Each home in the program will have a HERS analysis performed in order to better understand the existing structure. Recommendations will be provided to the homeowner for the existing portion (under a MassSAVE model) and also to increase the energy efficiency of the new addition by the market-based rater in the program. In sum, there will be a HERS analysis performed on the entire structure to better understand the usage in the total structure.</p> |

| | |
|---|---|
| Joint Program Administrator Enhancements Planned for 2010-2012 | None planned at this time due to the pilot nature of this program. |
| Program Administrator-Specific Elements | To be provided with October 2009 Filings. |
| Three-Year Deployment/Road Map | <p>Lessons learned though the 2009 pilot program will ultimately help to shape the direction of the program. Efforts will be made to discover the best way to capture savings of both the existing and new portions of the structure. Program Administrators will continue to leverage the new construction builder market as builders look to uncover new types of projects in this economy.</p> <p>For the three-year deployment, the Program Administrators will focus on:</p> <ul style="list-style-type: none"> • Expansion of the base of participating builders • Continued expansion of existing and new market allies • Establishment of best avenues to capture savings of both the existing and new portions of the structure • Continued ramp up of consumer awareness <p>The Program Administrators, in conjunction with the Council’s Consultants and LEAN, will be performing an assessment of the multi-family programs in Massachusetts. Because the target market for this program includes multi-family customers, the results of the statewide assessment may apply here. For low-income multi-family projects, the assessment will include the evaluation of strategies to serve low-income multi-family buildings in a manner that is fuel-blind, meter-blind, and integrates low-income, residential, and commercial programs, as appropriate, with minimal or no co-payment (pending a review of the budget impacts by each Program Administrator).</p> |
| Special Notes | The preceding program description is designed to support the successful attainment of the Green Communities Act’s energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This |

program design is intended to address a number of applicable Council priorities including:

- Coordinating with other programs for outreach communication and marketing strategy
- Deeper savings as a result of addressing elements such as additions that have not been addressed before. Based on findings from 2009, the Program Administrators will amend the program to address deeper savings.
- Comprehensive program delivery through JMC by integrating gas and electric Program Administrators in a fuel blind nature
- Coordinating with other programs on an integrated website
- Market based HERS Rater Model, Trainings and Technical Assistance

Residential ENERGY STAR® HVAC

| | |
|--|---|
| Primary Objective | To raise residential consumer awareness and market share of properly installed high-efficiency cooling equipment and systems, and to similarly increase the market share of ENERGY STAR-labeled warm-air furnaces equipped with an electronically commutated motor (“ECM”) or equivalent advanced furnace fan system. In addition, the program will place increased emphasis on cost effective savings opportunities from duct sealing, digital tune-ups, improved installation practices, maintenance, and specification of HVAC systems |
| Program Inception | The Program Administrators introduced their rebate program for ENERGY STAR-labeled central air conditioning units, which is now called COOL SMART, on April 1, 2004. The heating component of the program, a joint electric and gas offering, was initially offered in 2003. |
| 2010-2012 Program goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | <p>During the period 2010-2012, the COOL SMART Program will be offered by all Program Administrators. (Please note: Western Massachusetts Electric, Unitil, and Cape Light Compact did not offer the program in 2007 though 2009.)</p> <p>The heating component of the program will also be offered jointly in 2010-2012 by the Program Administrators.</p> |
| Program Design | The ENERGY STAR HVAC Program is an initiative designed to increase consumer awareness and the market share of ENERGY STAR-labeled furnaces, central air conditioning units, and air source heat pumps and to promote quality cooling installations by HVAC technicians and contractors. |
| Target Market | There are several target markets: |

| | |
|----------------------------------|---|
| | <ul style="list-style-type: none"> • New systems in existing and new homes (new systems) • Replacement systems in existing homes (new equipment/old systems) • Improvements in operational systems in existing homes (new equipment/old systems) <p>The program also targets the following market actors:</p> <ul style="list-style-type: none"> • Residential customers in the market to purchase HVAC equipment • HVAC contractors and technicians • Suppliers of HVAC equipment • Manufacturers and distributors of HVAC equipment • New-home builders and remodeling contractors • Big-box stores |
| <p>Marketing Approach</p> | <p>Program marketing, highlighted by the regional program’s COOL SMART initiative, is designed to promote the purchase and proper installation of ENERGY STAR residential central air conditioning and heat pump systems at multiple levels. In addition, it will increasingly emphasize the importance of proper installation and sizing practices as well as the promotion of duct sealing and enhanced air distribution system efficiency. The marketing effort will include:</p> <ul style="list-style-type: none"> • Full-time circuit rider visits and calls to distributors and contractors. The circuit rider also provides technical outreach services to follow up on training events in the field and by phone with recently trained technicians. • Development of cooperative (“upstream”) promotions with the HVAC industry • Sponsorship of contractor competitions and awards programs for rebates and Quality Installation and Verification (“QIV”) services, and an annual recognition celebration for contractors in a venue that helps recruit more contractors • Periodic COOL Talk meetings with QIV-listed HVAC contractors and distributors • Targeted outreach to large HVAC contractors previously inactive in the program. • Development of Consumer Testimonials affirming the benefits of program measures. • Customer certificates when a quality installation is performed • Print and media advertising targeting consumers, contractors, and distributors (including bill inserts, information on the website, participation at trades shows, articles in trade publications, mailings to |

| | |
|---------------------------------|--|
| | <p>distributors, contractor, and nonparticipants)</p> <ul style="list-style-type: none"> • Further, the Program Administrators will market and leverage all available federal tax credits where applicable as well as all supplemental consumer incentives (<i>e.g.</i>, equipment manufacturers) as a means to increase consumer adoption of purchases of high efficiency central air conditioning and heat pump systems. <p>In addition, Program Administrators will work with the following industry partners to promote best installation practices, awareness, education, and training for HVAC contractors:</p> <ul style="list-style-type: none"> • ENERGY STAR HVAC Quality Installation Program team and Best Practices Working Group • Consortium for Energy Efficiency (“CEE”) • North American Technician Excellence (“NATE”) • Air Conditioning Contractors of America (“ACCA”) • Northeast Energy Efficiency Partnerships (“NEEP”) |
| Target End Uses | Residential central cooling and heating equipment. |
| Recommended Technologies | <p>The primary recommended cooling technology is high-efficiency residential central air conditioner equipment, including air source heat pump condensers that meet or exceed the prevailing ENERGY STAR qualifications.</p> <p>The recommended minimum heating technology is a natural gas furnace with an AFUE of 92% or greater, equipped with an advanced ECM or equivalent energy-saving furnace fan (blower) motor.</p> <p>The COOL Smart Program is currently conducting a pilot installation project to determine if furnace fan retrofits with Brushless Fan Motors (“BFM”) will produce sufficient savings to justify full implementation in 2010.</p> <p>The electric efficiency program does not address boilers.</p> <p>Further, Program Administrators will explore integrating new technologies such as heat pump water heaters and solar hot water into program offerings and incentives</p> |
| Financial | The text below indicates anticipated 2010 incentive levels for all currently available program offerings. |

| | |
|-------------------|--|
| Incentives | <p>However, as noted above, Program Administrators expect that many of these individual program offerings will be simplified or collapsed beginning in 2010. Note: some key barriers related to incentives are described in the “Three-Year Deployment” section below.</p> <p>The Program Administrators will carefully monitor the future availability of this tax credit-eligible equipment in Massachusetts and adjust program promotion of tax credits and incentive levels accordingly.</p> <p>ENERGY STAR QIV for replacement systems (including systems replaced within the past three years) will receive an EPA certificate and \$100 customer incentive through participating contractors. The EPA requires sizing, duct sealing, and airflow and charge adjustments to specific American National Standards Institute/Air Conditioning Contractors of America (“ACCA”) standards.</p> <ul style="list-style-type: none">• The duct sealing requirement will be funded through a customer/contractor incentive of \$2 per CFM of duct leakage reduction, split 50/50 up to a total of \$600.• Contractors will receive a \$250 incentive for verification and advanced airflow measurement.• If duct modifications (<i>i.e.</i>, adding return ducts and/or turning vanes) are needed to meet airflow requirements, contractors may receive an additional \$400 incentive.• A standard early-replacement component that requires an existing system with a Seasonal Energy Efficiency Rating (“SEER”) of 9 to 10.• Increase customer incentive from \$300 to \$450 for 2010 for eligible equipment meeting the ENERGY STAR minimum SEER 14.5 and an Energy Efficiency Rating (“EER”) of 12.• Increase customer incentive from \$400 to \$550 for higher CEE-tier 2 equipment (SEER of 15, EER of 12.5 or higher).• A \$500 customer incentive for a SEER of 14.5 or greater, and HSPF of 8.2 for split ductless air conditioning or air-to-air heat pump systems with inverter technology.• A \$200 customer incentive and a \$100 contractor incentive when sizing is completed for 2009 ENERGY STAR or CEE-tier 2 equipment.• A \$500 per ½ ton downsizing incentive split 50/50 between customer and contractor.• Explore program options for installation of BFMs which have fairly high kWh savings but where there is no easy way for consumers to determine if a particular motor would achieve those savings in a way that did not drive up electrical demand. Options: 1) direct installation at no cost to customers by |
|-------------------|--|

| | |
|----------------------------------|---|
| | <p>contractors who are participating in the program; or 2) a rebate of this measure at minimal cost to consumers.</p> <p>In addition, the program offers a \$400 mail-in rebate on a natural gas furnace with an AFUE of 92% or greater, equipped with an ECM or equivalent energy-saving furnace fan (blower) motor. (Through a partnership arrangement, GasNetworks funds \$200 of the rebate; the remainder is funded through the customer's electric provider.) It also offers a NATE certification incentive — tuition reimbursement of up to \$250 for HVAC technicians who successfully pass the NATE certification examination in air conditioning or heat pump service and/or installation.</p> |
| <p>Delivery Mechanism</p> | <p>The program will be administered by the Program Administrator in each service territory. Delivery is through a common vendor selected through a common request for proposals. Whenever possible, there is coordination with the related gas Program Administrator's initiatives and energy-efficiency service providers. Program initiatives are piggybacked onto the residential new construction and MassSAVE programs:</p> <ul style="list-style-type: none"> • Participating residential new construction program builders and their HVAC contractors are referred to the COOL SMART Program for training and QIV. • MassSAVE participants are referred to COOL SMART for HVAC measures using COOL SMART literature, which is part of the standard MassSAVE information package. <p>Quality control/follow-up inspections are performed by independent inspectors on approximately 10% of installations to verify equipment installation and performance.</p> <p>The program continues to use equipment distributors to process rebates, sell high-efficiency and QIV-related technology, and to provide indoor training labs for HVAC contractors.</p> <p>Program Administrator will integrate with MassSAVE air-sealing and duct sealing services through an existing network of contractors who currently provide these services.</p> |

| | |
|--|---|
| <p>Joint Program Administrator Enhancements Planned for 2010-2012</p> | <p>Anticipated changes for the three-year planning period include:</p> <ul style="list-style-type: none"> a) Significantly increased equipment rebates to a level closer to full incremental costs of high efficiency equipment; b) Program simplification to minimize the complexity of program offerings and enhanced customer transactions such as online rebate fulfillment; and “packaged “incentive offerings to drive customer participation and adoption of new technologies and quality installation services. c) Aggressive emphasis on achieving program savings from improved equipment specification, checkups for existing equipment, and installation of conditioned air distribution systems; d) Expanded training programs to greatly increase contractor capabilities related to HVAC system efficiencies and increase market adoption of the newly developed ENERGY STAR Quality Installation (“ESQI”) standards, which will yield sizeable kW and kWh savings; e) Introduction of new pilots, such as consumer duct sealing, and expansion of pilots such as the retrofit of existing low efficiency air distribution fan motors with newly developed high efficiency BFM’s; f) Expanded negotiated cooperative promotion opportunities in cooperation with NEEP and other interested Program Administrators; and g) Explanation of joint attic duct sealing promotions and training in cooperation with gas utilities. <p>The Program Administrators also plan to support workforce development and contractor training efforts that provide increased educational opportunities as a means to ensure that new and existing contractors acquire the necessary skill sets and install high efficiency HVAC systems. Training will be oriented to raising the bar for quality installations and development of certification standards (<i>e.g.</i>, Building Performance Institute) and licensing where appropriate. The Program Administrators plan to utilize all publicly available institutional resources such as community colleges, vocational schools, and state licensing boards as well as independent and national organizations dedicated to quality installation standards and practices.</p> |
| <p>Program Administrator-Specific Elements</p> | <p>To be completed for the October filing if applicable.</p> |

**Three-Year
Deployment/Road
Map**

The Program Administrators believe that a significant increase in equipment incentive levels may be required to address market barriers and achieve higher levels of participation and savings goals during 2010-2012 based on market data. Rebate levels approaching full system incremental cost may be required to address two fundamental market barriers in the state.

- In Massachusetts, a low dollar savings compared to incremental costs associated with high efficiency air conditioning investments represents a significant program barrier to increasing the market share of high SEER/EER equipment. The depressed economy is dramatically reducing consumer spending on replacing functional HVAC heating equipment and negatively impacting spending on cooling equipment.
- In Massachusetts, another barrier to improved efficiency is the common practice in which HVAC contractors install “efficient” outdoor condensing equipment but fail to replace the pre-existing indoor equipment with any indoor evaporator coil. Additionally many other cases involve use of non matched non-AHRI rated indoor coils and then many other cases involve matched coils which do not reach the Energy Star standards. At each stage, customers are not well informed of the consequences and also do not benefit directly from the demand savings that are important to the program and the region. In consultation with contractors, distributors and field staff, Program Administrators estimate that approximately 50% of all sales of high SEER outdoor condensers do not include replacement of the indoor coil.

The expectation of Program Administrators is that many of these individual 2009 program offerings will be simplified or collapsed beginning in 2010.

The Program Administrators plan to progressively expand attic duct sealing offerings, preferably jointly with gas utilities.

The Program Administrators plan to work with regional groups to support research on and adoption of building codes and equipment standards.

The Program Administrators plan to hold strategic discussions to promote the expanded HVAC program which

| | |
|----------------------|---|
| | may include a significant number of new and emerging technologies and quality installation practices. |
| Special Notes | Program Administrators are currently exploring alternative charge and air flow verification measurement standards that would encourage improved installation practices and allow this modified QIV testing to become a required component for equipment rebates perhaps by 2011. In 2009, the COOL SMART Program is the first central air conditioning program east of the Mississippi to include the new EPA ENERGY STAR Quality Installation component. |

Residential Conservation Services / MassSAVE

| | |
|---|---|
| <p>Primary Objective</p> | <p>To provide residential customers with energy efficiency recommendations that enable them to identify and initiate the process of installing cost-effective energy efficiency upgrades. The Residential Conservation Services (“RCS”)/MassSAVE Program makes it easy, clear, and compelling for customers to participate in all comprehensive energy efficiency programs by providing information through bold outreach mechanisms, incentives, and multiple financing options. The program exemplifies a program-as-a-system approach where all components work together to support the success of achieving deeper energy savings per customer. The Program Administrators plan to increase the number of energy efficiency vendors and contractors while raising the level of quality control.</p> |
| <p>Program Inception</p> | <p>During the period 1980-2000, the RCS/MassSAVE program was an educational program encouraging customers to upgrade the efficiency of their homes.</p> <p>Beginning in 2001, the RCS/MassSAVE program began to change its emphasis from education only to education and measure implementation. Customers are now offered incentives to implement energy saving measures in their homes. The program has continued to increase cost effective incentive packages each year leading to greater energy savings and increased implementation.</p> |
| <p>2010-2012 Program goals</p> | <p>To be provided with October 2009 filings.</p> |
| <p>2010-2012 Budget</p> | <p>To be provided with October 2009 filings.</p> |
| <p>Joint vs. Program Administrator-Specific Offering</p> | <p>Joint</p> |

| | |
|-----------------------|--|
| Program Design | <p>The program is committed to a comprehensive whole-house approach and seeks to maximize both electric and gas energy savings (including fuel neutral incentives). The program plans to fully integrate the RCS/MassSAVE and Gas weatherization programs, so that customers experience “one program” as opposed to multiple offerings. Our program is essential to achieving maximum program success and deep energy savings. This is a significant leap forward, making distinctions between programs indiscernible to consumers. The program clearly defines the process and expectations of the customers up front and identifies those customers interested in investing in controlling their future energy costs.</p> <p>The level of service is intended to be flexible, providing information to a broad group of customers, with information regarding deep retrofit services and renewable opportunities supplied to interested parties. All customers who call the MassSAVE toll-free number to learn about the program are asked several questions to determine their need for and general interest in making energy-efficient improvements. The Program Administrators are dedicated to providing prompt customer service; the goal is to limit the response time between the initial customer call and the first visit of 30 days or less. The Program Administrators wish to provide an even quicker response time and will strive to achieve that outcome while recognizing factors outside of the Program Administrators control that create a demand for services. Customers are guided to appropriate program services provided by energy efficiency vendors including targeted energy efficiency information, advanced diagnostics, efficiency rebates, and deep energy retrofit support. (Low-income customers are referred to appropriate low-income programs.) When appropriate, a series of home visits are offered to further engage the customer and proceed in a logical and methodical process of identifying and informing customers of all available energy savings opportunities.</p> <p>The home visits include:</p> <ul style="list-style-type: none">• The first visit, referred to as the Screening Visit, is scheduled by a PA-approved vendor promptly after the initial customer phone call and is available at a variety of times to encourage maximum customer participation. This is an in-home visit designed to provide general information and education about energy efficiency and identify opportunities and challenges for energy saving installations. Identification of opportunities may include estimating time and labor needs for subsequent direct installation measures and a solar site assessment during the second or Diagnostic Visit. The Screening |
|-----------------------|--|

| | |
|--------------------------------------|---|
| <p>Program Design (cont.)</p> | <p>Visit will identify customers' specific needs and direct them to other energy-efficiency resources as appropriate. Should a customer choose not to proceed with the Diagnostic Visit, the initial assessment allows Program Administrators to collect customer data for future targeted marketing efforts. Instant energy savings are realized during the Screening Visit. With the customer's permission, CFLs and, when applicable, LEDs are installed for free in all appropriate locations, as are low-flow shower heads and faucet aerators. The instant savings measures installed during the Screening Visit are intended, on average, to exceed the expected average cost to deliver this initial visit.</p> <ul style="list-style-type: none"> • The Diagnostic Visit includes a comprehensive energy assessment including a variety of diagnostic techniques such as blower door tests, infrared scanning, and duct leakage testing (based on vendor determination). Wherever feasible, full installation of air sealing, duct sealing, and programmable thermostats are provided at no cost to the customer. The savings derived from the direct install measures are designed to cover the cost of the visit. This visit will also identify and recommend specific energy-efficient upgrades that require professional contractors, as well as, a customer contribution. The energy advisor explains the contractor services required to install recommended measures, as well as all available energy efficiency financial incentives. • The Quality Assurance Visit allows all work to be inspected through a combination of methods including phone survey, postcard, e-mail or actual site visit by a third party PA-approved vendor to ensure that contractor-installed measures are accurate, professional, and safely installed based on program standards and to ensure program savings. • Program Administrators strive to maximize energy savings by promoting and supporting contractor training and education in an effort to establish a broader workforce knowledgeable of proper installation techniques. The goal is to have a sustainable and experienced workforce that is focused on achievable maximum energy savings ready and able to meet customer demand. |
| <p>Target Market</p> | <p>All non-low income residential customers living in single-family houses or one- to four-unit multi-family buildings, regardless of heating fuel, who are committed to making their homes more energy efficient.</p> |

| | |
|----------------------------------|---|
| | <p>Program Administrators plan to shift more attention toward targeting trades that influence homeowners' decisions. The Program Administrators are currently discussing and addressing the major program design modifications needed to bring in new contractors and plan to have a structure in place for bringing new contractors into the program by January 1, 2010. Program Administrators are also exploring ways to identify and reach landlords to make them aware of the program benefits that increase property value and provide energy savings to tenants.</p> |
| <p>Marketing Approach</p> | <p>The Program Administrators will collaborate to proactively drive the demand needed to support the 2010 – 2012 increase savings goals. Marketing efforts will focus on single-family homeowners, developing leads for identifying owners of 2-4 family homes (decision makers) and recruiting and training contractors. Efforts will include:</p> <ul style="list-style-type: none"> • Designing a comprehensive education package to get customers thinking about ways to optimize their home's energy performance with a consistent statewide marketing message. • Creating a tool that informs customers how far they could go over the long-term that could put them on the path to Zero Net Energy. The tool will lay out steps customers can take this year, next year and over the years as they make home improvements. • Providing a statewide audit package that ensures customers are given consistent energy efficiency data and recommendations. <p>Outreach and marketing efforts will be expanded to include building relationships with realtors, home improvement contractors, architects and others involved in renovations of one-to-four family homes. Marketing efforts will be designed to meet the objectives of reaching more customers (going broader into the customer base) and maximizing energy savings opportunities (going deeper into each home to find ways to save energy). The program's multi-media outreach campaign will focus on strategic television partnerships with local affiliate or cable programming providers, radio, print advertising, web-based marketing through various social media sites, and through part of a new consolidated website planned for the fourth quarter of 2009 that integrates all the Massachusetts energy efficiency programs and websites into a single portal.</p> <p>Current forms of multi-media outreach include:</p> |

| | |
|--|--|
| <p>Marketing Approach (cont.)</p> | <ul style="list-style-type: none"> • MassSAVE website (enhanced via the Statewide Integrated Energy Efficiency Website) • Bill inserts • Radio, print and visual media advertising • New media advertising (advanced online options) • Targeted marketing through community outreach programs such as Cambridge Energy Alliance, Marshfield Energy Challenge and the Energy Smack-Down initiatives. • Targeted marketing through the use of data collected during the screening visits <p>Individual Program Administrators may conduct additional marketing and may ramp their marketing up or down as needed to meet participation and budget goals.</p> |
| <p>Target End Uses</p> | <p>The program targets any cost-effective energy-saving improvement using a comprehensive whole house approach including but not limited to:</p> <ul style="list-style-type: none"> • Building Envelope • HVAC/Mechanical systems • Water heating • Energy saving appliances and lighting • Deep retrofit measures • New technologies and renewables |
| <p>Recommended Technologies</p> | <p>Recommended technologies include air sealing, duct sealing, insulation, refrigerators, thermostats, ventilation, and heating/cooling systems. The program also provides general information about energy efficiency and solar domestic hot water systems (“DHW”) to consumers on request. Other measures may include heating system controls, super-insulation, CHP technologies, solar DHW systems and opportunities for piloting “deep retrofit” enhancements of major renovation projects. Customers will see these offerings as an integrated program.</p> |
| | |

**Financial
Incentives**

The RCS/MassSAVE program provides on site customer-specific information at no cost to the customer, free installation of instant savings measures, as well as an educational experience including information regarding all statewide program incentives, financing options, and where to find information about Federal and State tax credits. The Program currently offers free direct installation measures; incentives of 75% of the installed cost of contractor-installed measures, up to \$2,000. The Program Administrators are exploring the possibility of increasing or eliminating the \$2,000 cap.

The Technical Evaluation working group is in the process of conducting a cost-effectiveness evaluation of new measures, measures packages, and a ‘pay for savings’ rebate approach to go after deeper savings per house. This program will coordinate with other programs such as GasNetworks and Cool Smart by educating customers about rebates and financial incentives available to them through the Comprehensive Education Package and marketing materials providing a roadmap to achieving whole-house energy savings.

The HEAT Loan program provides qualified customers with 0% interest loans up to \$15,000 with terms up to seven years and can be applied towards the following energy efficiency upgrades:

- Insulation
- Duct System Improvements
- High-efficiency heating systems
- High-efficiency DHW systems
- Solar DHW systems (standardized incentive amount across all Program Administrators.)
- ENERGY STAR labeled thermostats
- ENERGY STAR labeled windows
- ENERGY STAR labeled water heaters
- Other renewable technologies on a pre-approved basis

A portion of the HEAT Loan may be used to finance the mitigation of barriers preventing the installation of energy efficient measures. In the past, safety barriers have been a significant obstacle in maximizing energy savings. Using HEAT Loan funds to manage safety issues will allow Program Administrators to access a

| | |
|----------------------------------|---|
| | <p>broader spectrum of efficiency in the future. To address renewables, Program Administrators may look towards possibly expanding the HEAT Loan to allow for installation of renewables.</p> <p>Additional customer financing options like the “Pay & Save Pilot” are also being explored and their effectiveness will be evaluated at the end of the pilot for possible inclusion as a program financing option. A long term financing option that might also be explored is to work with all stakeholders to potentially include the cost of upgrades on property tax bills. The Program Administrators will continually look to address “new” financing options that would allow customers the ability to go deeper.</p> |
| <p>Delivery Mechanism</p> | <p>The program is administered within each service territory by its Program Administrator and is coordinated statewide through the Residential Management Committee (“RMC”) that actively manages and steers the statewide MassSAVE program. The program is delivered by program vendors selected through a competitive bidding process. The Program Administrators are discussing how the structure and relationships will work as new vendors are brought into the Program. The Program Administrators will explore developing a comprehensive “Scope of Work” to be included in the Request for Proposal (“RFP”) used statewide to ensure vendors adhere to:</p> <ul style="list-style-type: none"> • Consistent statewide training • Data reporting • Achieving aggressive savings • Customer satisfaction • Quality Control standards • Scheduling requirements • Technical Assistance • Maintain and report health and safety information <p>Vendors capable of serving large numbers of customers and that have appropriate resources and experience will be included in the bidders list. Work completed by MassSAVE energy service providers and their subcontractors must meet Building Performance Institute standards or similar standards set by the individual Program Administrators. These standards require a systematic approach to home improvement that addresses</p> |

| | |
|--|---|
| <p>Delivery Mechanism (cont.)</p> | <p>all aspects of building systems.</p> <p>In order to increase the number of energy efficiency contractors, the program offers an incentive/rebate to contractors who are installing retrofit weatherization measures such as insulation and air sealing. Once approval/certification criteria are determined, a statewide marketing campaign to recruit contractors will begin and a central database of authorized (certified) contractors will be established. Customers are required to have an RCS Site Visit through the Program Administrator’s vendor to identify and prioritize all cost effective energy efficiency upgrades in order to receive an incentives or program rebate. All insulation work, whether performed by an authorized independent contractor or a vendor’s subcontractor, will have a Quality Control inspection performed by the Program Administrator vendor when the work is complete. This will ensure that, either through an authorized installer or the Program Administrator’s RCS vendor, installations meet Building Performance Institute standards or similar standards set by the Program Administrators.</p> <p>The RMC members are working together toward a “best practices” approach and to provide a more coordinated statewide training as a means to ensure correct installation techniques for the RCS/MassSAVE Program. It is expected that training requirements will increase over time in order for contractors to retain their status as an authorized program contractor. Contractors must maintain a high level of customer satisfaction to continue in the program.</p> <p>RMC will apply a “best practices” approach and work together to make quality control an integral part of the RCS/MassSAVE Program. The Program Administrators plan to issue an RFP for a third-party Quality Control (“QC”) vendor responsible for performing QC inspections of program implementation vendors, subcontractors, and contractors. The QC vendor will provide valuable information and feedback to the RMC on the program successes and areas that can be improved upon.</p> |
| <p>Joint Program Administrator Enhancements Planned for 2010-</p> | <p>In an effort to further penetrate the residential market, the RCS/MassSAVE program will evaluate the success of pilot programs such as the Marshfield Energy Challenge, the Cambridge Energy Alliance and the Energy Smack-Down and will explore offering similar initiatives within other communities. Also, the Program Administrators, in their efforts to enhance the current services provided, will look to incorporate infrared and</p> |

| | |
|--|--|
| 2012 | blower door testing where applicable. |
| Program Administrator-Specific Elements | To be completed for the October Filing, if applicable. |
| Three-Year Deployment /Road Map | <p>The RCS/MassSAVE program design is undergoing an effort to significantly increase the number of properties serviced by the program, which will also lead to higher energy savings potential. The design will also allow Program Administrators to better capture and utilize property data for the purpose of identifying all available energy efficient measures, as well as targeting marketing efforts. Program Administrators will continue to explore new technologies in conjunction with significantly increasing the implementation of known cost effective measures. Program Administrators intend to increase the number of qualified major measure installers through establishing qualification/training guidelines using the Building Performance Institute or its equivalent as a benchmark.</p> <p>The RCS/MassSAVE program will undergo an evolutionary redesign with emphasis being placed on reaching more customers while achieving deeper energy savings. Program design issues that are currently being addressed:</p> <ul style="list-style-type: none"> • The Marketing Evaluation working group is collecting and reviewing marketing data to further promote the program effectively. • The Technical Evaluation working group is determining the cost-effectiveness of new MassSAVE measures, and is screening packages that strategically group measures that leverage customer interest and provide deeper energy savings per home and potentially offer higher incentives. • Developing a Home Energy Use Index that shows in a single number or grade, how the home is performing relative to comparable homes. This is a 2009 metric (Existing Homes Rating) and the Program Administrators are partnering with NEEP to research and develop a rating system for potential incorporation into the MassSAVE program as a pilot in 2010. • Investigate custom incentive approach based on projected savings for the individual home (\$ per MMBtu, \$ per Kwh) • Identify alternative/new technologies and approaches (<i>e.g.</i>, spray foam in attics) as eligible for program |

| | |
|---|--|
| <p>Three-Year Deployment/Road Map (cont.)</p> | <p>rebates</p> <ul style="list-style-type: none"> • Work to connect additional complementary contractors with the Program, find ways to address “what’s in it for them?” • The Program is currently funding training that addresses the Program workforce needs and will continue to explore how specific technical training requirements can be introduced to training programs across the state • Evaluate other financing options such as on-bill financing and work with all stakeholders to potentially include cost of upgrades on property tax bills • Consider increasing or eliminating the \$2,000 incentive/rebate • Evaluate a higher incentive/rebate for landlords • Investigate funding sources to help eliminate health and safety barriers (<i>e.g.</i>, knob & tube wiring and other construction related repairs, subject to acceptable cost-effective levels, to increase the installation of energy efficient measures) |
| <p>Special Notes</p> | <p>The preceding program description is designed to support the successful attainment of the Green Communities Act’s energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This program design is intended to address a number of applicable Council priorities including:</p> <ul style="list-style-type: none"> • Coordinating with other programs for outreach communication and marketing strategy • Reduce program differences across the PAs • Engage in open, transparent and competitive solicitation. Maintain high standards of performance and accountability. • Develop an iterative process where learning and improvement is achieved over time. Phasing in new |

programs, with ongoing re-evaluation and improvement throughout the three year plan

- Train new service providers are trained, achieve quality control, and create benefits for the Commonwealth from associated job creation and economic growth
- Strive to provide customer rebate/incentives that encourage deeper energy savings by modifying customer incentives/rebate levels and incentive caps to encourage the best energy savings. Consider performance-based incentives structure. Add customer incentives for low-tech solutions such as air sealing that result in energy savings.
- Strive to maximize seamless delivery to the customer.
- The program is exploring a single number or grade for how the home is performing relative to comparable homes.
- The program description has addressed all bullets specific to the MassSave Program
- Through development of a marketing tool that informs the customer of how far they go over the long-term, putting them on the path to Zero Net Energy, the RCS/MassSAVE will look to further promote near zero energy homes
- Coordinating with other programs on integrated website
- Continued coordination of trainings to support a sufficient workforce.

Deep Retrofit 1-4 Family Pilot

| | |
|--|---|
| Primary objective | To investigate the potential of energy savings of 50% to 75% or more through deep retrofits of existing residential buildings and to identify how to reduce the costs associated with deep retrofits. |
| Initially offered | This pilot was originally offered as a pilot in the electric Program Administrators' 2009 plans. |
| 2010-2012 Program goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-specific offering | Joint by 2011, maybe individual in 2010 |
| Program design | <p>The pilot will assess the costs and benefits of deep energy retrofits in Massachusetts residences. The design includes a plan to support deep retrofits and to gather information on customer satisfaction, behavior modification, and energy savings. The pilot will help the Commonwealth continue to develop information on appropriate measures for deep retrofits, the correct way to model potential energy savings for deep retrofits, approaches for different housing types, training energy-retrofit contractors, customer education and marketing materials, and financing mechanisms and incentive levels.</p> <p>Program evaluation and case study review of the homes treated in 2009 will substantially inform the expanded effort in subsequent years.</p> |
| Target market | <ul style="list-style-type: none"> • Home owners considering renovations and or extensive carbon reductions • Advanced Remodelers and Builder Remodelers • Architects • Designers • Trade allies • Others involved in renovation of 1-4 family owner occupied homes |

| | |
|---------------------------------|---|
| Marketing approach | A number of existing homes will be selected to participate in this pilot. Homes on which renovations are planned (<i>e.g.</i> , siding and/or window replacements) will be targeted. Homeowner investments will be leveraged to maximize the effectiveness of the deep energy retrofits. It is hoped that incentives may be reduced and more homes treated each year. |
| Target end uses | To dramatically reduce the amount of energy used in homes |
| Recommended technologies | <ul style="list-style-type: none"> • Exterior wall super-insulation build-outs • Attic insulation enhancements • Foundation wall/slab insulation • Extensive whole-house air sealing • High-performance windows • High-performance lighting, including the use of CFL and light-emitting diode (“LED”) bulbs • High-efficiency heating and cooling systems • Advanced thermostatic controls • High-efficiency appliances and products • Mechanical ventilation • Solar photovoltaic systems • Solar thermal systems |
| Financial incentives | High levels of incentives will be offered to ensure that deep retrofits are completed on a small number of existing homes. Where possible incentives and appliance use and lifestyle education will be used to leverage selection of desired project (including housing style) types and maximum household energy reductions. |
| Delivery mechanism | Pilot program services will be delivered through the existing RCS network, with possible energy modeling and other assistance provided through the residential new construction program. |

| | |
|---|---|
| Joint program administrator enhancements planned for 2010 – 2012 | <p>Program Administrators will explore creating a second tier of incentives for households participating in the pilot program Thousand Home Challenge and/or approaching near Net Zero energy. This element and each project will be carefully reviewed to identify lessons and best practices as well as to identify and fill gaps in the portfolio of housing types treated to date. Depending upon outcomes of cost-benefit analysis, the pilot may be expanded into a more full scale statewide program starting in 2011.</p> |
| Program Administrator-specific elements | <p>To be completed for the October Filing if applicable.</p> |
| Three-Year Deployment/Road Map | <ul style="list-style-type: none"> • Publicity from completed projects will build interest for more homes, as will training of additional deep energy retrofit contractors. There are a number of other points of entry that can be explored for timely leads including basement remediation and siding contractors if and when the program expands to a wider scale. • Identifying lower cost HVAC and mechanical ventilation as well as super-insulated build-out approaches is a vital piece to reduce total project costs and since HVAC change-outs are often a must since sealed combustion is a requirement. • There are a number of products including advanced windows, integrated light HVAC, ventilation and water heating products that are ideal for very low energy load homes which are not yet available in the United States market. Through deep energy retrofit projects across New England and California, in particular, the market may grow and more of these technologies may emerge in the United States and can be tested and adopted in the program. One example is R7 windows with cork insulation at the metal spacers which currently are only available in Europe. |
| Special Notes | <p>Depending upon outcomes of benefit/cost analysis, the pilot may be expanded into a more full scale statewide program starting in 2011 focusing on the council’s priorities and the Commonwealth’s “zero net energy building” recommendations</p> |

ENERGY STAR Lighting

| | |
|---|--|
| <p>Primary Objective</p> | <p>The ENERGY STAR Lighting and Products Programs are administered jointly in order to streamline processes, maximize retailer and manufacturer relationships, and minimize vendor costs.</p> <p>To increase consumer awareness of the importance and benefits of purchasing ENERGY STAR-qualified lighting products and expand the availability, consumer acceptance, and use of high-quality energy-efficient lighting technologies and controls.</p> |
| <p>Program Inception</p> | <p>The program was initially offered in 1998. Initially, the Program Administrators focused on retail sales of energy efficient lighting through in-store coupons as well as the mail order channel. Over the years, the program has evolved to utilize upstream incentives, which dramatically increased sales and lowered costs of products for the customer. Additionally, lighting technology has extended past basic compact fluorescent spirals to more specialty products and solid state lighting (“SSL”).</p> |
| <p>2010-2012 Program goals</p> | <p>To be provided with October 2009 Filings.</p> |
| <p>2010-2012 Budget</p> | <p>To be provided with October 2009 Filings.</p> |
| <p>Joint vs. Program Administrator-Specific Offering</p> | <p>Joint</p> |
| <p>Program Design</p> | <p>The residential ENERGY STAR Lighting Program includes interaction with all the key market players in the residential lighting market, from manufacturers to retail sales staff, with the emphasis on involving upstream market players to leverage program resources.</p> |

**Program Design
(cont.)**

The ongoing collection of data on overall market conditions, product availability, market share, and pricing keeps Program Administrators up-to-date on changes in the residential lighting market. That awareness, in turn, enables Program Administrators to adapt program offerings as needed to maintain momentum in increasing the market share of energy-efficient lighting products. The program also supports independent, third-party testing to track, monitor, and ensure high-quality products in the marketplace. This third-party data will also be used in the coordination of lighting with other programs administered by Program Administrators. Additionally, the Program Administrators will continue to work with national and state organizations to collaboratively work on increasingly efficient codes and standards.

Historically, the ENERGY STAR Lighting Program has accounted for 65% of the residential sector. In the past several years, with the introduction of the Negotiated Cooperative Program, the influx and sales of CFLs in Massachusetts have grown such that 75% of homes have at least 1 CFL and approximately 20% of the sockets have a CFL. Looking forward, in 2012, the start up of the Energy Independence and Security Act (“EISA”) takes place, requiring higher wattage incandescent lighting to have a maximum wattage per lumen. Given the market transformation and the EISA, the Program Administrators will be directing more emphasis on specialty bulbs. The Program Administrators acknowledge the decrease in the base savings as well as the net to gross ratio.

The ENERGY STAR Lighting Program includes several components designed to educate consumers about the benefits of ENERGY STAR-qualified lighting products and to make these products more affordable:

- The Internet/mail-order sales channel offers education, rebates, and introductions to new products that may not be available at most retailers, and access to a variety of the sometimes-hard-to-find replacement bulbs. Internet sales account for a high percentage of this component’s sales. Recognizing the importance of Internet sales, the Program Administrators are working to improve the Internet/mail-order website as an educational tool for consumers.
- The program provides consumer education through the Internet/mail-order sales channel and a separate consumer awareness and education website, point-of-purchase displays in retail stores, and training retail sales staff to provide accurate information to customers and help them select the right products for

| | |
|--------------------------------------|---|
| <p>Program Design (cont.)</p> | <p>their specific needs.</p> <ul style="list-style-type: none"> • The Program Administrators will continue to support mercury awareness efforts and promote a CFL bulb recycling infrastructure at retail stores for consumers. The Program Administrators will work with the Department of Environmental Protection (“DEP”) in helping them with recycling efforts and educating customers. The Program Administrators will continue to encourage manufacturers and retailers to promote recycling and provide disposal sites of CFL products at retail stores through our upstream incentive process. Allowing consumers to drop off spent bulbs at retail locations increases consumer awareness, provides easy access for consumers and increases the likelihood that these bulbs will be disposed of properly. The Program Administrators will educate customers on the on-line resources available to show customers where and how to recycle at retail locations. Additionally, the Program Administrators will continue to provide increased incentives for low mercury products sold in the marketplace. • A number of incentives make products more affordable for consumers. NCPs include manufacturer and retailer markdowns and buydowns. Program Administrators offer higher financial incentives for the markdown model than for the buydown model because payments are based on actual sales; buydown data and payments are based primarily on shipping and receiving documentation. NCPs continue to account for the large majority of products moved through the program — 90% in 2009. Another type of incentive, instant rebate coupons, allows retail outlets that are not able or willing to share sales data to participate in the program. • ENERGY STAR-qualified solid-state lighting also will be eligible under the program with an emphasis on third-party testing, education, and new avenues for implementation in this market. |
| <p>Target Market</p> | <p>All residential customers</p> |
| <p>Marketing Approach</p> | <p>Multiple marketing approaches are being used to increase general awareness among consumers of the benefits of using ENERGY STAR lighting products, to help consumers identify qualifying products in stores, and to provide access to new products. In addition to direct advertising targeting consumers, these approaches include</p> |

| | |
|--|--|
| <p>Marketing Approach (cont.)</p> | <p>supporting national ENERGY STAR marketing campaigns, like the Department of Energy’s and EPA’s “Change the World, Start with ENERGY STAR” campaign, and working with industry partners at all levels of the retail supply chain.</p> <p>Specific marketing activities targeting consumers include the following:</p> <ul style="list-style-type: none"> • Retail marketing and point-of-purchase displays • Print and radio advertising • School/educational fundraising outreach efforts • The Internet/mail-order sales channel • The integrated Massachusetts website • Public relations <p>Work with industry partners at all levels of the retail supply chain, which includes the following:</p> <ul style="list-style-type: none"> ○ Leveraging marketing budgets through cooperative promotions with retailers, distributors, and manufacturers, including marketing promotions, cooperative advertising, and special events at retail stores and in communities ○ Training and supporting retail sales staff so they are able to tell consumers about the benefits of using ENERGY STAR-qualified lighting products and to help them choose the best products to meet their particular needs. <p>Promote lighting for hard to reach customers and communities such as ethnic and aging populations. The Program Administrators propose to use direct mail marketing to senior centers and retirement communities, develop targeted NCPs towards ethnic retailers, and pilot organized community distribution of ENERGY STAR CFL’s and or marketing materials such as door hangers.</p> |
| <p>Target End Uses</p> | <p>Residential lighting</p> |
| <p>Recommended Technologies</p> | <p>Recommended ENERGY STAR-qualified lighting products include:</p> <ul style="list-style-type: none"> • CFL bulbs and fixtures (and other applicable technologies under the prevailing ENERGY STAR |

| | |
|------------------------------------|---|
| | <p>specification). Given a significant increase in specialty bulb promotions, the MA Program Administrators will monitor the development of the “super lamp” specification being developed by the California Program Administrators.</p> <ul style="list-style-type: none"> • SSL products • Controls <p>The ENERGY STAR-qualified SSL product was introduced in 2009. These new technologies may necessitate working with new partners and identifying innovative incentive structures and mechanisms.</p> |
| Financial Incentives | <p>Specific incentive levels are subject to screening and are currently not known. Customer incentives are delivered via rebate or discount pricing through one of four mechanisms:</p> <ul style="list-style-type: none"> • The Internet/mail-order sales channel • Joint-sponsored instant rebates regularly available at retailers • Special promotions • NCPs with lighting manufacturers, distributors, and retailers |
| Delivery Mechanism | <p>A manufacturer/retailer outreach contractor will recruit and train retailers to participate in the program; place point-of-purchase materials and rebate coupons in participating retail stores; oversee the NCP process; and act as a liaison for Program Administrators, manufacturers, and retailers.</p> <p>A rebate fulfillment contractor will collect data and payment requests from manufacturers, retailers, and consumers; process rebate coupons and NCPs; and provide documentation to the Program Administrators for program tracking and evaluation purposes.</p> <p>An Internet/mail-order sales channel contractor will develop and distribute the catalog; purchase and stock products offered through the catalog and the www.estarlights.com website; staff a toll-free line for customers; and process catalog and website purchases.</p> |
| Joint Program Administrator | <p>As described more specifically in the “Three-Year Deployment” section, the Program Administrators are dedicated to broadening the awareness of the program and also concentrating on a further penetration of the</p> |

| | |
|--|---|
| Enhancements Planned for 2010-2012 | market. |
| Program Administrator-Specific Elements | To be completed for the October Filing if applicable. |
| Three-Year Deployment/Road Map | <p>The direction for the ENERGY STAR Lighting Program faces some unknowns in the upcoming three-year period. First, the per-unit savings may see a decrease due to on-going discussions surrounding net to gross ratios and how to evaluate lighting program savings. Second, federal lighting efficiency standards will begin to phase in starting in 2012. At this time, it is unclear how industry will respond to this federal mandate. The standard may accelerate the adoption of CFLs for many applications, or industry may promote a less efficient technology such as infrared halogen. Finally, the proposed lighting program also assumes limited savings from SSL based on estimates of future product availability and price. However, this technology is evolving very rapidly and cost competitive screw-in replacement lamps may become readily available within the three-year implementation timeframe.</p> <p>For the three-year deployment, the Program Administrators will focus on:</p> <ul style="list-style-type: none"> • Expansion of the mix of product available in retail • Increased focus on specialty products to reach “deeper” savings for each customer with more options for each socket • Expansion of retailers and other channels for the sale and distribution of efficient lighting • Continuous program offerings over longer horizon periods at retail to assure year-round product availability to consumers. • Innovative approaches to community and corporate events (including hard-to-reach communities) • Phasing-in of qualified products for new technologies that require new entrants and implementation strategies. |

Special Notes

The preceding program description is designed to support the successful attainment of the Green Communities Act's energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the EEAC Council members and their consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council's Priorities document. This program design is intended to address a number of applicable Council priorities by:

- Providing program consistency through this program.
- Focusing on maximizing incentive value for consumers and minimizing overhead costs in this program.
- Striving to provide all customers with an opportunity to lower utility bills through the purchase of energy efficient lighting products.
- Providing greenhouse gas reduction information for consumers.
- Striving to produce a variety of lighting rebate offerings for consumers to encourage depth in their purchase of lighting products for their homes.
- Striving to provide seamless delivery of this program to customers.
- Providing user-friendly program by offering multiple paths/opportunities for participation.

ENERGY STAR Appliances & Products

| | |
|---|--|
| <p>Primary Objective</p> | <p>The ENERGY STAR Lighting and Products Programs are administered jointly in order to streamline processes, maximize retailer and manufacturer relationships, and minimize vendor costs.</p> <p>To raise consumer awareness of the benefits of energy-efficient ENERGY STAR-qualified consumer products, encourage consumers to purchase qualified appliances and consumer electronics, promote higher efficiency standards for products, and to help customers reduce energy bills by replacing or recycling inefficient products.</p> <p>Historically, the program has focused on the major appliances—such as refrigerators, clothes washers, room air conditioners, and dishwashers—working with local retailers on cooperative promotions, and providing mail-in rebates for consumer purchases. In recent years, electronic devices, additional appliances and other ancillary equipment have become increasingly significant portions of a consumer’s energy bill, requiring additional program focus.</p> |
| <p>Program Inception</p> | <p>The program began in 1998.</p> |
| <p>2010-2012 Program goals</p> | <p>To be provided with October 2009 Filings.</p> |
| <p>2010-2012 Budget</p> | <p>To be provided with October 2009 Filings.</p> |
| <p>Joint vs. Program Administrator-Specific Offering</p> | <p>Joint</p> |
| <p>Program Design</p> | <p>The ENERGY STAR Consumer Products Program educates consumers about the benefits of ENERGY STAR-qualified products to increase consumer acceptance of those appliances and consumer electronics and to encourage them to look for and purchase ENERGY STAR-qualified models when they shop.</p> <p>The Program Administrators plan to negotiate with interested manufacturers and retailers to leverage rebate and/or</p> |

| | |
|--|--|
| <p>Program Design (cont.)</p> | <p>marketing funding. The program promotes all high-efficiency ENERGY STAR-qualified appliances at the point of sale by providing promotional literature and displays to retailers, working with sales staffs to ensure they understand and can accurately market the benefits of ENERGY STAR-qualified appliances, and providing labels to identify models that meet ENERGY STAR standards. Select electronics also will be included in these activities.</p> <p>The program supports raising federal and ENERGY STAR standards for appliances by promoting ENERGY STAR-qualified products. As particular ENERGY STAR-qualified products achieve a high share of market sales, the Program Administrators and other interested parties are in a good position to advocate for higher minimum federal and ENERGY STAR energy-efficiency codes and standards.</p> <p>The program will also try to leverage opportunities with federal stimulus in this area.</p> <p>The program actively participates in national ENERGY STAR awareness campaigns developed by ENERGY STAR and in efforts to keep ENERGY STAR specifications up to date and relevant. Similarly, the Program Administrators will also work with Consortium for Energy Efficiency (“CEE”) to develop efficiency tiers above ENERGY STAR for many products. As appropriate, the Program Administrators will support these tiers with higher incentives. This provides greater per unit and customer savings and developing and supporting these tiers also helps accelerate future ENERGY STAR specification revisions.</p> <p>The program will focus on assessing existing appliances as well as screening and implementing new appliances and electronic devices that can reduce the overall energy usage for a consumer.</p> |
| <p>Target Market</p> | <p>All residential customers</p> |
| <p>Marketing Strategy/ Approach</p> | <p>With a growing array of consumer products impacting a higher percentage of residential energy costs, the Program Administrators will be providing longer duration rebate promotions of eligible products and will work to introduce new technologies, partnering with manufacturers and other parties to educate consumers and implement programs successfully.</p> <p>A number of approaches will increase general consumer awareness of the benefits of ENERGY STAR-qualified appliances and consumer electronics, to establish ENERGY STAR as the value leader in appliances. In addition to direct advertising targeting consumers, these approaches include supporting national ENERGY</p> |

| | |
|--|---|
| <p>Marketing Strategy/ Approach (cont.)</p> | <p>STAR marketing campaigns and working with industry partners at all levels of the retail supply chain.</p> <p>Among the specific marketing activities targeting consumers are the following:</p> <ul style="list-style-type: none"> • Retail marketing and point-of-purchase displays • Print and radio advertising • Public relations • Coordination with the integrated Massachusetts website <p>Work with industry partners at all levels of the retail supply chain includes the following:</p> <ul style="list-style-type: none"> • Leveraging marketing budgets through cooperative promotions with retailers, distributors, and manufacturers, including marketing promotions, cooperative advertising, and special events at retail stores and in communities • Training and supporting retail sales staffs so they are able to tell consumers about the benefits of using ENERGY STAR-qualified products and to help them choose the best products to meet their particular needs. Satisfied consumers are more likely to purchase ENERGY STAR-qualified products in the future. |
| <p>Target End Uses</p> | <p>To reduce the amount of water and electricity used in homes by screened, cost-effective plug loads, major appliances, and ancillary equipment.</p> |
| <p>Recommended Technologies</p> | <p>The recommended technologies are cost-effective ENERGY STAR-qualified plug loads, major appliances, and ancillary equipment. In some cases, the Program Administrators will propose CEE Tiers for deeper savings than ENERGY STAR, and in other cases, the Program Administrators will propose to rebate energy efficient equipment before there is an ENERGY STAR label. There may also be additional products identified through other national efficiency efforts. The goal is to have the most comprehensive list of measures in this category that would greatly increase the available number of product categories.</p> |
| <p>Financial Incentives</p> | <p>Incentive levels are subject to benefit/cost screening and accordingly are not known at this time. Customer incentives are delivered via rebate or discount pricing through one of four mechanisms:</p> <ul style="list-style-type: none"> • Joint-sponsored rebates available at retailers • Special promotions • NCPs with product manufacturers, distributors, and retailers; and |

| | |
|---|---|
| | <ul style="list-style-type: none"> • The Internet/mail-order sales channel for some electronic products. |
| Delivery Mechanism | <p>A manufacturer/retailer outreach contractor will recruit and train retailers to participate in the program; place point-of-purchase materials and rebate coupons in participating retail stores; oversee the NCP process; and act as a liaison for Program Administrators, manufacturers, and retailers.</p> <p>A rebate fulfillment contractor will collect data and payment requests from manufacturers, retailers, and consumers; process rebate coupons and NCPs; and provide documentation to the Program Administrators for program tracking and evaluation purposes.</p> <p>An Internet/mail-order sales channel contractor will develop and distribute the catalog; purchase and stock products offered through the catalog and the www.estarlights.com website; staff a toll-free line for customers; and process catalog and website purchases.</p> |
| Joint Program Administrator Enhancements Planned for 2010-2012 | As described more specifically in the “Three-Year Deployment” section, the Program Administrators are dedicated to broadening awareness of the program and are also concentrating on a further penetration of the market. |
| Program Administrator-Specific Elements | To be completed for the October Filing if applicable. |
| Three-Year Deployment/Road Map | <p>For consumer products, efforts to broaden categories as well as allow consumers the opportunity to increase the savings in their homes with new technologies provide unique challenges for the Program Administrators.</p> <p>For example, when the Program Administrators introduced pool pumps in 2009, the Program Administrators met with representatives from industry and discovered that there are unique distributors, installers, training, and equipment from existing products in the program. In order to educate consumers, design a program, and realize savings, the program stakeholders must fully understand the market and the players.</p> <p>Because of these challenges, the Program Administrators will work on phasing-in new technologies while working</p> |

| | |
|-----------------------------|--|
| | <p>diligently to expand the program offerings and increase savings for each consumer. Working with manufacturers, distributors, retailers, installers, and consumers, the Program Administrators will work with the best available data to design successful programs.</p> <p>For the three-year deployment, the Program Administrators will focus on:</p> <ul style="list-style-type: none"> • Expansion of products available in retail • Expansion of retailers and other channels for the sale and distribution of efficient products • Continuous program offerings at retail to provide year-round product availability for consumers • Innovative approaches to community and corporate events (including hard-to-reach communities) • Phasing-in implementation of qualified products for new technologies that require new entrants and implementation strategies |
| <p>Special Notes</p> | <p>The preceding program description is designed to support the successful attainment of the Green Communities Act’s energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council members and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This program design is intended to address a number of applicable Council priorities including:</p> <ul style="list-style-type: none"> • Striving to provide all cost-effective measures through this program. • Providing program consistency through this program. • Planning to phase-in new products and technologies. • Leveraging stimulus funding and other available funding for products in this program. • Focusing on maximizing incentive value for consumers and minimizing overhead costs in this program. • Providing greenhouse gas reduction information for consumers. • Striving to produce a variety of product rebate offerings for consumers to encourage depth in their purchase of ENERGY STAR and energy-efficient products for their homes. Additionally, Program Administrators will strive to use the best available research and analyses to determine the most appropriate incentive levels and market strategies for the various products in this program. • Striving to provide seamless delivery of this program to customers. |

- | | |
|--|---|
| | <ul style="list-style-type: none">• Providing user-friendly program by offering multiple paths/opportunities for participation. |
|--|---|

Residential Pay & Save Financing/Loan Pilot

| | |
|--|---|
| Primary Objective | To establish a pilot loan program that eliminates barriers by creating an alternative financing mechanism for customers to finance the customer contribution cost of the implementation and installation of Energy Efficiency measures. |
| Program Inception | New pilot program (see “Special Notes” regarding 2009 Energy Pay and Save Pilot Program). |
| 2010-2012 Program Goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | This pilot is a Joint offering. |
| Program Design | The program would make funds available to customers to assist in financing energy efficiency improvements and enable customers to repay those loans through their utility bills without interest. |
| Target Market | Program participants, as designated by Program Administrators. |
| Marketing Strategy/Approach | Pilot program will be incorporated into the RCS Tier Two audit process. |
| Target End Uses | Residential customers who install weatherization measures |
| Recommended Technologies | Non-portable measures |

| | |
|---|---|
| Financial Incentives | Financing the customer contribution assists customers who do not have the ability to pay in full at the time of the installation. It is expected that this incentive will allow for increased customer participation in programs. |
| Delivery Mechanism | RCS/MassSAVE Program delivery vendors. |
| Three-Year Deployment / Road Map | Once the pilot program is completed on December 31, 2009, an evaluation of participation levels and cost effectiveness will commence in early 2010. A decision to incorporate this program into 2010-2012 programs will be explored by Program Administrators once the evaluation process is completed. |
| Special Notes | The desired effect of this pilot is to create an “on-bill” financing program available to our customers. The evaluation of this pilot will provide guidance as to how this may be accomplished. Further, the Program Administrators will incorporate findings of the Department-approved Energy Pay and Save pilot program offered to residential and small business customers from April 1, 2009 – December 31, 2009 (D.P.U. 09-07) in any new financing initiative that may be developed. |

Multi-Family Retrofit Program

| | |
|--|--|
| Primary Objective | To maximize the acquisition of cost-effective gas and electric energy and demand savings by addressing the informational, economic, institutional, and technical barriers that historically have made the multi-family market a “hard-to-reach” sector. Moreover, the program aims to broaden participation and achieve deeper savings per participant through an incentive structure that encourages such action. |
| Program Inception | The Massachusetts Program Administrators have offered energy efficiency services to the multi-family sector, through various program designs, since the 1980s. |
| 2010-2012 Program Goals | To be provided with October filings. |
| 2010-2012 Budget | To be provided with October filings. |
| Joint vs. Company Specific Offering | The Program Administrators are proposing a common statewide program with the goal of offering a consistent customer experience throughout the state. In designing a program for this multi-faceted market, the Program Administrators recognize the need to allow for the flexibility to ensure that the needs of all participants are met. |
| Program Design | <p>The program design was developed based upon the following guiding principles:</p> <ul style="list-style-type: none"> • Participants will be able to initiate a request for all program services through one party, without the need to directly contact multiple program administrators or multiple parties within the same program administrator. Throughout the project life cycle, the participant will have access to a single point-of contact that will facilitate all programmatic communication and coordination. • Eligibility for program measures and services will be based on cost-effectiveness and will not be restricted by the rate class associated with the meter(s) for the facility. • The program will be structured to ensure that participants are provided with a “whole building” fully integrated offering; targeting both gas and electric end-uses. While on-site, however, all opportunities, regardless of fuel source, will be identified and documented for the customer. <p>All efforts required to deliver a fully integrated offering to a participant, regardless of fuel source, service territory or rate class, will be performed in a manner that will result in a seamless customer experience, thus mitigating the potential for customer confusion and lost opportunities. The cornerstone of the program design</p> |

| | |
|-------------------------------|--|
| Program Design (cont.) | <p>involves the services of a Program Expeditor who will provide project management services to ensure the seamless delivery of the program phases described below. (Additional detail on the role of the Program Expeditor will be described in the section titled Program Delivery).</p> <p><u>Enrollment</u></p> <p>Because of the diversity within the multi-family sector and the various market actors that may be involved in lead generation, the program provides for multiple points of entry that will all ultimately provide participants with a comprehensive program offering and a seamless experience. Participants may enroll in the program via the statewide web site, which is currently under development, or their request for services may be initiated by other parties such as an Account Executive, a contractor, a consultant or engineer. Trying to force all project initiation through a single point of entry for this market would result in participant frustration and lost opportunities. Rather, as stated in the Guiding Principle above, each participant will only need to contact one party (as opposed to requiring all participants to contact the same party) to avail themselves of comprehensive services. Once the Program Expeditor is made aware of a project (either the web site or lead from another market actor), he or she reviews the information provided from the website screening questions or from the lead generator and then makes the initial contact with the customer and conducts further screening as required.</p> |
|-------------------------------|--|

| | |
|--------------------------------------|---|
| <p>Program Design (cont.)</p> | <p><u>Participant Screening</u></p> <p>Delivering energy efficiency services to the multi-family market is challenging because of the many variations in size and construction as well as ownership and decision-making structures that exist. The Program Administrators will ensure that the services offered by the program are easily scalable to accommodate simple projects, highly complex projects, and everything in between. In addition, there will be a screening process to identify where along this continuum a project lies. As stated above, some screening data will be available from the web site or lead generator and, in addition, usage data will be supplied by the appropriate Program Administrators (provided authorization from the customer paying the bills is obtained). The remaining screening information will be obtained when the participant is contacted upon enrollment. It is during this discussion that the Program Expeditor will gain a better understanding of the end uses available for treatment and the motivations that drove the participant to solicit energy efficiency services. Armed with this information, the Program Expeditor will explain that, in addition to the measures initially requested, a whole building assessment can be performed which can identify other energy savings opportunities. By motivating the participant to accept the whole building assessment, the project could ultimately result in deeper savings than otherwise would have been realized.</p> <p><u>Whole Building Assessment</u></p> <p>Based on the outcome of the screening process, the appropriate technical resources will be assigned to conduct a whole building, (fuel blind) assessment. The Program Expeditor will attempt, through the screening process, to identify all resources required for the assessment; however, there may be instances where additional expertise is required and therefore a second site visit is necessary. Technical assessments, benchmarking, and engineering studies will be conducted as needed. At the time of the assessment, education will be provided and instant saving measures will be installed, as appropriate and authorized by the customer.</p> <p><u>Integrated Proposal for Energy Efficiency Services</u></p> <p>Using the findings from the site-specific assessment, the appropriate parties will draft a project proposal that will include measures, other available services and incentives for both gas and electricity (where applicable). Once the comprehensive offer has received Program Administrator approval, it will be presented to the participant by the parties required to help the customer fully understand the offering.</p> <p><u>Delivery of Measures and Services</u></p> |
|--------------------------------------|---|

| | |
|--------------------------------------|--|
| <p>Program Design (cont.)</p> | <p>The Program Expeditor will coordinate the delivery of the measures and services opted by the customer. The Program Expeditor or other appropriate party will strive to have all dwelling unit measures installed in a single visit to minimize disruption for the tenants; however, multiple visits may be required for the installation of common area measures. Commissioning services will be performed as appropriate.</p> <p><u>Quality Assurance</u></p> <p>Quality assurance will be performed in support of this program. The Program Administrators anticipate that the quality assurance will be performed by an independent third party. Customer satisfaction surveys will also be administered to provide additional feedback for the Program Administrators.</p> <p><i>Additional Program Design Elements for Consideration</i></p> <ul style="list-style-type: none"> • The Program Administrators will examine the viability of and potential methods for informing customers of the change in their energy consumption one year after participating in the program. This may be accomplished via a letter or email. The Program Administrators will factor into the decision-making process both the costs and benefits from such an approach. • Research will be performed on tools available to allow customers to benchmark their energy use against like buildings to determine if this option should be used to supplement the current program design. • The Program Administrators recognize that proper training for building operators and maintenance staff is a key factor in ensuring that expected savings are realized. As such, the Program Administrators will assess the feasibility of offering incentives for the building owner/manager and/or their staff to obtain applicable training and certifications. • As the program evolves, and more experience is gained through the Deep Retrofit 1-4 Family Pilot, a deep retrofit track will also be explored for the multi-family sector. |
| <p>Target Market</p> | <p>Residential facilities with five or more dwelling units. The program will address the unique circumstances associated with mixed use buildings.</p> |
| <p>Marketing</p> | <p>The program will be supported by the statewide energy efficiency marketing effort; however, direct outreach to building owners and/or property managers via trade associations will be used as a cost-effective mechanism for</p> |

| | | | | | | | | | | | | | | | | | | | |
|--|--|-----------------|------------|---|------------|-------------------|-------------|--|----------------------------------|--------------------------|-------------------------|------------|------------------|--------------|--------------------------|-------------|------------------------------|---|-----------------------------------|
| Approach | communicating with this population. | | | | | | | | | | | | | | | | | | |
| Target End Uses | <p>The program targets, through a comprehensive energy assessment, gas and electric end-uses. Instant savings measures such as energy efficient lighting upgrades and DHW saving devices as well as major measures are included. Under the program re-design, participants will have access to both those measures that are traditionally deemed “residential” and those that are considered “commercial” without any limitations imposed by their rate class/metering. Listed below are the primary end-uses targeted through the program.</p> <p>All cost-effective applications, systems, and building shell improvements that impact gas and electric consumption are eligible for incentives under this program. These include, but are not limited to, lighting, DHW, building shell improvements, refrigerators, motors and drives, HVAC equipment and controls, energy management systems and building controls, chillers, compressed air, and other site specific end-uses.</p> | | | | | | | | | | | | | | | | | | |
| Recommended Technologies | <p>Recommended technologies offered include, but are not limited to:</p> <table border="0" data-bbox="478 833 1927 1372"> <tr> <td data-bbox="478 833 1344 868"><u>Electric</u></td> <td data-bbox="1344 833 1927 868"><u>Gas</u></td> </tr> <tr> <td data-bbox="478 894 1344 930">Energy efficient lighting upgrades & controls</td> <td data-bbox="1344 894 1927 930">Insulation</td> </tr> <tr> <td data-bbox="478 956 1344 992">Occupancy sensors</td> <td data-bbox="1344 956 1927 992">Air sealing</td> </tr> <tr> <td data-bbox="478 1018 1344 1053">DHW measures: low flow showerheads, aerators and pipe wrap</td> <td data-bbox="1344 1018 1927 1053">DHW measures: (same as electric)</td> </tr> <tr> <td data-bbox="478 1079 1344 1115">Programmable thermostats</td> <td data-bbox="1344 1079 1927 1115">Water heating equipment</td> </tr> <tr> <td data-bbox="478 1141 1344 1177">Insulation</td> <td data-bbox="1344 1141 1927 1177">Hot air furnaces</td> </tr> <tr> <td data-bbox="478 1203 1344 1239">Duct Sealing</td> <td data-bbox="1344 1203 1927 1239">Programmable thermostats</td> </tr> <tr> <td data-bbox="478 1265 1344 1300">Air Sealing</td> <td data-bbox="1344 1265 1927 1300">Boiler for hot water systems</td> </tr> <tr> <td data-bbox="478 1326 1344 1362">Space conditioning and hi-efficiency upgrades</td> <td data-bbox="1344 1326 1927 1362">Combined boiler and water heating</td> </tr> </table> | <u>Electric</u> | <u>Gas</u> | Energy efficient lighting upgrades & controls | Insulation | Occupancy sensors | Air sealing | DHW measures: low flow showerheads, aerators and pipe wrap | DHW measures: (same as electric) | Programmable thermostats | Water heating equipment | Insulation | Hot air furnaces | Duct Sealing | Programmable thermostats | Air Sealing | Boiler for hot water systems | Space conditioning and hi-efficiency upgrades | Combined boiler and water heating |
| <u>Electric</u> | <u>Gas</u> | | | | | | | | | | | | | | | | | | |
| Energy efficient lighting upgrades & controls | Insulation | | | | | | | | | | | | | | | | | | |
| Occupancy sensors | Air sealing | | | | | | | | | | | | | | | | | | |
| DHW measures: low flow showerheads, aerators and pipe wrap | DHW measures: (same as electric) | | | | | | | | | | | | | | | | | | |
| Programmable thermostats | Water heating equipment | | | | | | | | | | | | | | | | | | |
| Insulation | Hot air furnaces | | | | | | | | | | | | | | | | | | |
| Duct Sealing | Programmable thermostats | | | | | | | | | | | | | | | | | | |
| Air Sealing | Boiler for hot water systems | | | | | | | | | | | | | | | | | | |
| Space conditioning and hi-efficiency upgrades | Combined boiler and water heating | | | | | | | | | | | | | | | | | | |

| | | |
|-----------------------------|--|--|
| | ENERGY STAR-rated refrigerators equivalent Motors and drives Chillers Variable Speed Drives Air compressors Solar water heaters CHP HRVs / ERVs Custom Technologies | Furnaces equipped with ECM or Redistribution systems Boiler re-set controls Timers Solar thermal hot water Thermostatic radiator valves |
| Financial Incentives | <p>The Program Administrators will be evaluating various incentive structures and incentive levels to encourage increased participation and deeper savings. Specifically, incentives will be developed for the measure packages comprised of the technologies listed above. In addition, the following options will be assessed:</p> <ul style="list-style-type: none"> • Offering incentives for soft costs such as technical assistance and owner/operator training. • Providing milestone payments and on-bill financing to address financial barriers. • Incorporating into the program design, to the greatest extent possible, a means for customers to calculate their potential incentives in future years. • Committing project-specific funding for up to one year for pre-approved projects, subject to regulatory and funding constraints. | |
| Delivery Mechanism | <p>The program will be administered cooperatively by the gas and electric Program Administrators. Collectively, the Program Administrators will form a Multi-family Statewide Executive Committee which will be responsible</p> | |

| | |
|--|---|
| | <p>for program oversight and promoting continuous improvement/best practices with regard to the multi-family market.</p> <p>As stated in the Program Design section, the Program Expeditor role will be key to the delivery of this fully integrated statewide program. The role was specifically created to ensure a seamless customer experience for participants regardless of the fuels, rates and service territories involved in a project. The Program Expeditor will be responsible for facilitating the delivery of program services as well as acting as the conduit through which participant questions and concerns are directed to ensure that participants are not required to directly contact multiple parties during the project lifecycle. A comprehensive scope of work will be prepared for the Program Expeditor role and a vendor will be selected via a competitive bidding process. It is anticipated that the competitive procurement process will also be utilized to obtain third party QA/QC services.</p> <p>To further encourage a competitive marketplace, multiple vendors will perform tasks including auditing and the installation of measures throughout the Commonwealth. The Program Administrators will be evaluating the need to have all participating audit, installation, commissioning and inspection service providers meet minimum requirements (such as BPI certification).</p> <p>Provisions will be made within the delivery process to allow for participants to use their own staff or contractors to install the measures provided that documentation of their qualifications is presented prior to the installation.</p> |
| <p>Joint Program Administrator Enhancements Planned for 2010-2012</p> | <p>N/A</p> |
| <p>Sponsor Specific Elements</p> | <p>Individual Program Administrators are encouraged to conduct pilot programs designed to allow for the evaluation of alternative program designs or specific technologies, especially those that encourage deeper savings. Findings from these pilots will be shared with the entire Multi-family Statewide Executive Committee and will be assessed to determine if enhancements to the current program design should be made based on the results of the pilots.</p> |

**Three-Year
Deployment/Road
Map**

The multi-family program re-design effort is expected to develop a platform for gas and electric integration that may be adopted, or modified as required, by other programs. This endeavor, combined with the inherent complexities in serving this “hard to reach” market, will require program planning to extend beyond the October 31, 2009 timeframe. Specifically, the Program Administrators are currently planning to complete the program design and develop the scope of work for the Program Expeditor services by the end of 2009. To provide transparency for the Council between July and December, the Program Administrators will provide a progress report in the October 31, 2009 filing. The completed program design is expected to be submitted to the Council by December 31, 2009. In the event, however, that some issues remain outstanding on December 31, 2009, the Program Administrators will include the program design in its current state and will submit to the Council milestone completion dates for the remaining work.

Provided below is the roadmap for the completion of the program design and program implementation.

PHASE I – PROGRAM PLANNING

| Task Description | Target Completion Date | Deliverable |
|--|------------------------|--|
| 1. Identify Eligible Measures and Establish Incentives <ul style="list-style-type: none"> • Create measure packages for cost-effectiveness screening and establish incentive structures and levels that encourage participants to achieve deeper savings. | 10/31/09 | Set of measure packages and corresponding incentives |
| 2. Prepare draft scope of work for Program Expeditor services. | 10/31/09 | Draft work scope for Program Expeditor services. |
| 3. Establish PA protocols for budgeting and expense tracking under new “meter/rate” blind model | 10/31/09 | Discussion in the October filing in the Budget section describing assumption used in the budgeting process |
| 4. Evaluate the feasibility of the following : <ul style="list-style-type: none"> • Informing customers of the change in their energy consumption one year | 10/31/09 | Documented findings from joint Program Administrators and Consultant assessment |

| | | | |
|---|---|----------|---|
| Three-Year Deployment/Road Map (cont.) | <p>after participating in the program.</p> <ul style="list-style-type: none"> • Providing customers with a mechanism for benchmarking their energy use against like buildings. • Offering incentives soft costs such as technical assistance and for building owner/manager or their staff to obtain applicable trainings and certification. • Providing milestone payments and on-bill financing to address financial barriers. • Providing customers with mechanisms for calculating their potential incentive in future years. | | |
| | <p>5. Develop detailed program delivery model</p> | 12/31/09 | |
| | <ul style="list-style-type: none"> • Document detailed roles and responsibilities for each market actor required to support the program design. • Prepare second draft scope of work for Program Expeditor services. | 12/31/09 | <ul style="list-style-type: none"> • Matrix including market actors along with their roles and responsibilities. • Second draft of work scope for Program Expeditor services. |
| | <ul style="list-style-type: none"> • Develop process flow documentation illustrating the customer experience and the interactions between other key market actors including the Program Administrators, auditors, installation vendors, technical assistance and QA/QC providers. | 12/31/09 | <ul style="list-style-type: none"> • Process flow |
| | <p>6. Create Marketing Plan</p> | 12/31/09 | Marketing Plan including support provided by statewide marketing effort as well as additional |

**Three-Year
Deployment
(cont.)**

communications to be funneled through trade organizations within the multi-family community.

PHASE II – PROGRAM IMPLEMENTATION

| Task Description | Target Completion Date | Deliverable |
|---|------------------------|---|
| 1. Conduct training for PA and vendor staff | 2010 | Documented completion of this task |
| 2. Implement Marketing Plan | 2010 | Marketing materials and schedule for delivery |
| 3. Program Implementation | 2010 | Notification of program launch |
| 4. Monthly Multi-Family Statewide Executive Committee (“MSEC”) Meetings | Ongoing | Meeting notes distributed to all participating Program Administrators |

PHASE III – PROGRAM ASSESSMENT

| Task Description | Target Completion Date | Deliverable |
|---|------------------------|---|
| Annual Multi-family Statewide Executive Committee review of program successes and lessons learned with results feeding back into modifications to the program design as required. | 2011- 2012 | Narrative to be included in annual PA plan updates. |

| | |
|----------------------|--|
| Special Notes | <p>To provide a fully integrated energy efficiency offering, the program design is being developed by a cross-functional team including the Consultant and Program Administration staff representing gas and electric fuels, with experts from the both the residential and C&I sectors. To best utilize the expertise of each member of the team, the following subgroups have been formed.</p> <p>The Technical subgroup is responsible for identifying the end-uses and associated technologies that are appropriate for the multi-family market. This sub-group is also responsible for developing cost-effective measure packages and the associated incentives intended to achieve greater participation and deeper savings.</p> <p>The Evaluation subgroup is charged with building on the success of the April 2009 Multi-family Workshop to obtain a greater understanding of the “market rate” sector. This will assist the Program Administrators in developing strategies to overcome market barriers and thus achieve increased participation and deeper savings. To this end, the Program Administrators have contracted with Nexus Market Research to conduct focus groups which are scheduled for July, 2009. The findings from the focus group will be included in the October filing. Nexus will also be conducting “literature search” to identify successful programs across the country and then follow-up with in-depth interviews with the administrators of these programs. This information will inform the decisions made as the Program Administrators further develop the multi-family program design.</p> <p>Additionally, the Program Administrators are participating in pertinent webinars sponsored by organizations such as the Association of Energy Service Professionals (“AESP”) and ESource. Two recent and upcoming sessions are listed below:</p> <ul style="list-style-type: none">• “50 Homes in One: Multi-family Efficiency Programs”, on July 8, 2009, with speakers from Conservation Services Group, Wisconsin Energy Conservation Corp., Cambridge Energy Alliance, Pacific Gas & Electric, Commonwealth Edison, and NYSERDA. This program is being sponsored by ESource.• “Serving the Multi-family Market: New Construction to Existing Buildings to Policy Programs” on August 6, 2009 with speakers from the Wisconsin Energy Center, NYSERDA and the Hescong Mahone Group. This program is being sponsored by AESP. |
|----------------------|--|

| | |
|-------------------------------------|--|
| <p>Special Notes (cont.)</p> | <p>The preceding program description is designed to support the successful attainment of the Green Communities Act’s energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This program design is intended to address a number of applicable Council priorities including:</p> <ul style="list-style-type: none"> • “The PAs are encouraged to define “multifamily” as a building with more than four units”. <ul style="list-style-type: none"> ○ The target market for this program is a building with five or more units. • “The PAs are encouraged to work in conjunction with the Consultant to determine how to implement a program that from a customer’s perspective will be blind to whether building meters are commercial or residential”. <ul style="list-style-type: none"> ○ Participants will have access to incentives for all cost-effective measures offered through the program regardless of billing rate. • “The PAs are encouraged to work in conjunction with the Consultant to determine how to ensure that customers participating in the Multifamily Initiative need to fill out only one application for a given multi-family property and be required to interact with only one utility-related service provider or partner. For purposes of the multifamily program, the PAs are encouraged to define “property” as all buildings within a given property, regardless of the number of meters on that property. If the customer is not the building owner or landlord, the PA should seek to involve other customers on the property, whether other customers in the same development”. <ul style="list-style-type: none"> ○ The Program Expeditor will take the information necessary for the customer to apply for all eligible program services, so there will be no need for the customer to contact multiple parties to initiate a request. ○ The term property will not be limited to individual buildings, but rather can mean, where appropriate, a group of buildings. ○ The Program Administrators plan to involve tenants in the process, for example providing them with energy education. • “The PAs are encouraged to develop mechanisms, including outreach and education to landlords to demonstrate the benefits of undertaking energy efficiency and provide equitable sharing of the costs and |
|-------------------------------------|--|

| | |
|-------------------------------------|--|
| <p>Special Notes (cont.)</p> | <p>benefits of energy efficiency improvements”.</p> <ul style="list-style-type: none"> ○ The marketing strategy for this program will include targeted outreach to the multi-family community. <ul style="list-style-type: none"> ● “The PAs are encouraged to offer technical assistance in the form of audits, design assistance, commissioning, and training, and cash incentives based on building performance in the Multifamily Initiative”. ○ As stated above, the program includes technical assistance in the form of a “whole building” assessment to identify opportunities regardless of fuel. Incentives are provided for cost-effective gas and electric measures. <ul style="list-style-type: none"> ● “The PAs are encouraged to explore a Multi-family Initiative deep energy retrofit track”. ○ As the program evolves, and more experience is gained through the Deep Retrofit 1-4 Family Pilot, a deep retrofit track will also be explored for the multi-family sector. <ul style="list-style-type: none"> ● “To ensure the highest level of quality and consistency, the PAs are strongly encouraged, in conjunction with the Consultant, to research, analyze and report their findings to the Council requiring the accreditation of all auditors of multifamily facilities and associated contractors, through rapid but thorough review of successful models in other areas of the country including but not limited to New York, Wisconsin, Ohio, and the Pacific Northwest, and through researching BPI and other accreditation entities”. ○ The Program Administrators recognize the role that having trained professionals perform assessment and install measures plays in realizing expected savings. A research effort on accreditation requirements from other programs throughout the country as well programs offered will be performed and the findings provided to the Council. <ul style="list-style-type: none"> ● “PAs are encouraged to examine the experience of NYSERDA and other states’ multifamily programs”. ○ The Massachusetts Program Administrators held a conference call in April 2009 with NYSERDA and their Program Administrator to gain a better understanding of their delivery model. ○ In preparation for the Multi-family Workshop, the facilitator conducted best practice research and presented their findings to the workshop participants. ○ In June 2009, the Program Administrators retained the services of a market research firm to conduct in-depth telephone interviews pertaining to multi-family programs across the country. |
|-------------------------------------|--|

| | |
|------------------------------|---|
| Special Notes (cont.) | <ul style="list-style-type: none">○ Two up-coming webinars pertaining to multi-family programs will be attended by representatives from the Program Design Working Group. |
|------------------------------|---|

Multi-Family New Construction Program

| | |
|--|--|
| Primary Objective | To address multi-family new construction that cannot be served cost-effectively by either the ENERGY STAR Homes or C&I New Construction programs. In addition, to maximize the acquisition of cost-effective gas and electric energy and demand savings by addressing the informational, economic, institutional, and technical barriers that historically have made the multi-family market a “hard-to-reach” sector. Moreover, the program aims to broaden participation and achieve deeper savings per participant through an incentive structure that encourages a whole building approach. |
| Program Inception | The Massachusetts Program Administrators have offered energy efficiency services to the multi-family sector, through multiple programs implemented separately by the C&I, residential, electric and gas Program Administrators. |
| 2010-2012 Program Goals | To be provided with October filings. |
| 2010-2012 Budget | To be provided with October filings. |
| Joint vs. Company Specific Offering | The Program Administrators are proposing a common statewide program with the goal of offering a consistent customer experience throughout the state. In designing a program for this multi-faceted market, the Program Administrators recognize the need to allow for the flexibility to ensure that the needs of all participants are met. |
| Program Design | <p>The program design was developed based upon the following guiding principles:</p> <ul style="list-style-type: none"> • Participants will be able to initiate a request for all program services through one party, without the need to directly contact multiple Program Administrators or multiple parties within the same Program Administrator. Throughout the project lifecycle, the participant will have access to a single point-of-contact who will facilitate all programmatic communication and coordination. • Eligibility for program measures and services will be based on cost-effectiveness for appropriate residential and commercial measures. • The program will be structured to ensure that participants are provided with a “whole building” fully integrated offering targeting both gas and electric end-uses. |

- All efforts required to deliver a fully integrated offering to a participant, regardless of fuel source, service territory or rate class, will be performed in a manner that will result in a truly seamless customer experience, thus mitigating the potential for customer confusion and lost opportunities.
- Increase program cost-effectiveness by eliminating a project-specific analysis and implementing a comprehensive package of prescriptive incentives.

The cornerstone of the program design involves a Prescriptive Whole Building program (similar to the Advanced Buildings[®] program for C&I projects) and the services of a Program Expeditor who will provide project management services to ensure the seamless delivery of the program as described below. (Additional detail on the role of the Program Expeditor will be described in the section titled Program Delivery).

Enrollment

Because of the diversity within the multi-family sector and the various market actors that may be involved in lead generation, the program provides for multiple points of entry that will all ultimately provide participants with a comprehensive program offering and a seamless experience. Participants may enroll in the program via a request for services initiated by themselves or by other parties such as a Program Administrator account executive, a contractor, a consultant or engineer. Trying to force all project initiation through a single point of entry for this market would result in participant frustration and lost opportunities. Rather, as stated in the Guiding Principle above, each participant will only need to contact one party (as opposed to requiring all participants to contact the same party) to avail themselves of comprehensive services. Once the Program Expeditor is made aware of a project he or she reviews the project information provided from screening questions or from the lead generator and then makes the initial contact with the customer and conducts further screening as required.

Participant Screening

Delivering energy efficiency services to the multi-family market is challenging because of the many variations in size and construction as well as decision making structures that can occur. There must be a well-defined screening process to identify the program best suited to any particular project.

Prescriptive Whole Building Approach

The Prescriptive Whole Building program under consideration would present both commercial measures and

residential measures to the customer in a single package. All fuels would be considered. The measures will be presented as a menu of options that would be implemented as a package and result in a minimum of 20% savings beyond Code. The Program Expeditor would support the customer in selecting the package of measures best suited to their individual energy efficiency goals for the project. Modeling would not be required to implement the program, as deemed savings would be determined based on modeling prototype buildings, as was done with the Advanced Buildings program developed by the New Buildings Institute (“NBI”).

Savings would be documented as kWh savings and as therm savings and would be attributed to both the package of measures and each individual measure for ease in reporting the savings by each Program Administrator and, if desired, distributing the savings between residential and commercial program groups, according to the measures implemented.

Technical assistance and engineering studies will be conducted, as needed, for projects implementing custom measures not included in the prescriptive menu.

Integrated Proposal for Energy Efficiency Services

The Program Expeditor will draft a single project proposal that will include measures, other available services, and incentives for both gas and electricity (where applicable). Once the offer has received Program Administrator approval, it will be presented to the participant by the Program Expeditor and any additional staff required to help the customer fully understand the offering. The Program Expeditor will ensure that any additional questions are brought to the appropriate party and will facilitate the communications necessary to respond to the inquiries. The Program Expeditor will collect all supporting documentation required by the Program Administrator to approve the project proposal.

Delivery of Measures and Services

Upon execution of the customer agreement, the Program Expeditor will monitor the progress of construction and notify the Program Administrator to schedule the post-installation inspection. Commissioning services will be supplied as required.

Quality Assurance

Customer satisfaction surveys will be administered to provide additional feedback for the program administrators.

| | |
|----------------------------------|---|
| | <p><i>Additional Program Design Elements for Consideration</i></p> <p>The Program Administrators recognize that proper training for building operators and maintenance staff is a key factor in ensuring that expected savings are realized. As such, the Program Administrators will assess the feasibility of offering incentives for the building owner/manager/designer and/or staff to obtain applicable certifications.</p> <p>For consideration, the stretch code will provide multiple baselines by community throughout the state, which may impact cost-effectiveness of measures. This will be addressed in the general section on codes and standards.</p> |
| <p>Target Market</p> | <p>The target market is multi-family new construction projects that are too “large” to qualify for the ENERGY STAR Homes program and are eight stories or fewer in height. This market was identified based on the physical characteristics of the buildings being addressed, as well as customer segments. It was decided that the ENERGY STAR Homes program should remain intact and would serve as the “lower boundary” defining the new program. Projects that qualify to participate in the ENERGY STAR Homes program, would not qualify for this program. The upper boundary of the program has been defined as projects of eight stories or fewer. Projects larger than this tend to include various use types such as retail and office space and generally have systems similar to large C&I buildings. Based on the data collected during the Workshop, it was observed that customers building in the 4-8 story category more closely resemble those developing ENERGY STAR Homes projects than they resemble C&I developers who generally have more technical design resources available to them. It was observed that by treating 9+ story projects as C&I custom projects, and not as multi-family projects, this segment of developer would have a more consistent experience over their entire portfolio of projects.</p> |
| <p>Marketing Approach</p> | <p>The program will be supported by the statewide energy efficiency marketing effort; however, direct outreach to building developers and designers via trade associations will be used as a cost-effective mechanism for communicating with this population. In addition to the project management duties of the Program Expeditor, individual Program Administrators may choose to include marketing and promotional activities in the Scope of Work (“SOW”) of the Program Expeditor. In any case, it will be important that all marketing collateral have a consistent visual “brand” that is presented across the Commonwealth. Program Administrators with more internal resources to commit to marketing and promotion, may opt out of having the Program Expeditor provide this portion of the SOW.</p> |

| | |
|---------------------------------|--|
| Target End Uses | The program essentially targets, through a whole building approach, the installation of low cost efficiency measures, such as energy efficient lighting upgrades, high performance HVAC systems and DHW saving devices. |
| Recommended Technologies | Technologies to be evaluated for inclusion in the final program, include, but are not limited to: <ul style="list-style-type: none"> • Installation of energy efficient lighting upgrades & controls • Installation of new ENERGY STAR-qualified refrigerators and dishwashers • Domestic electric hot water saving devices, such as low flow showerheads, aerators, and pipe wrap • High efficiency HVAC systems • Increased levels of insulation • High performance windows • Duct Sealing • ECM Motors • Solar DHW and Solar Heating, and other renewable technologies |
| Financial Incentives | The Program Administrators will be evaluating various incentive structures and incentive levels to encourage increased participation and deeper savings. Specifically, incentives will be developed for the measure packages described above. In addition, the following options will be assessed by the Program Administrators and the Consultant: <ul style="list-style-type: none"> • Offering incentives for soft costs such as technical assistance and owner/operator training • Providing milestone payments to address financial barriers |
| Delivery Mechanism | Program design and implementation will remain the responsibility of the Program Administrators. Collectively the Program Administrators will form a MSEC which will be responsible for program oversight and promoting continuous improvement/best practices with regard to the multi-family market to insure a consistent customer |

| | |
|---|--|
| | <p>experience across service territories.</p> <p>As stated in the Program Design section, the Program Expeditor role will be key to the delivery of this fully integrated program. The role was specifically created to ensure a seamless customer experience for participants regardless of the fuels, rates, and service territories involved in a project. The Program Expeditor will be responsible for facilitating the delivery of program services as well as act as the conduit through which questions and concerns are funneled to ensure that participants are not required to directly contact multiple parties during the project lifecycle. A comprehensive scope of work will be prepared for the Program Expeditor and a vendor will be selected via a competitive bidding process.</p> |
| Joint Program Administrator Enhancements Planned for 2010-2012 | N/A |
| Sponsor Specific Elements | <p>Individual Program Administrators are encouraged to conduct pilot programs designed to allow for the evaluation of alternative program designs or specific technologies, especially those that encourage deeper savings. Findings from these pilots will be shared with the MSEC and will be assessed to determine if enhancements to the current program design can be made based on the results of the pilots. NSTAR Electric is currently conducting a pilot program which may serve as the foundation for the statewide program.</p> |
| Three-Year Deployment | <p>The multi-family program re-design effort is expected to design a platform for gas and electric integration that may be adopted, or modified as required, by other programs. This endeavor, combined with the inherent complexities in serving this “hard to reach” market, will require program planning to extend beyond the October 2009 timeframe. Specifically, the Program Administrators are currently planning to complete the program design and develop the scope of work for the Expeditor services by the end of 2009. To provide transparency for the Council between July and December, the Program Administrators will provide a progress report in the October 2009 filing. The completed program design is expected to be submitted to the Council by December 2009. In the event, however, that some issues remain outstanding on December 31, 2009, the Program Administrators will include the program design in its current state and submit to the Council milestone completion dates for the remaining work.</p> |

| | | | |
|--------------------------------------|--|--|--|
| Three-Year Deployment (cont.) | Provided below is the roadmap for both the completion of the program design and program implementation. | | |
| | PHASE I – PROGRAM PLANNING | | |
| | Task Description | Completion Date | Deliverable |
| | 1. Identify Eligible Measures and Establish Incentives | 10/31/09 | |
| | <ul style="list-style-type: none"> Create measure packages for cost-effectiveness screening and establish incentive structures and levels that encourage participants to achieve deeper savings | 10/31/09 | Set of measure packages and corresponding incentives |
| | 2. Prepare a draft scope of work for the Program Expedito services | 10/31/09 | Draft scope of work for Program Expedito Services |
| | 3. Establish PA protocols for budgeting and expense tracking under new “meter/rate” blind model | 10/31/09 | Discussion in the October filing in the Budget section describing assumption used in the budgeting process |
| | 4. Develop detailed program delivery model | 12/31/09 | |
| | <ul style="list-style-type: none"> Document detailed roles and responsibilities for each market actor required to support the program design. | 12/31/09 | Matrix including market actors along with their roles and responsibilities. |
| | <ul style="list-style-type: none"> Develop process flow documentation illustrating the customer experience and the interactions between other key market actors including the PAs, designers, and technical assistance vendors. | 12/31/09 | Process flow |
| 5. Develop Marketing Plan | 12/31/09 | Marketing Plan including support provided by statewide marketing effort as well as additional communications to be funneled through trade organizations within the | |

| | | | |
|---|--|---|---|
| Three-Year Deployment (cont.) | | | multi-family sector. |
| | PHASE II – PROGRAM IMPLEMENTATION | | |
| | Task Description | Completion Date | Deliverable |
| | 1. Conduct training for PA and vendor staff | 2010 | Documented completion of this task |
| | 2. Implement Marketing Plan | 2010 | Marketing materials and schedule for delivery |
| | 3. Program Implementation | 2010 | Notification of program launch |
| 4. Monthly Multi-family Statewide Executive Committee Meetings | Ongoing | Meeting notes distributed to all participating Program Administrators | |
| PHASE III – PROGRAM ASSESSMENT | | | |
| Task Description | Completion Date | Deliverable | |
| 1. Multi-family Statewide Executive Committee review of program successes and lessons learned with results feeding back into modifications to the program design as required. | 2011- 2012 | Narrative to be included in annual PA plan updates. | |
| Special Notes | <p>To provide a fully integrated energy efficiency offering, the program design is being developed by a cross-functional team including the Consultants and Program Administration staff representing gas and electric fuels, with experts from the both the residential and C&I sectors. To best utilize the expertise of each member of the team, the following subgroups have been formed.</p> <p>The Technical subgroup is responsible for identifying the end-uses and associated technologies that are appropriate for the multi-family market. This sub-group is also responsible for developing cost-effective measure packages and the associated incentives intended to achieve greater participation and deeper savings.</p> <p>The Evaluation subgroup is charged with building on the success of the April 2009 multi-family workshop to obtain a greater understanding of the “market rate” sector. This will assist the Program Administrators in developing strategies to overcome market barriers and thus achieve increased participation and deeper savings. To this end, the Program Administrators have contracted with Nexus Market Research to conduct focus groups</p> | | |

| | |
|--|---|
| <p>Special Notes (cont.)</p> | <p>which are scheduled for July 2009. The findings from the focus group will be included in the October filing. Nexus will also be conducting “literature search” to identify successful programs across the country and then follow-up with in-depth interviews with the administrators of these programs. This information will inform the decisions made as the Program Administrators further develop the Multi-family program design.</p> <p>Additionally, the Program Administrators are participating in pertinent webinars sponsored by organizations such as the AESP and ESource. Two recent or upcoming sessions are listed below:</p> <ul style="list-style-type: none"> • “50 Homes in One: Multi-family Efficiency Programs”, on July 8, 2009, with speakers from Conservation Services Group, Wisconsin Energy Conservation Corp., Cambridge Energy Alliance, Pacific Gas & Electric, Commonwealth Edison, and NYSERDA. This program is being sponsored by ESource. • “Serving the Multi-family Market: New Construction to Existing Buildings to Policy Programs” on August 6, 2009 with speakers from the Wisconsin Energy Center, NYSERDA and the Hescong Mahone Group. This program is being sponsored by AESP. <p>The preceding program description is designed to support the successful attainment of the Green Communities Act energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This program design is intended to address a number of applicable Council priorities including:</p> <ul style="list-style-type: none"> • “The PAs are encouraged to define “multifamily” as a building with more than four units”. <ul style="list-style-type: none"> ○ The target market for this program is a building with five or more units. • “The PAs are encouraged to work in conjunction with the Consultant to determine how to implement a program that from a customer’s perspective will be blind to whether building meters are commercial or residential”. <ul style="list-style-type: none"> ○ Participants will have access to incentives for all cost-effective measures offered through the program regardless of billing rate. |
|--|---|

**Special Notes
(cont.)**

- “The PAs are encouraged to work in conjunction with the Consultant to determine how to ensure that customers participating in the Multi-family Initiative need to fill out only one application for a given multi-family property and be required to interact with only one utility-related service provider or partner. For purposes of the multifamily program, the PAs are encouraged to define “property” as all buildings within a given property, regardless of the number of meters on that property
 - The Program Expeditor will take the information necessary for the customer to apply for all eligible program services, so there will be no need for the customer to contact multiple parties to initiate a request.
 - The term “property” will not be limited to individual buildings, but rather can mean, where appropriate, a group of buildings.
- “The PAs are encouraged to develop mechanisms, including outreach and education to landlords to demonstrate the benefits of undertaking energy efficiency and provide equitable sharing of the costs and benefits of energy efficiency improvements”.
 - The marketing strategy for this program will include targeted outreach to the multi-family community.
- “The PAs are encouraged to offer technical assistance in the form of audits, design assistance, commissioning, and training, and cash incentives based on building performance in the Multifamily Initiative”.
 - As stated above, the program includes technical assistance to evaluate custom measures.
- “PAs are encouraged to examine the experience of NYSERDA and other states’ multifamily programs”.
 - The Massachusetts Program Administrators held a conference call in April 2009 with NYSERDA and their Program Administrator to gain a better understanding of their delivery model.
 - In preparation for the multi-family workshop, the facilitator conducted best practice research and presented their findings to the workshop participants.
 - In June 2009, the Program Administrators retained the services of a market research firm to conduct in-depth telephone interviews pertaining to multi-family programs across the country.
 - Two up-coming webinars pertaining to multi-family programs will be attended by representatives from the Program Design Working Group.

Low-Income Residential New Construction

| | |
|--|---|
| Primary Objective | To capture lost opportunities, encourage the construction of energy-efficient homes, and drive the market to one in which new homes are moving towards net-zero energy. |
| Program Inception | Since 1998, Program Administrators have included low-income new construction into the residential low-income new construction. |
| 2010-2012 Program Goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | Joint |
| Program Design | <p>The Program Administrators continue their strong commitment to a comprehensive whole-house approach for the Massachusetts New Homes with ENERGY STAR Program. The program is committed to achieving both a broader market penetration of energy-efficient homes as well as deeper energy savings where possible. The Program Administrators strive to retain participating builders and recruit new ones.</p> <p>Homebuilders must target ENERGY STAR certification for all homes submitted to the program. However, the program will also provide incentives for CODE Plus (a level above Massachusetts State Code but shy of the ENERGY STAR certification standards) as an avenue for broader reach as an entrée to ENERGY STAR. Direct installation of ENERGY STAR-qualified CFLs in appropriate hard wired sockets, on-site training, and a final verification inspection is required for all homes participating in the program.</p> <p>All projects four units and fewer will be identified as single family, and all projects five units and greater will be classified as multi-family. Buildings that are five stories or fewer that are permitted under the residential use group are eligible to participate in the program and to be certified as an ENERGY STAR-qualified Home.</p> <p>Mixed-use (Residential/C&I) Buildings may participate if they are permitted in the commercial use group as long as: (1)</p> |

| | |
|--------------------------------------|--|
| <p>Program Design (cont.)</p> | <p>the entire structure is five stories or fewer and (2) the space conditioning and water heating systems are not shared between the residential and commercial spaces.</p> <p>Additional qualifications for program participation are:</p> <p>ENERGY STAR Certification:</p> <ul style="list-style-type: none"> • ENERGY STAR compliance with a HERS Index of 85 or less for ENERGY STAR Tier I and a minimum modeled improvement over the current Massachusetts Baseline Home/UDRH of at least 30% and 60% respectively for ENERGY STAR Tiers II and III. Three tiers of ENERGY STAR certification will be offered in the 2010 program. The criteria for each tier are listed in the Financial Incentives section. • Meeting the envelope leakage and duct leakage criteria. • Successful completion of a TBC and additional checklists as introduced by the EPA for version III of the national ENERGY HOMES standard. • Meeting the EPA’s ENERGY STAR homes qualifications and/or the most rigorous standard available at the time (see www.energystar.gov/index.cfm?c=new_homes.hm_index). • Program required percentage of CFL installations. <p>Code Plus Certification:</p> <ul style="list-style-type: none"> • Meeting envelope leakage and duct leakage criteria • Program required percentage of CFL installations |
| <p>Target Market</p> | <ul style="list-style-type: none"> • Homebuilders • Contractors • Architects/Designers • Trade allies • HERS Raters • Homebuyers • Realtors • Developers • Low Income and Affordable Housing Developers • Code Officials • Consumers (in the market for new homes and or major renovations) |

| | |
|-------------------------------------|--|
| Marketing Strategy/ Approach | <p>The program will continue to educate homebuilders, consumer, and trade partners regarding the energy saving benefits, and value of ENERGY STAR-qualified homes. Marketing efforts will focus on: homebuilder recruitment, continued training and support, public relations, and the implementation of large scale multi-media advertising campaigns geared toward homebuilders, consumers and trade ally groups. The program will continue to support development of leads through building permit lists in cities and towns throughout the Commonwealth. These lists will be provided to market-based raters to use as prospecting tools. Hosting, sponsoring and attending various trade show exhibitions and homebuilder conferences remain crucial to marketing the program.</p> <p>The program’s multi-media advertising campaign will include vehicles such as: strategic television partnerships with local affiliate or cable programming providers, radio live reads and on-air interviews, print advertising in builder and trade publications, direct marketing via email/fax lists and a heavy online advertising presence which includes comprehensive social media outlets. The program will participate in the new statewide consolidated website that will further promote the program and aid in cross program promotion. There will continue to be heavy emphasis on “earned media” and editorial PR involvement to ensure market penetration and an increased program capture rate. In addition, individual Program Administrators will use targeted marketing as needed to meet program participation and spending goals.</p> |
| Target End Uses | <ul style="list-style-type: none"> • ENERGY STAR-qualified heating and cooling systems, lighting, appliances and windows • Increased levels of insulation using better materials <i>i.e.</i>, blown in and/or foam board • Improved construction techniques to minimize air leakage, duct leakage, infiltration, and heat loss • Improved HVAC installation techniques and guidelines • Incorporate mechanical ventilation • Renewable ready-PV/Solar Thermal |
| Recommended Technologies | <ul style="list-style-type: none"> • ENERGY STAR-qualified heating and cooling systems, lighting, appliances and windows • Increased levels of insulation using better materials, <i>i.e.</i>, blown in and/or foam board • Improved construction techniques to minimize air leakage, duct leakage, infiltration, and heat loss • Improved HVAC installation techniques and guidelines • Incorporate mechanical ventilation • Renewable ready-PV/Solar Thermal |
| Financial | <p>Incentive levels may be adjusted to respond to market conditions. Current levels are shown in the table below. In</p> |

| | |
|-------------------|--|
| Incentives | <p>addition, free ENERGY STAR-qualified CFL products are provided for each home. Participating homes are currently eligible for the following incentives which the program processes in addition to base incentives.</p> <p>This program will coordinate with other programs such as MassSAVE, GasNetworks, and CoolSmart. Please refer to those other filing sections for specifics.</p> <ul style="list-style-type: none"> Income eligible participants receive \$100 incentive for an ENERGY STAR-rated dishwasher and refrigerator. |
|-------------------|--|

| Package | Requirements | Single-Family Incentive^[1] | Multifamily Incentive^[2] | | |
|-----------------------|--|--|--|----------------------|-------------------|
| | | | 5-99 units | 100-199 units | 200+ units |
| CODE Plus | 6 ACH CFM 50, 8 percent duct leakage | \$325 | \$225.00 | \$225.00 | \$225.00 |
| ENERGY STAR | ENERGY STAR compliance with a minimum HERS Index of 85 or less | \$750 | \$650.00 | \$500.00 | \$350.00 |
| ENERGY STAR II | ENERGY STAR compliance with a minimum HERS Index of 85 or less and 30% improvement or better over the Massachusetts UDRH | \$1,250 | \$1,150.00 | \$850.00 | \$550.00 |

| | | | | | |
|------------------------|--|------------|--------------------------|--------------------------|--------------------------|
| ENERGY STAR III | ENERGY STAR compliance with a minimum HERS Index of 85 or less and 60% improvement or better over the Massachusetts UDRH | \$8,000.00 | \$4000.00 ^[3] | \$3000.00 ^[3] | \$2000.00 ^[3] |
|------------------------|--|------------|--------------------------|--------------------------|--------------------------|

^[1] Starting in 2010 the program will define a single-family home as a structure that contains between one and four units.

^[2] Starting in 2010 the program will define a multi-family home as a structure that contains five or more units.

^[3] Energy Star III Multifamily projects will be reviewed for final fee structure, listed are the maximum incentives paid by Program Administrators.

| | |
|------------------------------------|--|
| Delivery Mechanism | <p>The program is administered by a Program Administrator in each service territory and coordinated regionally through the JMC. The JMC, through a competitive bid process, choose an implementation contractor to oversee the day-to-day operations of the program statewide. The contractor is responsible for tracking and reporting program activity to the respective JMC Program Administrators. The contractor will also conduct quality assurance/quality control of field activities and advise the JMC on necessary program changes and enhancements. Throughout the planned timeframe, the JMC plans to continuously strive towards a market-based network of trained contractors who offer energy-efficiency and rating services to homebuilders for a fee. The Program Administrators may consider continuing to support rater fees for low-income projects in their service territories.</p> <p>The program recognizes the new emphasis on training necessary to make this program successful, as well as to support workforce development efforts through the Green Jobs Act. The program will support training of increased frequency and greater depth in the fundamentals of building science and the latest available technologies, including those for air sealing and insulation. The contractor will be a HERS provider of last resort to help new raters become established as part of the open market structure.</p> |
| Joint Program Administrator | <ul style="list-style-type: none"> The Program Administrators are currently working together to identify a way to provide complete support to multi-family structures five stories or fewer. The Program Administrators will consider allowing master metered |

| | |
|---|--|
| <p>Enhancements Planned for 2010-2012</p> | <p>electric buildings to participate in the program, as they are ineligible currently.</p> <ul style="list-style-type: none"> • The 2009 major renovation pilot projects being conducted by the Program Administrators will provide further understanding for the JMC to garner greater savings by administering a Major Renovation Program during 2010-2012. A plan for a consistent unified program--either within RCS or within new construction--will be part of the October filing for the 2010-2012 Three-Year Plan. • Support code amendments that add to energy efficiency • The program will promote building science technologies which help interested homebuilders construct zero energy homes. • Support workforce development efforts through Green Jobs Act by encouraging new raters to enter into the marketplace. |
| <p>Program Administrator-Specific Elements</p> | <p>To be completed for the October Filing, if applicable.</p> |
| <p>Three-Year Deployment/Road Map</p> | <p>For new construction, the efforts to achieve both deeper savings and gain broader market penetration will continue through multiple tiers of participation, one of which continues to push homes closer to net zero energy. These goals are daunting given the downturn in the economy and the resultant slow down of the building market. However, the program will have significant resources dedicated to “putting feet on the ground” to promote the program and support participating builders and other key stakeholders in the residential new construction market.</p> <p>For the three-year deployment, the Program Administrators will focus on:</p> <ul style="list-style-type: none"> • Expansion of the current HERS rater network of nine competing companies • Moving closer to a fully market-based program where Program Administrators reduce and ultimately phase out subsidies to raters shifting those monies directly to builders who, in turn, will negotiate directly with raters for associated fees to rate homes • Expansion of the base of participating builders • Continued expansion of existing and new market allies • Training the market effectively in order to stay ahead of the introduction of more stringent building codes as well as new versions of the national ENERGY STAR Homes which will be significantly harder to achieve • Collaboration with Green Communities through technical support • Continued ramp up of consumer awareness |

| | |
|---|---|
| Three-Year Deployment/Road Map (cont.) | <p>The Program Administrators, in conjunction with the Consultants and LEAN, will be performing an assessment of the multi-family programs in Massachusetts. Because the target market for this program includes multi-family customers, the results of the statewide assessment may apply here. For low-income multi-family projects, the assessment will include the evaluation of strategies to serve low-income multi-family buildings in a manner that is fuel-blind, meter-blind, and integrates low-income, residential, and commercial programs, as appropriate, with, a minimal or no co-payment pending a review of the budget impacts by each Program Administrator.</p> |
| Special Notes | <p>The preceding program description is designed to support the successful attainment of the Green Communities Act’s energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This program design is intended to address a number of applicable Council priorities including:</p> <ul style="list-style-type: none"> • Coordinating with other programs for outreach communication and marketing strategy • Performance-based incentive structure, Third Tier • Comprehensive program delivery through Joint Management Committee integrating gas and electric Program Administrators in a fuel-blind nature • Through tier development and refinement informed by the 2008-09 Zero Energy Challenge, the JMC will look to further promote near zero energy homes • Coordinating with other programs on integrated website • Market based HERS Rater Model, Trainings and Technical Assistance |

Residential Low-Income Electric Single Family Program

| | |
|--------------------------------|--|
| Primary Objective | To deliver energy efficient products and services directly to the homes of eligible low-income customers to help them lower their energy bills to achieve deeper and broader energy savings. |
| Program Inception | <p>Some Program Administrators' low-income programs date back to the early nineties.</p> <p>Since 1998, Program Administrators have been working with LEAN to improve the low-income program and increase funding. From this emerged the Best Practices Working Group, a vehicle to provide a more coordinated statewide low-income program and to ensure correct installation techniques for the program.</p> <p>Working with the Best Practices Working Group, the Program Administrators have broadly expanded the measures offered in the program and have arranged for contractor training to implement such measures. A 2002 Low-Income Market Research Study recommended the following strategies to minimize barriers: statewide marketing of programs through a central source; extend outreach to more areas such as health services, social service agencies, and rental offices at apartment complexes; expand marketing efforts to regional and local newspapers; and offer marketing in languages not currently available.</p> <p>To address some of these barriers, the program has: 1) broadened from Program Administrators and Low-income Weatherization and Fuel Assistance Program Network ("NETWORK") agencies' outreach and mailings to a statewide coordinated approach to help increase awareness and customer education regarding technologies and benefits including local media; 2) increased the guidelines for participation to include households with annual incomes at or below 60% of the state median income levels to assist customers with limited funds the cost of energy saving improvements; and 3) increased efforts to serve low-income renters.</p> |
| 2010-2012 Program Goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program | This program is offered jointly with each Program Administrator having individual administrative processing. |

| | |
|--|--|
| Administrator-Specific Offering | |
| Program Design | <p>The Program Administrators, in collaboration with LEAN, state organizations such as the DHCD and Low-income Weatherization and Fuel Assistance Program Network (“Network”), make up the Best Practices Working Group. The working group’s objective is to collaborate and coordinate on all aspects of the low-income program, including but not limited to planning, delivery, implementation, standardization, education, marketing, training, cost effectiveness, evaluation, and quality assurance.</p> <p>This program piggybacks on the current DHCD low-income energy efficiency program. Once customers are deemed eligible, they will receive an in-home energy assessment from their local Network agency. The Network agency will then arrange for weatherization and other services to be installed by a qualified contractor. Savings will be deepened by installing additional efficiency measures, to the extent cost-effective, such as indirect hot water heaters with heating systems, exterior doors, front load clothes washers, smart strips, and repairs to make efficiency measures possible. Other measures will be investigated, such as solar hot water heaters, insulating window shades, and usage monitoring systems. Savings will be distributed more broadly by treating additional homes, including mobile homes (including contractor training if needed) and rental homes where tenants pay for heat. Relatedly, a change in rules as a result of the Recovery Act makes it possible to spend more federal money in each home. As a final step the Network agency will perform a final quality assurance inspection to ensure that all work is performed to program guidelines.</p> <p>Education and information are included in all Program Administrators’ energy efficiency programs. The low-income program plans to develop/improve education materials and material distribution which will include:</p> <ul style="list-style-type: none"> • Customer Education packages: Common leave behinds in customer audit packs • Materials for outreach workers (<i>e.g.</i> hospital intake people, senior centers) • A web link on unemployment website • Other outreach opportunities |
| Target Market | <p>Residential customers living in 1-4 unit dwellings who are at 60 percent of the state median income level. In the case of multi-unit dwellings, 50 percent of the occupants must qualify as low-income in order to be served by the low-income program.</p> |

| | |
|----------------------------------|---|
| | <p>In special cases, where outside grant money can enhance program services, the Program Administrators may approve participation for customers in specific communities at 80 percent of the state median income. Any changes to eligibility will be addressed through the Best Practices Working Group.</p> |
| <p>Marketing Approach</p> | <p>Program Administrators will engage in outreach efforts to notify customers of the availability and value of energy efficiency services. Marketing will consist of contacting, by mail and/or telephone, customers subscribing to the low-income rates who have not received prior energy efficiency services. Direct mail, bill inserts, and literature distributed through social service agencies, government offices, and other networks are also used to market the program. In addition, Program Administrators and low-income advocates are participating in statewide marketing efforts to encourage income-eligible customers to take advantage of discount rates, energy efficiency programs and fuel assistance programs.</p> <p>The program is also being integrated into a unified, statewide website. This website will allow customers to go to one site to find out about all energy efficiency offerings available to them.</p> <p>Outreach and marketing efforts will be expanded to include building relationships with unemployment centers, medical service providers, and other venues that would reach potential income-eligible customers.</p> <p>Marketing efforts will be designed to meet the objectives of reaching more customers (going broader into the customer base, for example by participating in statewide education and marketing efforts) and maximizing energy savings opportunities (going deeper into each home to find ways to save energy, such as by an energy education monitoring approach, with computerized feedback based on actual usage, if such a strategy proves to be cost-effective).</p> |
| <p>Target End Uses</p> | <p>Target end uses include but are not limited to:</p> <ul style="list-style-type: none"> • Comprehensive, whole house approach • Building shell • Heating • Domestic water heating |

| | |
|--|---|
| | <ul style="list-style-type: none"> • HVAC/Mechanical systems • Lighting and Appliances • General waste heat • New technologies and renewables |
| <p>Recommended Technologies</p> | <p>The Program Administrators will continue to work with the Best Practices Working Group to identify new cost-effective energy efficiency services, measures, and technologies that are appropriate to offer to low-income customers. Current measures offered through the low-income program include but are not limited to:</p> <ul style="list-style-type: none"> • Attic insulation • Wall insulation • Pipe insulation • Duct insulation • Air sealing • DHW measures • CFLs /Low mercury CFLs • Heating system repair and replacement • Major weatherization repairs (<i>e.g.</i>, electrical repairs, and roofs) • Refrigerators • Freezers (PA-specific) • Landlord heating system retirement pilot (PA-specific) • Air conditioners • “Smart” power strips • Health and safety <p>Other technologies to be discussed in the Best Practices working group for future consideration include but are not limited to:</p> <ul style="list-style-type: none"> • Expanded landlord heating system retirement • Exterior doors • LEDs • Solar water heating |

| | |
|---|--|
| Recommended Technologies (cont.) | <ul style="list-style-type: none"> • Green/hypoallergenic products • Window coverings • Mobile home insulation • Super-insulated roofs • Demand response • Other measures determined on a site-specific basis |
| Financial Incentives | <p>In all but exceptional cases, low-income products and services are directly installed and delivered with no co-payment from participating customers, subject to local Network agency discretion.</p> |
| Delivery Mechanism | <p>Program Administrators, when appropriate, use a lead vendor to administer the program. The Program Administrators work closely with their lead vendor and/or respective Network agencies on all aspects of the program design and implementation. The lead vendor/Network agencies are responsible for providing the actual weatherization services to the customer. The lead vendor/Network agencies work with installation contractors to ensure that the proper program guidelines are enforced. These agencies are also responsible for ensuring that the customer meets the eligibility requirements for program participation and providing the lead vendor and/or Program Administrator with the required documentation of all work performed.</p> |
| Joint Program Administrator Enhancements Planned for 2010-2012 | <p>In order for the low-income program to increase the number of program participants and achieve deeper energy savings over the next three years, the Program Administrators will:</p> <ul style="list-style-type: none"> • Work with LEAN, DHCD, and Network agencies to increase qualified contractor participation in the program through training and workforce development. • Continually review and evaluate new measures and technologies through the Best Practices Working Group process • Leverage all applicable revenue streams available to enhance services • Broaden program participation through coordinated marketing and outreach efforts • Deepen efficiency penetration consistent with our comprehensive, whole house approach |

| | |
|--|---|
| Program Administrator-Specific Elements | To be provided with October 2009 Filings. |
| Three-Year Deployment/Road Map | <p>Training and workforce development will be accomplished by the Program Administrators working with LEAN, DHCD, and CAP agencies to increase the number of qualified contractors, energy auditors, and administrative staff.</p> <p>The Best Practices working group process will continually review and evaluate new measures and technologies. See “Recommended Technologies” above.</p> <p>Program Administrators will leverage all applicable revenue streams available to enhance services.</p> <p>Through marketing and outreach efforts, the Program Administrators will attempt to broaden program participation.</p> <p>Program Administrators will attempt to deepen efficiency penetration consistent with a comprehensive, whole-house approach.</p> |
| Special Notes | <p>The program will address several of the Council Priorities including:</p> <ul style="list-style-type: none"> • Seamless Delivery. By coordinating Program Administrator programs with the U.S. Department of Energy and the Department of Health and Human Services programs administered by DHCD, as well as other programs implemented by the Network that implement the Program Administrator and DHCD programs, Program Administrators assure that a common set of programs is available to all low-income customers and that the programs are seamless from the viewpoint of customers. Program Administrators' programs are also coordinated with each other, particularly across fuels. Nevertheless, experimentation and pilot programs implemented in particular territories allow for the development of improvements that are monitored by the Best Practices Working Group for possible adoption statewide. • Best Practices. The Program Administrators will continue to work in coordination with LEAN at the Best Practice Working Group meetings for successful program development. The Best Practice Working |

**Special Notes
(cont.)**

Group's objective is to collaborate and coordinate on all aspects of the low-income program including ongoing planning, delivery, implementation, marketing, training, evaluation and quality assurance. In addition, by piggy-backing on the DHCD weatherization program, the Program Administrators will maximize seamless delivery to the customer without duplication or complexity.

- **Training.** The Program Administrators will continue to explore common protocols in auditor and contractor training development and outreach for all areas identified through the Best Practices Working Group. The quality standards for qualified contractors will be consistent with the Massachusetts Weatherization Assistance Program Technical Manual, which was developed as a working document to be used in conjunction with the Northeast Weatherization Field Guide. The Guide provides comprehensive technical guidelines on appropriate weatherization protocols and techniques. In addition, the Program Administrators will provide qualified auditors and contractors in-field training and materials related to energy efficiency technologies and help expand outreach efforts.
- **Quality Control.** All work is rigorously inspected to ensure that high quality materials and installation practices are used. The Program Administrators, in coordination with the Best Practices Working Group, will work to maintain this high level of oversight.
- **Pilots.** The Best Practices Working Group is continually looking for new and innovative technologies and measures to help low-income customers save energy. To that end, the Program Administrators will consider piloting, monitoring, and evaluating new technologies/measures to determine if a full program rollout is justified.
- **Deeper/Broader.** Through the comprehensive, whole-house approach, all available cost-effective energy efficiency measures offered through the program will be considered and, where feasible (dependent on health and safety as well as overall program cost effectiveness), implemented in order to attain greater savings.

The Program Administrators are aware that significant amounts of short-term economic stimulus funds may be made available to help underwrite low-income energy efficiency efforts. The levels and possible effect of this potential capital infusion is not yet known, but this issue will be re-visited by the Program Administrators, LEAN and the Council as final, accurate information becomes available.

Low-Income Residential Multi-Family Retrofit

| | |
|--|---|
| Primary Objective | To deliver energy efficient products and services directly to the homes of eligible low-income customers living in multi-family homes to help lower their energy bills. Multi-family is defined as five units or more. |
| Program Inception | Some utilities' low-income programs date back to the early nineties. Since 1998, Program Administrators have been working with the Best Practices Working Group to provide a coordinated program. |
| 2010-2012 Program Goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | This program is offered jointly with each Program Administrator conducting individual administrative processing. |
| Program Design | <p>The Program Administrators, in collaboration with LEAN, state organizations such as the DHCD, and Community Action Program (“CAP”) agencies, make up the Best Practices Working Group. The working group’s objective is to collaborate and coordinate on all aspects of the low-income program, including but not limited to, planning, delivery, implementation, standardization, education, marketing, training, cost effectiveness, evaluation, and quality assurance.</p> <p>This program piggybacks on the current DHCD low-income energy efficiency program.</p> <p>Education and information are included in all Program Administrators’ energy efficiency programs. The low-income program plans to develop/improve education materials and material distribution which will include:</p> <ul style="list-style-type: none"> • Customer Education packages: Common leave behinds in customer audit packs • Materials for landlords, property managers, and property management personnel |

| | |
|-------------------------------------|--|
| Target Market | <p>Residential customers living in dwellings with five or more units who are at 60 percent of the state median income level; as well as landlords and property managers of these buildings.</p> <p>Fifty percent of the occupants must qualify as low-income in order to be served by the low-income program. In special cases, where outside grant money can enhance program services, the Program Administrators may approve participation for customers in specific communities at 80 percent of median income. Any changes to eligibility will be addressed through the Best Practices Working Group.</p> |
| Marketing Strategy/ Approach | <p>The Program Administrators will engage in outreach efforts to notify customers of the availability and value of energy efficiency services. Marketing will consist of contacting, by mail and/or telephone, customers subscribing to the low-income rates who have not received prior energy services. Direct mail, bill inserts, and literature distributed through social service agencies, government offices, and other networks are also used to market the program. Program Administrators will use their relationship with Public Housing Authorities (“PHAs”) and other low-income property managers to market the benefits of the program.</p> <p>In addition, Program Administrators and low-income advocates are participating in state-wide marketing efforts to encourage income-eligible customers to take advantage of discount rates, energy efficiency programs, and fuel assistance programs.</p> <p>The program is also being integrated into a unified, statewide website. This website will allow customers to go to one site to find out about all energy efficiency offerings available to them. Marketing efforts will be designed to meet the objectives of going broader and deeper to maximize energy savings.</p> |
| Target End Uses | <p>Target end uses include but are not limited to:</p> <ul style="list-style-type: none"> • Comprehensive, whole house approach • Building shell • Heating • Domestic water heating • HVAC/Mechanical systems • Lighting and Appliances • General waste heat • New technologies and renewables |

| | |
|---------------------------------|---|
| Recommended Technologies | <p>The Program Administrators will continue to work with the Best Practices Working Group to identify new cost-effective energy efficiency services, measures, and technologies that are appropriate to offer to low-income multi-family customers. Current measures offered through the low-income program include, but are not limited to:</p> <ul style="list-style-type: none">• Attic insulation• Wall insulation• Pipe insulation• Duct insulation• Air sealing• Domestic hot water measures• CFLs• Heating system repair and replacement• Refrigerators• Freezers (PA-specific)• Landlord heating system retirement pilot (PA-specific)• Air conditioners• Health and safety <p>Other technologies to be discussed in the Best Practices working group for future consideration include but are not limited to:</p> <ul style="list-style-type: none">• Expanded landlord heating system retirement• Major weatherization repairs (<i>e.g.</i>, electrical repairs, roofs, etc.)• Exterior doors• Low mercury light• LEDs• Power Smart strips• Low-Hg CFLs• ENERGY STAR clothes washers• Solar hot water heating• Green/hypoallergenic products |
|---------------------------------|---|

| | |
|---|--|
| Recommended Technologies (cont.) | <ul style="list-style-type: none"> • Window coverings • Motors • HVAC • Temperature and building controls • Other measures as determined on a site-specific basis |
| Financial Incentives | <p>In all but exceptional cases, low-income products and services are directly installed and delivered with no co-payment from participating customers, subject to local CAP agency discretion.</p> |
| Delivery Mechanism | <p>Program Administrators, when warranted, use a lead vendor to administer the program. The Program Administrators work closely with their lead vendor and/or respective CAP agencies on all aspects of the program design and implementation. The lead vendor/CAP agencies are responsible for providing the actual weatherization services to the customer. The lead vendor/CAP agencies work with installation contractors to ensure that the proper program guidelines are enforced. These agencies are also responsible for ensuring that the customer meets the eligibility requirements for program participation and providing the lead vendor and/or Program Administrator with the required documentation of all work performed.</p> |
| Joint Program Administrator Enhancements Planned for 2010-2012 | <p>In order for the low-income program to increase the number of program participants and achieve deeper energy savings over the next three years, the Program Administrators will:</p> <ul style="list-style-type: none"> • Work with LEAN, DHCD, and NETWORK agencies to increase qualified contractor participation in the program through training and workforce development. • Continually review and evaluate new measures and technologies through the Best Practices Working Group process • Leverage all applicable revenue streams available to enhance services • Broaden program participation through coordinated marketing and outreach efforts • Deepen efficiency penetration consistent with our comprehensive, whole-house approach |
| Program Administrator-Specific Elements | <p>To be completed for the October Filing, if applicable</p> |

| | |
|--|---|
| <p>Three-Year Deployment/Road Map</p> | <p>Training and workforce development will be accomplished by the Program Administrators working with LEAN, DHCD, and CAP agencies to increase the number of qualified contractors, energy auditors, and administrative staff.</p> <p>The Best Practices Working Group process will continually review and evaluate new measures and technologies. See “Recommended Technologies” above.</p> <p>Program Administrators will leverage all applicable revenue streams available to enhance services. Through marketing and outreach efforts the Program Administrators will attempt to broaden program participation.</p> <p>Program Administrators will attempt to deepen efficiency penetration consistent with their comprehensive, whole-house approach.</p> <p>The Program Administrators, in conjunction with the Council’s Consultants and LEAN, where appropriate, will be performing an assessment of the multi-family program in Massachusetts. Because the target market for this program includes multi-family customers, the results of the statewide assessment may apply here. For low-income multi-family projects, the assessment will include strategies for serving low-income multi-family buildings in a manner that is fuel-blind, meter-blind, and integrates low-income, residential and commercial programs, as appropriate, with minimal or no co-payment (pending a review of the budget impacts by each Program Administrator).</p> |
| <p>Special Notes</p> | <p>The preceding program description is designed to support the successful attainment of the Green Communities Act’s energy efficiency investment goals and environmental benefits. Further, it is the intent of the Program Administrators to support the Council and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities document. This program design is intended to address a number of applicable Council priorities including:</p> <ul style="list-style-type: none"> • Seamless Delivery. By coordinating Program Administrator programs with the U.S. Department of Energy and the Department of Health and Human Services’ programs administered by DHCD, as well as other programs implemented by the Network that implements the Program Administrator and DHCD programs, Program Administrators assure that a common set of programs is available to all low-income |

**Special Notes
(cont.)**

customers and that the programs are seamless from the viewpoint of customers. Program Administrators' programs are also coordinated with each other, particularly across fuels. Nevertheless, experimentation and pilot programs implemented in particular territories allow development of improvements that are monitored by the Best Practices Working Group for possible adoption statewide.

- **Best Practices.** The Program Administrators will continue to work in coordination with LEAN at the Best Practice Working Group meetings for successful program development. The Best Practice Working Group's objective is to collaborate and coordinate on all aspects of the low-income program including ongoing planning, delivery, implementation, marketing, training, evaluation, and quality assurance. In addition, by piggy-backing on the DHCD weatherization program, the Program Administrators will maximize seamless delivery to the customer without duplication or complexity.
- **Training.** The Program Administrators will continue to explore common protocols in auditor and contractor training development and outreach for all areas identified through the Best Practices Working Group. The quality standards for qualified contractors will be consistent with the Massachusetts Weatherization Assistance Program Technical Manual, which was developed as a working document to be used in conjunction with the Northeast Weatherization Field Guide. The Guide provides comprehensive technical guidelines on appropriate weatherization protocols and techniques. In addition, the Program Administrators will provide qualified auditors and contractors in-field training and materials related to energy efficiency technologies and help expand outreach efforts.
- **Quality Control.** All work is rigorously inspected to ensure high quality materials and installation practices are used. The Program Administrators, in coordination with the Best Practices Working Group, will work to maintain this high level of oversight.
- **Pilots.** The Best Practices Working Group is continually looking for new and innovative technologies and measures to help low-income customers save energy. To that end, the Program Administrators will consider piloting, monitoring, and evaluating new technologies/measures to determine if a full program rollout is justified.
- **Broader/Deeper.** Through the comprehensive, whole-house approach, all available cost-effective energy efficiency measures offered through the program will be considered and, where feasible

| | |
|----------------------------------|--|
| Special Notes (cont.) | <p>(dependent on health and safety as well as overall program cost effectiveness), implemented in order to attain greater savings.</p> <p>The Program Administrators are aware that significant amounts of short term economic stimulus funds may be made available to help underwrite low-income energy efficiency efforts. The levels and possible effect of this potential capital infusion is not yet known, but this issue will be re-visited by the Program Administrators, LEAN and the Council as final, accurate information becomes available.</p> |
|----------------------------------|--|

9. *C&I Program Descriptions*

The following C&I overview and Program Descriptions have not changed from the April 30, 2009 version of the Plan. The Program Administrators contemplate revisions to these program descriptions over the next several months, however, and have worked diligently with the Council and its Consultants to update these programs in order to enable even deeper and broader savings levels, with an initial focus on achieving deeper savings and then expanding to broader implementation. A C&I Roadmap of Further Actions based on these productive, collaborative discussions is presented in Appendix E of this Plan.

C&I Retrofit Program for Existing Buildings

| | |
|----------------------------------|---|
| Primary Objective | Focus on energy efficiency opportunities associated with existing mechanical, electrical, and thermal systems in commercial, industrial, governmental and institutional buildings by providing high efficiency options for retrofitting equipment that continues to function, but is outdated, energy inefficient, and can be replaced with a premium efficient product. As part of these efforts, determining specific peak load management plans to enable participants to maximize time-based opportunities to manage their electric and thermal loads will be developed. This program also assists occupants in improving their operation and maintenance practices. |
| Initially Offered | The Program Administrators’ portfolios of programs have included retrofit services since 1988. Programs have evolved and improved over time using a combination of strategies to successfully address customer barriers in this market. The attributes of program services include the recognition that better building performance begins with providing customers with solutions that result in better peak and overall energy management, incentives to drive customers to replace existing inefficient equipment and systems, and a means to measure the results of these replacements through effective commissioning practices. The program has been responsive to changes in available new technology and standards for higher performance practices. The program has incorporated more comprehensive solutions and incentive structures that promote higher customer participation and adapted offerings to meet the needs and expectations of customers to reduce costs. In addition, the infrastructure of practitioners who influence the selection and replacement, and peak load management of mechanical, electrical and gas equipment and systems—contractors, trade allies and suppliers—has grown. Lessons learned have spawned a number of new initiatives that are both sector and customer focused including initiatives targeting cities and towns, schools, and industrial processes with high performance options. |
| 2010 – 2012 Program Goals | To be provided with October 2009 filings. |
| 2010 - 2012 Budget | To be provided with October 2009 filings. |

| | |
|---|---|
| <p>Joint vs. Program Administrator-Specific Offering</p> | <p>Consistent statewide basic program and services, with individual Program Administrators offering pilots to test the viability of new strategies and options for customers. Pilots under consideration for implementation in 2010 include cost effective methods to improve energy efficiency in retrofit markets, new financing instruments to promote greater access to capital to promote deeper penetration into customer sectors, and incorporating new technologies to accelerate adoption of emerging and promising electric and gas end uses, as well as an increased emphasis to automate loads to maximize the value of time-based energy supply offerings. Detailed information on pilot offerings and budgets will be provided in the October PA-specific plans.</p> |
| <p>Program Design</p> | <p>The program addresses energy efficiency opportunities associated with existing mechanical, electrical and thermal systems in commercial, industrial, governmental and institutional buildings by providing financial incentives, technical assessments, and commissioning, as appropriate, for customers retrofitting outdated and energy-inefficient building equipment and systems. Incentives are tailored to match customer co-payment expectations or abilities to achieve deeper savings in their existing facilities. Technologies must have proven capabilities to provide reliable, long-term energy savings as well as peak load reductions when called upon.</p> <p>Larger buildings with potential for achieving significant savings benefit from the Whole Building Assessment (“WBA”) approach described in more detail below. The program also targets municipal customers and offers options that make it easier for them to participate; specific municipal building options are described in more detail below. The program also considers demand response strategies, renewable energy and CHP opportunities; approaches for addressing these potential opportunities are also described below.</p> <p>WBA is a targeted approach within the existing buildings program designed to attain maximum savings in larger buildings through a detailed technical review and integration of better performing energy consuming equipment and systems. WBA will help commercial and municipal customers with larger buildings assess energy efficiency opportunities, provide them with an integrated and optimized action plan to address identified opportunities and overcome institutional barriers, and provide the technical assistance and incentives required to achieve maximum savings.</p> <p>Customers with qualifying buildings sign a memorandum of understanding (“MOU”) or Letter of Agreement (“LOA”) that commits their interest in implementing a menu of cost-effective energy efficiency and peak load</p> |

| | |
|--------------------------------------|--|
| <p>Program Design (cont.)</p> | <p>reduction strategies identified in an energy assessment report. The in-depth technical assessment includes benchmarking buildings using ENERGY STAR’s Portfolio Manager¹ to analyze energy use data. The assessment also includes a lighting and mechanical all-fuels walk-through audit. This holistic analysis is summarized in a report to the customer. The report details the building’s current energy use, lists and prioritizes energy saving opportunities (both low-cost/no-cost and capital improvements), identifies incentives (both gas and electric) available to bring the plan to action and provides the basis for a jointly-developed action plan to systematically improve the building’s energy performance. In addition, the plan will provide peak load management opportunities to allow participants to consider time-sensitive supply offerings.</p> <p>Customers are also encouraged to enroll their facility staff in the Building Operator Certification Program and other energy education opportunities; Program Administrators pay for a portion of the cost of participating. These offerings help building operators implement low-cost/no-cost recommendations and monitor building operations by reviewing and interpreting Portfolio Manager reports.</p> <p>Results from a process evaluation of completed WBA projects will be available later this spring. This report is expected to illuminate opportunities to increase participation levels and contrast the relative advantages of different approaches.</p> <p>Municipalities are a sector confronted with unique barriers. They are usually capital-constrained, staff-constrained, and their procurement process is not conducive to the vendor-driven process of energy efficiency. Procurement officials sometimes lack familiarity with efficiency options, and requirements for governing body approval of capital budget items make it difficult for municipal officials to identify and act on opportunities to reduce energy costs. Older urban cities and towns with aging facilities tend to have chronically underfunded maintenance budgets and, therefore, defer maintenance. Likewise, government tends to diffuse and dilute responsibility for energy upgrades to the individual department level, while payment of bills often resides at a central finance office. Lastly, there is little incentive for departments to upgrade the energy efficiency of their buildings because the reward for reduced energy bills may simply be a reduced budget in the subsequent year. The cumulative consequence is that these customers often have very outdated and inefficient energy systems. However, because savings per building may be low and transaction costs high, energy service companies have</p> |
|--------------------------------------|--|

¹ http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager.

| | |
|--------------------------------------|---|
| <p>Program Design (Cont.)</p> | <p>little or no incentive to market to these customers.</p> <p>The Green Communities Act provides a new streamlined contracting process that allows cities and towns to sole-source efficiency projects to a Program Administrator, or the Program Administrators’ delivery contractor, for energy efficiency work with a total cost of less than \$100,000. By providing upfront competitive bidding, Program Administrators can provide turnkey services to this sector, which addresses implementation barriers. In addition, enhanced financial incentives coupled with Program Administrator financing options, including on-bill payment, address some of the unique financial barriers to municipal participation in energy efficiency programs and will help leverage municipal budgets to promote deeper savings in participating facilities.</p> <p>The Program Administrators will use direct, targeted outreach to municipalities to ensure they are aware of all energy services and customized assistance available to facilitate participation and will simplify transaction and administrative burdens for municipalities.</p> <p>Renewable Energy: Some existing buildings have potential for incorporating renewable energy options. Vendors conducting audits on existing buildings will perform a preliminary investigation of PV and solar thermal opportunities. Where opportunities are found, the customer will be given information to assist them in further evaluating these opportunities. Solar thermal opportunities may be eligible for custom measure incentives.</p> <p>Governor’s Clean Energy Challenge (“CEC”): The Program Administrators are fully engaged to assist in the delivery of the Clean Energy Challenge. Massachusetts companies that accept the CEC will reduce GHGs from their facilities, be provided a means to reduce their energy and operating costs, and stand to benefit from leadership through exemplary environmental stewardship. The basis of the challenge begins with an on-site whole building energy assessment including energy use benchmarking and the development of a technical study to identify energy use reduction strategies—performed through a review of utility consumption data provided directly by utilities and other vendors. In addition, customers participating in the challenge will be eligible for incentives that cover from 30%-80% of project costs as well as project management assistance to deploy the energy efficiency improvement strategies. The combination of the activities described above, assisted by the Program Administrators, will help customers in the state to not only achieve cost reduction strategies but also reduce their carbon footprint and contribute to the state’s carbon reduction mitigation goals.</p> <p>Demand Response (“DR”): Larger C&I customers will be evaluated for automated DR opportunities and,</p> |
|--------------------------------------|---|

| | |
|--------------------------------------|--|
| <p>Program Design (cont.)</p> | <p>where feasible, identified automated DR opportunities will be incorporated. To maximize demand resource enrollment in the FCM, Program Administrators will work with third party curtailment service providers (“CSP”s) to facilitate the enrollment of as many participating large C&I customers as possible. Program Administrators expect that this approach will provide a more manageable path for customers to participate in the FCM and, therefore, the need for Program Administrators to aggregate these customers should be minimal.</p> <p>Smaller businesses with simple thermostats will be offered DR-enabled thermostats if they agree to participate in potential load curtailment in the future. The DR potential for this customer class will be aggregated and after two years the cost and market penetration impacts of this strategy will be evaluated. The intent and expectation is that this least-cost method of enabling mass market DR will reach a critical mass whereby enrollment into the FCM and energizing the system will be cost effective; DR impacts would be retained by the Program Administrators.</p> <p>Combined Heat and Power (“CHP”) is an attractive offering for customers such as hospitals, thermal intensive industrials, multi-family housing and others with year round thermal use. CHP presents unique challenges as reductions of metered electric loads are offset by increased use of fossil fuels to power the CHP system. Overall energy utilization efficiency is improved through increased utilization of the on-site electric generator’s waste heat. Program Administrators will require a custom analysis and screening of potential CHP opportunities to ensure positive net benefits and a net reduction in green house gases. The eligibility process will be aligned with the Alternative Portfolio Standard (“APS”) process.</p> <p>The program offering will include co-funded technical assistance and \$/kW of installed capacity incentives. The technical assistance will include a feasibility study with a focus on the viability of the thermal load. The incentive will be calculated based on installed capacity of an appropriately sized unit, capped as a percentage of project cost. The gas and electric Program Administrators will equally split the incentive. It is also expected that ongoing metering of the thermal load will be a requirement for an incentive payment.</p> |
| <p>Target Market</p> | <p>The target market is non-residential customers with the potential for achieving annual electric energy savings and trade allies, such as equipment vendors and energy service companies (“ESCOs”).</p> |
| <p>Marketing Approach</p> | <p>A variety of marketing approaches are employed. Extensive one-on-one communication via account executives with end use customers is primarily used to identify opportunities and promote efficiency. These relationships are leveraged considerably along with intimate knowledge and analysis of company data (energy use, demand,</p> |

| | |
|--|--|
| <p>Marketing Approach (cont.)</p> | <p>sector analysis, etc.). Channel partners are another key factor in promoting, identifying, and delivering services to customers. Close relationships are maintained with these partners including door-to-door sales calls, open houses, training, and new product and service demos. These programs are “open” allowing significant flexibility to vendors and customers in determining the most optimal implementation strategy for their particular project.</p> <p>In addition to channel partners, Program Administrators also leverage closer alliances with project expeditors. These are a limited selection of firms that have been chosen through a formal bid solicitation. With these firms, Program Administrators strategically market to specific customers, sectors and/or technologies. While channel partners provide wide spread marketing and customer flexibility, project expeditors allow more targeted, coordinated sales along with a choice of turn-key solutions to customers.</p> <p>In order to increase overall program awareness and drive customers to action there will be a statewide website and statewide media marketing. Additional marketing approaches that may be used by one or more Program Administrators to increase participation and capture deeper, broader savings include direct mail; seminars and training sessions; power breakfasts; webinars; participation in trade shows and conferences; co-marketing through trade industry, public interest and civic groups that represent the target market and have extensive outreach capabilities; and informational meetings with ESCOs and contractors.</p> <p>In addition, Program Administrators expect to enhance the above strategies by using cost-effective, broad-based radio, printed matter and email-blast outreach. In addition, email alerts and other low-cost means to reach customers will be adopted to advance customer participation. Program Administrators are currently using on-line communications developed for their customers to bring both new and emerging technologies forward in a cost effective way with high customer penetration. Moreover, other social marketing techniques will be used to increase customer awareness of Program Administrator services and the means to access these services. The combination of these strategies and others will be integrated into a common marketing plan that will identify key drivers, objectives, strategies, and tactics to increase customer participation.</p> |
| <p>Target End Uses</p> | <p>Targeted end uses include, but are not limited to, lighting and lighting controls, motors and drives, HVAC equipment, energy management systems, compressed air and unique industrial processes, and furnaces and boilers. Building envelope measures and any commercially available energy efficiency technology may be considered. Site-specific custom measures, including CHP distributed generation, may also be considered.</p> |

| | |
|---|---|
| | |
| Recommended Technologies | Recommended technologies include efficient lamp technologies, efficient lighting fixtures, lighting controls, efficient motor drive systems, efficient HVAC systems, CHP, compressed air systems, advance gas technologies, Energy Recovery Ventilation Units (“ERVs”), dehumidification and humidification. |
| Financial Incentives | Both prescriptive incentives (fixed amounts for specific measures) and custom incentives (based on the unique energy savings criteria of a project) are available. Financial incentives cover a portion of the total installed costs, including labor and equipment, or buy the installed costs down to the equivalent of a fixed payback period. Financial incentives may also include co-funding engineering and commissioning studies and/or design incentives covering a portion of incremental architectural and design costs for efficiency improvements. In addition, some Program Administrators offer on-bill financing options for municipal customers. |
| Delivery Mechanism | In-house account management staff and project administrators perform most sales, marketing, program administration, and implementation functions. In addition, outside contractors are retained for technical review of applications, on-site energy analysis, technical and design assistance for comprehensive projects, and project commissioning services. |
| Joint program administrator enhancements planned for 2010-2012 | Joint Program Administrator enhancements are identified throughout the program description. Examples include developing an integrated website and statewide program marketing and customer outreach campaigns. Program Administrators will also work together on “CHP” and “DR” activities, introducing and promoting new and emerging technologies, integrating multi-family program options, and responding to GCA directives. |
| Program Administrator-Specific Elements | To be provided with the October 2009 filings. |
| Three-Year | Over the next three years the Program Administrators will increase their capacity to deliver deeper savings by adding internal staff and retaining additional engineering and architectural consulting firms to deliver larger scale |

| | |
|----------------------------------|--|
| Special Notes (cont.) | <p>Within the large business sector the fully developed energy efficiency model is leveraged to deliver CHP, renewable energy, and demand response services to build customer connections that will help facilitate the adoption of utility Smart Grid proposals. Moreover, as the markets change substantially in reaction to emerging, new clean energy technologies the Program Administrators will be poised to accelerate the adoption of these new energy efficiency business opportunities for customers. For instance, with expansion of the internet, data centers have grown dramatically and there is now the ability to reduce energy consumption by providing high performance ventilation and cooling strategies for computer servers.</p> <p>Similarly, the growing industry related to commercial laboratories exists as an opportunity to provide better practices in energy use reduction. Laboratories are the most energy intensive non-industrial facilities, with the possible exception of data centers. The opportunities for efficiency improvements in laboratories have gone largely untouched due to concerns about health and safety. Program Administrators have embarked on a campaign to directly address the health and safety issues of decision makers as a prelude to presenting proposals for efficiency projects. This will open the door to countless projects with outstanding potential for producing both electric and fossil fuel savings.</p> <p>Following through on the Governor’s Zero Net Energy Task Force recommendations, Program Administrators will expand their current effort to put the above ideas into practice. Program Administrators’ current involvement in the design of two projects will provide valuable insights into how to best promote zero net energy strategies in new private and public sector projects. Going forward, the resulting synergies from these and other new enhancements in program design will be significant and enable customers to quickly realize their full potential for more effectively managing their energy costs. In addition, by providing these services comprehensively, there may be additional cross-fertilization benefits, as we have experienced with comprehensive energy efficiency projects to date.</p> |
|----------------------------------|--|

C&I Lost Opportunity Program

| | |
|--|---|
| Primary Objective | To capture lost opportunities and encourage best practices in new construction and renovation of commercial, industrial, institutional and government facilities and failed equipment replacement. |
| Initially Offered | The portfolios of Program Administrators have included new construction services since 1987. Programs have evolved and improved over time using a combination of strategies to successfully address customer barriers in this market. Program attributes include recognizing that achieving better building performance begins with providing technical assistance, incentives, and commissioning. Program Administrators address better design practices in the early stages of customers’ new construction plans. The principles of an integrated approach for both peak and overall energy reductions are applied to ensure the technical and achievable potential is optimized through the design and construction process. Material to this strategy is the recognition that active participation in the development and advancement of commercial building codes and standards will cement higher specifications of performance through evolving code standards and compliance levels. Lessons learned from this delivery have spawned a number of new initiatives that are both sector and customer focused including <i>Advance Buildings Core Performance</i> , Office of the Future, and initiatives targeting data centers, high performance laboratories, and other industrial processes with high performance options. |
| 2010 – 2012 Program Goals | To be provided with October 2009 Filings. |
| 2010 - 2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | Consistent statewide basic program with individual Program Administrators offering pilots to test the viability of new strategies and options. Pilot initiatives under consideration for implementation in 2010 address data centers, high performance laboratories, a transition to LED installations, and investigating Zero Net Energy Buildings. Detailed information on pilot offerings and budgets will be provided in the October filings. |

| | |
|------------------------------|---|
| <p>Program Design</p> | <p>The program offers C&I customers the opportunity to receive financial incentives, technical services, and commissioning services for their projects. The program addresses two broad types of time-dependent projects:</p> <ul style="list-style-type: none"> • Projects involving new construction of a building or the major renovation/remodeling of an existing facility • Projects involving primarily new equipment purchases and/or the end-of-life replacement of fully depreciated equipment. <p>The program encompasses the Comprehensive Design track and the Massachusetts MotorUp and Cool Choice initiatives. The program will continue to incorporate the New Buildings Institute’s Advanced Building Guidelines (described in more detail below) and Advanced Lighting Guidelines as a means of promoting comprehensive whole building design, particularly with smaller buildings.</p> <p>The program also supports advancing federal equipment standards, the Massachusetts Building Energy Code and code compliance training. (This effort is described in more detail below.)</p> <p>Advanced Buildings is a comprehensive, prescriptive program for small commercial new construction built around delivering the New Building Institute’s Advanced Buildings Program to developers of small to medium sized new commercial construction projects.</p> <p>The Advanced Buildings’ <i>Core Performance Guide</i> applies state-of-the-shelf (proven, but not yet common practice) technology and building science to the design of commercial and institutional buildings in the 10,000–70,000 square foot range. The Core Performance criteria address better performance characteristics in the building envelope, dedicated mechanical and lighting systems, multiple demand control ventilation practices, indoor air quality improvements, and domestic hot water system efficiency. These criteria are based on the results of 30,000 energy modeling evaluations of three major building prototypes (retail, office, school), with four high-efficiency HVAC system permutations for each prototype. That analysis identified a package of consistent strategies (the “core” in Core Performance) that lead to predictable energy savings across all climate zones. In Massachusetts, application of all Core Performance criteria will result in buildings with energy savings that exceed the Massachusetts Energy Code by 20-30%. Also, Core Performance is accepted by the US Green Buildings Council as an alternative pathway to achieve the energy and environment points required to qualify a</p> |
|------------------------------|---|

| | |
|--|--|
| <p>Program Design (Cont.)</p> | <p>smaller building for Leadership in Energy and Environmental Design (“LEED”) certification. In addition, peak energy reduction techniques will be employed to allow participants with either third-party energy supplier time-sensitive rate offerings or those enrolled in the ISO-NE Price Response Program additional savings opportunities.</p> <p>Program Administrators will provide technical assistance consultants to help design teams incorporate all the Core Performance features in their buildings, incentives (presented to the customer in easy-to-comprehend \$ per Sq. Ft. terms), independent third party verification of Core Performance compliance, and recognition via certification of the building as an “Advanced Building” as well as ancillary publicity as jointly agreed to by the Program Administrator and the client.</p> <p>The Core Performance model is best applied in small office, retail, public assembly, and school/preschool applications. (The benefits diminish in lodging, large multi-family and assisted living circumstances.) The economics are based on buildings with central mechanical cooling systems. Building owners and their design teams must agree to comply with all of the essential requirements of the program (the “core”) in order to participate, and they may select other features (“Enhanced Performance Strategies”) to exceed the base savings potential.</p> <p>Office of the Future (“OTF”) is a targeted initiative addressing energy efficiency in the tenant-occupied commercial buildings market. The largest areas of energy use in office buildings are interior lighting, plug loads (computers, office equipment, etc.), ventilation, and cooling. A consortium of some of the nation’s largest and most progressive energy utilities developed a comprehensive package of measures—the 25% Solution—that can predictably reduce lighting, plug, and HVAC loads in office spaces by 25%. The package also highlights improvements in lighting quality and comfort system performance. The 25% Solution is structured to complement the tenant improvement process, when new or existing office spaces are “fit up” for an incoming tenant. Implementers of the OTF initiative will work with property owners/managers, tenants, design professionals, and contractors to create a more responsive and responsible office environment—one that better serves tenants’ needs while also reducing energy costs, enhancing property values, and supporting a reduced carbon footprint. It is expected that with today’s heightened concern about both high energy prices and climate change, tenants will aspire to achieve “25% Solution Certified” space. In addition, peak energy reduction techniques will be employed to allow participants with either third-party energy supplier time sensitive rate offerings or those enrolled in the ISO-NE Price Response Program additional savings opportunities.</p> |
|--|--|

| | |
|--|--|
| <p>Program Design (cont.)</p> | <p>Key elements of the 25% Solution include high-quality, energy-efficient lighting design; reduced energy for plug loads; improved thermostats; verified performance of lighting and HVAC systems; and tenant education.</p> <p>Advanced Codes and Standards: The Program Administrators will support advanced building energy codes and equipment energy standards. Advancing codes and standards is good for public policy and also makes it feasible for the region’s energy efficiency programs to advance efficiency and design practices to a higher level. Advanced codes and standards “lock in” market transformation efforts, thereby reducing the need for ratepayer funding to promote efficiency practices that have achieved significant market penetration. Program Administrators will concentrate their efforts in four primary areas: 1) state and federal equipment standards, 2) advancements to building energy codes, 3) training for code compliance and 4) local stretch codes.</p> <p>State and Federal Equipment Standards: Appliances and plug loads often account for 25% of a building’s total energy consumption and can be as much as 50% or more, especially in hospitals and laboratories.² Appliances may not necessarily be governed by building energy codes, which is why supporting higher equipment standards may be equally as important.</p> <p>The Program Administrators’ new construction program can help by addressing comprehensive energy-efficient upgrades to equipment that might be covered under standards, but not building codes. Gas and electric programs already offer incentives for energy-efficient HVAC equipment that is more efficient than required by state and federal standards. Program Administrators will continue to seek improvements to these offerings over the life of this plan and beyond. In addition, programs addressing plug load devices and commercial equipment will be expanded.</p> <p>Program Administrators will continue to work with regional and national groups, such as NEEP and the Appliance Standards Awareness Project to support legislation for more advanced state and federal equipment standards. Program Administrators will also support efforts underway to ensure that states can seek exemptions from federal standards should Massachusetts want to adopt energy efficiency standards for equipment that exceed federal standards. Support provided by Program Administrators in the past includes testifying on behalf of legislation, meeting with state and federal legislators, and writing letters of support for key legislation on codes</p> |
|--|--|

² From “*The Role of Energy Codes in Public Policy A White Paper by the Northwest Energy Codes Group*” - December 2008

³ The Energy Advisory Committee was initiated by the BBRs over 10 years ago and is made up of building design practitioners and others. This group advises the BBRs on matters related to residential and non-residential building energy codes in the state.

⁴ Advanced Buildings Core Performance is a prescriptive program intended to “achieve significant, predictable energy savings in new commercial buildings.” Advanced Buildings Core Performance was developed by the New Buildings Institute. For more information, go to www.advancedbuildings.net

| | |
|----------------------|---|
| | <p>and standards.</p> <p>Advancements to Massachusetts Building Energy Codes: Program Administrators have worked with other interested partners and the Massachusetts Board of Building Regulations and Standards (“BBRS”) on the advancement of building energy codes for over a decade. As active members of the Energy Advisory Committee³ (“EAC”), Program Administrators have helped BBRS plan and implement more stringent energy codes and provided support for the training of building design professionals and code enforcement officials.</p> <p>The Program Administrators have also supported a movement to have the state allow a “stretch” energy code. The stretch code would be based on <i>Advanced Buildings Core Performance</i>⁴, which stipulates criteria more stringent than the current energy code. The stretch code could be adopted by a community in lieu of the current energy code, which would help advance energy efficiency design practices in the state.</p> <p>Training for Code Compliance: Program Administrators support training of code officials and building design professionals. This helps code practitioners improve code compliance. The Program Administrators will make recommendations to BBRS and seek their direction on developing training and outreach efforts that might be offered for the current code and any stretch codes that might be adopted. The Program Administrators and BBRS will coordinate efforts to develop and implement a plan.</p> <p>Product Availability: Program Administrators work with distribution houses to facilitate product access and provide competitive pricing. In some cases, this involves bidding for specific products (lamps, ballast, fixtures, drives, etc.), which are then promoted to customers and vendors. This is especially vital to smaller customers and vendors who do not have the resources and size to procure at bulk pricing.</p> |
| Target Market | The target market is all time-dependent energy efficiency opportunities in the C&I sector. Marketing will target architects, engineers and owners of new buildings and distributors and other trade allies for new equipment. |
| Marketing | Projects involving new construction have significantly different dynamics than retrofit projects. New construction typically requires longer lead-times and involves multiple decision makers and influencers as compared to retrofit |

| | |
|-------------------------------|--|
| <p>Approach</p> | <p>projects. In addition, while retrofit projects typically involve turn-key vendors selling a project specifically on efficiency attributes, a similar role does not exist in new construction. Products are usually specified, not sold. A supplier may increase profits by “up-selling,” however, the sale is still achieved at low-bid/base-efficiency.</p> <p>While the customer is still a key decision maker, it is critical that all stakeholders are approached, educated and influenced towards the goals of energy efficiency. Although this starts with the architect, the final design/product can be changed (value-engineered/alternate specification) by the engineer, contractor, distributor and so forth. In order to address this, specific outreach strategies are designed for each of these stakeholders groups. For channel builders, providing extensive one-on-one communication is the primary outreach strategy, building relationships and ensuring commitment to efficiency. This direct marketing is supported through numerous other channels including brown bag educational seminars, formal training such as Labs21, newsletters, and open houses. Direct marketing pieces have been developed to pursue new construction leads identified through such publications as the REED Construction Database and New England Construction News. Additional marketing approaches used by one or more Program Administrators include direct contact with customers identified through trade publications and advertising in local trade publications, seminars and training sessions.</p> <p>To address overall awareness, there will be a statewide website and statewide media marketing.</p> <p>For time-dependent projects involving end-of-life equipment replacement or the purchase of new equipment, marketing efforts focus on customers and equipment vendors rather than on developers and designers. Program Administrators market the equipment replacement track to customers and vendors through extensive one-on-one communication. Supplemental marketing efforts include the development and distribution of promotional material such as case studies, attendance at trade shows and conferences, power breakfasts, and other customer and vendor focused training seminars. Program Administrators will be looking at additional innovative ways to work with equipment distributors and installers to help them promote energy-efficient equipment and systems to their customers.</p> |
| <p>Target End Uses</p> | <p>Targeted end uses include, but are not limited to, lighting equipment and controls, lighting design, motors, variable speed drives, HVAC equipment, refrigeration systems, building envelope measures, compressed air and industry-specific industrial processes.</p> |
| <p>Recommended</p> | <p>Recommended technologies include, but are not limited to, efficient lamp technologies, direct/indirect lighting</p> |

| | |
|---|--|
| Technologies | fixtures, lighting controls, building envelope measures, efficient motors and motor drive systems, efficient cooling systems, efficient chillers and controls, compressed air, ERVs, dehumidification, humidification, process improvements and energy management systems. |
| Financial Incentives | <p>Both prescriptive incentives (fixed amounts for specific measures) and custom incentives (based on the unique energy savings criteria of a project) are available. Prescriptive financial incentives are offered for selected lighting, motor, variable frequency drive and HVAC measures. Other cost effective measures are promoted with custom incentives based on the incremental equipment and installation labor costs of installing high efficiency equipment compared to standard efficiency equipment. Design incentives covering a portion of incremental architectural and design costs associated with energy efficiency improvements may also be available and Program Administrators may co-fund engineering and commissioning studies.</p> <p>Detailed information on incentive levels will be provided in the individual Program Administrator’s October filings.</p> |
| Delivery Mechanism | <p>In-house account management staff and project administrators perform most sales, marketing, program administration and implementation functions. In addition, outside contractors may be retained for technical review of applications, on-site energy analysis, technical and design assistance for comprehensive projects, and project commissioning services.</p> <p>The availability of high quality technical assistance provides solutions for better building practices, and training and commissioning are provided to ensure the integrity of the savings generated through these building design and construction solutions. Technical assistance provides information and education to participants on the use of energy-efficient engineering practices to support their ability to build to efficiency standards that exceed current code-compliant buildings. Technical assistance also provides customers with criteria related to energy efficiency options that can be used when specifying new equipment. Additional education opportunities for customers and trade allies are offered through participation in regional and national market transformation initiatives.</p> |
| Joint Program Administrator enhancements planned for | Opportunities for Program Administrators to work together to market and implement program initiatives that will maximize customers’ potential for saving energy (gas and electric) and reducing demand are identified throughout the C&I Lost Opportunity program description. Details of specific joint enhancements will be |

| | |
|--|--|
| 2010-2012 | provided in the October 2009 filings. |
| Program Administrator-Specific elements | To be provided with the October 2009 filings. |
| Three-Year Deployment | <p>Over the next three years, Program Administrators will increase their capacity to deliver deeper savings by adding internal staff and retaining additional energy professionals to deliver energy-efficient technical solutions to customers. In addition, the Program Administrators are looking to develop additional strategic partnerships with other energy services providers. The intent of the Program Administrators is to build on experience with a continued focus on offering all-fuels-integrated design solutions to move buildings to higher levels of performance along the path toward zero net energy buildings.</p> <p>Program Administrators plan to ramp up the market penetration of <i>Advanced Buildings Core Performance</i> in new buildings to the extent possible in a very depressed new construction market.</p> <p>Program components targeting specific customer groups and building types with specific needs and energy saving opportunities will be expanded to increase participation and savings. Examples include program initiatives targeting data centers and laboratories, and an enhanced high performance lighting initiative targeting architects and lighting design professionals. Also, program initiatives addressing plug load devices and commercial equipment will be expanded.</p> <p>The Program Administrators, in conjunction with the Council’s Consultants and LEAN, where appropriate, will be performing an assessment of the multi-family programs in Massachusetts. Because the target market for this program may include multi-family customers, the results of the statewide assessment may apply here. For low-income multi-family projects, the assessment will include the evaluation of strategies to serve low-income multi-family buildings in a manner that is fuel-blind, meter-blind, and integrates low-income, residential, and commercial programs, as appropriate, with a minimal or no co-payment (pending review of the budget impacts by each Program Administrator).</p> |

| | |
|----------------------|--|
| Special Notes | <p>The energy performance of commercial buildings can be significantly improved, leading to better economic performance and a reduction in carbon emissions. The next generation of planning will examine how buildings can move to <i>Getting to Fifty</i>—50% more efficient than current codes. This will require work with a number of leading organizations that are investigating technical solutions and practices to meet this next threshold, including the NBI, US Green Buildings Council (“USGBC”), ACEEE and other experts in the building science field. In addition, greater emphasis will be placed on providing sustainable design solutions for customers using USGBC’s guidelines.</p> <p>While the Program Administrators have received numerous awards for their new construction portfolio, including ACEEE’s Best Practices award in 2006, it is incumbent on Program Administrators to continue improving performance by developing services and strategies that push innovation, moving from buildings that are 20-30% better than current practices, exemplified by Advance Buildings, to standards that result in commercial buildings achieving zero net energy performance.</p> |
|----------------------|--|

C&I Small Business Services

| | |
|----------------------------------|---|
| Primary Objective | The primary objective of the Small Business Services (“SBS”) Program is to provide cost-effective, retrofit services on a turnkey basis. |
| Initially Offered | Program Administrators’ program portfolios began including retrofit services for small business customers in 1990. The SBS programs have evolved and improved over time, using a combination of strategies to successfully address customer barriers in this market. The prime delivery system for small business customers has been a direct installation model. The Program Administrators solicit competitive bids for the labor and materials cost of installing improved lighting equipment, lighting controls and, in some cases, improved refrigeration measures for walk-in coolers. Unlike large business services that are market driven, the small business sector benefits from a turnkey process that has a single contractor conduct an audit to identify better lighting options and install recommended measures. SBS has evolved over time to include some Program Administrators offering on- and/or off-bill financing options to help customers finance the cost of installing lighting improvements. Also, the SBS Program has added additional energy-efficient lighting and lighting control equipment as technology has improved. Over the past several years, the program has incorporated additional comprehensive solutions and higher performance equipment such as the advance lamps, ballasts and improved lighting fixtures available today. SBS customers receive an incentive covering a portion of the equipment costs. Over time the Program Administrators have learned that, depending on the jurisdiction, it is possible to provide lower incentives and maintain attractive customer penetration rates. In addition, peak energy reduction techniques will be employed to allow participants with either third-party energy supplier time-sensitive rate offerings or those enrolled in the ISO-NE Price Response program additional savings opportunities. |
| 2010 – 2012 Program Goals | To be provided with October 2009 Filings. |
| 2010 - 2012 Budget | To be provided with October 2009 Filings. |

| | |
|--|--|
| Joint vs. Program Administrator-Specific Offering | The Program Administrators offer consistent statewide basic SBS programs and services, with individual Program Administrators offering enhanced measures to test the viability of new deeper savings strategies and options for customers. In addition, as the emphasis on integration becomes a larger factor in increasing both gas and electric savings, the Program Administrators will investigate how to incorporate gas measures that lend themselves to the SBS program model. Potential retrofit gas opportunities include pipe and duct insulation, water heating, thermostats and energy management systems. Detailed information on how these offerings will be implemented and budgeted will be provided in the October filings. |
| Program Design | This is a direct install, turnkey program that offers small business customers financial incentives for replacing electrical and mechanical equipment that is outdated and energy inefficient or installing new energy-efficient equipment. In addition, peak energy reduction techniques will be employed to allow participants with either third-party energy supplier time-sensitive rate offerings or those enrolled in the ISO-NE Price Response Program additional savings opportunities. |
| Target Market | The program targets small business customers who do not have access to outside technical or financial resources. Small business customers tend to have loads that are dominated by lighting and a historical reluctance or inability to fund efficiency improvements. While their small size tends to exclude them as potential beneficiaries of services from other energy service providers, their lighting dominance makes them excellent candidates for the direct install approach of the SBS program. |
| Marketing Approach | A variety of marketing approaches are employed. There will be a statewide website and statewide media marketing. Primarily, the direct installation contractors market the program to customers; key elements of their marketing efforts are direct mailings and telemarketing, targeting hard-to-reach market segments such as customers in economic development zones and ethnic neighborhoods, and reaching out to neighborhood business associations. Trade allies, industry stakeholders, suppliers and company field personnel also inform customers about the program's benefits and incentive mechanisms. In addition, small business customers with high-bill complaints may be referred to the program as a way for them to reduce their electric usage. |
| Target End Uses | Targeted end uses include, but are not limited to, lighting and lighting controls, HVAC equipment, water heating, VSDs and refrigeration. Other energy savings opportunities may be served through a custom approach. |
| Recommended | Recommended technologies include energy-efficient fluorescent ballasts, lamps, and fixtures; hard-wired and screw-in compact fluorescent systems; high intensity discharge systems; LED lighting and occupancy sensors; |

| | |
|---|---|
| <p>Technologies</p> <p>Recommended Technologies (cont.)</p> | <p>energy management systems; and refrigeration measures such as evaporator fan controls, efficient evaporator fan motors, automatic door closers and door heater control devices for walk-in coolers. To create greater depth and appeal for the program, customers are offered the opportunity to install non-prescriptive lighting and other comprehensive energy efficiency measures through the custom approach.</p> |
| <p>Financial Incentives</p> | <p>Participants are provided with a free audit to identify cost effective opportunities for saving energy. Both prescriptive incentives (fixed amounts for specific measures) and custom incentives (based on the unique energy savings criteria of a project) are available. Financial incentives cover a portion of the total installed costs, including labor and equipment, or buy the installed costs down to the equivalent of a fixed payback period. In addition, some Program Administrators offer low- or no-interest financing options and/or discounts for upfront payment of their share of the cost.</p> |
| <p>Delivery Mechanism</p> | <p>Vendors selected through a competitive bidding process implement the program. These vendors market the program, perform audits at customers' facilities, offer recommendations to customers, complete audit forms and questionnaires, purchase materials from a supplier selected through a competitive bid process, install measures, input data into a database, and prepare progress reports for the Program Administrators on a regular basis.</p> |
| <p>Three-Year Deployment</p> | <p>Over the next three years the Program Administrators will increase their capacity to deliver deeper savings by adding internal staff, retaining additional installation contractor to deliver services to customers and promoting the installation of custom measures. Technical assistance consultants will be retained to help installation contractors with custom projects. In addition, a variety of financing and discount options will be offered to meet the needs of customers.</p> <p>The Program Administrators, in conjunction with the Council's Consultant and LEAN, will be performing an assessment of the multi-family programs in Massachusetts. Because the target market for this program may include multi-family customers, the results of the statewide assessment may apply here. For low-income multi-family retrofit projects, the assessment will include the evaluation of strategies, separate from this program, to serve low-income multi-family buildings in a manner that is fuel-blind, meter-blind, and integrates low-income, residential, and commercial programs, as appropriate, with no co-payment (pending a review of the budget</p> |

| | |
|----------------------|--|
| | impacts by each Program Administrator). |
| Special Notes | The Program Administrators have received numerous awards for their Small Business Services portfolio. It has been shown to be a national model that addresses the unique characteristics and barriers to promoting energy efficiency within the small business sector. Going forward, it is incumbent on Program Administrators to continue improving SBS performance by developing enhanced product and measure offerings, continuing to introduce new lighting technologies and expanding the reach of the direct installation model to bring other fuels into the program to maximize energy savings. |

C&I Pay & Save Financing/Loan Pilot

| | |
|--|---|
| Primary Objective | To establish a pilot loan program that creates an alternative financing mechanism for customers to finance the customer contribution cost of the implementation and installation of energy efficiency measures. The desired effect is to eliminate a barrier for customers to participate in energy conservation. |
| Program Inception | New pilot program (see Special Notes regarding 2009 Energy Pay and Save Pilot Program) |
| 2010-2012 Program Goals | To be provided with October 2009 Filings. |
| 2010-2012 Budget | To be provided with October 2009 Filings. |
| Joint vs. Program Administrator-Specific Offering | Joint offering. |
| Program Design | The program would make funds available to customers to assist in financing energy efficiency improvements and enable customers to repay those loans through their utility bills without interest. |
| Target Market | To be used by programs designated by Program Administrators. |
| Marketing Strategy/Approach | Pilot program will be incorporated into the small business audit process as well as other C&I programs |
| Target End Uses | C&I customers who install non-portable measures. |
| Recommended Technologies | Non-portable measures |

| | |
|------------------------------|---|
| Financial Incentives | Financing the customer contribution assists customers who do not have the ability to pay in full at the time of the installation. It is expected that this incentive will allow for increased customer participation in programs. |
| Delivery Mechanism | C&I program delivery vendors. |
| Three-Year Deployment | Once the pilot program is completed on December 31, 2009, an evaluation will commence and a decision to incorporate this program into 2010-2012 programs will be explored by Program Administrators. |
| Special Notes | The Program Administrators will incorporate findings of the Department-approved Energy Pay and Save pilot program offered to residential and small business customers from April 1, 2009 – December 31, 2009 (D.P.U. 09-07) in any new financing initiative which may be developed. |