

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.
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 Massachusetts program is a proud participant of the national ENERGY STAR Homes program and benefits from the regional, as well as national advertising 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 percent of the participating builders and recruit additional homebuilders and contractors working in the major renovations market.</p> <p>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</p>

<p>Program Design (cont.)</p>	<p>candelabra based lighting. The Joint Management Committee (“JMC”) will also cross-promote with the lighting program to introduce solid state lighting (“SSL”) into this program.</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • 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 percent and 60 percent 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 the EPA for Version III of the national ENERGY HOMES standard in 2010 with potential Version III adoption. • Meeting the EPA’s ENERGY STAR Homes qualifications and/or the most rigorous standard available at the time (<i>see</i> 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
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Target Market	<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 Approach	<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 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>

Target End Uses	<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
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 Photovoltaic//Solar Thermal. Solar Thermal will likely be needed in order to achieve Tier 3 described below.
Financial Incentives	<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> <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.</p>

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	\$225	\$225
ENERGY STAR I	ENERGY STAR compliance with a HERS Index of 85 or less	\$750	\$650	\$500	\$350
ENERGY STAR II	ENERGY STAR compliance with a HERS Index of 85 or less and 30% improvement or better over the Massachusetts Baseline Home	\$1,250	\$1,150	\$850	\$550
ENERGY STAR III	ENERGY STAR compliance with a HERS Index of 85 or less and 60% improvement or better over the Massachusetts Baseline Home	\$8,000	\$4,000 ^[3]	\$3,000 ^[3]	\$2,000 ^[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 Multi-family projects will be reviewed for final fee structure; listed are the maximum incentives paid by Program Administrators.

2010-2012 Statewide Forecasted Program Activity

MA New Homes with ENERGY STAR Participation Levels			
	2010	2011	2012
Total Estimated Program Participants	2,138	2,396	2,956

Estimated Annual Growth Rate	2%	9%	21%
Total Estimated Housing Starts	6628	7224	8742
Estimated Market Penetration	32%	33%	34%

*Growth rate estimated by Reed Construction Data, June 2009 Edition

*The forecasted annual program activity referenced above represents all program participants statewide including units completing in municipal electric territories where a Gas Program Administrator also exists

<p>Delivery Mechanism</p>	<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, chose 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 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 percent of the builders in the Program.</p>
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<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 2011. • 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. Allowing master metered electric buildings to participate in the program is being considered, as they are ineligible currently. As stated earlier, there will be a new multi-family new construction pilot for 4-8 story buildings. • 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 programs—will be part of the October 2009 filings. • 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 the section 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.
<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 will be daunting in the recognition of 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>

**Three-Year
Deployment/Road
Map (cont.)**

For the three-year deployment, the Program Administrators will focus on:

- Expansion of the current HERS rater network of ten 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 rater's 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

The Program Administrators, in conjunction with the Consultants and LEAN, where appropriate, 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. Please refer to the multi-family section for an update on the programs.

The Program Administrators plan to implement the Statewide Multi-Family New Construction Pilot Program during the course of 2010. Coordination between this program and the ENERGY STAR Homes program will occur in order to provide a seamless delivery of new construction services to all eligible customers.

Special Notes

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 Resolution document. This program design is intended to address a number of applicable Council priorities including:

- Providing program consistency through this program.
- Maximizing incentive values and minimizing overhead costs in this program.
- Providing customers/builders with an opportunity to lower utility bills through the purchase of energy efficient products.
- Providing seamless delivery of this program to customers.
- Providing user-friendly program by offering multiple paths/opportunities for participation
- Coordinating with other programs for outreach communication and marketing strategy.
- Obtaining deeper savings by 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.
- Providing comprehensive program delivery through JMC integrating gas and electric Program Administrators in a fuel blind nature
- Coordinating with other programs to develop an integrated website
- Market based HERS Rater Model, Trainings and Technical Assistance
- Performance based incentive structure, Third Tier
- Through tier development and refinement informed by the 2008-2009 Zero Energy Challenge, the JMC will look towards deeper energy savings to promote near zero energy homes

In order to provide context for the Program Administrators proposal, please refer to Appendix H, containing the document "Massachusetts New Homes with ENERGY STAR[®]: Program Theory 2010-2012, Final Report."

Also, the Program Administrators are working on an integrated gas and electric initiative (across customer classes) to support progressive building and appliance efficiency standards. The Program Administrators are reviewing a very recent draft proposed description of these efforts that they are working on collaboratively with the Consultants. The Program Administrators will share this description with the Council when it is finalized.

In anticipation of Version 3 of the ENERGY STAR Homes specification going into effect in 2011, the Program Administrators anticipate adopting many of the new specifications during the course of the 2010 program year in order to remain early adopters of more stringent energy efficiency requirements nationwide.

The Program Administrators plan to conduct ENERGY STAR Homes Version 3 and Advanced Lighting Design pilots during the course of the 2010 program year. Electric Sponsors, as a pilot, will work with lighting designers and build/design teams to identify creative ways to approach energy savings through proper lighting design on a portfolio level.

The Program Administrators also plan to implement the Statewide Multi-Family New Construction 4-8 Story Pilot during the course of the 2010 program year.

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.
Program Administrator-Specific Elements	Joint
Program Design	This pilot program is designed to help customers who 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 RCS program (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 Approach	Marketing strategies include direct builder and customer outreach, website information and meeting 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	<p>All participants will be eligible to receive weatherization incentives up to \$2,000 for both the new and existing portions of the home. 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.</p>
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 PA Enhancements Planned for 2010-2012	<p>None planned at this time due to the pilot nature of this program.</p>

<p>Three-Year Deployment/Road Map</p>	<p>Lessons learned through 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>
<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 Resolution 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 • 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.

Special Notes (cont.)	<ul style="list-style-type: none">• 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
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Residential ENERGY STAR® HVAC

<p>Primary Objective</p>	<p>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 in coordination with gas Heating, Ventilation, and Air Conditioning (HVAC) programs. Where appropriate the COOL SMART program will work with GasNetworks on joint program offerings, marketing, and trade ally outreach and training.</p>
<p>Program Inception</p>	<p>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.</p>
<p>Joint vs. Program Administrator-Specific Offering</p>	<p>During the period 2010-2012, the COOL SMART Program will be offered by all Program Administrators. (Please note that Western Massachusetts Electric, Unital, and Cape Light Compact did not offer the program in 2007 though mid 2009.)</p> <p>The heating component of the program will also be offered jointly in 2010-2012 by the Program Administrators.</p>
<p>Program Design</p>	<p>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.</p>

<p>Target Market</p>	<p>There are several target markets:</p> <ul style="list-style-type: none"> • New systems in existing and new homes (new systems) • Replacement systems in existing homes (new equipment/old systems), including the early retirement of existing equipment. • 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 COOL SMART initiative will work with the GasNetworks’ High Efficiency Heating and Hot Water program to develop and implement joint marketing activities. 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. At the end of current contract terms, the COOL Smart and Gas Networks’ High Efficiency Heating and Hot Water program sponsors will work to procure a single, joint circuit rider to support both programs in the field. • Development of cooperative (“upstream”) promotions with the HVAC industry • Sponsorship of contractor competitions and awards programs for rebates and Quality Installation and

<p>Marketing Approach (cont.)</p>	<p>Verification (“QIV”) services, and an annual recognition celebration for contractors in a venue that helps recruit more contractors</p> <ul style="list-style-type: none"> • 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 distributors, contractor, and non participants) These will be in conjunction with gas programs, where possible. • Promote program education and awareness utilizing manufacturer/distributor level marketing and training infrastructure as a platform to educate contractors and wholesalers at a regional level. These will be in conjunction with gas programs, where possible. • 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”) • Air Conditioning, Heating, and Refrigeration Institute (“AHRI”)
<p>Target End Uses</p>	<p>Residential central cooling and heating equipment.</p>

<p>Recommended Technologies</p>	<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 percent or greater, equipped with an advanced ECM or equivalent energy-saving furnace fan (blower) motor.</p> <p>The COOL Smart Program has conducted 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. The pilot proved that there are enough savings to justify full implementation of a measure.</p> <p>The electric efficiency program does not directly address boilers.</p> <p>Further, Program Administrators will integrate new technologies such as heat pump water heaters and will further explore solar hot water opportunities into program offerings and incentives</p>
<p>Financial Incentives</p>	<p>The text below indicates anticipated 2010 incentive levels for all currently available program offerings. The program aims to simplify the rebate offering while ensuring that consumer installed equipment is achieving the high efficiency rating and performance that the consumer expects they will receive. Energy savings can be diminished with high efficiency equipment if it is not installed and commissioned properly. The Program Administrators will attempt to address these issues by enacting the following changes. In 2010, Program Administrators will propose to reward a contractor for following high quality installation practices. A program will be implemented to train and educate contractors who currently lack the skills to install equipment at these high standards. We will monitor the contractor base progression in adopting these skills during 2011, and it’s our intention to possibly require a “CS Tier 1” or “CS Tier 2” installation for all installations starting in 2012 for a customer to qualify for a rebate. Contractors who choose not to participate in “The Tier” program will be able to continue to receive incentives but at a much lower level during 2010-2011.</p> <p>The electric PAs will work with their GasNetworks’ counterparts to ensure that quality installation practices, particularly proper sizing and duct design and sealing, are pursued in a fully coordinated manner.</p>

Financial Incentives (cont.)	See schedule below for specifics:	
	Contractor Incentives:	
	CS Tier 1 (Early Replacement of 9 or 10 SEER equipment with replacement equipment of ENERGY STAR 14.5 SEER and 12.0 EER or greater):	
	Required to qualify for CS Tier 1	
	QIV Pre and Post Installation – Must pass QIV and airflow	\$ 225.00
	Manual J	\$ 300.00
	Early Replacement	\$ 450.00
	Total Incentive for required components	\$ 1000.00
	Optional Incentives for CS Tier 1	
	Downsizing per ½ ton reduction	\$ 250.00
ESQI with CO detector	\$ 125.00	
Duct modifications to pass QIV or ESQI	Up to \$ 400.00	
Duct sealing in attic spaces that have air conditioning and heat in connected ductwork.	\$ 2 per CFM of duct leakage reduction up to \$ 600.00 max	
CS Tier 2 (Standard Replacement of existing equipment with replacement equipment of ENERGY		

STAR 14.5 SEER and 12.0 EER or greater)

Required to qualify for CS Tier 2

QIV Post Installation – System must pass QIV charge and airflow – If duct modifications are claimed, require pre and post QIV of ductwork	\$ 225.00
Manual J	\$ 300.00
Total Incentive for required components	\$ 525.00

Optional Incentives for CS Tier 2

Downsizing per ½ ton reduction	\$ 250.00
ESQI with CO detector	\$ 125.00
Duct modification to pass QIV or ESQI	Up to \$ 400.00
Duct sealing in attic spaces that have air conditioning and heat in connected ductwork	\$2 per CFM of duct leakage reduction up to \$ 600.00 max

Contractor individual incentive for 2010 and 2011 (No Tier Participation):

Non – Participation in Tier – Contractor Incentives

Manual J	\$ 100.00
QIV	\$ 175.00

ESQI w/ CO detector (QIV Included)	\$ 300.00
Downsizing ½ ton reduction	\$ 250.00
Early Replacement	\$ 100.00
Duct Sealing in attic	\$2/CFM up to \$ 600.00 max
Duct modifications to pass QIV or ESQI airflow requirements	Up to \$ 400.00 max

No contractor incentives will be paid on the quality installation of Ductless Mini Splits due to the inability of the PAs' to have a quantifiable savings estimate for this measure of performance for the equipment.

Customer Incentives:

- A customer incentive of \$300.00 for eligible equipment meeting the ENERGY STAR minimum SEER of 14.5 and an Energy Efficiency Rating (EER) of 12.0.
- A customer incentive of \$400.00 for higher CEE-Tier 2 equipment (SEER of 15, EER of 12.5 or higher)
- A \$500.00 incentive for a SEER of 14.5 or greater, EER of 12.0 or greater and HSPF of 8.2 for split ductless air conditioning or air-to-air heat pumps with inverter technology.
- BFM (Brushless Fan Motor) installation which has a fairly high kWh savings is being evaluated and has shown in our pilot study to achieve savings of 25-70% depending on the application. The program will fund the installation and provision of the motor for the consumer.
- \$ 100.00 instant credit for a digital check-up (QIV) performed by a Cool Smart qualified participating contractor

- 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/ACCA standards

	<p>The Program Administrators will carefully monitor the future availability of tax credit-eligible equipment in Massachusetts and adjust program promotion of tax credits and incentive levels accordingly.</p> <p>In addition, the program offers a \$400 mail-in rebate on a natural gas furnace with an AFUE of 92 percent 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>A Cool Card program has been established to offer financial incentives for distributors to participate in increasing rebate participation.</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 RFP. Whenever possible, there is coordination with the related gas Program Administrator’s initiatives and energy-efficiency service providers. To this end, the COOL Smart and Gas Networks’ High Efficiency Heating and Hot Water programs will work to procure a single, joint circuit rider to support both programs in the field. Program initiatives are also 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. . Whenever appropriate these training will be jointly provided with GasNetworks • 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 up to 10 percent of installations</p>

	<p>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) Work with GasNetworks to further coordinate implementation, marketing and training activities and to develop and implement joint program offerings whenever feasible and cost-effective <p>Significantly increased equipment rebates to a level closer to full incremental costs of high efficiency equipment;</p> <ul style="list-style-type: none"> 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) Expansion 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</p>

	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 (“BPI”)) 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.
Program Administrator-Specific Elements	The Cool Smart administrators will be conducting a Heat Pump Water Heater pilot on major OEM water heaters. We will conduct a thorough evaluation and monitoring of the system using meters to calculate energy usage as well as flow meters. This test will also confirm the reliability of the water heaters for use in our area.
Three-Year Deployment/Road Map	<p>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.</p> <ul style="list-style-type: none"> • 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 percent of all sales of high SEER outdoor condensers do not include replacement of the indoor coil.

The Program Administrators have simplified or collapsed many of the individual 2009 program offerings for 2010. The decision was made to allow a gradual transition to the new incentive measures until the PA's feel comfortable that the contractors are able to grasp the needed skill set. Contractors will have the opportunity to continue working under the 2009 incentive level until they transition to the Tier System. Complete transition to the Tier System should occur in 2011 or 2012 at the latest, and is dependent on contractor adaptation to the new system. In addition, the Program Administrators plan to:

- Progressively expand attic duct sealing offerings, jointly with gas utilities;
- Work with regional groups to support research on and adoption of building codes and equipment standards;
- Host strategic discussions to promote the expanded HVAC program which may include a significant number of new and emerging technologies and quality installation practices.

Further, the gas Program Administrators will also strive to identify and support gas and electric program integration opportunities where appropriate as a means to increase consumer participation, gain economies of scale, create consumer-focused transparency across programs, and achieve broader and deeper energy savings.

The programs will work with the gas HVAC programs to work together on an integrated technical circuit rider that promote both programs jointly.

Also, the Program Administrators are working on an integrated gas and electric initiative (across customer classes) to support progressive building codes and appliance efficiency standards. The Program Administrators are reviewing a very recent draft proposed description of these efforts that they are working on collaboratively with the Consultants. The Program Administrators will share this description with the Council when it is finalized.

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.
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Residential Conservation Services / MassSAVE

<p>Primary Objective</p>	<p>To provide residential customers with energy efficiency recommendations that enables 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>Joint vs. Program Administrator-Specific Offering</p>	<p>Joint</p>
<p>Program Design</p>	<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. Through the intake process, the customer’s primary heat source will be identified. The purpose of the screening is to steer customers using natural gas for space heating to the Gas PA’s and customers using electric, oil or propane for space heating to the Electric PA’s. It is also recognized that</p>

<p>Program Design (Cont.)</p>	<p>exceptions to this guideline may occur (e.g., specialized high bill complaints, community outreach programs, etc.). In these cases, and unless there are prior mutual agreements between the Gas and Electric PA's, the Electric PA(s) will seek to negotiate in good faith with the Gas PA(s) to achieve a resolution that serves the common interests of both PA's, the interests of the consumer, and maximizes savings opportunities on a fuel-neutral basis. The program is committed to achieving maximum program success and deeper 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 deeper 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
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<p>Program Design Cont.</p>	<p>installation measures and a solar site assessment during the second or Diagnostic Visit. The Screening 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, Light Emitting Diodes ("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.
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<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. 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 first quarter of 2010</p>

	<p>that integrates all the Massachusetts energy efficiency programs and websites into a single portal.</p> <p>Current forms of multi-media outreach include:</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 initiatives such as Cambridge Energy Alliance, Marshfield Energy Challenge, and the Energy Smack-Down program. • 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 • Deeper retrofit measures • New technologies and renewable
<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 energy</p>

	retrofit” enhancements of major renovation projects. Customers will see these offerings as an integrated program.
Financial Incentives	<p>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; and incentives of 75 percent 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.</p> <p>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.</p> <p>Consistent with the Green Communities Act, the HEAT Loan program provides qualified customers with 0 percent interest loans up to \$15,000 with terms up to seven years and can be applied towards the following energy efficiency upgrades:</p> <ul style="list-style-type: none"> • 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

	<p>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 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 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</p>

	<p>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 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 BPI 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</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</p>

Planned for 2010-2012	Administrators, in their efforts to enhance the current services provided, will look to incorporate infrared and blower door testing where 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 BPI 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 rebates • Work to connect additional complementary contractors with the program, find ways to address contractors' "What's in it for us?" concerns

	<ul style="list-style-type: none"> • 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 Resolution 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 • Reducing program differences across the Program Administrators • Engaging in open, transparent and competitive solicitation and maintaining high standards of performance and accountability. • Developing 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 • Ensuring new service providers are trained, achieving quality control, and creating benefits for the

	<p>Commonwealth from associated job creation and economic growth</p> <ul style="list-style-type: none"> • Striving 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. • Striving to maximize seamless delivery to the customer. • Exploring a single number or grade for how the home is performing relative to comparable homes. • 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.
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Deep Retrofit Single and Multi Family Pilot

Primary objective	To investigate the potential for energy savings of at least 50 percent of total on-site energy use through deep retrofits of existing residential buildings and to identify how to reduce the costs and challenges 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	PA-specific targets to be provided with October 2009 filings.

2010-2012 Budget	PA-specific budgets to be provided with October 2009 filings.
Joint vs. Program Administrator-specific offering	Jointly offered program integrated gas and electric including single family and multi-family by 2010. Incentive levels and outreach and program support vendors may vary by program administrator.
Program Design	<p>The “deep energy efficiency” pilot will be consistent with the Governor’s Zero Energy Task Force recommendations and will at a minimum explore 1) a new Deep Energy Retrofit Pilot Program of existing buildings achieving 50% energy reductions or more as compared to baseline energy usage and 2) a Zero Energy Pilot Program that encourages diverse paths to Zero Energy, including Passive House or similar programs. This will include a wide range of projects such as single family homes, affordable housing, mid to large multifamily and include a substantial amount of square footage.</p> <p>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 and incentive levels.</p> <p>Budget permitting, gas utilities will pay incentives for eligible project if primary source of heat is gas. For 1-4 unit homes the electric program administrators will pay incentives for eligible project for non gas-heated homes, and for multifamily (5+ unit) buildings as well, if primary source of heat is electric. There is currently exploration by DOER into the possibility of the electric PAs paying incentives for multifamily (5+ unit) projects whose primary heating fuel is oil or propane. Based on the results of this exploration, the electric PAs will consider paying incentives for multifamily projects on a fuel blind basis.</p> <p>In order to achieve the targeted depth of energy savings in these projects it will be necessary to carefully consider the projects’ HVAC systems with regard to size, efficiency, air intake and venting mechanisms, overall health and safety issues, and other ‘house as a system’ considerations. In some cases, in order to reach the highest efficiency levels a complete redesign out of the project’s HVAC system may be necessary.</p>

	<p>On-going program evaluation and case study review of the homes treated will substantially inform the expanded effort in subsequent years.</p> <p>The PAs will coordinate with the RCS/MassSAVE working group on making Deep Energy Retrofit information, including energy and other benefits, available through RCS/MassSAVE educational materials, statewide web content, and through home energy assessments.</p>
Target market	<ul style="list-style-type: none"> • Home owners, property owners, and property managers considering renovations and willing to invest in extensive carbon reductions • Advanced Remodelers and Builder Remodelers • Architects • Designers • Trade allies • Others involved in renovation or restoration of residential buildings
Marketing approach	<p>Outreach and marketing to identify and interest potential pilot candidates will be performed through internet research, targeted media outreach, contractor outreach through new homes program, multi-family audit program and potentially through home energy raters and other professionals with appropriate skills. Successful outreach and marketing are essential to the success of the pilot, and so a marketing strategy will be developed to ensure that customers who have the greatest likelihood of pursuing a Deep Energy Retrofit are systematically identified and approached about pilot participation.</p> <p>Project selection will be by the sponsoring Program Administrator, based on property owner proposals to participate utilizing a qualified project team with a design that meets program defined criteria for optimal energy performance, health, safety and durability, and other criteria.</p> <p>A listing of contractors and designers with appropriate pre-requisite deep energy retrofit related experience as per criteria defined by the Program Administrator working group will be maintained to assist building owners in forming project teams to propose projects.</p> <p>Homes and apartment buildings 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.</p>

Target end uses	To dramatically reduce the amount of energy used in existing residences
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 and storm windows • High-performance lighting, including the use of CFL and light-emitting diode (“LED”) technologies • High-efficiency heating and cooling systems • Advanced thermostatic controls • High-efficiency appliances and products • Advanced energy use feedback and monitoring technology • Mechanical ventilation • Solar photovoltaic systems • Solar thermal systems
Financial incentives	<p>High levels of incentives will be offered to ensure that deep retrofits are completed on the targeted number of existing homes and to achieve the desired mix of multifamily and single family demonstrations.</p> <p>Incentives may be tiered based on the number of units in a building.</p>
Financial incentives (cont.)	<p>Basic incentives to move the market, based on pilot experience to date, will be a maximum of \$42,000 per unit. A higher tier of incentive levels up to an additional \$10,000 may be offered for deep energy retrofit projects that approach the highest energy performance standards, for example Net Zero energy, Passive House or Thousand Home Challenge standards.</p> <p>Staged and partial projects will be considered for inclusion in the pilot, and incentives will be scaled accordingly. A ‘staged’ project is one in which the participant plans to pursue deep energy retrofit levels (over 50% energy use</p>

	<p>reduction) in stages over a period of time. A ‘partial’ project is one in which the participant will pursue a substantial energy retrofit but which will fall below the 50% savings target.</p> <p>The HEAT Loan will be made available to pilot participants as an added tool to assist in bringing projects to fruition.</p>
Delivery mechanism	<p>Pilot program services will consist of outreach through a variety of channels to customers including through the existing RCS network to homeowner and to contractors through the residential new construction program. Project design details and assistance to the DER contractors doing the work will be handled through technical specialist organizations under contract and/or utilizing ARRA funds. In order for these projects to succeed it will be essential to have extensive technical support and training, since the challenges of retrofitting a building to this degree in a manner that enhances rather than degrades the durability of the structure and the health and safety of the occupants, exceeds to a considerable degree what is involved in RCS or new home construction.</p>
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 learned 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.</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, fire restoration and siding contractors if and when the pilot expands to a wider scale. Identifying how best to enable those contractors to partner with DER experienced contractors and make this work for their business plans is another tactic the pilot will explore. • Identifying lower cost HVAC and mechanical ventilation as well as super-insulated build-out approaches is vital to reducing total project costs. HVAC change-outs are often necessary since sealed combustion or forced draft is a requirement for combustion devices. • 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

	<p>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.</p> <ul style="list-style-type: none"> • The full value proposition in DER work is not yet accounted for in the BCR models or well known, or in a form that helps to move this market including: far longer measure life than the 28 or 30 year max in current models and enhanced building durability and lower maintenance and insurance costs due to the addition of a rain screen with super insulated wall build out, not to mention improved IAQ and the impact on health costs. Opportunities to quantify and share information on this to better inform BCR analysis and market actor decisions can further the effort to reach pilot goals and climate change goals in the existing homes sector. However this is a large undertaking in some ways beyond the scope of the pilot, perhaps best done in a regional or national context.
Special Notes	<p>In the 2009 pilot, many customers who were passionate about climate change withdrew from consideration, even though forewarned that their costs would likely be equal to or greater than the incentives (\$42,000) due to worries about the economy and not being able to recoup their investment in energy savings over time or at time of resale of the property. Financing which is extensive, long term and replicable or is transferable to the next owner is seen by many involved in this market as essential to increase participation including those who withdrew.</p> <p>Given the economy and scale of total investment for building owners, the pilot goals may only be achieved if considerable additional financing options become available through a wider group effort. The Deep Energy Retrofit working group will coordinate with the Financing and On-bill Repayment working group which is currently exploring financing options.</p> <p>Lifestyle education will be used to reduce appliance use and will be used to leverage selection of desired project (including housing style) types and maximum household energy reductions.</p> <p>If customers who express interest turn out not to be good candidates or opt out the pilot, the customer will be referred to the appropriate energy efficiency program.</p>

ENERGY STAR Lighting

<p>Primary Objective</p>	<p>The ENERGY STAR Lighting and ENERGY STAR Appliances 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 SSL.</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> <p>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</p>

<p>Program Design (cont.)</p>	<p>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.</p> <p>Historically, the ENERGY STAR Lighting Program has accounted for approximately 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. A recent multi-state evaluation study of the current program design also suggests a high level of market transformation for the plain bare spiral CFLs in MA as well as other states across the county. While these new results are preliminary, the PAs are planning the following for the Residential Lighting Program: 1) assume net-to-gross (NTG) ratios of .3 for the bare spirals in 2010 and 0 in 2011 and 2012, and .8, .8, and .65 for specialty bulbs respectively for the 3 years; 2) re-design the program in such a way to maximize savings from specialty bulbs and hard to reach customers. The NTG ratios for hard to reach customers is planned to be .7 for all three years. Currently, 90% of the bulb sales are from the bare spirals. Any program design which limits the sales of these products will have a large impact on our historical performance.</p> <p>Additionally, the PAs are cognizant of the start up in 2012 of the Energy Independence Securities Act (EISA), requiring higher wattage incandescent lighting to have a maximum wattage per lumen. The PAs acknowledge the potential further decrease in the base savings with the implementation of this act beyond 2012. To counteract the drop in savings from CFLs, the PAs are hopeful that solid state lighting products will become more mainstream in the next several years.</p> <p>The ENERGY STAR Lighting Program has included several components designed to educate consumers about the benefits of ENERGY STAR-qualified lighting products and to make these products more affordable:</p> <ul style="list-style-type: none"> • 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
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	<p>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 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 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 percent 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. These incentive types will be reconsidered along with other new rebate and market models in the redesign of the Residential Lighting Program. • ENERGY STAR-qualified SSL also will be eligible under the program with an emphasis on third-party testing, education, and new avenues for implementation in this market.
Target Market	All residential customers
Marketing Approach	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

<p>Marketing Approach (cont.)</p>	<p>new products. In addition to direct advertising targeting consumers, these approaches include 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 PAs will work to identify potential hard to reach customers and establish profiles of these population segments in order to maximize outreach and influence with them. There may be language and cultural differences that need to be addressed. The PAs 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. Other marketing activities that are identified through research and work with the different communities will be explored.</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 specification). Given a significant increase in specialty bulb promotions, the Program Administrators will monitor the development of the “super lamp” specification being developed by the California Program Administrators. • 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>
<p>Financial Incentives</p>	<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> <ol style="list-style-type: none"> (1) the Internet/mail-order sales channel; (2) Joint-sponsored instant rebates regularly available at retailers; (3) Special promotions; (4) NCPs with lighting manufacturers, distributors, and retailers
<p>Delivery Mechanism</p>	<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	<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 market.</p>
Program Administrator-Specific Elements	<p>To be provided with the October filing, if applicable.</p>
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 experience a decrease due to 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 is 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 Resolution 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.

For 2010 planning purposes, the Program Administrators and the Council have agreed to NTGs of .3 (spirals), .8 (specialties) and .7 (hard to reach). For 2010, EM&V results will be used in measuring savings for performance incentives, subject to a program level "collar" on the results of 15% up/down. A cap on the upside of the lighting component of 2010 performance incentives in saving and value components of 115%, which does not reduce target or overall pool. This customized approach is transitional and reflects the unique, unexpected results from the current interim draft evaluation and unique issues of the Lighting Program that is in transition

Additionally, for 2010, the Program Administrators have agreed to production goals as follows:

	NStar	National Grid	WMECO	CLC	Unitil	PA
Spiral CFLs	122,400	206,800	35,200	31,800	3,800	400,000
Specialty CFLs	348,000	475,000	88,000	88,000	1,000	1,000,000
Hard to Reach CFLs	153,000	258,500	44,000	39,500	5,000	500,000
LED fixtures	1,530	2,585	440	385	60	5,000
Indoor Fixture	30,600	51,700	8,800	7,700	1,200	100,000
Outdoor Fixture	765	1,293	220	193	30	2,500
Torchiere	61	103	18	15	2	200
LED lamps	306	517	88	77	12	1,000
Screw-in Bulbs - School Fundraiser	50,000	20,000	5,380	4,620	0	80,000

These production goals cause alignment of the Program Administrators' production to be more uniformly specific to customer counts. Additionally, the Program Administrators retain reasonable flexibility to adjust costs based on experience.

A new lighting program, including a proposal addressing standard CFLs, will be developed in 2010 and will be filed with the Department on or before the 2010 due date for mid-course modifications of October 31, 2010.

ENERGY STAR Appliances & Products

<p>Primary Objective</p>	<p>The ENERGY STAR Lighting and ENERGY STAR Appliances 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>PA-specific targets to be provided with October 2009 filings.</p>
<p>2010-2012 Budget</p>	<p>PA-specific budgets 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 Appliances & 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>Program Design (cont.)</p>	<p>The Program Administrators plan to negotiate with interested manufacturers and retailers to leverage rebate and/or 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 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</p>

<p>Marketing Strategy/ Approach (cont.)</p>	<p>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 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 educate 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>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>

Financial Incentives	<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 • 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	<p>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.</p>
Program Administrator-Specific Elements	<p>To be provided with the October filing, if applicable.</p>

<p>Three-Year Deployment/Road Map</p>	<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 incentives for pool pumps in 2009, the Program Administrators met with representatives from industry and discovered that there are unique distributors, installers, training, and equipment for 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 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 efficient products available in the retail market • 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 and its Consultants through a recognized ongoing iterative planning process to develop and implement plans that meet the objectives of the Council’s Priorities Resolution 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. • 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. • Providing user-friendly program by offering multiple paths/opportunities for participation.
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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 1980’s.
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.

<p>Program Design</p>	<p>The program design is based upon the following guiding principles:</p> <ul style="list-style-type: none"> • Participants will 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 is 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 gas and electric offering to a participant (the audit will be offered for propane and oil end-uses, however, at this time incentives will be provided only for gas and electric measures), regardless of 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 involves the services of a Multi-family Market Integrator who will provide project management services to ensure the seamless delivery of the program phases described below. (Additional detail on the role of the Multi-family Market Integrator will be described in the section titled Program Delivery).</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 Multi-family</p>
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Market Integrator 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 Multi-family Market Integrator will explain that, in addition to the measures initially requested, a whole building assessment may be performed which will identify other energy savings opportunities. (At this time, incentives will be paid for gas & electric measures only.) By motivating the participant to accept the whole building assessment, the project could ultimately result in deeper savings than otherwise would have been realized.

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 telephone, 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. Each participant will need to contact only one party to avail themselves of comprehensive services. Once the Multi-family Market Integrator is made aware of a project (either via telephone, 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 collects further information, as needed, to complete the enrollment.

Whole Building Assessment

Based on the outcome of the screening/enrollment process, the appropriate technical resources will be assigned to conduct a whole building, (fuel blind) assessment. The Multi-family Market Integrator 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 further site visits may be necessary. Technical assessments, benchmarking, and engineering studies may be conducted on an as needed basis.

Integrated Proposal for Energy Efficiency Services

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. At this time, incentives will be provided for gas and electric measures only. Once the comprehensive offer receives Program Administrator approval, it will be

presented to the participant by the parties required to help the customer fully understand the offering.

Delivery of Measures and Services

The Multi-family Market Integrator will coordinate the delivery of the measures and services opted by the customer. The Multi-family Market Integrator 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.

Quality Assurance

Quality assurance will be performed in support of this program. Third party independent QA/QC services will be solicited through a competitive bidding process. Currently there are plans for a statewide RFP to be issued to obtain QA/QC services for multiple residential programs, including the Multi-family program. Customer satisfaction surveys will also be administered to provide additional feedback for the Program Administrators.

Additional Program Design Elements

- Upon request, a comparison of energy usage before and after participation will be provided by the Program Administrators or a vendor under contract to perform these services.
- A link to the current EPA Benchmarking tool (Portfolio Manager), or other comparable tool, will be included on the website page(s) associated with the Multi-family Program. This will allow building owners/managers to assess the energy efficiency of their buildings against comparable facilities.
- The Program Administrators recognize that proper training for building operator and maintenance staff is a key factor in ensuring that expected savings are realized initially and persist over time. The Program Administrators will sponsor at least two sessions of a multi-family building operator training each year and provide an incentive of up to 50% of the training cost for facility operators .
- Representation from the Multi-family working group will be included on the Deep Retrofit Pilot design team. The Multi-family Steering Committee will coordinate referrals to the Deep Energy Retrofit Single-family and

	Multi-family Pilot Program.
Target Market	Residential facilities with five or more dwelling units. The program will address the unique circumstances associated with mixed use buildings.
Marketing Approach	<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 communicating with this population.</p> <p>Beginning in November of 2009, the Multi-family Steering Committee will begin developing a marketing plan to educate customers on the program services to be offered in 2010. The existing program vendors will participate in this session to provide their perspective based on their interactions with customers in the field.</p> <p>The Program Administrators conducted a literature review and focus group study. The results indicate that building owners/managers need to have confidence in the expected outcome from program participation. Once some projects are completed and results from these projects become available, this data can be used to develop simple case studies that can be placed on the web site and in other marketing materials.</p>
Target End Uses	<p>At this time the program targets, through a comprehensive energy assessment, gas and electric end-uses only. 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, appliances, motors, variable-speed drives, HVAC equipment, energy management systems and building controls, chillers, compressed air, and other site specific end-uses.</p>
Recommended Technologies	<p>Recommended gas and electric technologies offered may include, but are not limited to:</p> <p>Energy efficient lighting upgrades & controls</p>

Occupancy sensors

DHW measures: low flow showerheads, aerators and pipe wrap

Programmable thermostats

Insulation

Air Sealing

HVAC hi-efficiency equipment upgrades and controls

ENERGY STAR-rated refrigerators and other eligible appliances

Variable Speed Drives

Motors

Chillers

Energy Management Systems (EMS)

Air compressors

Water heating equipment, including Solar hot water heating systems

Combined Heat and Power (CHP)

Heat Recovery Ventilators (HRV) / Energy Recovery Ventilators (ERV)

Custom Technologies

Duct sealing measures and heat pump testing and upgrades will be performed through the existing Cool Smart or Cool Choice Program as appropriate. The Multi-family Market Integrator will work with the customer to ensure that the appropriate services are delivered. These end-uses are best served by contractors specializing in this

	<p>technology. In addition, there are instances where the customer’s warranty may become void if anyone other than the original installation contractor performs work on the system. During program delivery, a packet of additional program offerings (i.e. lighting & appliances) will be made available to participants.</p>
<p>Financial Incentives</p>	<p>There are four categories of incentives including a.) 100% incentive with \$0 customer co-pay; b.) fixed incentive and customer co-pay per measure; c.) incentive expressed as a percentage of the total installed cost; and d.) custom incentives based on the change between existing and replacement equipment. For individual gas and electric measure incentives, see Appendix A. Project caps, which take budget constraints into consideration, will be established by each Program Administrator.</p> <p>The Multi-family Steering Committee will consider alternative incentive structures specifically designed to encourage deeper savings over time. However, the Multi-family working group, based on their collective experience along with that of their implementation vendors, believes that offering integrated program services will provide for deeper savings than are currently being realized. The Program Administrators’ approach involves launching the program using the incentive structure described above. Data on measures not opted for by program participants will be tracked by the Multi-family Market Integrator and assessed by the Multi-family Steering Committee. The Program Administrators believes that implementing this approach will allow for assessing where program incentives may need to be enhanced based on in-the field program experience.</p> <p>In addition to the measure-level incentives described above, the Program Administrators will provide funding for “soft costs” including building operator training and technical assistance for those projects requiring an engineering study. The Program Administrators recognize that proper training for building operators and maintenance staff is a key factor in ensuring that expected savings are realized initially and persist over time. The Program Administrators will sponsor at least two sessions of a multi-family building operator training each year and provide an incentive of up to 50% of the training cost for facility operators. Incentives may also be paid to offset the costs of gas and electric engineering studies.</p> <p>The Program Administrators will examine the potential for offering on-bill financing to program participants. This assessment will take into consideration the unique characteristics of the multi-family market (i.e. the owner of the facility may be responsible for the co-pay, but the energy bills may be paid by the tenants. The owner may not even be a customer of the Program Administrator).</p>

	To assist building owners and managers with their planning efforts, the Program Administrators will commit to project-specific funding for up to one year for pre-approved projects with signed service agreement by customer, 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 Steering Committee which will be responsible 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 Multi-family Market Integrator 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 Multi-family Market Integrator 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 has been prepared for the Multi-family Market Integrator role and a vendor will be selected via a competitive bidding process.</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 they have Program Administrator approval which will involve providing documentation of their qualifications prior to the installation.</p>
Joint Program Administrator Enhancements Planned for 2010-2012	N/A
Sponsor Specific Elements	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 Steering Committee and will be assessed to determine if enhancements to the current program design should be made based on the results of the pilots.

Three-Year Deployment/Roadmap	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. Prepare scope of work for Multi-family Market Integrator services.	Completed 9/09	Work scope for Multi-family Market Expeditor services.
	2. Document process based on Multi-family Market Integrator scope of work	10/31/09	Process Flow
	3. Create 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 multi-family community.
	4. Finalize bidder list for Multi-family Market Integrator	12/31/09	Vendor list
	5. Begin monthly Multi-family Steering Committee Meetings	1/31/10	Agenda and meeting notes
	6. Vendor Selection for Multi-family Market Integrator	6/1/10	
	a. Update scope of work (if required) based on regulatory ruling on the Plans	2/8/10	Final SOW
	b. Issue RFP	2/16/10	RFP
	c. Bids due	4/1/10	Bidder proposals
	d. Vendor selection	5/5/10	Notice to procurement staff of vendor selected
	e. Contracts with each PA signed	6/1/10	Signed contracts
7. Individual Program Administrators develop internal plans to implement statewide program	7/15/10		

PHASE II – PROGRAM IMPLEMENTATION

Task Description	Target Completion Date	Deliverable
1. Implement common statewide incentives	1/1/10	
2. PAs that share a service territory will work together to provide integrated gas and electric energy efficiency services to customers being served prior to implementation of the formal Multi-family Market Integrator role.	1/1/10	
3. Implement Marketing Plan	Jan- Jun 2010	Marketing materials and schedule for delivery
4. Kick-off meeting with Multi-family Market Integrator	6/2/10	Agenda and meeting notes
5. Conduct training for PA and vendor staff	7/5/10	Documented completion of this task
6. Preparation of all program materials	7/5/10	Program materials
7. Program Implementation	7/15/10	Notification of program launch
8. Monthly Multi-family Statewide Executive Committee Meetings	Ongoing	Meeting notes distributed to all participating Program Administrators
9. Standardize gas C&I measures and incentives (please see footnote in Appendix A)	For 2010 Program Year	Updated measure and incentive list

PHASE III – PROGRAM ASSESSMENT

	Task Description	Target Completion Date	Deliverable
	1. 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 both the residential and C&I sectors. To best utilize the expertise of each member of the team, the following sub-groups have been formed.</p> <p>The Technical sub-group 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 incentive structures intended to achieve greater participation and deeper savings.</p> <p>The Evaluation sub-group was charged with building on the success of the April 2009 Multi-family Workshop to obtain a greater understanding of the “market rate” sector. This assisted the Program Administrators in developing strategies to overcome market barriers and thus achieve increased participation and deeper savings. To this end, the Program Administrators contracted with Nexus Market Research to conduct focus groups as well as in-depth interviews with program administrators throughout the country.</p> <p>Additionally, the Program Administrators participated in pertinent webinars sponsored by organizations such as the Association of Energy Service Professionals (AESP) and ESource .</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 Heschong Mahone Group. This 		

program is being sponsored by AESP.

This program description has addressed each of the items included in the Council’s Priorities Resolution. A summary of how these issues have been addressed is provided below for ease of reference.

- “The PAs are encouraged to define “multifamily” as a building with more than four units”.
 - The target market for this program is a facility with 5 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”.
 - 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”.
 - The Multi-family Market Integrator 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 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 in the form of a “whole building” assessment to identify opportunities regardless of fuel. Incentives are provided for cost-effective gas and electric measures.
- “The PAs are encouraged to explore a Multi-family Initiative deep energy retrofit track”.
 - There will be representation from the Multi-family Steering Committee on the program design team working on the Deep Retrofit Pilot to assess opportunities in facilities with five or more dwelling units.
- “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. Primary vendors contracted by the Residential Program Administrators are required to have BPI certification or the equivalent. Sub-contractors will work under the supervision of the primary vendor. Primary vendors contracted by the C&I Program Administrators are required to meet all local, municipal and state licensing requirements.
- “PAs are encouraged to examine the experience of NYSERDA and other states’ multifamily programs”.

	<ul style="list-style-type: none"> ○ 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 focus groups and in-depth telephone interviews pertaining to multi-family programs across the country. ○ Two nationwide webinars pertaining to multi-family programs were attended by representatives from the Program Design Working Group to review best practices.
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APPENDIX A – FINANCIAL INCENTIVES TABLE -ELECTRIC

MEASURE	INCENTIVE
<i>Instant Savings Measures</i>	
Compact fluorescent light bulbs Energy Star rated light fixtures for within units	No Cost to Customer

Domestic hot water saving devices, such as faucet aerators and showerheads	
Programmable thermostats	
Air sealing	
Pipe insulation	
Smart strips	
Night lights	
<i>Fixed Incentive or Customer Co-pay per Installed Measure</i>	
Energy Star rated light fixtures for interior and exterior common areas	\$10 co-payment per fixture
Metal Halide Pulse Start lighting	\$70 incentive per unit
Daylight Dimming	\$40 per ballast
Fluorescent HiLow dimming	\$40 per ballast
Occupancy Sensors Remote mount	\$75 per control
Occupancy Sensors Wall Mount	\$25 per control
HIF and HID Wall Mounts	\$25 incentive per unit

HIF and HID Ceiling Mounts	\$75 incentive per unit
Exit signs	\$10 incentive per unit
Brushless Fan Motors	\$300 incentive per unit
New ENERGY STAR-rated refrigerator	\$150 incentive toward the cost of a new ENERGY STAR-rated model
Motors – 1-200 HP	\$45-\$700.
Air conditioning 1-30 tons	Provided through the Cool Choice Program. (No rooftops unless broken.)
Dual Enthalpy Controls	\$250 incentive per unit
ECM Fan Motor	\$150 incentive per unit
Demand Control Ventilation:	\$150 incentive per unit
Chillers- Air & Water Cooled (up to 1000 tons)	Incentives vary (No chillers unless broken)
HVAC – EMS up to 40,000 sq.ft. building:	\$225 incentive per unit (limit 16 pts.)
HVAC – EMS 40,001 – 80,000 sq.ft. building	\$300 incentive per unit (limit 48 pts)
HVAC – EMS 80,001 – 200,000 sq.ft. building	\$200 incentive per unit (limit 128 pts)
VSDs 5-100 hp:	Incentive between \$1,500 and \$7,300
Air compressors:	Incentives vary and likely will not apply to

	multifamily
Refrigerated Beverage – Vending	\$75 incentive per unit (If there is an existing unit only)
Non-refrigerated Vending	\$30 incentive per unit (If there is an existing unit only)
Refrigerated Glass Front Vending	\$75 incentive per unit (If there is an existing unit only)
CHP	Provided through the CHP program
<i>Incentive Expressed as a Percentage of Total Installed Cost</i>	
Attic insulation for electrically heated homes Wall insulation for electrically heated homes Basement/crawl space insulation in electrically heated homes Rim joist insulation	75% incentive
<i>Custom Incentive Based on Change Between Existing & Replacement Equipment</i>	
High Performance Sodium Lighting:	Incentive based on wattage reduction
Other Custom Technologies	Up to 50% incentive based on BCR

	analysis
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Multi-Family 4-8 Story New Construction Program

Primary Objective	To broaden participation and achieve deeper savings in the multifamily new construction 4-8 story category through a program and incentive design that encourages such action.
Program Inception	The Program Administrators have offered energy efficiency services to the multi-family sector through multiple programs implemented separately by the commercial, residential, electric and gas Program Administrators.
2010-2012 Program goals	PA-specific targets to be provided with October 2009 filings.
2010-2012 Budget	PA-specific budgets to be provided with October 2009 filings.
Joint vs. Sponsor-Specific Offering	The Program Administrators are proposing a common statewide program with the goal of offering a consistent customer experience throughout the state.

<p>Program Design</p>	<p>The cornerstone of the program design involves a Prescriptive Whole Building program and the services of a Multi-Family Market Integrator (MMI) who will provide project management services to ensure the seamless delivery of the program as described below.</p> <p>The program design was developed based on the same guiding principles as the Multi-Family Retrofit Program. Refer to “Program Design” section of the Multi-Family Retrofit description.</p> <p><u>Participant Screening</u></p> <p>There will be a well-defined screening process administered by the MMI to identify the participant’s need for a particular project. Based on size and the inclusion of both residential and commercial measures, units will be eligible for this program.</p> <p><u>Enrollment</u></p> <p>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.</p> <p><u>Prescriptive Whole Building Approach</u></p> <p>This program will present both commercial and residential measures to the participant in a single offering. All fuels will be considered however at this time incentives will be provided only for gas and electric measures. The MMI would support the participant in selecting the 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.</p> <p>Savings will be documented in kWh and therms. Savings will be attributed to the measures installed for ease in reporting and distributing the savings between residential and commercial sectors as required by each Program Administrator.</p> <p>Technical assistance and engineering studies will be conducted, as needed, for projects implementing custom measures not included in the prescriptive menu.</p>
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	<p><u>Integrated Proposal for Energy Efficiency Services</u></p> <p>The MMI will coordinate a single project proposal that will include measures, other available services, and incentives for both gas and electricity (where applicable). Once the offer has Program Administrator approval, it will be presented to the participant by the MMI and any additional staff required to help the customer fully understand the offering. The MMI will ensure that any additional questions are brought to the appropriate party and facilitate the communications necessary to respond to the inquiries. The MMI will collect all supporting documentation required by the Program Administrator to approve the project proposal.</p> <p><u>Delivery of Measures and Services</u></p> <p>Upon execution of the participant agreement, the MMI will monitor the progress of construction and notify the Program Administrator to schedule post-installation inspections. Commissioning services will be supplied as required.</p> <p><u>Quality Assurance</u></p> <p>Customer satisfaction surveys will be administered to provide additional feedback for the program administrators.</p> <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 applicable trainings.</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>
Target Market	This program targets multi-family new construction projects in the 4-8 story category.
Marketing	The program will be supported by the statewide energy efficiency marketing effort; however, direct outreach to

Strategy/Approach	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 MMI, individual Program Administrators may choose to include marketing and promotional activities in the Scope of Work (“SOW”) of the MMI. In any case, it will be important that all marketing collateral have a consistent visual “brand” that is presented across the Commonwealth.
Target End Uses	The program essentially targets, through a whole building approach, the installation of cost-effective measures, such as energy efficient lighting upgrades, building shell improvements, high performance HVAC systems and domestic hot water.
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 • Domestic hot water saving devices, such as low flow showerheads, aerators, and pipe wrap • High efficiency HVAC systems • Increased levels of insulation • Air and Duct Sealing • ECM Motors • Renewable technologies, as appropriate and cost-effective
Financial	The Program Administrators will be evaluating various incentive structures and incentive levels to encourage

Incentives	increased participation and deeper savings. Specifically, incentives will be developed from the measure list described above. In addition, the Program Administrators will explore incentives for soft costs such as technical assistance and owner/operator training.
Delivery Mechanism	Program design and implementation will remain the responsibility of the Program Administrators. Collectively the Program Administrators will form a Multi-family Steering Committee (MSC) which will be responsible for program oversight and promoting continuous improvement and best practices with regard to the multi-family market to insure a consistent customer experience across service territories.
Joint Program Administrator Enhancements Planned for 2010-2012	N/A
Sponsor Specific Elements	
Three Year Deployment/Road Map	<p>The multi-family program design effort is expected to create a platform for gas and electric integration that may be adopted or modified as required by other programs.</p> <p>Please refer to the Multi-family Retrofit Program for program roadmap details.</p>

<p>Special Notes</p>	<p>In order to provide a fully integrated energy efficiency offering, the program design is being developed by a cross-functional team including Program Administrator staff representing gas and electric fuels, with experts from 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 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 Resolution 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 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 MMI 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.

Residential Low-Income Electric Single Family Program

Primary Objective	To deliver energy efficient products and services directly to the homes of income eligible 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, as 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.</p> <p>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	PA - specific targets to be provided with October 2009 Filings.

Program Goals	
2010-2012 Budget	PA – specific budgets to be provided with October 2009 Filings.
Joint vs. Program Administrator-Specific Offering	This program is offered jointly with each Program Administrator having individual administrative processing.
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 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 water heaters and usage monitoring systems. In addition, a change in rules as a result of the American Recovery and Reinvestment Act (ARI) makes it possible to spend more federal money in each home which will allow Program Administrator funding to help address more items on the cost effective priority list for each customer. 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 (e.g. 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>
Marketing Approach	<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</p>

	<p>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 • 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 income eligible 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

	<ul style="list-style-type: none"> • Major weatherization repairs (e.g., electrical repairs, roofs, etc.) • 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 • 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</p>

	<p>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>
<p>Joint Program Administrator Enhancements Planned for 2010-2012</p>	<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
<p>Program Administrator-Specific Elements</p>	<p>To be provided with October 2009 Filings.</p>
<p>Three-Year Deployment</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>Three-Year</p>	<p>The Best Practices working group process will continually review and evaluate new measures and technologies. See recommended technologies above.</p>

<p>Deployment (cont.)</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>
<p>Special Notes (cont.)</p>	<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 implements the Program Administrator and DHCD programs, Program Administrators assure that a common set of programs is available to all income eligible 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 within 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 income eligible 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 is available.

Low-Income Multi-family Retrofit Program

Primary Objective	<p>To deliver energy efficient products and services directly to the dwellings of residential customers living in facilities (with five or more units) on the low-income rate or of eligible income-eligible residents living in multi-family non-institutional facilities (with five or more units) owned or operated by a non-profit entity or a public housing authority, by addressing the informational, economic, institutional, and technical barriers that have historically made the low-income multi-family market a “hard to reach” sector in order to help eligible participants lower their energy bills.</p> <p>The program aims to broaden participation and achieve deeper savings per participant by integrating gas and electric measures into a single program.</p>
Program Inception	<p>Some Program Administrators offering services to this customer segment date back to the early nineties. Since 1998, Program Administrators have been working with the Best Practices Working Group to provide a coordinated program.</p>
2010-2012 Program Goals	<p>See individual PA filings.</p>
2010-2012 Budget	<p>See individual PA filings.</p>
Joint vs. Program Administrator-Specific Offering	<p>The Program Administrators are proposing a common statewide program with the goal of offering a consistent participant experience throughout the state. The Program Administrators recognize the need to allow for the flexibility to ensure that the needs of all participants are met.</p>
Program Design	<p>This program is designed to minimize or eliminate co-payments, integrate gas and electric program delivery, and integrate funding across all sectors that serve low-income multi-family facilities to the greatest extent possible.</p> <p>Eligibility for program measures and services will be based on the established program cost-effectiveness test,</p>

which include agreed non-energy benefits, and will not be restricted by rate class associated with the meter(s) for the facility to the greatest extent possible.

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, all opportunities, regardless of fuel source will be identified and documented for the customer. All efforts to deliver a fully integrated offer to a participant will be performed in a manner that will result in a seamless participant experience.

The Program Administrators in collaboration with LEAN, state organizations such as the DHCD, public housing authorities (PHAs), community development corporations (CDCs), other non-profit entities that own or operate low-income non-institutional multi-family housing (non-profits), and Community Action Program (“CAP”) agencies, will make up the Best Practices Working Group. The working group’s objective will be to collaborate and coordinate on all aspects of the low-income multi-family program, including but not limited to, planning, delivery, implementation, standardization, education, marketing, training, cost effectiveness, evaluation, and quality assurance.

This program will piggyback on the current DHCD low-income energy efficiency programs and all other eligible funding sources (i.e. federal and state) to enhance program services. The LEAN Lead Vendor with respect to each PA service territory will be the same as the LEAN Lead Vendor for other low-income efficiency programs, or such other arrangement as is agreed with LEAN (hereinafter “LEAN Lead Vendor”). Sub-contracting will be appropriate to the complexity of the work required and will be based on the same audit tool as in the market rate multi-family retrofit program. Low-income customers will be referred to the LEAN Lead Vendor by the Multi-family Market Integrator (MMI), as defined in the multi-family retrofit program. Low-income customers may also apply directly through the LEAN network. An essential element of this program is that interested customers also have the option, at their discretion, of electing to participate in the market rate multi-family retrofit program. This approach helps ensure that there are multiple paths to participation in energy efficiency programs in this unique market sector that has also been served over many years by skilled contractors and engineering firms. These firms will continue to be eligible to provide services in this sector, both through the market rate multi-family retrofit program (and its terms and conditions) and, where qualified, as providers for the LEAN network under the terms and conditions of this program.

The following program design components are similar as those found in the multi-family retrofit program description.

Enrollment

Participants for this program may enroll through a low-income agency, statewide website, the multi-family statewide toll free number, Program Administrators or other venue.

Participant Screening

LEAN will develop an Advisory Committee comprised of LEAN, CDCs, other nonprofit owners of low-income non-institutional multifamily housing, and PHAs, which will be tasked with prioritizing low-income multi-family projects for each Program Administrator and alerting the Multi-family Market Integrator (MMI), as defined in the multi-family retrofit program, of projects assigned to move forward. The Advisory Committee will integrate flexibility into their planning to handle unique needs of Program Administrators or potential participants.

Due to the nature of this market segment most leads will be generated through the Advisory Committee, however, leads coming in via other venues will be screened by the MMI and forwarded to LEAN for eligibility confirmation.

Upon confirmation of a project, the LEAN Lead Vendor is responsible for coordinating the appropriate parties to address the project needs based on protocols agreed to by specific Program Administrators and consultation with specific Program Administrators to move the project forward.

Whole Building Assessment

Based on the outcome of the screening process, the appropriate technical resources will be assigned to conduct a whole building, (fuel blind) assessment. The audit firms used for the market rate program will also serve the low-income sector, along with the current Network agencies who serve the low-income multi-family market. If

the same firms are not available, the auditor(s) performing the services will be required to have, at a minimum, the same qualifications (i.e. training, certification, etc.) as the market rate program auditors. The LEAN Lead Vendor 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 more than one 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 to participants and instant saving measures will be installed, as appropriate and authorized by the customer.

Integrated Proposal for Energy Efficiency Services

Using the findings from the site-specific assessment, the appropriate parties will draft a project proposal that will include gas and electric cost-effective measure opportunities and other available services where applicable. The project proposal will be forwarded to the appropriate Program Administrators for approval. 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.

Delivery of Measures and Services

The LEAN Lead Vendor will coordinate the delivery of the measures and services opted by the customer. The installation firms used for the market rate program may also serve the low-income sector. If the same firms are not available, the vendors performing the services will be required to have, at a minimum, the same qualifications (i.e. training, certification, etc.) as the market rate program vendors. An exception to this protocol will occur when participants select their own vendor for the installation of gas measures such as heating systems, but they still must have the same qualifications as any other qualified installation vendor. The installation contractors 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.

Quality Assurance/Quality Control

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

	<p>administered to provide additional feedback for the Program Administrators. The same QA/QC protocols and vendors will be used for both the market rate and low-income sectors.</p> <p>Education and information are included in all Program Administrators' energy efficiency programs. The low-income multi-family program plans to develop/improve education materials and material distribution which will include education materials for landlords, property managers, building occupants, and property management personnel</p> <p><i>Additional Program Design Elements</i></p> <ul style="list-style-type: none"> • The Program Administrators will, on request, inform participants of the change in their energy consumption one year after participating in the program. This may be accomplished via a letter or email. • Subject to a review of cost reasonableness, available tools will be used to allow LEAN to benchmark customer energy use against like buildings as part of the project screening process. • 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. <p>The Program Administrators in collaboration with LEAN, state organizations such as the DHCD, public housing authorities (PHAs), community development corporations (CDCs), other non-profit entities that own or operate low-income multi-family housing (non-profits), and Community Action Program ("CAP") agencies, will make up the Best Practices Working Group. When topics to be discussed apply to both market rate and low-income customers, this group and the Multi-family Steering Committee (for the market rate program) will hold joint working sessions.</p>
Target Market	Residential customers on the low-income rate or individuals living in non-institutional dwellings owned or

	<p>operated by non-profit entities or public housing authorities with five or more units who are at 60 percent of 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 multi-family 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 median income. Any changes to eligibility will be addressed through the Best Practices Working Group.</p>
<p>Marketing Strategy/ Approach</p>	<p>The Program Administrators foresee a high demand for the low-income multi-family program that will be managed jointly by the Advisory Committee and the Program Administrators.</p> <p>The Program Administrators will engage in outreach efforts to notify customers of the availability and value of energy efficiency services to stimulate interest in the program and operate within budgets. Marketing will consist of contacting customers subscribing to the low-income rates who have not received prior energy services and landlords of low-income tenants. Direct mail, bill inserts, and literature distributed through social service agencies, housing funders, government offices, and other networks are also used to market the program. Program Administrators will use their relationship with 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 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 and potential participants 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</p>

	savings.
Target End Uses	<p>Gas and electric target end uses in both dwelling units and common areas include but are not limited to the following:</p> <ul style="list-style-type: none"> • Comprehensive, whole building approach, including audits • Building shell • Heating and cooling • Domestic water heating • HVAC and other Mechanical systems and controls • Lighting and Appliances • General waste heat • New technologies and renewables • All other cost-effective site-specific end uses that impact gas and electric consumption
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 for gas and electric end uses that are appropriate to offer to low-income multi-family customers. Potential measures offered through the low-income multi-family program, where cost-effective, include but are not limited to:</p> <ul style="list-style-type: none"> • Attic insulation • Wall insulation • Pipe insulation • Duct sealing/insulation • Air sealing, including weatherstripping • Domestic hot water measures • Lighting upgrades and controls • Energy Management Systems (EMS) • Occupancy sensors • Motors and drives

<p>Recommended Technologies (cont.)</p>	<ul style="list-style-type: none"> • Chillers • Air compressors • Heating system repair and replacement • Water heating equipment • Programmable thermostats • Ventilation system repair, adjustment, replacement • Refrigerators • Freezers (PA-specific) • Air conditioners • Heat Recovery Ventilation/Energy Recovery Ventilation • Redistribution systems • Temperature building controls • Power smart strips • Health and safety <p>Other technologies to be discussed in the Best Practices working group for future consideration if cost-effective include but are not limited to:</p> <ul style="list-style-type: none"> • Combined heat and power (CHP) • Major weatherization repairs (e.g., electrical repairs, roofs, etc.) • Exterior doors • Other envelope measures • Low mercury light • LED • ENERGY STAR Clothes washers • Solar water heating • Geothermal • Biomass
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	<ul style="list-style-type: none"> • Green/hypoallergenic products • Window coverings • Other measures as determined on a site-specific basis
<p>Financial Incentives</p>	<p>Program Administrators will pay up to 100% of the project cost with established caps, including measure caps, which will be determined by agreement between LEAN and the Program Administrators based on a review of cost-effectiveness. Given the cost of larger capital investment projects (e.g. heating system upgrades), the Program Administrators will negotiate with all interested stakeholders to establish incentive caps and guidelines to ensure cost-effectiveness and a more systematic balanced approach to program spending.</p> <p>Program Administrator funds will only be accessed after other funding sources have been leveraged. Project participants willing to provide co-payments will be entitled to favorable weighting as the Advisory committee prioritizes projects.</p>
<p>Delivery Mechanism</p>	<p>The program will be administered cooperatively by the gas and electric Program Administrators in conjunction with interested stakeholders.</p> <p>There will be a common enrollment process (using the services of the Multi-family Market Integrator) for both the market rate and low-income segments to prevent customer confusion. Once the participant’s project is identified as a low-income multi-family project the delivery of the program services will be similar to that for market rate participants except that the LEAN Lead Vendor will be responsible for coordinating the appropriate resources and vendors to move the project forward.</p> <p>The program delivery mechanism serves to minimize lost opportunities and encourage deeper savings in the following ways:</p> <ul style="list-style-type: none"> • The increased incentives amounts may allow for achieving energy savings that would not be possible if this population had to provide a significant co-payment. • Having the PHAs and non-profits (CDCs and other non-profit owners of non-institutional low-income multifamily housing) directly working with members of the Best Practices Working Group will

	<p>facilitate access to the tenant spaces, which has been traditionally cited a potential barrier in the multi-family market.</p> <ul style="list-style-type: none"> • The Best Practices Working Group will attempt to leverage funds from all applicable revenue streams to achieve deeper savings. 						
<p>Joint Program Administrator Enhancements Planned for 2010-2012</p>	<p>In order for the low-income multi-family program to achieve deeper energy savings and increase the number of program participants over the next three years, the Program Administrators will:</p> <ul style="list-style-type: none"> • Leverage, to the best extent possible, all applicable revenue streams available to enhance services on a meter-blind basis, including integration of gas and electric, low-income, residential, and commercial funding. • Deepen efficiency penetration consistent with our comprehensive, whole building approach on a fuel-blind basis with increased incentives. • Implement LEAN Lead Vendor services across the state, similarly as described for the MMI in the Market Rate Multi Family program description. • Broaden program participation through coordinated marketing and outreach efforts, if needed. • Continually review and evaluate new measures and technologies through the Best Practices Working Group process. 						
<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>Provided below is the roadmap for the completion of the program design and program implementation.</p> <p>PHASE I – PROGRAM PLANNING</p> <table border="1"> <thead> <tr> <th>Task Description</th> <th>Target Completion Date</th> <th>Deliverable</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Task Description	Target Completion Date	Deliverable			
Task Description	Target Completion Date	Deliverable					

	1. Identify eligible measures and establish incentives	Completed 10/09	Set of measures and corresponding incentives
	2. Prepare draft scope of work for Multi-family Market Integrator services.	Completed 9/09	Draft work scope for Multi-family Market Integrator 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 offering incentives soft costs such as technical assistance and for building owner/manager or their staff to obtain applicable trainings and certification.	10/31/09	Documented findings from joint PA and Consultant assessment
	5. 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, auditors, installation vendors, technical assistance and QA/QC providers. 	12/31/09	Process flow
	6. Create Marketing Plan	Ongoing	If needed, form a low-income

<ol style="list-style-type: none"> 1. If needed, the Program Administrators and LEAN will work together to develop a full marketing plan beyond the statewide marketing efforts 2. Identify marketing material needed for customers 		<p>multifamily marketing committee to develop a detailed marketing and outreach plan.</p>
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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 and/or create customer marketing materials	2010	Marketing materials and schedule for delivery
3. Program Implementation	2010	Notification of program launch
4. Monthly Multi-family Statewide Executive Committee Meetings, including LEAN	Ongoing	Meeting notes distributed to all participating Program Administrators and LEAN
5. Training	Ongoing	Training and workforce development will be accomplished by the Program Administrators working with LEAN, DHCD, CDCs, PHAs, other non-profit owners of non-institutional low-income multi-family housing, and CAP agencies to increase the number of qualified contractors, energy

			auditors, and administrative staff.
	6.Leveraging of funds	Ongoing	The Best Practices Working Group will leverage all applicable revenue streams available to enhance services.
PHASE III – PROGRAM ASSESSMENT			
	Task Description	Target Completion Date	Deliverable
	1. Annual Multi-family Statewide Executive Committee (including LEAN) 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.
	2. Evaluation of new measures.	ongoing	The Best Practices Working Group process will continually review and evaluate new measures and technologies. See “Recommended Technologies” above.
Special Notes	The Program Administrators, in conjunction with the Council’s Consultants, PHAs, CDCs, other non-profit owners of non-institutional low-income multi-family housing, and LEAN, have performed an assessment of the multi-family program in Massachusetts. For low-income multi-family projects, the assessment developed this		

program 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 increased incentives up to 100% (pending a review of the budget impacts by each Program Administrator).

The program will address several of the Council's Priorities Resolution including:

- **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 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. This program will be uniquely meter-blind, i.e., combine funding from gas and electric PAs across low-income, residential, and commercial sectors.
- **Best Practices.** The Program Administrators will continue to work in coordination with LEAN (expanded to include CDCs, PHAs, and other non-profit owners of non-institutional low-income multi-family housing) 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 multi-family program including ongoing planning, delivery, implementation, marketing, training, evaluation and quality assurance. In addition, by piggy-backing on the DHCD weatherization program and/or other state or federal programs, 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

**Special Notes
(cont.)**

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 audits and technologies/measures to determine if a full program rollout is justified.
- Broader/Deeper. Through the comprehensive, whole building approach, all available cost-effective energy efficiency measures offered through the program will be considered on a fuel-blind basis with minimized or no co-payments for gas and electric measures 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, including at public housing authority buildings. 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 is available. The Program Administrators reserve the right to claim savings regardless of funding sources used.

While the LEAN is looking to expand eligibility for this program to include affordable housing owners that are for-profit entities, both the Program Administrators and LEAN agree that implementation of this change will require policy changes. Until such changes are approved by the necessary regulators, this segment of the multi-family market will be served through the market rate program.

