Quarterly Report of the Program Administrators
Fourth Quarter, 2013
February 11, 2014
I. Introduction

Pursuant to the requirements of the Green Communities Act (“GCA”), codified at G.L. c. 25, § 22(d), “The electric and natural gas distribution companies and municipal aggregators shall provide quarterly reports to the council on the implementation of their respective plans. The reports shall include a description of the program administrator’s progress in implementing the plan, a summary of the savings secured to date and such other information as the council shall determine.”

Building upon this legislative mandate, as well as the Order of the Department of Public Utilities (“Department”) in D.P.U. 12-100 – D.P.U. 12-111 (the “Order”), dated January 31, 2013, approving Three-Year Energy Efficiency Plans (the “Plans”) for each Program Administrator (“PA”), this document serves to report on PA activities throughout the Commonwealth during the fourth quarter of 2013. This document presents narrative status updates regarding program implementation and specific areas of interest as requested by the Energy Efficiency Advisory Council (“EEAC” or “Council”), followed by quantitative data set forth at Attachment A and additional EM&V information set forth at Attachment B.

The narrative portion of this Quarterly Report for the fourth quarter of 2013 is organized as follows:

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1 The Department of Public Utilities requires that these Quarterly Reports be provided to it as well for informational purposes. Orders in D.P.U. 09-116 – D.P.U. 09-120 and D.P.U. 09-121 – D.P.U. 09-128 (January 28, 2010).
II. 2013 Council Priorities Update

1. Achieve at least 100% of the savings and benefits goals set for the 2013 program year, and emphasize key actions to be implemented in 2013 for sustained program success going forward.

   ACTION: Based on the preliminary Q4 data, the lifetime savings achieved for 2013 as a percentage of planned savings for electric PAs is 89% and for gas PAs is 101%. Looking at these lifetime savings by sector, electric PAs achieved 135% of residential goals, 122% of low-income goals and 80% of commercial and industrial ("C&I") goals; gas PAs achieved 125% of residential goals, 160% of low-income goals and 74% of C&I goals. To date, the total benefits achieved for 2013 as a percentage of total planned benefits for electric PAs is 96% and for gas PAs is 100%. As anticipated, achievement of C&I goals was a challenge for both gas and electric PAs. In Q4, all PAs were engaged in efforts to increase C&I savings, including particular focus on CHP, segmentation, seeking deeper savings, new technology, hiring staff and adding vendors, and improving productivity. For additional detailed information on the efforts made by the PAs in Q4 toward achieving their savings and benefits goals, please see Sections III through VIII.

2. Continue to Improve the Cost Efficiency of Program Delivery. Identify and quantify cost efficiencies realized in the 2010-2012 programs, pursue and implement additional efficiencies, and continue to improve the cost efficiency of program delivery. In addition, pursue outside funding and non-low-income financing options to leverage program funds and maximize benefits.

   ACTION: For 2013, the PAs achieved historic savings and benefits goals while driving costs lower than planned. To date, the total spend for 2013 as a percentage of planned budgets for electric PAs is 89% and for gas PAs is 90%. Looking at the total spend by sector, electric PAs spent 113% of residential budget, 93% of low-income budget and 74% of C&I budget; and gas PAs spent 103% of residential budget, 101% of low-income budget and 61% of C&I budget. In Q4, PAs continued to review the findings of their 2010-2012 data analysis on costs to achieve and to work together to achieve the greatest savings in the most cost-efficient manner, including minimizing administrative costs through the their statewide collaborative process.


   ACTIONS:
   • In the fourth quarter, the PAs presented to the EEAC on their C&I, residential and low income efforts.
   • The Residential Barriers Working Group (“RBWG”) continued meeting and making progress in Q4. The RBWG met on October 30, 2013 for a discussion of landlord tenant issues with Renew Boston. The RBWG will meet during the first quarter of 2014 to
discuss the evaluation of the Efficient Neighborhoods+ Initiative upon its completion.

- During Q4, the new leadership for the statewide Massachusetts Technology Assessment Committee (“MTAC”) updated MTAC’s internal charter to clarify the committee mission, structure, roles and responsibilities. The committee also improved MTAC’s visibility on the Mass Save website to encourage new technology applications for MTAC review. MTAC has been active in reaching out to similar New England utility based new technology working groups to leverage regional knowledge and experience. During Q4, the Committee received and evaluated three inquiries, including one Residential and two C&I. For additional information, please see Section IV below.

- The Mass Save Statewide Awareness campaign ran September 1 to November 10, 2013. In Q4, digital banners with the Residential, Commercial & Industrial and multi-cultural messaging continued to run on 16 ad networks, regional and local websites. The ads were optimized with the best performing ads from Q3 running on all sites. The mobile (smartphones & tablets) continued into 4th quarter to reach the Residential and Commercial & Industrial targets; this ended on October 26. Paid search and Facebook ads also ran until November 10. For additional information, please see Section V below.

- For additional detailed information on the efforts made by the PAs in Q4 toward achieving this priority, please see Sections III through VIII.

4. **Develop and Implement a Statewide Energy Efficiency Database.** In order to enhance data availability and transparency, reduce administrative costs, and enable better and more efficient data analysis, the Council and its Consultants should work with the PAs to design, develop, and implement a statewide database that is readily accessible, reliable, efficient, and able to evolve to meet growing and changing energy efficiency data needs.

**ACTION:** In Q4, the PAs actively participated in EEAC database working group, subcommittee and other meetings convened by Energy Platforms, the EEAC’s database facilitator. The PAs provided comments on Energy Platforms’ conceptual proposal on December 23, 2013. The PAs are committed to working with DOER, the EEAC, and the Department to achieve the development of a statewide database that achieves the goals of this priority. The PAs have budgeted $500,000 in each year of the 2013-2015 Plan for the design and development of a statewide database and associated costs. In Q4, the PAs began working on an interim reporting solution to assist in reporting while the statewide database is being scoped and developed. The PAs are currently developing an online statewide data reporting repository that is user-friendly, effective and timely. The PAs expect this tool will improve access by stakeholders to currently reported PA data by providing a single source of information for the most up-to-date reported initiative-level PA data. This tool will provide PA data in different formats and views and will automate the statewide view from 12 individual PAs. The PAs will continue their commitment to a statewide database in 2014.

5. **Identify and Implement Best Practices.**

Continue to identify and integrate best practices, including the customer experience, into the
energy efficiency planning and implementation efforts consistently across service territories.

**ACTION:** As discussed in more detail in Sections III through VIII, the PAs continued to build on the experience of the initial three-year plan by leveraging their good working relationships to better coordinate their efforts and share ideas and best practices to refine their approach to the successful delivery of energy efficiency. The PAs continued to have regular meetings of their management committees to facilitate the process of enhanced integration and coordination between gas and electric programs. The PAs also were actively engaged in the low-income best practices group convened by LEAN. Further, the PAs continued their ongoing and consistent meeting and engagement with the Council’s consultants, in order to benefit from ideas/suggestions based on the consultants’ expertise and experience. Lastly, the PAs continue their active search and review of new technologies through the MTAC.

6. **Evaluation Efforts**

Ensure the accurate analysis and quantification of the savings, benefits, and costs of the energy efficiency programs through objective and unbiased planning, tracking, evaluation measurement and verification (“EM&V”), and reporting. Participate in the development of avoided cost values as part of the regional avoided costs study (Avoided Energy Supply Component or AESC).

**ACTION:** In the fourth quarter, work on the Evaluation Strategic Plan (“ESP”) for 2013-2014 was completed, as the result of a productive collaboration by the PAs, the Council’s consultants and the evaluation contractors. This was a significant undertaking as historically evaluation planning in Massachusetts was largely completed in one-year cycles with study efforts being a function of past evaluation activities and changes in savings levels or implementation of programs, with the purpose of describing the evaluation planning process and describing studies, both planned and in progress. The PAs presented at the October EEAC meeting on the development, purpose and scope of the 2013-2014 ESP. The PAs have completed 117 studies since 2010 and have over 50 studies planned or in progress. The 2013 Avoided Energy Supply Cost (“AESC”) Study was finalized on July 12, 2013 after extensive review by the AESC Study Group, which is comprised of regional stakeholders, including the PAs, with leadership by the Massachusetts PAs. The PAs presented on this topic at the October EEAC meeting. For additional details on the PAs’ evaluation activities in Q4, please see Section VI below and the EM&V Gantt chart and a related evaluation table included as Attachment B.
III. Gas and Electric Program Highlights

Since the Department of Public Utilities approved the Gas and Electric Three-Year Energy Efficiency Plans on January 31, 2013, the Program Administrators have been proceeding with the implementation of their EEAC-endorsed 2013–2015 Plans.

In Attachment A, the PAs present quantitative cost and savings data, along with other data. The PAs will keep the EEAC apprised of significant cost and savings variances from Plan goals that become apparent as the PAs continue to implement programs over the three years of the Plan.

RESIDENTIAL SECTOR

Residential New Construction & Major Renovation

Through the end of the fourth quarter, the Program completed over 3,741 units statewide. PAs reached the statewide goal, but not all PAs reached individual 2013 goals. In those territories that fell short, recruitment plans have been implemented focusing on non-participating builders.

As of October 2013, 134 communities have adopted the “Stretch Energy Code.” Several additional towns across the Commonwealth are looking to adopt the new “Stretch Energy Code”. As in prior years, builders will continue to look to the PAs to provide training, technical assistance and incentives to meet the new energy code. Currently, 50 Home Energy Rating companies receive this type of support through the program.

New in 2013, the prescriptive path offering had two projects enrolled and working with HERS raters to complete the program.

During the fourth quarter of 2013, the Major Renovation Pilot officially closed out all remaining active projects. One project remained unfinished and it was then transferred into Residential New Construction. In three years, 62 units completed through the Pilot.

RESIDENTIAL SECTOR HIGH-RISE

At the end of 2013, 18 projects with 1,650 residential units completed the multi-family high-rise program path. Seven projects were rolled over to the 2014 program year due to construction delays. Recruitment efforts among the most active multi-family developers continued throughout the last quarter with weekly lunch and learn events, project reviews and site meetings. Several new web-based search tools were brought online during the past quarter to assist in building a project recruitment pipeline.

C&I COORDINATION

During the last quarter of 2014, the C&I sectors of NSTAR and NGRID funded a contract to help deliver additional savings and perform additional outreach within the Multi-family High Rise building sector on their behalf. NSTAR and NGRID have dedicated staff to begin the review/expansion with monthly program and project meetings scheduled to aid in the
Home Energy Services and HEAT Loan

2013 was a strong year for Home Energy Services, with most PAs meeting or exceeding savings goals. Over the course of the year, the PAs were able to incorporate many new program enhancements as well as implemented various new initiatives including the following:

- Electric PAs’ introduction of LEDs and Advanced Power Strips during the Home Energy Assessment
- Pre-Weatherization Barrier Offer
- Early Boiler Replacement Rebate
- Efficient Neighborhoods℠ Initiative
- Cross Program Promotions
- 2-4 Unit Incentive (Efficient Neighborhoods℠ and Renew Boston)
- Enhanced Customer Bonus Initiatives (for applicable PAs)
- Contractor Incentives (for applicable PAs)
- Participating Contractor Marketing Workshops

The Contractors Best Practices Working Group (“BPWG”) had many accomplishments in 2013. A new committee of BPWG Home Performance Contractor (“HPC”) and Independent Installation Contractor (“IIC”) representatives were elected in Q3. Three new contractors were elected, and the group continues to make positive strides towards increasing quality and customer satisfaction as well as addressing other best practices across the program.

PAs were committed to workforce development in 2013, offering subsidies for various trainings, including weatherization boot camps, combustion safety testing, and one-on-one mentoring sessions. PAs also expanded training opportunities to offer IICs and HPCs a Marketing Workshop, to review marketing best practices in the Home Performance industry, as well as teach the basics of branding, marketing, and strategy. PAs continue to explore opportunities for additional training to enhance the skills of participating contractors.

The HEAT Loan was in high demand throughout the 4th quarter, and the PAs saw an extremely high number of authorizations, including multiple measures financed. The PAs have exceeded the 2012 HEAT Loan authorizations and total amount financed.

Multi-Family Retrofit

Through the completion of the fourth quarter of 2013, some PAs exceeded annual spending and savings goals, while others struggled, mainly due to recommendations from assessments not being implemented by the facility in various Multi-Family housing facilities from region to region.

The Multi-Family Market Integrator (“MMI”) continues to report a trend of successfully enrolling facilities into the program as a result of increased marketing awareness as well as previously established relationships with facility owners/property managers.
The MMI received a total of 1570 incoming calls in the fourth quarter of 2012, and enrolled 229 facilities into the program. With the conclusion of 2013, the MMI reported a year over year increase of 19% in incoming calls for Multi-Family services.

In the fourth quarter, both Residential and C&I representatives of the Multi-Family working group continued to meet regularly to develop and refine program enhancements as outlined in the Three-Year Plan and launched the Statewide Multi-Family Energy Action Plan for implementation by Multi-Family Program Vendors.

**Electric Residential Cooling and Heating**

In whole, the statewide Cool Smart initiative exceeded its annual production goals, reaching 202% of its equipment rebate goals, 157% of its duct sealing goals, and 151% of its early equipment replacement goals. In addition, over 3,500 Heat Pump Water Heaters were rebated through the program in 2013, far exceeding anticipated production.

The QIV (Quality Installation Verification) initiative had another strong year. Cool Smart trainers held 54 classes, trained 452 technicians who represented 138 new companies and 153 companies already participating in Cool Smart. These technicians quickly became engaged in the QIV testing and helped contribute to the overwhelming success of QIV, which reached production in excess of 350% of state-wide goals.

PAs created an electronic (online) rebate submission process, which launched January 1st, for the 2014 program year. This will now give customers the option of the mail-in rebate or the electronic approach, which will improve the customer experience and reduce fulfillment time.

Contractors have been very active in working with their customers to utilize the 0% HEAT loan this year, where approximately 25% HEAT loans generated incorporate AC or Heat Pump equipment.

Cool Smart held its annual fall Cool Talk on November 6, 2013 at the Holiday Inn in Marlboro, MA. Over 50 HVAC contractors and equipment distributors attended to learn about the 2014 program offerings and to provide feedback to program sponsors.

**Gas Residential Heating and Water Heating**

PAs continued to experience a steady demand for rebates. As a result, a majority of PAs were able to meet savings goals.

PAs finalized the new rebate forms for the 2014 calendar year. A major enhancement developed for 2014 will allow customers to complete the rebate application via online submission and also receive prepaid cards for certain measures. The PAs continued steady and consistent direct outreach to various manufacturers and supply houses in sales training and rebate distribution over the course of the quarter.
For other highlights and Q4 trade ally training, the PAs conducted and participated in the following events:

- On October 29th, PAs joined Bill VanNorman from Ed-OS and Lee Ensminger, National Sales Manager for Crown Boilers, for a counter day at George O’Brien Supply Company in Dennis, MA. Approximately 25 contractors attended the event to learn about the Crown High Efficiency Bimini Boiler and their Mega-Stor Indirect Water Heater. The event provided the PAs the opportunity to gather feedback on the recently completed Early Boiler Replacement Program and to assure attendees that the rebate program would be continuing in 2014.

- On November 6th, PAs attended the Grand Opening counter day at F.W. Webb Company in Falmouth MA. Approximately 25 contractors stopped by the new branch. PAs fielded several questions concerning 2014 rebate programs.

PAs engaged with ICF to perform additional outreach to distributors and manufacturers in order to get the distributors and manufacturers to link directly to the incentives on the GasNetworks website. PAs continue direct outreach to trade allies through the distribution of the GasNetworks quarterly e-newsletter. In the month of December, the GasNetworks e-Newsletter received an open rate of 40.1%, which is well above industry standard.

**Residential Lighting**

The ENERGY STAR® Lighting initiative ended the year strong, with all PAs surpassing lighting goals. While CFLs continue to be the backbone of the lighting initiative, LEDs saw dramatic adoption this year. The PAs also launched a Market Lift promotion with Costco/FEIT in the fourth quarter, which is showing promising results. The Market Lift promotion will run for six months and final results will be realized in early Q2 of 2014.

PAs executed a special lighting promotion in partnership with General Electric during the month of October. The purpose of this promotion was to educate consumers on how to select the right bulb for specific rooms in their home. Special signage was developed and placed in Wal-Mart, Sam’s Club, Aubuchon, Price Chopper, True Value, and ACE Hardware. The promotion was successful with Wal-Mart reporting a 34% increase in CFL sales in comparison to the same period in 2012.

The promotion also had a sweepstakes component as well where consumers could enter via the Facebook.com/MassSave page to win one of five room lighting packs that included different types of CFLs and LEDs to retrofit a bedroom, bathroom, living room, kitchen, or home office. Similar sweepstakes were executed in partnership with Cordelia through the @MassSave twitter page and with Philips through Facebook.

**Residential Consumer Products**

The Consumer Products program saw varying results from individual PAs. The ENERGY STAR refrigerator category struggled, which may have been a result of a lower incentive level
in 2013. The introduction of TopTen™ tiered rebates for refrigerators and freezers in 2013 showed slow adoption, which can be expected with any new product category. The PAs saw success with both ENERGY STAR and TopTen televisions and even saw a jump in pool pump rebates this year.

As a result of the Mass Save Consumer Product and Lighting Summit, the PAs began development of new point-of-purchase (“POP”) materials to address some of the issues raised by retailers and manufacturers during the all-day meeting. New POP materials were developed to explain the benefits of TopTen and ENERGY STAR Most Efficient appliances in preparation of their inclusion in the 2014 program. Enhancements to product rebates and clings were made as well to increase their effectiveness at point of sale.

### LOW-INCOME SECTOR

#### Low-Income New Construction

The Low-Income New Construction initiative has seen 412 completions through the fourth quarter of 2013. The Low Income sector is not seeing the building activity that the other sectors are experiencing. The PAs continue to aggressively seek out low-income projects throughout the Commonwealth. Account Managers have developed business plans with significant attention to Low-Income outreach. Additional marketing efforts to statewide Low-Income funding sources and statewide Low-Income advocates were increased in 2013. Account Managers have provided workshops on the programs and on other related topics to conferences and other meetings focused to the low-income arena. Developers of low-income projects have been targeted with direct marketing and trainings that support the program.

Under the Multi-Family High-Rise (“MFHR”) program path, 2013 completions yielded 134 low-income units. Recruitment efforts for both high-rise and low-rise are coordinated through all of the program account managers with a specific focus on energy consultants and design firms who specialize in low-income projects. Due to the prolonged construction schedule of most MFHR projects, present day recruitment efforts typically yield projects that will be completing in 2015.

#### Low Income Single Family

Preliminary budgets and savings for the Low-Income Single Family Program at the end of quarter four 2013 vary by PA. Some PAs have exceeded savings goals while others were under, as some PAs reallocated funding toward Low-Income Multi-Family based upon customer demand.

Due to less Federal Weatherization Assistance Program (“WAP”) funding availability, the community agencies relied heavily on PA funding in 2013, which resulted in much higher production levels and per unit costs for weatherization than planned.

The PAs continued to participate in the Best Practices Working Group and have finalized and implemented standardized, statewide client education materials provided at the time of the audit.
by the various local community agencies.

In the fourth quarter, the PAs completed implementation of their strategic marketing plans targeting hard to reach/challenged communities across the state as part of the 2013 Low-Income Metric #1. Most PAs were able to achieve the Exemplary level by increasing program participation by at least 5% within these targeted areas.

**Low Income Multi-Family**

The Low-Income Multi-Family budgets and savings vary by PA; however, as of quarter four 2013, preliminary results indicate that the majority of PAs have exceeded savings goals while reaching or exceeding budgets. The demand in some PA territories for Multi-Family was higher in comparison to the funding that was available; therefore, some PAs reallocated Low-Income Single Family funding to Low-Income Multi-Family funding in order to serve more customers.

2013 was the last year for the Multi-Family Building Inventory Metric, and the PAs successfully inventoried a total of 20,315 accounts over the three year period. By utilizing this platform, the PAs have been able to identify the least-efficient buildings among all those eligible for funding, which aided in prioritizing energy efficiency projects to make the most of the budgets that were available.

**COMMERCIAL AND INDUSTRIAL SECTOR**

Throughout Q4, the Program Administrators continued to work diligently toward implementing the plan and achieving the 2013 savings goals while actively exploring strategies to expand offerings and enhance strategies in several areas anticipated to have the potential to yield savings. Activities in Q4 included the following:

**Events and Outreach**

During Q4, the PAs participated in a number of events throughout the state including the Worcester Business Journal Energy Summit, Massachusetts Association of School Committees Annual Conference, Architecture Boston Exposition, and the Massachusetts Green Career Conference.

On December 3, 2013, representatives from National Grid, NU, Columbia Gas of Massachusetts, Berkshire Gas and the Center for EcoTechnology met to discuss coordinating efforts among the gas PAs’ small commercial program and Direct Install vendors.

On November 4, 2013, representatives from DEP, DOER, USDA, and the PAs met at the Amherst Wastewater Treatment Plant (“WWTP”) office. Discussion topics included efficiency opportunities for Plants, funding and loan options, and oil to gas conversions.
DCAMM MOU

The DCAMM Accelerated Energy Program (“AEP”) began ramping up in Q4. For the first wave of primarily “simple fix” projects, 10 sites are substantially complete, and 33 sites have projects currently in progress. Fifteen vendors were pre-qualified and have been approved to work on DCAMM AEP projects. With regard to large retrofit, the first project at Northern Essex Community College was recently completed and received $820,000 in PA incentives. Also, at Springfield Technical Community College (STCC), an $11 million HVAC upgrade is almost complete – the project included installation of steam traps, new low pressure steam boilers in the central steam plant, fourteen new boilers in various buildings throughout the campus and new chilling equipment. Ten additional large projects are also underway in various stages ranging from procurement to construction.

Main Streets Delivery

NU has evaluated the impact of the Main Street Program. Based on the information that was gathered from the pilot, NU is looking at incorporating the Main Street Program in the Direct Install Program.

In Q4, National Grid planned the testing of the Main Streets Delivery Model. Internal structures and processes were developed and outreach methods prepared for a Q1 2014 mailing and implementation in the City of Medford. Lessons learned during planning are informing subsequent iterations of the Main Street Delivery Model that National Grid is planning for Q1 2014.

Initial results are in for the two Main Streets tests implemented in Q4. In CLC’s Provincetown test, 23% of the just over 200 small businesses marketed to went ahead with audits, and of those, 70% went on to accept proposals for energy efficiency equipment installation. Some businesses have lagged behind due to seasonal closings for the winter months. Overall project savings are expected to exceed 275 MWh. CLC is planning additional Main Streets testing in 2014.

Utility Owned LED Streetlights

NU is currently conducting field evaluations of the LED street lights fixtures utilized in this pilot, which consisted of two separate locations in the Town of Wayland that were retrofitted in 2013 with these new fixtures. The field test evaluation is a critical step in the process and allows for NSTAR to evaluate how these fixtures perform over a period of time to make sure that the technology performs to standard and provides the customer with the light quality expected for the test site.

Grocery Initiative

This marketing initiative was launched to target small to medium sized grocers and convenience stores. It focuses on bundling of common measures for this segment, including refrigeration, lighting and domestic hot water applications with prescriptive incentives and
Bonuses for going deeper. In Q4, a list of eligible measures and an end-customer focused marketing brochure was completed in preparation for the roll-out.

Pro Forma

In Q4, the PAs made final adjustments to the Pro Forma and scheduled webinar training for PA staff in January 2014.

Combined Heat and Power (“CHP”)

National Grid and Northeast Utilities have been jointly discussing with the DOER strategies for addressing the small scale CHP market. The focus is to enhance uptake, and improve efficiency of small scale CHP projects statewide. Some ideas under consideration include load profiling for potential small CHP users to enable better customer targeting and creating a streamlined delivery process for deploying modular CHP units. In addition, the DOER has offered some available funds to support the PAs’ efforts with the details of the level and types of support are under discussion.

Upstream

In Q4 2013, the PAs continued to drive success in Upstream lighting. The PAs implemented strategic tactics to grow the results of the program, including targeted initiatives for LED parking lot lights for auto dealers as well as LED replacement lamps for state agencies and municipalities as well as colleges and universities. Additionally, the PAs continued to develop relationships with the manufacturers in the program and launched marketing campaigns to increase program awareness with distributors and end users. By year-end, the upstream lighting program had produced sales of 1.8 million lamps, including nearly 700,000 LEDs, through the 89 participating distributors.

Stakeholder Engagement

WMECO and Columbia Gas met with representatives from the DOER Green Communities Division, DEP, and the Westmass Area Development Corporation to develop plans for a collaborative energy assessment of a brownfields project with significant historical significance. Key to development of this project is a comprehensive plan to reduce both electric and natural gas use. WMECO and Columbia solicited assessment proposals by facilitating a site tour for engineering consultants, advised the team on selection of a consultant, and have offered funding for the analysis. A unique aspect of this project is the intention to develop a now vacant historic New England Mill into an incubator for the start-up of small manufacturing rather than the far more common transition of mills to residential use. DOER and DEP are also contributing resources to create jobs and economic growth.

IV. Massachusetts Technology Assessment Committee

The Statewide Massachusetts Technology Assessment Committee (“MTAC”) evaluates new
technologies for inclusion in the energy efficiency programs. MTAC provides a consistent statewide venue for evaluation of efficiency technologies. During the fourth quarter of 2013, the recently merged residential and C&I MTAC committee continued to improve the operating structure of MTAC and also evaluated new technologies for energy savings.

During Q4, the new MTAC leadership updated its internal charter to clarify the committee mission, structure, roles and responsibilities. Additionally, the committee made improvements to its internal knowledge sharing tools to streamline the documentation process of new technology evaluations. The committee also took efforts to expand the public facing side of MTAC by improving its visibility on the Mass Save website to encourage new technology applications for MTAC review. MTAC has also been active in reaching out to similar New England utility based new technology working groups to leverage regional knowledge and experience.

During Q4, the Committee received and evaluated three inquiries, including one Residential and two C&I. The residential technologies included a Z-wave Thermostat that was deemed appropriate for consideration by the PAs for inclusion in the Residential Products program. The C&I technologies included a Demand Limiting Controller that was found acceptable for future consideration and had a new Ductless Fume Hoods technology presentation that was in consideration for a custom application.

V. Marketing, Education, Outreach Highlights

Statewide Marketing

The Mass Save Statewide Awareness campaign ran September 1- November 10, 2013. In Q4, digital banners with the Residential, Commercial & Industrial and multi-cultural messaging continued to run on 16 ad networks, regional and local websites. The ads were optimized with the best performing ads from Q3 running on all sites. The mobile (smartphones & tablets) continued into 4th quarter to reach the Residential and Commercial & Industrial targets; this ended on October 26. Paid search and Facebook ads also ran until November 10.

Seven weeks of radio ran from September 2 through November 3. Spots were aired on 26 top-rated stations across the state in English, Spanish and Portuguese languages. The messaging targeted the Residential and Commercial & Industrial audiences. Ad length for radio spots includes 60-second and 30-second spots to maximize audience exposure.

Print advertising in 11 business journals and chamber publications that cover the state reached the Commercial & Industrial target audience. Ads were placed in issues September 1 through mid-November.

Commuter rail/MBTA platform posters started again after a summer hiatus and were placed August 26 through October 20. Billboards continued to run around the state until October 6. Bus side ads were posted on August 26 and ran on 90 buses around the state, along with 36 interior cards.

KSV reported great success with the campaign, including:
• Campaign delivered over 197 million impressions from March 29 - November 10 at a $2.53 blended CPM
• Close to 200,000 site visits were driven by clicks
• Flash banners delivered over 50,000 clicks
• Mobile banners delivered over 110,000 clicks
• Facebook accounted for 44% of the impressions at 3% of the spend, the CPM was very efficient at $0.16 per thousand impressions

The Mass Save website also showed great year-over-year results. 2013 statistics from PixelMedia include:
• Over 800,000 visits to MassSave.com
• Over 500,000 events completed (video view, contacts, downloads)
• Events increased 45% from the previous year
• Downloads increased by 35%
• Over 3 million page views
• Over 500,000 unique visitors
• Organic search increased by 26%
• Visits from social media increased by 58%

Opinion Dynamics conducted the Post Campaign survey for both residential and small commercial customers December 2-17. Preliminary results are expected in January.

Statewide Education

The Statewide Residential Education Working Group sponsored three teacher trainings in Springfield, Falmouth, and Plymouth in Q4. The trainings were very well attended. The group also attended and staffed an informational booth at the MA State STEM Summit on November 13, 2014 at Gillette Stadium. The Working Group is in full swing planning the 2014 Energy Education Teacher Trainings, participation at the national NSTA Conference hosted in Boston in April and the State Energy Education Youth Awards Program in June at the State House.

VI. Evaluation, Measurement, and Verification Highlights

During the fourth quarter of 2013, the evaluation team continued to work with ongoing studies in all three research areas - Residential, Commercial & Industrial, and Special and Cross Sector. To help share best practices and streamline the evaluation process, the Program Administrators and the EEAC Consultants continued monthly meetings of the Evaluation Management Committee (“EMC”) and coordination with the Residential and Commercial & Industrial Management Committees.
The following includes only studies that have reached at least the detailed scoping phase. There are other studies in the early scoping phase that aren’t included.

**Residential Research Area**

Work on the following studies continued, results will be included with a future regulatory filing.

The **Massachusetts Residential New Construction Net Savings Study** is focused on assessing the impacts the RNC program has had on the marketplace over the past seven years, and includes builder survey, Delphi panel and energy modeling components. The evaluation contractor submitted a draft of the final report in the fourth quarter of 2013 and was tasked with additional work related to assessing bias and extrapolation of the modeling results. The final report will be completed in the first quarter of 2014.

**Residential Lighting - Regional Operating Hours Study.** Completed in collaboration with Connecticut, Rhode Island, and NYSERDA, this study has provided a robust look into hours of use of both efficient and non-efficient light bulbs by room and socket type. The study will provide the data necessary to update hours of use assumptions, as well as demand load shapes. The final report will be completed in the first quarter of 2014.

**Low Income Programmable Thermostat and Lighting Operating Hours Study.** This study is a Massachusetts and LI-specific version of the Regional Operating Hours Study. The evaluation contractor has removed all metering equipment and submitted a memo with preliminary results in mid-2013. However, the PAs and evaluation team decided to delay releasing the report in order to methodologically align the study with the concurrent Regional Lighting Logger study (above). The final report will be completed in the first quarter of 2014.

**Lighting Market Assessment.** The objective of this effort is to provide ongoing monitoring of the evolving Massachusetts lighting market. This study will use a multi-task approach that includes consumer surveys, on-site saturation visits in Massachusetts, on-site saturation visits in two comparison areas, shelf-stocking surveys, supplier interviews and a Market adoption model update. Draft results are expected in the third quarter of 2014.

**Lighting Saturation Stagnation Assessment.** The objective of this study is to explore reasons for the recent slow growth in CFL saturation, as well as to determine ways to accelerate LED adoption. Research is underway and draft results are expected in the third quarter of 2014.

**Lighting Market Lift Assessment.** The objective of this study is to assess the planning and implementation of the Market Lift effort and develop a specific net-to-gross (NTG) estimate for that effort. Research began in the fourth quarter of 2013 and draft results are expected in the third quarter of 2014.

**HEHE Impact Evaluation.** The objective of this study is to determine gross savings for the HEHE programs and provide refined estimates of hours of use and coincidence factor for a variety of space heating measures. Metering equipment has been installed in more than 100
homes. The meters will remain in place throughout the 2014 heating season. Draft results are expected in the third quarter of 2014.

Ductless Mini-Split Heat Pump Assessment. The objective of this study is to determine why participants install ductless mini-split heat pumps (DMSHPs) through the COOL SMART program. Research is underway and draft results are expected in the second quarter of 2014.

HES Program Delivery Assessment. The objective of this study is to determine accurate conversion rates (installed measures: recommended measures) and other key performance metrics for HES overall, as well as for Lead Vendors (LVs) and Home Performance Contractors (HPCs) specifically. The study will also explore the effectiveness of linkages between HES and other PA programs (most notably HEHE and CoolSmart) and attempt to identify opportunities for greater and deeper savings for each program, as well as the overall residential portfolio. Research is underway and draft results are expected in the first quarter of 2015.

HEAT Loan Assessment. The objective of this study is to understand the extent to which the Mass Save HEAT Loan influences customer decision-making relative to the other factors that influence participation (PA incentives, tax credits, pre-program intentions, etc.), and to explore whether the availability of the HEAT Loan has an impact on contractor pricing. Research is underway and draft results are expected in the second quarter of 2015.

Multifamily Process Evaluation. The objective of this study is to assess and monitor the current state of the evolution of the Multifamily Program as a stand-alone or integrated offering with the commercial side and provide an ongoing examination of barriers, program operations, and customer experience. Focus groups will be completed in the first quarter of 2014. Draft results are expected in the third quarter of 2014.

Residential Customer Profile Study. The objective of this study is to compile PA customer and participation data on residential customers to provide insights into levels of participation, energy consumption, and energy savings relative to consumption. The study will inform several of the other ongoing evaluation efforts. A half-day meeting has been scheduled in the first quarter of 2014 to discuss possible study outputs in greater detail. Draft results are expected in the third quarter of 2014.

Lighting Multi-Stage Net-to-Gross. The objective of this study is to estimate net-to-gross (NTG) ratios for key product types for which incentives were offered in the ENERGY STAR® Lighting initiative and to assess the associated strategic implications. Scoping focused on supplier interviews, point-of-sale data analysis, and self-reported purchase analysis is nearly final. That work is expected to begin in the first quarter of 2014.

Multifamily High-Rise New Construction Baseline Assessment. The objective of this study is to develop a baseline for construction building practices in four-story and higher multifamily buildings. The PAs, EEAC and evaluation contractor are participating in meetings to discuss the study’s scope and the best methodologies for moving forward.
**Low-Income Multifamily Impact Assessment.** The objective of this study is to provide an inventory of the methods currently used to estimate LIMF savings, explore opportunities for standardization where appropriate, assess whether all data required for evaluation are available, and develop PA-specific realization rates for appropriate measures. Scoping of the research is underway and work is expected to begin in the first quarter of 2014.

**Trade Ally Panels.** The objective of this effort is to explore whether data quality, response rates, and data collection costs can be improved by a more systematic data-collection approach across programs, markets, and evaluations. This study is in the scoping phase.

**Residential Market Effects Study.** The overall objective of this study is to capture the net effects over time of Massachusetts' programs to promote a technology to be determined by the PAs. The development of this market effects study and selection of the targeted technology will be coordinated with the Cross-Cutting Research Area's Market Effects Planning work. Market Effects meetings have been scheduled for the first quarter of 2014.

**Appliance Program Evaluation.** The goal of this study is to explore changes to the way the Appliance initiative is currently delivered, including new marketing strategies or retail partnerships, updated incentives, and other cost-effective options. This study is in the scoping phase.

**Incremental Cost Study.** The goal of this study is to provide updated incremental cost data for use in cost-effectiveness screening and setting of customer incentive levels. This study is in the scoping phase.

**Advanced Power Strips Impact Evaluation.** The goal of this study is to identify alternative program designs that will generate higher participation and savings per participant. This study is in the scoping phase.

**Commercial & Industrial Research Area**

Work on the following studies continued, results will be included with a future regulatory filing.

**Impact Evaluation of Upstream Lighting Program.** This study will provide several updated savings inputs based on two waves of on-site metering of a robust sample of projects installed in 2011 and 2012. Metering is complete and a draft report was received in the fourth quarter of 2013. The report will be finalized in the first quarter of 2014.

**Mid-Sized Customer Needs Assessment.** This study will provide an assessment of whether or not the needs of mid-sized customers are being accurately and efficiently met by current program implementation processes. Analysis includes in-depth interviews with program administrators, customer telephone surveys and data mining of PA customer databases. The report will be finalized in the first quarter of 2014. In addition, the PAs included an update on draft results with the 2012 Energy Efficiency Annual Reports.
Impact Evaluation of CHP Installations. This study will provide updated realization rates based on in-field metering of projects completed in 2011 and 2012. A draft report was received in the third quarter of 2013, and the final report was received in the fourth quarter of 2013.

Existing Building Market Characterization. This study will provide information on equipment market share and saturation, baseline information, market conditions, program penetration, savings potential and market barriers by conducting telephone surveys with customers and on-site visits. The general population survey continued to be fielded through the fourth quarter of 2013. Analysis and draft results of the survey effort are expected in the first quarter of 2014.

Lighting Controls Scoping Study. The purpose of the Lighting Control study is to inform the PAs of the current state of the Lighting Control market and make recommendations as to whether an impact study should be conducted and if so, what type. The study consists of secondary research and interviews with PA staff, Project Expediters, and lighting distributors. All secondary research is complete, interviews are being wrapped up, and a draft report is expected in the first quarter of 2014.

Whole System Approach Assessment. This study will provide information on best practices and lessons learned from three programs in other regions which focus on taking a whole system approach. Research began in the first quarter of 2013 and interim results were received in the third quarter of 2013. The PAs and EEAC consultants will determine whether additional research is warranted in the first quarter of 2014.

New Construction Data Mining – Codes & Standards Research. This study will leverage onsite data collected in support of the 2011 Code Compliance Baseline Study to learn about the baseline for potential code compliance program measures. Scoping is nearly final and work is expected to begin in the first quarter of 2014.

LED Market Effects Study (Residential & Commercial). The first round of this study will examine baseline conditions of the market for LEDs in MA. Research began in the third quarter of 2013 and draft results are expected in the third quarter of 2014.

Impact Evaluation of Custom HVAC Measures. This study will provide updated realization rates based on in-field metering of a robust sample of projects completed in 2012. Research began in the second quarter of 2013.

Impact Evaluation of Prescriptive Non-Lighting Measures. This study will provide updated savings estimates for a pre-selected group of non-lighting measures. The measures will be determined during the scoping process which will include an assessment of the percent of program savings achieved by each measure as well as the precision and confidence associated with the current measure savings estimates. Scoping is underway and work is expected to begin in the first quarter of 2014.

C&I Customer Profile. This is the second study in an annual series and will use existing program tracking and customer billing data to create a profile of C&I customers in the state based on market and participant characteristics such as size, business type and program
participation rates. Data analysis is currently underway and draft results are expected in the first quarter of 2014.

Learning From Successful Projects. The intent of this study is to assess the characteristics of successful projects and recommend best practices that could reasonably be duplicated elsewhere. Detailed work planning is currently underway and work is expected to begin in the first quarter of 2014.

PA Differences Assessment. This intent of this study is to analyze and document the different factors that affect PA performance. These factors may include the percent of customers participating, the depth at which customers participate, the cost to deliver savings and the demographics and key characteristics of each PA’s territory. Detailed work planning is underway and work is expected to begin in the first quarter of 2014.

Commercial Real Estate Market Assessment. The intent of this study is to provide a comprehensive understanding of the complex relationship between building owners, property managers and tenants and identify specific program offerings and points in the leasing process that offer opportunities to capture energy savings. Scoping of the study is currently on hold and the PAs and EEAC consultants anticipate coordinating any future work with the Commercial Real Estate Working Group’s efforts.

Roof-Top Unit Controllers Market Effects Study. The first round of this study will examine baseline conditions of the market for Roof-Top Unit controllers in MA. Scoping of the research is underway.

Supply Side Population Assessment. The intent of this study is to characterize the population of market actors that serve the MA PAs’ C&I customers and potentially recruit market actors for participation in future EM&V efforts. Scoping of the research is underway and work is expected to begin in the first quarter of 2014.

Process Evaluation of the Direct Install Program. This study will focus on research objectives identified by PA implementation staff and other key stakeholders including EEAC consultants and could include options for deeper savings, targeting of micro-businesses, establishing savings estimates for behavioral measures, etc. Scoping of the research is underway and work is expected to begin in the first quarter of 2014.

Boiler Market Assessment. This study will provide an in-depth understanding of the current baseline in the C&I boiler market, including historical trends regarding equipment efficiencies and size. Research is underway and draft results are expected in the first quarter of 2014.

Impact Evaluation of Prescriptive Gas Measures. This study will provide updated savings estimates for a pre-selected group of gas measures. The measures will be determined during the scoping process which will include an assessment of the percent of program savings achieved by each measure as well as the precision and confidence associated with the current measure savings estimates. Scoping is underway and work began in the fourth quarter of 2013.
**Special and Cross-Sector Research Area**

The following studies are underway with completion date beyond the 2012 Energy Efficiency Annual Report:

**Efficient Neighborhoods+:** The implementation of the Efficient Neighborhoods+ initiative is complete, with one exception (for CLC, the implementation of the initiative is scheduled to run until March, 2014). PAs worked closely with the evaluation team to develop and finalize the evaluation plan and scope for the initiative. At this time, the evaluation is underway, PAs are working on assembling the data requested by the evaluation team, and are reviewing the survey instruments designed by the evaluation team to support the evaluation. Next steps include the evaluation team fielding participant and non-participant surveys, conducting impact and process evaluation (as specified in the evaluation scope), and preparing a draft evaluation report.

**Behavioral Persistence Study:** This evaluation will examine the persistence of behavioral savings associated with customers who began receiving reduced treatment (i.e., fewer home energy reports (HERs)). In particular, beginning in January 2013, some customers continued to receive monthly reports while others, randomly selected, began receiving reports only twice per year. The “reduced-treatment” customers in the electric cohort received reports in April in September of 2013, and, will receive reports in the same months of 2014. The “reduced-treatment” customers in the gas cohort received reports in September and November of 2013, and will receive reports in the same months of 2014. The scope of work for this evaluation was finalized in February 2014 and the study will commence immediately. The focus of this analysis is the difference in consumption between reduced-treatment customers compared with both the control group and the monthly-report group during the 2012-2013 time period. The analysis will be conducted separately for the electric and gas cohorts. The study is expected to run through May 2014.

**2013 Massachusetts Statewide Marketing Campaign Post-Campaign Results:** This study provides information on the results of the 2013 Massachusetts statewide marketing campaign. The goal of this effort is to address the language contained in the Gas and Electric Term Sheets, and assess awareness of Mass Save immediately after the new 2013 marketing campaign concludes. To support the December 2013 post-campaign assessment of Mass Save, the evaluation team reviewed all of the statewide marketing materials used in 2013, as well as each of the PA websites. The team also fielded telephone surveys with a sample of residential and commercial and industrial (C&I) customers. These surveys were fielded immediately after the close of the 2013 campaign in December 2013. In total, the Team spoke with 500 residential customers and 300 C&I customers from around the state. A draft report was issued in January 2014 and the evaluation team expects to provide a final report in February 2014.

**COOL SMART / GasNetworks Brand Assessment:** This study will assess the effectiveness of the COOL SMART and GasNetworks brands among contractors. The focus is on addressing the language outlined in the Gas and Electric Term Sheets regarding the effectiveness of all joint statewide branding efforts. In particular, the research objectives for this study include: provide documentation of the brand strategy and branding efforts undertaken to date for the COOL SMART and GasNetworks brands; explore brand awareness, knowledge and associations; assess
branding effectiveness for each brand; and examine the relationship between awareness and attitudes towards Mass Save, and GasNetworks and COOL SMART. Key research activities include in-depth interviews with marketing staff, a literature review, and a contractor telephone survey. At this time, the evaluation team has completed the in-depth interviews, a draft of the contractor survey, and a preliminary assessment of available literature.

The following specific high priority studies are being scoped out and will be included with a future regulatory filing.

**Codes & Standards Coordination/Planning:** The goal of this effort is to provide overall coordination with implementation to ensure that as implementation plans develop in this area, they are designed in such a way that the necessary data is being collected in order to evaluate the impact of such efforts along with appropriate attribution to the PAs.

**Codes & Standards Initiative Evaluation:** This evaluation will determine the code compliance rates for single-family homes built at the end of the 2006 International Energy Conservation Code (IECC) cycle and at the beginning of the 2009 IECC code cycle. The evaluation will also include process and impact evaluation activities to determine how well the program is operating, identify opportunities for improvements, and determine the impact the program is having on code compliance in the residential and nonresidential areas.

**Market Effects:** The goal of this study is to develop a framework for the evaluation of market effects for programs targeting reductions in residential and commercial energy use and demand. The study will help the PAs, the EEAC, and residential and commercial EM&V contractor teams to 1) understand and agree to working definitions of what market effects are, their relation to other concepts like spillover and market transformation, and what conditions could lead to them, 2) identify and prioritize specific markets that stand to be sufficiently influenced by existing or planned programs that the resulting effects could affect program value and planning, 3) develop suggested methodologically consistent approaches for assessing market effects within these markets; and 4) Identify how program administrators can improve the evaluability of market effects for the programs or parts of programs targeting these markets.

**Net-to-Gross – Top-Down NTG Methods:** This is a two phased study to provide guidance to determine the role of top-down modeling of net energy impacts. Phase I will take place during the 2014 evaluation period. Phase II will follow the Phase I research. The Phase I study will review existing Top-Down modeling techniques and recommend specific methods to be used in MA, obtain the necessary data for employing one or more agreed approaches, implement multiple agreed-upon approaches in parallel to provide an initial demonstration of the contribution that Top-Down modeling may make to on-going evaluation efforts, and make recommendations for data that should be tracked to facilitate better Top-Down modeling in the future.

**Net-to-Gross – Electric C&I NTG:** The goal of this study is to update the incremental short-term program effects of the C&I sector electric programs. The study will also examine how updated NTG factors vary in the participant population for Green Communities, and how NTG factors have changed over time in Massachusetts.
Non-Energy Impacts – Low Income Health NEIs: The proposed research is aimed at identifying and quantifying NEIs of energy efficiency measures on the health and well-being of low-income energy efficiency program participants, estimating their costs, and projecting those costs to the year 2050.

Non-Energy Impacts – Using C&I NEIs for Project Recruitment: The overall goal of this research is to provide sales and marketing personnel with specific talking points for prospects by industry. This study will present analysis of the 2012 NEI data drilling down into the specific cost reductions and revenue increases resulting from energy efficiency measures reported by firms in different industries. This analysis will first identify industries with statistically significant NEI estimates. It will then explore the qualitative and quantitative survey results for commonly reported sources of cost and revenue changes resulting from energy efficient measures.

Non-Energy Impacts – Quantifying C&I New Construction NEIs: The goal of this study is to quantify participant non-energy impacts (NEIs) associated with commercial and industrial new construction projects.

Retro Electric DRIPE: The PAs will research whether estimates of electric DRIPE developed as a part of recent Avoided Cost studies were accurate.

Please also see the EM&V Gantt chart and a related evaluation table at Attachment B.

VII. Regulatory Updates

The PAs worked on discovery in their 2011 and 2012 Energy Efficiency Annual Reports dockets in quarter four. This process is ongoing, with hearings scheduled for March 2014, if necessary.

On November 21, 2013, the gas Program Administrators received Department orders approving their 2010 Annual reports, including recovery of costs, nearly all of the claimed performance incentive (with the exception for some low income metrics where the Department determined that not enough clear and district supporting information was provided), and lost based revenues (“LBR”) for those PAs collecting LBR in 2010.

In the fourth quarter, the Department continued the streamlining working group in D.P.U. 11-120. On October 30, 2013, the Department convened a Technical Session to discuss a method to calculate carbon compliance costs. The Department announced that any carbon compliance value will have to go through an adjudicatory process that will provide the Department with record evidence from which it can make a decision. The Department indicated that proponents of the value will have to make a case, including expert testimony, and must address the jurisdiction of the Department to make a ruling. On November 14, 2013, Conservation Law Foundation hosted a stakeholder meeting, which the PAs attended, to explore whether any consensus positions might be possible. The Department issued a hearing officer memorandum on December 19, 2013 related to Environmental Compliance Costs, requiring stakeholders to notify the Department on or before January 17, 2014, of their intent to file a petition that meets
statutory and regulatory requirements. The Department noted that, in order to ensure that the case can proceed in a timely manner, any petition, including prefiled testimony and exhibits, should be filed no later than February 24, 2014.

The Department convened a subcommittee to discuss Three-Year Term and Plan-Year Reports, which met on November 8, 2013 and December 19, 2013 at the Department. The Department requested that the PAs submit a revised Plan-Year Report Straw by December 11, 2013. The PAs’ Plan-Year Straw is meant to be a simplified, data-focused, and statewide document that also includes individual PA data to allow the Department to evaluate an individual PA’s performance during the three-year term. The PAs sought to keep the spirit of a three-year filing when proposing this straw.

VIII. Special Focus Topics

A. MBA Financing

The Program Administrators continued to offer financial products in conjunction with the Massachusetts Bankers Association and Credit Unions.

In 2013 Massachusetts customers and participating lenders closed on nearly $825,000 in third-party lending to businesses. Also, the Massachusetts PAs have improved the marketing collateral and the Mass Save Financing for Business web page in order to enhance customers’ understanding of financing options for their energy efficiency projects. The financing program for business was expanded in 2013 to increase the maximum loan amount to $500,000, to provide financing for gas heating and kitchen equipment, and to create a mechanism to enable small business customers to more easily participate in this program.

The Program Administrators continue their efforts to understand the nature of barriers related to accessing capital for certain customer segments, and to explore financing solutions to address them, particularly for C&I customers. PAs have continued quarterly telephone conferences with lenders to address any issues with lending and explore ways to improve the program.

B. Residential Barriers Working Group Update

The PAs presented on the work of the Residential Barriers Working Group at the October EEAC meeting. The Residential Barriers Working Group later met on October 30, 2013. Representatives from Renew Boston and LEAN discussed their experiences with tenant/landlord programs. The meeting included a presentation on landlord/tenant barriers by Brad Swing and Amy Vavak based upon their experience with Renew Boston. The group identified next steps, including reviewing the evaluation of the Efficient Neighborhoods+ initiative upon its completion. The Residential Barriers Working Group expects to reconvene in the first quarter of 2014.
IX. Performance Metrics Update

Please see the section below for preliminary best available information on achievement of performance metrics for 2013. Final performance metrics achievement will be detailed in each Program Administrator’s Plan-Year Report filed with the Department.

A. Residential

2013 Residential Metrics progress is as follows:

1. Whole House/Home Energy Services: Deeper Savings {Electric & Gas} – Statewide

   **Threshold:** Achieve an increase in the overall close rate of Full Assessments* in Home Energy Services (HES) a minimum of 6%** or greater, as compared with 2012. Each PA to submit documentation showing performance relative to targets.

   **Design:** Achieve an increase in the overall close rate of Full Assessments * in Home Energy Services (HES) a minimum of 10%** or greater, as compared with 2012. Each PA to submit documentation showing performance relative to targets.

   **Exemplary:** Achieve an increase in the overall close rate of Full Assessments * in Home Energy Services (HES) a minimum of 12.5%** or greater, as compared with 2012. Each PA to submit documentation showing performance relative to targets.

   * **Full Assessment** is defined as comprehensive HES audit, as distinct from a ‘Special Home Visit (SHV)’ which is a home visit targeted to a specific purpose (e.g. direct-install measures; verification of information prior to HVAC installation).

   * **Major Measure** is defined as air sealing, envelope insulation, or both. Measures must meet applicable program eligibility requirements.

   **Close Rate calculation will be based on comparing the full assessment-to-major measure (as defined above) close rate in 2013 to 2012 baseline.

\[
\text{Increase in close rate } (\%) = \frac{(2013 \text{ close rate} / 2012 \text{ close rate}) - 1}{1}
\]

**UPDATE:**

The table below describes the utility PAs’ expected achievement for the Mass Save/Weatherization: Deeper Savings metric in 2013. The PAs are still processing final year-end numbers and will provide final close rates in the Plan-Year Reports.
<table>
<thead>
<tr>
<th></th>
<th>Full HEAs YTD June</th>
<th>Conversion Rate YTD June</th>
<th>Expected Achievement Dec. 2013</th>
<th>Threshold Goal 6%</th>
<th>Design Goal 10%</th>
<th>Exemplary Goal 12.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSTAR Electric</td>
<td>7,326</td>
<td>32.49%</td>
<td>Threshold</td>
<td>36.81%</td>
<td>38.20%</td>
<td>39.07%</td>
</tr>
<tr>
<td>NSTAR Gas</td>
<td>4,679</td>
<td>27.42%</td>
<td>Exemplary</td>
<td>28.00%</td>
<td>29.06%</td>
<td>29.72%</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>12,709</td>
<td>31.71%</td>
<td>Design</td>
<td>31.72%</td>
<td>32.91%</td>
<td>33.66%</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>12,718</td>
<td>27.15%</td>
<td>Below Threshold</td>
<td>33.11%</td>
<td>34.36%</td>
<td>35.15%</td>
</tr>
<tr>
<td>WMEO</td>
<td>1,180</td>
<td>34.32%</td>
<td>Below Threshold</td>
<td>42.27%</td>
<td>43.87%</td>
<td>44.87%</td>
</tr>
<tr>
<td>Berkshire Gas</td>
<td>441</td>
<td>34.69%</td>
<td>Below Threshold</td>
<td>44.44%</td>
<td>46.12%</td>
<td>47.16%</td>
</tr>
<tr>
<td>Columbia Gas of MA</td>
<td>2,434</td>
<td>29.09%</td>
<td>Below Threshold</td>
<td>35.53%</td>
<td>36.87%</td>
<td>37.71%</td>
</tr>
<tr>
<td>Liberty Utilities (New England Gas)</td>
<td>222</td>
<td>18.92%</td>
<td>Below Threshold</td>
<td>28.20%</td>
<td>29.26%</td>
<td>29.93%</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>191</td>
<td>44.50%</td>
<td>Threshold</td>
<td>60.42%</td>
<td>62.70%</td>
<td>64.12%</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>44</td>
<td>36.36%</td>
<td>Threshold</td>
<td>60.42%</td>
<td>62.70%</td>
<td>64.12%</td>
</tr>
</tbody>
</table>

2. Whole House/Home Energy Services: Early Boiler Replacement* {Electric & Gas} – Statewide

**Threshold:** PAS to promote deeper savings for single family homes and encourage landlords to invest in major energy efficiency upgrades in multi-unit dwellings (e.g. 3 deckers) by increasing early boiler replacements by 6% over the 2013 planned goal. Each PA to submit documentation showing performance relative to targets.

**Design:** PAS to promote deeper savings for single family homes and encourage landlords to invest in major energy efficiency upgrades in multi-unit dwellings (e.g. deckers) by increasing early boiler replacements by 8% over the 2013 planned goal. Each PA to submit documentation of performance relative to targets.

**Exemplary:** PAS to promote deeper savings for single family homes and encourage landlords to invest in major energy efficiency upgrades in multi-unit dwellings (e.g. 3 deckers) by increasing early boiler replacements by 10% over the 2013 planned goal. Each PA to submit documentation showing performance relative to targets.

*An Early Boiler Replacement is defined as replacement of an existing, functional forced hot water or steam boiler that is a minimum of 30 years old and is fueled by natural gas, oil or propane. Eligibility is based on:
- New equipment meeting specific high efficiency AFUE (Annual Fuel Usage Efficiency) rating
- Customer receiving a Home Energy Assessment as a method to identify additional energy savings opportunities and to verify existing boiler is in fact functional.
**UPDATE:**

The table below describes the utility PAs’ preliminary results for the 2013 Early Boiler Replacement metric. The column “EBRs Offered” represents the number of customers identified as eligible for this initiative. The column “EBRs Completed” represents the number of rebates billed through June 30, 2013; actual EBR net results did not increase significantly after that time since customers had to submit their applications and complete the installation by October 1, 2013. Final year-end results will be available for the Plan-Year Report.

<table>
<thead>
<tr>
<th></th>
<th>EBRs Offered</th>
<th>EBRs Completed June 2013</th>
<th>Threshold Goal 6%</th>
<th>Design Goal 8%</th>
<th>Exemplary Goal 10%</th>
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<tbody>
<tr>
<td>NSTAR Electric</td>
<td>409</td>
<td>16</td>
<td>887</td>
<td>904</td>
<td>921</td>
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<tr>
<td>NSTAR Gas</td>
<td>286</td>
<td>5</td>
<td>606</td>
<td>618</td>
<td>629</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>530</td>
<td>33</td>
<td>636</td>
<td>648</td>
<td>660</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>620</td>
<td>25</td>
<td>424</td>
<td>432</td>
<td>440</td>
</tr>
<tr>
<td>WMECO</td>
<td>72</td>
<td>4</td>
<td>53</td>
<td>54</td>
<td>55</td>
</tr>
<tr>
<td>Berkshire Gas</td>
<td>50</td>
<td>1</td>
<td>31</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Columbia Gas of MA</td>
<td>212</td>
<td>6</td>
<td>60</td>
<td>62</td>
<td>63</td>
</tr>
<tr>
<td>Liberty Utilities (New England Gas)</td>
<td>36</td>
<td>3</td>
<td>42</td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>13</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Expected achievement levels for Metric #2 (Early Boiler Replacement) at the end of 2013 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Achievement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSTAR Electric</td>
<td>Below Threshold</td>
</tr>
<tr>
<td>NSTAR Gas</td>
<td>Exemplary</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>Exemplary</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>Exemplary</td>
</tr>
<tr>
<td>WMECO</td>
<td>Exemplary</td>
</tr>
<tr>
<td>Berkshire Gas</td>
<td>Exemplary</td>
</tr>
<tr>
<td>Columbia Gas of MA</td>
<td>Exemplary</td>
</tr>
<tr>
<td>Liberty Utilities (New England Gas)</td>
<td>Exemplary</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>Threshold</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>Threshold</td>
</tr>
</tbody>
</table>

**B. Low-Income**

The 2013 Low Income metrics results to date are as follows:

1. **Strategic Targeting {Electric & Gas} – Statewide**
**Threshold:** In coordination with LEAN, Program Administrators to develop a marketing strategy/plan to increase program participation through targeting Gateway cities and/or identified challenged communities and/or hard-to-reach communities across the State with the intent to educate consumers within these communities about available low-income program offerings they can benefit from. The marketing strategy plan will include key elements that describe the overall strategies and provide an implementation overview. Key elements include, at minimum: 1) detailed sections on communication/outreach strategies, 2) implementation action items 3) deployment outline and 4) monitoring outline. Targeting may include both single and multi-family housing types but is not meant to reduce funding to communities now served. Each PA will target at least one (1) city or hard-to-reach community within their service territory. Gas and Electric PAs will cooperate as appropriate, on efforts in shared towns. A shared PA effort will be counted as one (1) community for both PAs. Program Administrators to submit marketing plan to EEAC Consultants and DOER by May 1, 2013.

**Design:** In coordination with LEAN, each Program Administrator to implement its marketing strategy plan within its respective territory no later than August 1, 2013. Program Administrators will submit notification to the EEAC Consultants that the plans are underway along with a list of the communities in which they are being deployed. The PAs agree to track participation uptake, including kWh and/or therm savings, at the on-set of deployment.

**Exemplary:** Each PA to increase program participation in designated community(s) by 5%* in Q3/Q4 compared to equivalent 2012 baseline**. By February 1, 2014 PAs to present a report to the EEAC Consultants and DOER that includes individual Program Administrator’s participation rates, a summary document of Program Administrator’s production, lessons learned, and recommendations for future marketing strategies. Each PA to submit a memo to EEAC consultants and DOER by February 15, 2014 detailing their Clear and Distinct Role in accomplishing this activity.

**UPDATE:**

**Target Markets**

The chart below details each PA’s target community in which it implemented marketing strategies in order to increase program participation by at least 5%. Nine PAs have met the exemplary status, and one has met design.
<table>
<thead>
<tr>
<th>Program Administrator</th>
<th>Target Community(s)</th>
<th>BASELINE Q3-Q4 2012 Participation</th>
<th>GOAL 5% Increase in 2012 Participation</th>
<th>ACTUAL Q3-Q4 2013 Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire Gas</td>
<td>Turners Falls</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Columbia Gas</td>
<td>Forest Park neighborhood in Springfield, MA</td>
<td>2</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Liberty Utilities</td>
<td>Fall River</td>
<td>38</td>
<td>40</td>
<td>23</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>Haverhill</td>
<td>15</td>
<td>16</td>
<td>103</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>Haverhill</td>
<td>6</td>
<td>7</td>
<td>85</td>
</tr>
<tr>
<td>NSTAR Electric</td>
<td>Somerville</td>
<td>44</td>
<td>47</td>
<td>76</td>
</tr>
<tr>
<td>NSTAR Gas</td>
<td>Somerville</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>Fitchburg</td>
<td>14</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>Fitchburg</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>WMECo</td>
<td>Forest Park neighborhood in Springfield, MA</td>
<td>1</td>
<td>2</td>
<td>22</td>
</tr>
</tbody>
</table>

* The participation indicated above represents the total number of customers who participated in the Low Income Energy Efficiency Program.

In satisfaction of the exemplary level, the PAs presented a report to the EEAC Consultants and DOER by February 1, 2014 that included the individual Program Administrator’s participation rates and a summary of each Program Administrator’s production, lessons learned, and recommendations for future marketing strategies. The PAs detailed their Clear and Distinct Role in accomplishing this activity.

**Implementation of Marketing Strategy/Plans (Design)**

In coordination with LEAN, each PA has implemented a marketing strategy/plan in 2013 to increase program participation by targeting the communities listed in the above chart. Each Program Administrator implemented its marketing strategy plan within its respective territory by August 1, 2013, and Program Administrators submitted notification to the EEAC Consultants that the plans were underway, along with the list of the communities in which they are being deployed. Information on each PA’s marketing strategy and plans as available for the August 1 submission is as follows:

**Berkshire Gas Marketing Plan**

Berkshire Gas along with Community Action of the Franklin, Hampshire, and North Quabbin Regions, Inc. (“CA”) has developed a marketing and outreach plan to increase program participation in the town of Turners falls by 5%. CA has generated a list of 165 LIHEAP eligible households in Turners falls and has prepared a mailing to reach out to these households. Natural Gas heated multi-family buildings have also been targeted for service in 2013.

- Berkshire Gas and CA met in May to determine appropriate steps to increase client participation. A direct mail campaign to all 165 households was designed.
• CA met with the Franklin County Regional Housing and Redevelopment Program in Turners Falls in June and identified 4 low-income multi-family buildings totaling 105 units and is securing final permission to perform the energy assessment for these properties.

• Community Action designed a flyer to go to the 165 LIHEAP eligible households in June. This mailing went out on August 1 with an expected return rate of approximately 15%.

• CA was part of a Community Energy Savings for Seniors presentation on September 11, 2013 at the Greenfield Savings Bank in Turners Falls to present options for low-income energy efficiency.

Berkshire Gas and CA have monitored the process of outreach and tally the results of the targeted mailing. The energy assessment for the 4 low-income multi-family buildings was planned for August 2013, with all measure identification and contractor coordination in place by October.

**Columbia Gas & Western Massachusetts Electric Company Marketing Plan**

Western Massachusetts Electric Company (WMECo) and Columbia Gas of Massachusetts (CMA) along with their partners, Springfield Partners for Community Action (Springfield Partners) and the Vietnamese American Civic Association (“VACA”) have developed a marketing plan to increase program participation by at least 5% within the hard-to-reach neighborhood of Forest Park in Springfield, MA. WMECo and CMA began implementation of the marketing plan in April 2013. WMECo, CMA and Springfield Partners have implemented the following marketing activities.

• WMECo and CMA met on March 7th, 2013 and April 4th, 2013 with Springfield Partners and VACA to become familiar with the community’s needs, discuss potential barriers, develop outreach strategies and identify opportunities for this initiative.

• VACA held its 10th Annual Health Fair on Friday, April 26, 2013 which was attended by Springfield Partners, WMECo and CMA as a means to become more familiar to the community and increase visibility.

• Springfield Partners attended the Fall of Saigon Memorial Service on Saturday, April 27th, 2013 to market the initiative.

• Two bi-lingual and bi-cultural translators are working to help with the potential language barrier and trust issues. The translators work from the offices of Springfield Partners and the VACA community center. The translators have been trained to discuss the benefits of the weatherization programs, answer customer questions and schedule weatherization appointments. They call members of VACA to personally invite them to the “Sunny Wednesday” events. The translators are also present at the initial home audit and during the weatherization work. The presence of a translator increases the comfort of the customer as well as reduces the language and trust barriers.

• Springfield Partners has also implemented “Sunny Wednesdays” beginning May 29th, 2013. Over 60 people attended this event. On “Sunny Wednesdays”, Springfield
Partners sets up an information table at the VACA community center to promote the initiative and answer questions about energy efficiency and utility discount rates. Utility weatherization literature and a Vietnamese/English brochure are distributed. “Sunny Wednesdays” will be held throughout the summer to provide a continual presence in the community.

- Springfield Partners continues to reach out to all community resources. To date, they have attended 5 community events including a Saturday morning men’s meeting and breakfast at VACA. At the breakfast, they met with the lay person in charge of the local Buddhist temple on Berkshire Ave, VACA board members and other influential community leaders.

- Springfield Partners additional outreach efforts include Springfield Partners auditors handing out CMA and WMECo weatherization and educational packets to neighbors of weatherized homes. VACA hands out a “Sunny Wednesdays” flyer to their after school and senior center participants and has weatherization applications available at their center.

- Springfield Partners has weatherized 2 gas heated demonstration homes that were used to familiarize the community with weatherization. These homes are being used as an opportunity for the landlord to discuss the process of weatherizing a home in addition to the benefits of the weatherization program to the Vietnamese community.

- A total of two gas heated homes (2-two family homes) have been weatherized. The estimated energy savings are 3,081 kWh and 1,052 therms per year.

- One single family oil heated home has been weatherized. The estimated energy savings is 377 kWh per year and 204 gallons of oil per year. Three additional oil heated homes are scheduled for weatherization.

### National Grid Electric & Gas Marketing Plan

National Grid developed a marketing plan to increase program participation by at least 5% of the income eligible population in the City of Haverhill. National Grid began implementation of this marketing plan in May 2013. To date, the Company has completed the following action items:

- Finalized mailing list of Haverhill single family customers on the discount rate to receive correspondence. The total number of customers targeted is 3,290. Customers who were previously served were excluded from the campaign.

- Created and finalized direct mail collateral and email blast text, in collaboration with CAP agencies.

- Printed the direct mail piece and mailed to the defined target audience on June 28, 2013. The call to action was to contact the local community action program agency, Community Action Inc. (CAI) via phone, business reply card or email.

- Also an email blast was sent to the targeted list on July 1, 2013.

As of July 2013, the CAP agencies had received 150 inquiries regarding the direct mail/email blast, a 4% response rate. In addition, there had been 29 energy assessments completed as a
result of this campaign. Eleven assessments were scheduled, and 7 heating system projects were out to bid for replacement.

National Grid will continue to implement the remainder of the marketing plan, and monitor and track participation uptake, including kWh and/or therm savings, as outlined in the initial documentation submitted on May 1, 2013.

**Liberty Utilities’ (formerly New England Gas Company) Marketing Plan**

Liberty Utilities’ marketing plan focused on the hard-to-reach community in Fall River. The plan was implemented starting in the first quarter of 2013 and progressed in the second quarter as scheduled. The following was completed through the end of the second quarter:

- A Kick-Off Event was held on Saturday, March 2nd, after a postponement due to weather. The event included participation by the Mayor’s Office, local media, local contractors for energy efficiency, and a number of the target neighborhood associations taking part in the contest. The promotion of the kick-off was attained by advertising in local papers and on local radio stations. These spots were run in both English and Portuguese in a further attempt to reach the hard-to-reach population of the unique Fall River territory. The event was also promoted through distribution of a flier to students at all Fall River public schools. The mid-Spring promotion of the initiative was completed using several channels. A multi-lingual flier (English, Portuguese, and Spanish) was distributed to all Fall River public school students, to the local CAP agency (Citizens for Citizens), and Fall River City Hall in April, reminding people that the initiative was in full swing. The same multi-lingual information was also run in the local paper on three separate occasions throughout the second quarter.

- The results of the contest were originally anticipated to be announced at the end of the second quarter. However, the interest was such that the deadline to apply for the contest was extended and, therefore, the results of the contest were available in the third quarter of 2013.

Liberty Utilities will review the results of the contest and continue to implement the marketing plan as outlined in the documentation submitted on May 1, 2013. The Company will use lessons learned to further enhance its marketing strategies to hard-to-reach customers in its entire service territory.

**NSTAR Electric & Gas Marketing Plan**

NSTAR has developed a marketing plan to increase program participation by at least 5% within the hard-to-reach community of Somerville. NSTAR began implementation of our marketing plan in May 2013. To date, NSTAR has completed the following implementation action items:

- NSTAR finalized the mailing list of Somerville single family customers on the discount rate to be included within the marketing campaign and receive all direct mail collateral. The total amount of NSTAR Electric and Gas customers that are on the discount rate targeted within this campaign is 1,296 customers. Customers that were previously served via the Energy Efficiency program were excluded from this campaign in addition to addresses located within multi-family facilities.
• NSTAR worked in conjunction with Conservation Services Group ("CSG"), a vendor contracted for marketing services, to develop and finalize two different direct mail collateral pieces for two separate mailings to the targeted list. Both pieces described the various measures available at no cost through the program and instructed the customers to call the local Community Action Program Agency, Tri-City Community Action Program, Inc., directly to schedule an assessment.

• The first direct mail piece was printed and mailed to the targeted list on May 10, 2013. As of July 2013, Tri-City Community Action Program, Inc. had received 42 calls regarding the mailing, a 3.24% response rate, and has completed 21 energy assessments to date.

• The second direct mail piece was printed and mailed to the targeted list on July 22, 2013. The response rate in addition to the number of completed assessments will continue to be tracked and reported within the final metric document.

• Research on property management companies and landlords of affordable housing as well as Public Housing Authorities within Somerville has occurred via NSTAR’s lead vendor, ABCD, and outreach is ongoing via phone calls and meetings. To date, NSTAR has completed an assessment of a 50 unit multi-family property in Somerville and is in the process of installing Energy Efficient lighting.

NSTAR will continue to analyze participation uptake, including kWh and therm savings of the Low Income Program in Q3 through Q4 2013 from the baseline of participation in Q3 through Q4 2012 within Somerville and will continue to implement the remainder of the marketing plan as outlined in the initial documentation submitted on May 1, 2013.

**Unitil Electric & Gas Marketing Plan**

Unitil has developed a marketing plan to increase participation by 5% in the hard to reach community of Fitchburg. Unitil began implementation of this marketing plan in June 2013: To date, Unitil has completed the following:

• Partnered with the Green and Healthy Homes Initiative to ensure that anyone receiving state referrals is checked for all available program participation, including Unitil’s Low Income Weatherization program, as well as others such as rodent remediation, Lead Safety, Smoking awareness, etc.

• Worked in coordination with Montachusett Opportunity Council, Inc. (MOC) to provide a list of high usage LI customers for MOC to vet for participation

• Developed a bill insert to be included in bills later this year

• Meeting with Chamber of Commerce to set up a seminar for a QA session

Unitil monitored customer participation and note participation uptake through Q3 and Q4.
2. Multi-family Building Inventory {Electric & Gas} – Statewide

**Threshold:** In coordination with LEAN the utilities shall continue to support the development and on-going efforts of the 2010-2012 statewide non-profit multi-family building inventories, begun in 2010 and scheduled to conclude by the end of 2013. The objective is to facilitate benchmarking for identification of energy retrofit potential in low-income multifamily buildings and to screen potential projects. Benchmarking allows the Low-Income Multifamily Program to identify and target the most energy-inefficient buildings in order to maximize deep, comprehensive savings. This four-year effort, begun in 2010, provides building square footage and at least a year of energy consumption data with respect to buildings that are majority-occupied by low-income tenants. This information is currently systematically available on a limited basis for public housing authority buildings and virtually not at all for other buildings. The information will support development of an energy efficiency standard (e.g., BTUs of energy per square foot of heated space) for low-income multi-family buildings.

**UPDATE:**

The utility PAs have continued the statewide inventory. Therefore, each utility PA has met the threshold of this metric. Also, please see below under “Design” for more detail and quantitative data with respect to achievement of this metric.

**Design:** Each utility PA will conduct an inventory in its service territory, reaching the designated milestone number of account reports (defined under “Baseline Information”) as indicated below. Each utility will support the inventory on an allocated basis, with a statewide total of 838.5 accounts per month through June 30, 2013 (not including Cape Light Compact).

**UPDATE:**

Each PA identified and maintained inventory within its service territory, reaching the designated milestone number of account reports as specified within the Design level of the metric.

<table>
<thead>
<tr>
<th>Program Administrator</th>
<th>% Allocation</th>
<th># of Acct Reports/ Year*</th>
<th># of Acct Reports/ Month</th>
<th># of Acct Reports/ Year*</th>
<th>Ave # of Acct Reports/ Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire Gas</td>
<td>1.67%</td>
<td>84</td>
<td>14</td>
<td>85</td>
<td>14</td>
</tr>
<tr>
<td>Columbia Gas</td>
<td>8.94%</td>
<td>450</td>
<td>75</td>
<td>451</td>
<td>75</td>
</tr>
<tr>
<td>Liberty Utilities</td>
<td>1.19%</td>
<td>60</td>
<td>10</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>18.72%</td>
<td>942</td>
<td>157</td>
<td>944</td>
<td>157</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>22.18%</td>
<td>1,116</td>
<td>186</td>
<td>1,118</td>
<td>186</td>
</tr>
<tr>
<td>NSTAR Electric</td>
<td>26.48%</td>
<td>1,332</td>
<td>222</td>
<td>1,332</td>
<td>222</td>
</tr>
<tr>
<td>NSTAR Gas</td>
<td>15.38%</td>
<td>774</td>
<td>129</td>
<td>776</td>
<td>129</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>0.12%</td>
<td>6</td>
<td>1</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>0.06%</td>
<td>3</td>
<td>0.5</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>WMECO</td>
<td>5.25%</td>
<td>264</td>
<td>44</td>
<td>264</td>
<td>44</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>5,031</strong></td>
<td><strong>838.5</strong></td>
<td><strong>5,041</strong></td>
<td><strong>840.2</strong></td>
</tr>
</tbody>
</table>

* Year represents January through June 30, 2013
Exemplary: By Jan 31st, 2014, in coordination with LEAN, each PA will submit a status report showing its inventory results. The status report shall include a summary of what has been learned to date relating to the energy consumption in non-profit low income multi-family buildings (e.g., average BTUs/square foot, reasonable target consumption, reasonable threshold consumption for weatherization measures, etc.), and recommendations as appropriate.

UPDATE:

In coordination with LEAN, the PAs submitted a status report on January 30, 2014 showing inventory results, including a summary of what has been learned to date relating to the energy consumption in non-profit low income multi-family buildings (e.g., average BTUs/square foot, reasonable target consumption, reasonable threshold consumption for weatherization measures, etc.), and recommendations as appropriate. All PAs have achieved exemplary status for this metric. A summary of the work in 2013 and the findings are as follows:

2013 Summary and Findings:

In summary, 5,041 accounts were inventoried and ranked as part of the 2013 efforts, with 2,493 from gas accounts and 2,548 from electric accounts. Based upon a quartile analysis of the data gathered from January 2013 through June 2013, energy benchmarks were calculated for Gas Usage, Whole Building Electricity Usage, Common Area Electricity Usage, and Usage for Electrically Heated facilities. The median was used to develop the four quartiles as defined by WegoWise for the inventoried accounts. The mean of inventoried accounts fell into one of the four quartiles below for each category.

- “Energy Efficient” – defined as buildings in the top quartile of performance;
- “Better than Median” – represents the second quartile of performance;
- “Worse than Median” – details the third quartile of performance; and
- “Poor” – represents the fourth quartile.

The calculated benchmarks can be used to approximately assess a building’s performance relative to other affordable housing buildings in Massachusetts based on where its energy use falls within this classification scheme. Accounts that fall into the “Worse” and “Poor” categories likely have particularly attractive payback energy efficiency opportunities. The following means (averages) were calculated by WegoWise based on the results of the 2013 benchmarking effort relative to usage per square foot:

<table>
<thead>
<tr>
<th>Usage Type</th>
<th>Average (Mean)</th>
<th>Quartile</th>
<th>EE Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>0.69 Therms/sq ft</td>
<td>3</td>
<td>Worse than Median</td>
</tr>
<tr>
<td>Electric Common Areas</td>
<td>5.17 kWh/sq ft</td>
<td>3</td>
<td>Worse than Median</td>
</tr>
<tr>
<td>Electric Whole Building</td>
<td>5.00 kWh/sq ft</td>
<td>3</td>
<td>Worse than Median</td>
</tr>
<tr>
<td>Electrically Heated Building</td>
<td>11.09 kWh/sq ft</td>
<td>3</td>
<td>Worse than Median</td>
</tr>
</tbody>
</table>

Buildings that fall into the “Poor” energy efficiency classification have the greatest opportunity for energy usage improvement and would lead to significant energy savings by bringing these buildings to at least the median level of efficiency. Estimated below are the potential energy
savings for each “Poor” building by calculating the difference between current whole building usage and the potential usage if that building were to upgrade to perform at the median per square foot benchmark.

<table>
<thead>
<tr>
<th>Building Type</th>
<th># of &quot;Poor&quot; Buildings</th>
<th>Energy Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Heat/Hot Water</td>
<td>1,101</td>
<td>2,256,887 Therms</td>
</tr>
<tr>
<td>Electrically Heated</td>
<td>68</td>
<td>2,940,707 kWh</td>
</tr>
<tr>
<td>Non-Electrically Heated</td>
<td>499</td>
<td>15,738,817 kWh</td>
</tr>
</tbody>
</table>

In short, the inventory of accounts that were benchmarked in 2013 reinforces the need and demand for energy efficiency within low-income multi-family buildings in Massachusetts. PAs, in conjunction with LEAN and Low Income Multi-family vendors, continue to review the details of the inventory and target customers that appear in the bottom quartiles (“worse than average” and “poor” respectively) first. These buildings show the greatest opportunity for energy savings and further exemplify a strong pool of candidates likely to be ripe for cost-effective energy efficiency.

C. Commercial & Industrial

2013 C&I Q4 Metrics review is as follows:

1. C&I Large Retrofit Depth of Savings

Detailed Description:

For Electric PAs: To qualify, projects with customers that use gas must achieve a minimum of 15% building electric savings and at least 5% gas savings. For those that do not use gas, projects can qualify if they meet either a minimum of 15% electric savings and 5% other fuel savings, or a minimum of 20% electric savings alone.

For Gas PAs: To qualify, projects with customers that use electricity delivered by a PA offering Mass Save programs must achieve a minimum of 15% building gas savings, plus at least 5% electric savings. For those that do not use electricity delivered by a PA offering Mass Save programs (e.g., a municipal utility), projects can qualify if they meet a minimum of 20% gas savings alone.

Note: A single project can be counted by both an electric and a gas PA so long as it meets each of their depth criteria (i.e., it met or exceeded both 15% electric savings and 15% gas savings).

2013 Targets:

- Threshold level: 5% more qualifying projects than were achieved in 2012
- Design level: 10% more qualifying projects than were achieved in 2012
- Exemplary level: 20% more qualifying projects than were achieved in 2012
The table below describes the PAs’ results for the C&I Large Retrofit Depth of Savings metric through December 31, 2013

<table>
<thead>
<tr>
<th></th>
<th>Number of Qualifying Projects YTD Dec</th>
<th>Number of Qualifying Projects in 2012</th>
<th>Threshold Goal 5%</th>
<th>Design Goal 10%</th>
<th>Exemplary Goal 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSTAR Electric</td>
<td>32</td>
<td>28</td>
<td>29</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>NSTAR Gas</td>
<td>17</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>14</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>WMECO</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Berkshire Gas</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Columbia Gas of MA</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Liberty Utilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

2. **C&I New Construction Depth of Savings**

For Electric PAs: For projects that use gas, to qualify they must achieve a minimum of 20% whole building savings for both gas and electric usage. For projects that do not use gas, projects can qualify if they meet either a minimum of 20% whole building savings for both electric and other non-gas fuel usage, OR a minimum of 25% electric savings alone.

For Gas PAs: For projects that use electricity delivered by a PA that offers a Mass Save program, to qualify projects must achieve a minimum of 20% whole building savings for both gas and electric usage. For projects that do not use electricity delivered by a PA offering a Mass Save program, projects can qualify if they meet a minimum of 25% gas savings alone.

*Note:* A single project can be counted by both an electric and a gas PA so long as it meets each of their depth criteria (e.g., it met or exceeded 20% whole building savings for both electric and gas).

**2013 Targets:**

- Threshold level: 5% increase in the percentage of qualifying projects than was achieved in 2012
- Design level: 10% increase in the percentage of qualifying projects than was achieved in 2012
- Exemplary level: 20% increase in the percentage of qualifying projects than was achieved in 2012

The table below describes the utility PAs’ results for the 2013 C&I New Construction Depth of Savings metric through December 31, 2013
3. **Small Business Direct Install Depth of Savings**

For Electric PAs: For all PA SBDI projects completed in 2013 the metric is met by achieving an average depth of savings as a percent of building electric annual usage that meets the target.

For Gas PAs: For all PA SBDI projects completed in 2013 the metric is met by achieving an average depth of savings as a percent of building gas annual usage that meets the target.

**2013 Targets:**

- Threshold level: 5% increase in average percentage depth achieved in 2012
- Design level: 10% increase in average percentage depth achieved in 2012
- Exemplary level: 20% increase in average percentage depth achieved in 2012

The table below describes the utility PAs’ results for the Small Business Direct Install Depth of Savings metric through December 31, 2013

<table>
<thead>
<tr>
<th>Utility PAs</th>
<th>% Depth Achieved YTD Dec</th>
<th>% Depth Achieved in 2012</th>
<th>Threshold Goal 5%</th>
<th>Design Goal 10%</th>
<th>Exemplary Goal 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSTAR Electric</td>
<td>37%</td>
<td>22%</td>
<td>23%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>NSTAR Gas</td>
<td>47%</td>
<td>40%</td>
<td>42%</td>
<td>44%</td>
<td>48%</td>
</tr>
<tr>
<td>National Grid Electric</td>
<td>65%</td>
<td>62%</td>
<td>65%</td>
<td>69%</td>
<td>75%</td>
</tr>
<tr>
<td>National Grid Gas</td>
<td>42%</td>
<td>40%</td>
<td>42%</td>
<td>44%</td>
<td>48%</td>
</tr>
<tr>
<td>WMECO</td>
<td>8%</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Berkshire Gas</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Columbia Gas of MA</td>
<td>50%</td>
<td>83%</td>
<td>87%</td>
<td>91%</td>
<td>100%</td>
</tr>
<tr>
<td>Liberty Utilities</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Utility PAs</th>
<th>% Depth Achieved YTD Dec</th>
<th>% Depth Achieved in 2012</th>
<th>Threshold Goal 5%</th>
<th>Design Goal 10%</th>
<th>Exemplary Goal 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire Gas</td>
<td>0%</td>
<td>10.34%</td>
<td>13.3%</td>
<td>14.0%</td>
<td>15.9%</td>
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<tr>
<td>Columbia Gas of MA</td>
<td>3.66%</td>
<td>6.08%</td>
<td>6.38%</td>
<td>6.69%</td>
<td>7.30%</td>
</tr>
<tr>
<td>Liberty Utilities</td>
<td>3%</td>
<td>22.59%</td>
<td>23.71%</td>
<td>24.85%</td>
<td>27.10%</td>
</tr>
<tr>
<td>Unitil Electric</td>
<td>13%</td>
<td>16.3%</td>
<td>17.15%</td>
<td>17.96%</td>
<td>19.59%</td>
</tr>
<tr>
<td>Unitil Gas</td>
<td>18%</td>
<td>7.6%</td>
<td>7.94%</td>
<td>8.32%</td>
<td>9.07%</td>
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ATTACHMENT A

QUANTITATIVE REPORT
### STATEWIDE ELECTRIC BUDGETS SPEND
#### Q3 2013

#### Total Sum of Program Planning and Administration

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Total Sum of Program Planning and Administration</th>
<th>Total Sum of Marketing and Advertising</th>
<th>Total Sum of Participant Incentive</th>
<th>Total Sum of Technical Assistance &amp; Training</th>
<th>Total Sum of Evaluation and Market Research</th>
<th>Total Sum of Total Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>$27,969,172$</td>
<td>$17,632,591$</td>
<td>$351,403,005$</td>
<td>$69,370,509$</td>
<td>$15,487,556$</td>
<td>$481,862,833$</td>
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<tr>
<td>1. Residential Whole House</td>
<td>$2,274,718$</td>
<td>$1,526,896$</td>
<td>$1,460,958$</td>
<td>$1,824,486$</td>
<td>$1,490,493$</td>
<td>$7,560,249$</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>$919,859$</td>
<td>$580,715$</td>
<td>$141,611$</td>
<td>$71,599$</td>
<td>$10,941$</td>
<td>$2,999,159$</td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td>$3,233,979$</td>
<td>$2,999,159$</td>
<td>$3,993,159$</td>
<td>$3,993,159$</td>
<td>$3,993,159$</td>
<td>$8,412,556$</td>
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<tr>
<td>Low-Income</td>
<td>$1,824,486$</td>
<td>$347,466$</td>
<td>$39,131,176$</td>
<td>$39,131,176$</td>
<td>$39,131,176$</td>
<td>$1,409,493$</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>$1,208,114$</td>
<td>$919,465$</td>
<td>$10,568,625$</td>
<td>$10,568,625$</td>
<td>$10,568,625$</td>
<td>$1,008,876$</td>
</tr>
<tr>
<td>5. Low-Income Hard-to-Measure</td>
<td>$1,820,453$</td>
<td>$1,167,455$</td>
<td>$124,978,713$</td>
<td>$124,978,713$</td>
<td>$124,978,713$</td>
<td>$1,300,880$</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>$1,116,086$</td>
<td>$416,120$</td>
<td>$8,153,201$</td>
<td>$8,153,201$</td>
<td>$8,153,201$</td>
<td>$1,116,086$</td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>$3,735,474$</td>
<td>$416,120$</td>
<td>$5,033,571$</td>
<td>$5,033,571$</td>
<td>$5,033,571$</td>
<td>$3,764,413$</td>
</tr>
<tr>
<td>Q4</td>
<td>$19,490,020$</td>
<td>$12,582,522$</td>
<td>$324,593,555$</td>
<td>$64,874,712$</td>
<td>$5,563,971$</td>
<td>$427,104,762$</td>
</tr>
<tr>
<td>Residential</td>
<td>$7,973,527$</td>
<td>$3,735,474$</td>
<td>$10,568,625$</td>
<td>$10,568,625$</td>
<td>$10,568,625$</td>
<td>$7,973,527$</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>$2,445,078$</td>
<td>$1,167,455$</td>
<td>$8,153,201$</td>
<td>$8,153,201$</td>
<td>$8,153,201$</td>
<td>$2,445,078$</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>$1,460,958$</td>
<td>$1,167,455$</td>
<td>$5,033,571$</td>
<td>$5,033,571$</td>
<td>$5,033,571$</td>
<td>$1,460,958$</td>
</tr>
<tr>
<td>Low-Income</td>
<td>$1,208,114$</td>
<td>$919,465$</td>
<td>$124,978,713$</td>
<td>$124,978,713$</td>
<td>$124,978,713$</td>
<td>$1,208,114$</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>$1,820,453$</td>
<td>$1,167,455$</td>
<td>$23,490$</td>
<td>$23,490$</td>
<td>$23,490$</td>
<td>$1,820,453$</td>
</tr>
<tr>
<td>5. Low-Income Hard-to-Measure</td>
<td>$1,820,453$</td>
<td>$1,167,455$</td>
<td>$23,490$</td>
<td>$23,490$</td>
<td>$23,490$</td>
<td>$1,820,453$</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>$12,900,288$</td>
<td>$2,290,165$</td>
<td>$160,394,891$</td>
<td>$25,311,917$</td>
<td>$25,311,917$</td>
<td>$12,900,288$</td>
</tr>
</tbody>
</table>

#### YTD as Percentage to Goal

<table>
<thead>
<tr>
<th>Program Planning and Administration</th>
<th>Marketing and Advertising</th>
<th>Participant Incentive</th>
<th>Sales, Technical Assistance &amp; Training</th>
<th>Evaluation and Market Research</th>
<th>Total Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>70%</td>
<td>71%</td>
<td>92%</td>
<td>94%</td>
<td>36%</td>
</tr>
<tr>
<td>Residential</td>
<td>76%</td>
<td>93%</td>
<td>122%</td>
<td>108%</td>
<td>42%</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>75%</td>
<td>93%</td>
<td>116%</td>
<td>104%</td>
<td>33%</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>73%</td>
<td>93%</td>
<td>134%</td>
<td>81%</td>
<td>67%</td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td>83%</td>
<td>92%</td>
<td>126%</td>
<td>214%</td>
<td>21%</td>
</tr>
<tr>
<td>Low-Income</td>
<td>56%</td>
<td>67%</td>
<td>100%</td>
<td>87%</td>
<td>39%</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>73%</td>
<td>45%</td>
<td>100%</td>
<td>86%</td>
<td>40%</td>
</tr>
<tr>
<td>5. Low-Income Hard-to-Measure</td>
<td>37%</td>
<td>97%</td>
<td>0%</td>
<td>102%</td>
<td>2%</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>70%</td>
<td>36%</td>
<td>77%</td>
<td>82%</td>
<td>32%</td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>60%</td>
<td>19%</td>
<td>103%</td>
<td>67%</td>
<td>36%</td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>64%</td>
<td>28%</td>
<td>70%</td>
<td>87%</td>
<td>31%</td>
</tr>
<tr>
<td>8. C&amp;I Hard-to-Measure</td>
<td>108%</td>
<td>83%</td>
<td>0%</td>
<td>0%</td>
<td>11%</td>
</tr>
</tbody>
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## STATEWIDE ELECTRIC SAVINGS

### Q3 2013

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Total Sum of Participants</th>
<th>Total Sum of Capacity (kW)</th>
<th>Total Sum of Energy (annual MWh)</th>
<th>Total Sum of Energy (Lifetime MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>2,204,880</td>
<td>173,352</td>
<td>1,195,186</td>
<td>13,146,628</td>
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<tr>
<td>Residential</td>
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<td>1,892,380</td>
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<tr>
<td>1. Residential Whole House</td>
<td>915,457</td>
<td>21,056</td>
<td>153,182</td>
<td>596,356</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>3,332</td>
<td>923</td>
<td>5,019</td>
<td>52,630</td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>24,896</td>
<td>892</td>
<td>15,902</td>
<td>159,565</td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>46,798</td>
<td>4,008</td>
<td>32,928</td>
<td>284,428</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>840,431</td>
<td>15,233</td>
<td>99,733</td>
<td>99,733</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>1,245,066</td>
<td>21,917</td>
<td>176,609</td>
<td>1,296,024</td>
</tr>
<tr>
<td>2a. Residential Cooling &amp; Heating Equipment</td>
<td>1,142,091</td>
<td>16,668</td>
<td>155,437</td>
<td>1,094,927</td>
</tr>
<tr>
<td>2b. Residential Lighting</td>
<td>90,968</td>
<td>2,051</td>
<td>15,320</td>
<td>120,638</td>
</tr>
<tr>
<td>2c. Residential Consumer Products</td>
<td>27,879</td>
<td>3,332</td>
<td>28,837</td>
<td>265,017</td>
</tr>
<tr>
<td>Low-Income</td>
<td>27,879</td>
<td>3,332</td>
<td>28,837</td>
<td>265,017</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>1,245</td>
<td>128</td>
<td>1,184</td>
<td>11,476</td>
</tr>
<tr>
<td>4a. Low-Income New Construction</td>
<td>10,446</td>
<td>1,543</td>
<td>13,043</td>
<td>119,243</td>
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<tr>
<td>4b. Low-Income Single Family Retrofit</td>
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<td>1,661</td>
<td>14,610</td>
<td>134,298</td>
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<tr>
<td>4c. Low-Income Multi-Family Retrofit</td>
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<td>127,046</td>
<td>836,559</td>
<td>10,989,232</td>
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<tr>
<td>Commercial &amp; Industrial</td>
<td>5,097</td>
<td>35,895</td>
<td>205,768</td>
<td>2,700,683</td>
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<td>6a. C&amp;I New Construction</td>
<td>11,380</td>
<td>91,151</td>
<td>630,790</td>
<td>8,288,549</td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>7,431</td>
<td>68,108</td>
<td>509,669</td>
<td>6,979,842</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>7,632</td>
<td>23,043</td>
<td>121,121</td>
<td>1,308,707</td>
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</table>

### YTD as Percentage to Goal

<table>
<thead>
<tr>
<th>Participants</th>
<th>Capacity (kW)</th>
<th>Energy (annual MWh)</th>
<th>Energy (Lifetime MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>126%</td>
<td>88%</td>
<td>89%</td>
</tr>
<tr>
<td>Residential</td>
<td>126%</td>
<td>91%</td>
<td>113%</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>104%</td>
<td>62%</td>
<td>106%</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>90%</td>
<td>190%</td>
<td>153%</td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>118%</td>
<td>112%</td>
<td>124%</td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>98%</td>
<td>91%</td>
<td>139%</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>104%</td>
<td>44%</td>
<td>91%</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>141%</td>
<td>118%</td>
<td>119%</td>
</tr>
<tr>
<td>2a. Residential Cooling &amp; Heating Equipment</td>
<td>145%</td>
<td>118%</td>
<td>188%</td>
</tr>
<tr>
<td>2b. Residential Lighting</td>
<td>142%</td>
<td>119%</td>
<td>118%</td>
</tr>
<tr>
<td>2c. Residential Consumer Products</td>
<td>129%</td>
<td>107%</td>
<td>103%</td>
</tr>
<tr>
<td>Low-Income</td>
<td>146%</td>
<td>102%</td>
<td>115%</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>146%</td>
<td>102%</td>
<td>115%</td>
</tr>
<tr>
<td>4a. Low-Income New Construction</td>
<td>46%</td>
<td>63%</td>
<td>51%</td>
</tr>
<tr>
<td>4b. Low-Income Single Family Retrofit</td>
<td>91%</td>
<td>129%</td>
<td>119%</td>
</tr>
<tr>
<td>4c. Low-Income Multi-Family Retrofit</td>
<td>190%</td>
<td>81%</td>
<td>116%</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>140%</td>
<td>87%</td>
<td>79%</td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>328%</td>
<td>121%</td>
<td>102%</td>
</tr>
<tr>
<td>6a. C&amp;I New Construction</td>
<td>328%</td>
<td>121%</td>
<td>102%</td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>56%</td>
<td>73%</td>
<td>72%</td>
</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>54%</td>
<td>63%</td>
<td>69%</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>57%</td>
<td>104%</td>
<td>84%</td>
</tr>
<tr>
<td>Row Labels</td>
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<td>Q4 Total Sum %</td>
<td>Q4 Total Sum $</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Residential</td>
<td>$1,521,815,487</td>
<td>278,699,581</td>
<td>(76,246,480)</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>$16,699,293</td>
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<td>$211,775</td>
</tr>
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<td>1b. Residential Multi-Family Retrofit</td>
<td>$21,281,155</td>
<td>$264,290</td>
<td>$19,302</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
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<td>-</td>
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<tr>
<td>2. Residential Products</td>
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<tr>
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<td>2b. Residential Lighting</td>
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<tr>
<td>2c. Residential Consumer Products</td>
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<table>
<thead>
<tr>
<th>Low-Income</th>
<th>40,817,543</th>
<th>5,191,663</th>
<th>699,545</th>
<th>22,975,741</th>
<th>119,974,281</th>
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</thead>
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<tr>
<td>4a. Low-Income New Construction</td>
<td>$1,859,784</td>
<td>$385,742</td>
<td>$682,719</td>
<td>$1,999,170</td>
<td>$5,128,654</td>
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<tr>
<td>4c. Low-Income Multi-Family Retrofit</td>
<td>$15,635,339</td>
<td>$4,118,641</td>
<td>-</td>
<td>$7,442,023</td>
<td>$29,544,697</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>$1,171,351,637</td>
<td>$12,061,965</td>
<td>$(82,242,885)</td>
<td>$1,355,304,710</td>
<td>$877,249,687</td>
</tr>
<tr>
<td>6c. C&amp;I New Construction</td>
<td>$778,977,417</td>
<td>$(8,928,265)</td>
<td>$19,422,405</td>
<td>$799,130,604</td>
<td>$1,191,749,256</td>
</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>$608,422,429</td>
<td>$(7,880,254)</td>
<td>$(76,735,942)</td>
<td>$70,211,565</td>
<td>$667,377,222</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>$170,574,987</td>
<td>$1,051,679</td>
<td>$(7,847,323)</td>
<td>$28,082,039</td>
<td>$210,871,464</td>
</tr>
</tbody>
</table>

### YTD as Percentage to Goal

<table>
<thead>
<tr>
<th>Electric Benefits</th>
<th>Other Resource Benefits</th>
<th>Gas Benefits</th>
<th>Non Resource Benefits</th>
<th>Sum of Total Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>81%</td>
<td>133%</td>
<td>52%</td>
<td>90%</td>
<td>96%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residential</th>
<th>119%</th>
<th>125%</th>
<th>154%</th>
<th>87%</th>
<th>116%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Residential Whole House</td>
<td>108%</td>
<td>123%</td>
<td>153%</td>
<td>84%</td>
<td>107%</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>180%</td>
<td>216%</td>
<td>20%</td>
<td>47%</td>
<td>149%</td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>114%</td>
<td>30%</td>
<td>132%</td>
<td>15%</td>
<td>53%</td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>95%</td>
<td>123%</td>
<td>204%</td>
<td>100%</td>
<td>112%</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>75%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>79%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Residential Products</th>
<th>128%</th>
<th>0%</th>
<th>138%</th>
<th>150%</th>
<th>138%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2a. Residential Cooling &amp; Heating Equipment</td>
<td>139%</td>
<td>0%</td>
<td>138%</td>
<td>133%</td>
<td>144%</td>
</tr>
<tr>
<td>2b. Residential Lighting</td>
<td>129%</td>
<td>0%</td>
<td>0%</td>
<td>121%</td>
<td>141%</td>
</tr>
<tr>
<td>2c. Residential Consumer Products</td>
<td>87%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>102%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low-Income</th>
<th>119%</th>
<th>123%</th>
<th>55%</th>
<th>57%</th>
<th>103%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Low-Income New Construction</td>
<td>117%</td>
<td>55%</td>
<td>54%</td>
<td>32%</td>
<td>52%</td>
</tr>
<tr>
<td>4b. Low-Income Single Family Retrofit</td>
<td>138%</td>
<td>127%</td>
<td>16.2%</td>
<td>91%</td>
<td>123%</td>
</tr>
<tr>
<td>4c. Low-Income Multi-Family Retrofit</td>
<td>88%</td>
<td>46%</td>
<td>0%</td>
<td>38%</td>
<td>78%</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>74%</td>
<td>60%</td>
<td>54%</td>
<td>104%</td>
<td>87%</td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>96%</td>
<td>56%</td>
<td>71%</td>
<td>9438%</td>
<td>120%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. C&amp;I Retrofit</th>
<th>66%</th>
<th>63%</th>
<th>57%</th>
<th>69%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>62%</td>
<td>64%</td>
<td>56%</td>
<td>61%</td>
<td>71%</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>84%</td>
<td>71%</td>
<td>76%</td>
<td>106%</td>
<td>95%</td>
</tr>
</tbody>
</table>
## STATEWIDE ELECTRIC SUMMARY
### Q3 2013

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Sum of Participants</th>
<th>Sum of Total Spend</th>
<th>Sum of Capacity (kW)</th>
<th>Sum of Energy (annual MWh)</th>
<th>Sum of Energy (Lifetime MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electric</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>2,204,880</td>
<td>$ 481,862,833</td>
<td>173,352</td>
<td>1,195,186</td>
<td>13,146,628</td>
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<tr>
<td>Residential</td>
<td>2,160,523</td>
<td>$ 153,782,491</td>
<td>42,973</td>
<td>329,791</td>
<td>1,892,380</td>
</tr>
<tr>
<td>Low-Income</td>
<td>27,879</td>
<td>$ 54,136,833</td>
<td>3,332</td>
<td>28,837</td>
<td>265,017</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>16,477</td>
<td>$ 273,943,509</td>
<td>127,046</td>
<td>836,559</td>
<td>10,989,232</td>
</tr>
<tr>
<td><strong>Q4</strong></td>
<td>2,776,272</td>
<td>427,104,780</td>
<td>152,574</td>
<td>1,068,971</td>
<td>11,673,063</td>
</tr>
<tr>
<td>Low-Income</td>
<td>40,724</td>
<td>50,333,864</td>
<td>3,415</td>
<td>33,075</td>
<td>324,216</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>23,141</td>
<td>203,662,768</td>
<td>110,164</td>
<td>662,010</td>
<td>8,800,864</td>
</tr>
<tr>
<td><strong>YTD as % of goal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>126%</td>
<td>89%</td>
<td>88%</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>Low-Income</td>
<td>146%</td>
<td>93%</td>
<td>102%</td>
<td>115%</td>
<td>122%</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>140%</td>
<td>74%</td>
<td>87%</td>
<td>79%</td>
<td>80%</td>
</tr>
</tbody>
</table>

### YTD Preliminary Actuals as a Percent of Plan Goal

- **Residential**: 126%, 91%, 89%, 88%, 89%
- **Low-Income**: 126%, 93%, 89%, 88%, 89%
- **Commercial & Industrial**: 126%, 87%, 88%, 87%, 88%
- **Total**: 140%, 87%, 88%, 87%, 88%
STATEWIDE ELECTRIC SUMMARY  
Q3 2013

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Column Labels</th>
<th>National Grid</th>
<th>UNITIL</th>
<th>CLC</th>
<th>NU (NSTAR)</th>
<th>NU (WMECo)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electric</strong></td>
<td><strong>Goal</strong></td>
<td><strong>5,714,431</strong></td>
<td><strong>96,645</strong></td>
<td><strong>412,865</strong></td>
<td><strong>6,014,393</strong></td>
<td><strong>908,293</strong></td>
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<tr>
<td>Residential</td>
<td>Residential Whole House</td>
<td>925,837</td>
<td>9,174</td>
<td>135,146</td>
<td>634,788</td>
<td>187,435</td>
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<tr>
<td>1. Residential New Construction</td>
<td>304,235</td>
<td>2,027</td>
<td>53,196</td>
<td>184,365</td>
<td>52,533</td>
<td></td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>27,463</td>
<td>618</td>
<td>3,853</td>
<td>18,312</td>
<td>2,385</td>
<td></td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>92,938</td>
<td>781</td>
<td>7,061</td>
<td>54,409</td>
<td>4,375</td>
<td></td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>115,805</td>
<td>628</td>
<td>42,100</td>
<td>88,940</td>
<td>36,955</td>
<td></td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>68,029</td>
<td>-</td>
<td>182</td>
<td>22,704</td>
<td>8,818</td>
<td></td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>621,602</td>
<td>7,147</td>
<td>81,949</td>
<td>450,423</td>
<td>134,902</td>
<td></td>
</tr>
<tr>
<td>2a. Residential Cooling &amp; Heating Equipment</td>
<td>29,847</td>
<td>436</td>
<td>9,053</td>
<td>34,294</td>
<td>6,829</td>
<td></td>
</tr>
<tr>
<td>2b. Residential Lighting</td>
<td>535,930</td>
<td>5,170</td>
<td>59,784</td>
<td>372,404</td>
<td>121,639</td>
<td></td>
</tr>
<tr>
<td>2c. Residential Consumer Products</td>
<td>55,826</td>
<td>1,541</td>
<td>13,112</td>
<td>43,725</td>
<td>6,414</td>
<td></td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Low-Income</td>
<td>118,474</td>
<td>3,301</td>
<td>11,299</td>
<td>93,085</td>
<td>38,858</td>
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<tr>
<td>4. Low-Income Whole House</td>
<td>118,474</td>
<td>3,301</td>
<td>11,299</td>
<td>93,085</td>
<td>38,858</td>
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<tr>
<td>4a. Low-Income New Construction</td>
<td>5,229</td>
<td>247</td>
<td>172</td>
<td>4,410</td>
<td>1,418</td>
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<tr>
<td>4b. Low-Income Single Family Retrofit</td>
<td>57,246</td>
<td>864</td>
<td>8,199</td>
<td>38,330</td>
<td>13,983</td>
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<tr>
<td>4c. Low-Income Multi-Family Retrofit</td>
<td>55,998</td>
<td>2,190</td>
<td>2,308</td>
<td>50,345</td>
<td>23,458</td>
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<td>5. Low-Income Hard-to-Measure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>Commercial &amp; Industrial</td>
<td>4,670,121</td>
<td>84,170</td>
<td>266,421</td>
<td>5,286,520</td>
<td>682,000</td>
<td></td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>1,241,862</td>
<td>10,673</td>
<td>86,578</td>
<td>1,238,125</td>
<td>123,446</td>
<td></td>
</tr>
<tr>
<td>6a. C&amp;I New Construction</td>
<td>1,241,862</td>
<td>10,673</td>
<td>86,578</td>
<td>1,238,125</td>
<td>123,446</td>
<td></td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>3,428,259</td>
<td>73,498</td>
<td>179,842</td>
<td>4,048,395</td>
<td>558,554</td>
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</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>3,093,629</td>
<td>50,550</td>
<td>100,666</td>
<td>3,486,021</td>
<td>248,976</td>
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</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>334,630</td>
<td>22,948</td>
<td>79,176</td>
<td>562,374</td>
<td>309,578</td>
<td></td>
</tr>
<tr>
<td>8. C&amp;I Hard-to-Measure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Q4</strong></td>
<td><strong>4,508,031</strong></td>
<td><strong>95,475</strong></td>
<td><strong>286,002</strong></td>
<td><strong>5,780,504</strong></td>
<td><strong>1,003,051</strong></td>
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<tr>
<td>Residential</td>
<td>1,318,243</td>
<td>14,058</td>
<td>108,131</td>
<td>908,669</td>
<td>198,822</td>
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</tr>
<tr>
<td>1. Residential Whole House</td>
<td>404,375</td>
<td>2,027</td>
<td>53,196</td>
<td>184,365</td>
<td>52,533</td>
<td></td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>304,235</td>
<td>2,027</td>
<td>53,196</td>
<td>184,365</td>
<td>52,533</td>
<td></td>
</tr>
<tr>
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<td>54,409</td>
<td>4,375</td>
<td></td>
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</tr>
<tr>
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<td>34,294</td>
<td>6,829</td>
<td></td>
</tr>
<tr>
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<td>372,404</td>
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<td>55,826</td>
<td>1,541</td>
<td>13,112</td>
<td>43,725</td>
<td>6,414</td>
<td></td>
</tr>
</tbody>
</table>
ELECTRIC STATEWIDE BUDGETS, Q4 2013

Electric Statewide Spend Compared to Goal

Electric Statewide Percentage Spent by Sector

- Residential: 48%
- Low-Income: 12%
- Commercial & Industrial: 40%
- Total: $427,104,780

- Low-Income: $50,333,864
- Commercial & Industrial: $203,662,768
- Total: $427,104,780
ANNUAL ELECTRIC STATEWIDE SAVINGS, Q4 2013

Electric Statewide Annual Savings (MWh) Compared to Goal

<table>
<thead>
<tr>
<th>Sector</th>
<th>Savings (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>373,887</td>
</tr>
<tr>
<td>Low-Income</td>
<td>33,075</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>662,010</td>
</tr>
<tr>
<td>Total</td>
<td>1,068,971</td>
</tr>
</tbody>
</table>

Electric Statewide Annual Savings Percentage by Sector

- Residential: 35%
- Low-Income: 3%
- Commercial & Industrial: 62%
LIFETIME ELECTRIC STATEWIDE SAVINGS, Q4 2013

Electric Statewide Lifetime Savings (MWh) Compared to Goal

<table>
<thead>
<tr>
<th>Sector</th>
<th>Electric Statewide Lifetime Savings (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>2,547,983</td>
</tr>
<tr>
<td>Low-Income</td>
<td>324,216</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>8,800,864</td>
</tr>
<tr>
<td>Total</td>
<td>11,673,063</td>
</tr>
</tbody>
</table>

Electric Statewide Lifetime Savings Percentage by Sector

- Residential: 22%
- Low-Income: 3%
- Commercial & Industrial: 75%
ELECTRIC STATEWIDE BENEFITS, Q4 2013

Electric Statewide Benefits Compared to Goal

<table>
<thead>
<tr>
<th>Sector</th>
<th>Electric Benefits</th>
</tr>
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<tbody>
<tr>
<td>Residential</td>
<td>$758,348,027</td>
</tr>
<tr>
<td>Low-Income</td>
<td>$119,974,281</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>$1,355,304,710</td>
</tr>
<tr>
<td>Total</td>
<td>$2,233,627,018</td>
</tr>
</tbody>
</table>

Electric Statewide Benefits Percentage by Sector

- Residential: 34%
- Low-Income: 5%
- Commercial & Industrial: 61%
## STATEWIDE GAS BUDGETS SPEND
### Q3 2013

### Total Sum of Program Planning and Administration

<table>
<thead>
<tr>
<th>Goal</th>
<th>Total Sum of Program Planning and Administration</th>
<th>Total Sum of Marketing and Advertising</th>
<th>Total Sum of Participant Incentive</th>
<th>Total Sum of Sales, Technical Assistance &amp; Training</th>
<th>Total Sum of Evaluation and Market Research</th>
<th>Total Sum of Total Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td>$8,767,375</td>
<td>$7,892,645</td>
<td>$117,973,681</td>
<td>$26,811,287</td>
<td>$7,035,427</td>
<td>$168,480,416</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>$4,169,404</td>
<td>$4,284,177</td>
<td>$51,990,210</td>
<td>$14,777,100</td>
<td>$3,543,029</td>
<td>$84,785,882</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>$2,354,491</td>
<td>$1,444,166</td>
<td>$37,775,161</td>
<td>$12,522,085</td>
<td>$2,359,334</td>
<td>$56,455,236</td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td>$1,001,762</td>
<td>$1,945,855</td>
<td>$19,110,340</td>
<td>$1,934,889</td>
<td>$1,968,255</td>
<td>$25,061,201</td>
</tr>
<tr>
<td>Low-Income</td>
<td>$2,152,734</td>
<td>$1,091,048</td>
<td>$23,801,877</td>
<td>$5,942,972</td>
<td>$1,420,344</td>
<td>$34,408,975</td>
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<tr>
<td>4. Low-Income Whole House</td>
<td>$1,382,945</td>
<td>$915,398</td>
<td>$23,801,877</td>
<td>$5,942,972</td>
<td>$1,384,474</td>
<td>$33,427,667</td>
</tr>
<tr>
<td>5. Low-Income Hard-to-Measure</td>
<td>$769,789</td>
<td>$175,650</td>
<td>$ -</td>
<td>$ -</td>
<td>$35,870</td>
<td>$88,109</td>
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<tr>
<td>Commercial &amp; Industrial</td>
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<td>$36,181,594</td>
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<td>$2,071,154</td>
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<tr>
<td>7. C&amp;I/Retrofit</td>
<td>$1,253,179</td>
<td>$1,074,078</td>
<td>$22,901,071</td>
<td>$4,304,900</td>
<td>$1,293,488</td>
<td>$30,826,806</td>
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### Q4 2013

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<tr>
<th>Goal</th>
<th>Total Sum of Program Planning and Administration</th>
<th>Total Sum of Marketing and Advertising</th>
<th>Total Sum of Participant Incentive</th>
<th>Total Sum of Sales, Technical Assistance &amp; Training</th>
<th>Total Sum of Evaluation and Market Research</th>
<th>Total Sum of Total Spend</th>
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</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td>$7,744,939</td>
<td>$4,925,901</td>
<td>$111,188,453</td>
<td>$25,733,890</td>
<td>$2,182,170</td>
<td>$151,805,353</td>
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<tr>
<td>1. Residential Whole House</td>
<td>$3,644,958</td>
<td>$2,756,782</td>
<td>$64,158,888</td>
<td>$15,970,718</td>
<td>$637,253</td>
<td>$87,388,839</td>
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<tr>
<td>2. Residential Products</td>
<td>$2,047,958</td>
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<td>$14,622,734</td>
<td>$562,959</td>
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<td>3. Residential Hard-to-Measure</td>
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<td>$24,021,547</td>
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<td>Low-Income</td>
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<td>$27,030,731</td>
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<td>$254,029</td>
<td>$34,583,568</td>
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<td>4. Low-Income Whole House</td>
<td>$1,267,642</td>
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<td>$27,030,731</td>
<td>$5,501,310</td>
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<td>5. Low-Income Hard-to-Measure</td>
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<td>$64,576</td>
<td>$1,399</td>
<td>$462,641</td>
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<td>7. C&amp;I/Retrofit</td>
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<td>$716,838</td>
<td>$12,137,067</td>
<td>$2,930,293</td>
<td>$691,425</td>
<td>$17,641,003</td>
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### YTD AS PERCENTAGE OF GOAL

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<tr>
<th>Program Planning and Administration</th>
<th>Marketing and Advertising</th>
<th>Participant Incentive</th>
<th>Sales, Technical Assistance &amp; Training</th>
<th>Evaluation and Market Research</th>
<th>Total Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>89%</td>
<td>62%</td>
<td>94%</td>
<td>96%</td>
<td>31%</td>
</tr>
<tr>
<td>Residential</td>
<td>87%</td>
<td>64%</td>
<td>111%</td>
<td>108%</td>
<td>24%</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>87%</td>
<td>66%</td>
<td>114%</td>
<td>117%</td>
<td>24%</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>86%</td>
<td>50%</td>
<td>109%</td>
<td>53%</td>
<td>25%</td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td>88%</td>
<td>94%</td>
<td>25%</td>
<td>102%</td>
<td>21%</td>
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<tr>
<td>Low-Income</td>
<td>73%</td>
<td>15%</td>
<td>114%</td>
<td>94%</td>
<td>18%</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>92%</td>
<td>8%</td>
<td>114%</td>
<td>93%</td>
<td>18%</td>
</tr>
<tr>
<td>5. Low-Income Hard-to-Measure</td>
<td>40%</td>
<td>51%</td>
<td>0%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>105%</td>
<td>80%</td>
<td>55%</td>
<td>69%</td>
<td>52%</td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>91%</td>
<td>91%</td>
<td>59%</td>
<td>72%</td>
<td>50%</td>
</tr>
<tr>
<td>7. C&amp;I/Retrofit</td>
<td>93%</td>
<td>67%</td>
<td>53%</td>
<td>68%</td>
<td>51%</td>
</tr>
<tr>
<td>8. C&amp;I/Hard-to-Measure</td>
<td>176%</td>
<td>87%</td>
<td>0%</td>
<td>40%</td>
<td>34%</td>
</tr>
</tbody>
</table>
## STATEWIDE GAS SAVINGS
### Q3 2013

### Row Labels
- Residential
- 1. Residential Whole House
- 1a. Residential New Construction
- 1b. Residential Multi-Family Retrofit
- 1c. Residential Home Energy Services
- 1d. Residential Behavior/Feedback
- 2. Residential Products
  - 2a. Residential Heating & Water Heating
- Low-Income
  - 4. Low-Income Whole House
  - 4a. Low-Income Single Family Retrofit
  - 4b. Low-Income Multi-Family Retrofit
- Commercial & Industrial
  - 6. C&I New Construction
  - 7. C&I Retrofit
  - 7a. C&I Retrofit
  - 7b. C&I Direct Install

### YTD AS PERCENTAGE OF GOAL
- Participants
- Annual Therms
- Lifetime Therms

### Gas

<table>
<thead>
<tr>
<th>Goal</th>
<th>Total Sum of Participants</th>
<th>Total Sum of Annual Therms</th>
<th>Total Sum of Lifetime Therms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>517,690</td>
<td>10,290,782</td>
<td>116,613,304</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>509,451</td>
<td>8,138,116</td>
<td>76,083,031</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>2,893</td>
<td>675,217</td>
<td>15,219,310</td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>9,507</td>
<td>595,948</td>
<td>66,639,157</td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>39,833</td>
<td>3,698,672</td>
<td>66,639,157</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>472,810</td>
<td>5,345,444</td>
<td>4,439,534</td>
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<tr>
<td>2. Residential Products</td>
<td>29,375</td>
<td>2,152,666</td>
<td>40,530,273</td>
</tr>
<tr>
<td>2a. Residential Heating &amp; Water Heating</td>
<td>28,238</td>
<td>2,152,666</td>
<td>40,530,273</td>
</tr>
<tr>
<td>Low-Income</td>
<td>9,993</td>
<td>2,285,548</td>
<td>44,133,838</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>9,993</td>
<td>2,285,548</td>
<td>44,133,838</td>
</tr>
<tr>
<td>4a. Low-Income Single Family Retrofit</td>
<td>3,139</td>
<td>769,805</td>
<td>15,415,609</td>
</tr>
<tr>
<td>4b. Low-Income Multi-Family Retrofit</td>
<td>6,854</td>
<td>1,515,744</td>
<td>28,718,228</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>10,177</td>
<td>8,465,463</td>
<td>117,596,065</td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>9,094</td>
<td>5,855,261</td>
<td>64,408,751</td>
</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>8,126</td>
<td>5,620,465</td>
<td>62,453,290</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>968</td>
<td>234,796</td>
<td>1,955,461</td>
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</tbody>
</table>

### Q4

<table>
<thead>
<tr>
<th>Goal</th>
<th>Total Sum of Participants</th>
<th>Total Sum of Annual Therms</th>
<th>Total Sum of Lifetime Therms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>537,690</td>
<td>10,290,782</td>
<td>116,613,304</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>525,043</td>
<td>10,315,280</td>
<td>97,094,135</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>2,893</td>
<td>675,217</td>
<td>15,219,310</td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>9,507</td>
<td>595,948</td>
<td>66,639,157</td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>39,833</td>
<td>3,698,672</td>
<td>66,639,157</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>472,810</td>
<td>5,345,444</td>
<td>4,439,534</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>27,739</td>
<td>2,857,781</td>
<td>48,812,283</td>
</tr>
<tr>
<td>2a. Residential Heating &amp; Water Heating</td>
<td>27,739</td>
<td>2,857,781</td>
<td>48,812,283</td>
</tr>
<tr>
<td>Low-Income</td>
<td>9,993</td>
<td>2,285,548</td>
<td>44,133,838</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>9,993</td>
<td>2,285,548</td>
<td>44,133,838</td>
</tr>
<tr>
<td>4a. Low-Income Single Family Retrofit</td>
<td>3,139</td>
<td>769,805</td>
<td>15,415,609</td>
</tr>
<tr>
<td>4b. Low-Income Multi-Family Retrofit</td>
<td>6,854</td>
<td>1,515,744</td>
<td>28,718,228</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>10,177</td>
<td>8,465,463</td>
<td>117,596,065</td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>9,094</td>
<td>5,855,261</td>
<td>64,408,751</td>
</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>8,126</td>
<td>5,620,465</td>
<td>62,453,290</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>968</td>
<td>234,796</td>
<td>1,955,461</td>
</tr>
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</table>
### STATEWIDE GAS BENEFITS  
**Q3 2013**

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Total Sum of Total Gas Benefits</th>
<th>Total Sum of Total Electric Benefits</th>
<th>Total Sum of Total Other Resource Benefits</th>
<th>Total Sum of Total Non Resource Benefits</th>
<th>Total Sum of Total Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>$271,871,715</td>
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<td>$437,059,901</td>
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<tr>
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<td>2. Residential Products</td>
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<tr>
<td>Low-Income</td>
<td>$25,641,567</td>
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<td>$512,393</td>
<td>$24,881,923</td>
<td>$55,232,534</td>
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<tr>
<td>7a. C&amp;I Retrofit</td>
<td>$73,493,345</td>
<td>$2,793</td>
<td>$4,175,644</td>
<td>$20,253,251</td>
<td>$97,925,606</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>$2,380,216</td>
<td>$2,119,477</td>
<td>$1,498,716</td>
<td>$6,007,410</td>
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</table>

**Q4**

<table>
<thead>
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<th>Total Sum of Total Electric Benefits</th>
<th>Total Sum of Total Other Resource Benefits</th>
<th>Total Sum of Total Non Resource Benefits</th>
<th>Total Sum of Total Benefits</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>2. Residential Products</td>
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<td>$68,964,532</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>$39,841,880</td>
<td>$2,123,042</td>
<td>$1,367,182</td>
<td>$25,164,275</td>
<td>$68,964,532</td>
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<tr>
<td>6. C&amp;I New Construction</td>
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<tr>
<td>7a. C&amp;I Retrofit</td>
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<td>$2,793</td>
<td>$4,175,644</td>
<td>$20,253,251</td>
<td>$97,925,606</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>$2,380,216</td>
<td>$2,119,477</td>
<td>$1,498,716</td>
<td>$6,007,410</td>
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</tr>
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</table>

**YTD AS PERCENTAGE OF GOAL**

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Total Sum of Total Gas Benefits</th>
<th>Total Sum of Total Electric Benefits</th>
<th>Total Sum of Total Other Resource Benefits</th>
<th>Total Sum of Total Non Resource Benefits</th>
<th>Total Sum of Total Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Residential Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## STATEWIDE GAS SUMMARY
### Q3 2013

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Values</th>
<th>Sum of Participants</th>
<th>Sum of Total Spend</th>
<th>Sum of Annual Therms</th>
<th>Sum of Lifetime Therms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal</td>
<td>549,188</td>
<td>$168,480,416</td>
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<td>303,524,964</td>
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</tr>
<tr>
<td>Residential</td>
<td>537,690</td>
<td>$84,785,881</td>
<td>10,290,782</td>
<td>116,613,304</td>
<td></td>
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<tr>
<td>Low-Income</td>
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<td>$34,408,975</td>
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</tr>
<tr>
<td>Commercial &amp; Industrial</td>
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<td>$49,285,560</td>
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</tr>
<tr>
<td>Q4</td>
<td>572,952</td>
<td>$151,805,353</td>
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<td>307,636,322</td>
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</tr>
<tr>
<td>Residential</td>
<td>552,782</td>
<td>$87,388,639</td>
<td>13,173,062</td>
<td>145,906,419</td>
<td></td>
</tr>
<tr>
<td>Low-Income</td>
<td>9,993</td>
<td>$34,583,568</td>
<td>2,285,548</td>
<td>44,133,838</td>
<td></td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>10,177</td>
<td>$29,833,145</td>
<td>8,465,463</td>
<td>117,596,065</td>
<td></td>
</tr>
<tr>
<td><strong>YTD as % of goal</strong></td>
<td><strong>104%</strong></td>
<td><strong>90%</strong></td>
<td><strong>106%</strong></td>
<td><strong>101%</strong></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>103%</td>
<td>103%</td>
<td>128%</td>
<td>125%</td>
<td></td>
</tr>
<tr>
<td>Low-Income</td>
<td>150%</td>
<td>101%</td>
<td>164%</td>
<td>160%</td>
<td></td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>210%</td>
<td>61%</td>
<td>77%</td>
<td>74%</td>
<td></td>
</tr>
</tbody>
</table>

### YTD Preliminary Actuals as a Percent of Plan Goal

- **Residential**
- **Low-Income**
- **Commercial & Industrial**
- **Total**

![Chart showing YTD Preliminary Actuals as a Percent of Plan Goal](chart.png)
## STATEWIDE GAS SUMMARY
### Q3 2013

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>National Grid</th>
<th>BERKSHIRE</th>
<th>UNITIL</th>
<th>CMA</th>
<th>NEG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas</strong></td>
<td><strong>151,749,190</strong></td>
<td><strong>8,039,899</strong></td>
<td><strong>3,370,763</strong></td>
<td><strong>61,856,280</strong></td>
<td><strong>5,434,873</strong></td>
</tr>
<tr>
<td>Residential</td>
<td>60,220,434</td>
<td>2,687,594</td>
<td>646,043</td>
<td>29,121,269</td>
<td>2,238,055</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>39,847,612</td>
<td>1,416,011</td>
<td>420,356</td>
<td>17,550,530</td>
<td>1,145,335</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>5,211,866</td>
<td>132,100</td>
<td>73,653</td>
<td>1,172,270</td>
<td>138,998</td>
</tr>
<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>4,890,290</td>
<td>43,358</td>
<td>151,319</td>
<td>1,700,014</td>
<td>99,596</td>
</tr>
<tr>
<td>1c. Residential Home Energy Services</td>
<td>26,503,766</td>
<td>1,192,953</td>
<td>195,184</td>
<td>14,318,247</td>
<td>815,742</td>
</tr>
<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>3,241,690</td>
<td>47,600</td>
<td>-</td>
<td>360,000</td>
<td>91,000</td>
</tr>
<tr>
<td>2. Residential Products</td>
<td>20,372,822</td>
<td>1,271,583</td>
<td>225,687</td>
<td>11,570,739</td>
<td>1,092,720</td>
</tr>
<tr>
<td>2a. Residential Heating &amp; Water Heating</td>
<td>20,372,822</td>
<td>1,271,583</td>
<td>225,687</td>
<td>11,570,739</td>
<td>1,092,720</td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-Income</td>
<td>14,685,521</td>
<td>902,761</td>
<td>402,392</td>
<td>5,347,851</td>
<td>764,729</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>14,685,521</td>
<td>902,761</td>
<td>402,392</td>
<td>5,347,851</td>
<td>764,729</td>
</tr>
<tr>
<td>4a. Low-Income Single Family Retrofit</td>
<td>10,514,188</td>
<td>525,840</td>
<td>236,955</td>
<td>2,540,425</td>
<td>531,350</td>
</tr>
<tr>
<td>4b. Low-Income Multi-Family Retrofit</td>
<td>4,171,333</td>
<td>376,921</td>
<td>165,437</td>
<td>2,807,426</td>
<td>233,379</td>
</tr>
<tr>
<td>5. Low-Income Hard-to-Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>76,843,236</td>
<td>4,449,544</td>
<td>2,322,327</td>
<td>27,387,160</td>
<td>2,432,089</td>
</tr>
<tr>
<td>6. C&amp;I New Construction</td>
<td>31,381,925</td>
<td>1,726,271</td>
<td>735,294</td>
<td>12,107,371</td>
<td>421,203</td>
</tr>
<tr>
<td>6a. C&amp;I New Construction</td>
<td>31,381,925</td>
<td>1,726,271</td>
<td>735,294</td>
<td>12,107,371</td>
<td>421,203</td>
</tr>
<tr>
<td>7. C&amp;I Retrofit</td>
<td>45,461,310</td>
<td>2,723,272</td>
<td>1,587,033</td>
<td>15,279,789</td>
<td>2,010,886</td>
</tr>
<tr>
<td>7a. C&amp;I Retrofit</td>
<td>45,461,310</td>
<td>2,723,272</td>
<td>1,587,033</td>
<td>15,279,789</td>
<td>2,010,886</td>
</tr>
<tr>
<td>7b. C&amp;I Direct Install</td>
<td>1,110,271</td>
<td>56,910</td>
<td>563,263</td>
<td>387,475</td>
<td>51,646</td>
</tr>
<tr>
<td>8. C&amp;I Hard-to-Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td><strong>156,044,477</strong></td>
<td><strong>9,831,107</strong></td>
<td><strong>2,612,615</strong></td>
<td><strong>52,227,821</strong></td>
<td><strong>4,324,735</strong></td>
</tr>
<tr>
<td>Residential</td>
<td>87,770,527</td>
<td>3,713,646</td>
<td>1,115,618</td>
<td>22,354,421</td>
<td>1,638,715</td>
</tr>
<tr>
<td>1. Residential Whole House</td>
<td>56,933,057</td>
<td>2,147,938</td>
<td>742,404</td>
<td>14,242,729</td>
<td>819,606</td>
</tr>
<tr>
<td>1a. Residential New Construction</td>
<td>9,441,375</td>
<td>146,895</td>
<td>85,900</td>
<td>2,264,669</td>
<td>26,108</td>
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<tr>
<td>1b. Residential Multi-Family Retrofit</td>
<td>5,562,980</td>
<td>50,632</td>
<td>8,999</td>
<td>1,265,597</td>
<td>39,932</td>
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<tr>
<td>1c. Residential Home Energy Services</td>
<td>37,280,601</td>
<td>1,950,411</td>
<td>647,505</td>
<td>10,712,463</td>
<td>753,066</td>
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<tr>
<td>1d. Residential Behavior/Feedback</td>
<td>4,648,101</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2. Residential Products</td>
<td>30,837,470</td>
<td>1,565,708</td>
<td>373,215</td>
<td>8,111,692</td>
<td>819,109</td>
</tr>
<tr>
<td>3. Residential Hard-to-Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-Income</td>
<td>27,487,831</td>
<td>1,460,729</td>
<td>314,360</td>
<td>7,067,128</td>
<td>747,673</td>
</tr>
<tr>
<td>4. Low-Income Whole House</td>
<td>27,487,831</td>
<td>1,460,729</td>
<td>314,360</td>
<td>7,067,128</td>
<td>747,673</td>
</tr>
<tr>
<td>4a. Low-Income Single Family Retrofit</td>
<td>8,817,580</td>
<td>510,214</td>
<td>110,850</td>
<td>2,927,020</td>
<td>249,991</td>
</tr>
<tr>
<td>4b. Low-Income Multi-Family Retrofit</td>
<td>18,670,251</td>
<td>950,515</td>
<td>203,510</td>
<td>4,140,108</td>
<td>503,682</td>
</tr>
</tbody>
</table>
GAS STATEWIDE BUDGETS, Q4 2013

Statewide Gas Spend Compared to Goal

- Residential: $87,388,639
- Low-Income: $34,583,568
- Commercial & Industrial: $29,833,145
- Total: $151,805,353

Statewide Gas Percentage Spent by Sector

- Residential: 57%
- Low-Income: 23%
- Commercial & Industrial: 20%
ANNUAL GAS STATEWIDE SAVINGS, Q4 2013

Gas Statewide Annual Savings (Therms) Compared to Goal

Gas Statewide Annual Savings Percentage by Sector

- Residential: 55%
- Low-Income: 10%
- Commercial & Industrial: 35%
- Total: 23,924,073 therms
LIFETIME GAS STATEWIDE SAVINGS, Q4 2013

Gas Statewide Lifetime Savings (Therms) Compared to Goal

- Residential: 145,906,419
- Low-Income: 44,133,838
- Commercial & Industrial: 117,596,065
- Total: 307,636,322

Gas Statewide Lifetime Savings Percentage by Sector

- Residential: 48%
- Low-Income: 14%
- Commercial & Industrial: 38%
GAS STATEWIDE BENEFITS, Q4 2013

Gas Statewide Benefits Compared to Goal

- Residential: $229,715,388
- Low-Income: $68,496,532
- Commercial & Industrial: $140,226,909
- Total: $438,438,829

Gas Statewide Benefits Percentage by Sector

- Residential: 52%
- Low-Income: 16%
- Commercial & Industrial: 32%
## STATEWIDE GHG EMISSIONS REDUCTIONS
### Q2 2013

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Sum of Energy (annual MWh)</th>
<th>Sum of Annual Therms</th>
<th>Sum of Annual Oil (MMBTU)</th>
<th>Sum of NOX</th>
<th>Sum of SO2</th>
<th>Sum of CO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>1,199,015</td>
<td>12,937,043</td>
<td>335,344</td>
<td>288</td>
<td>756</td>
<td>677,010</td>
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<tr>
<td>Residential</td>
<td>332,807</td>
<td>10,458,061</td>
<td>331,052</td>
<td>80</td>
<td>210</td>
<td>247,291</td>
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<tr>
<td>Low-Income</td>
<td>29,584</td>
<td>1,460,981</td>
<td>74,981</td>
<td>7</td>
<td>19</td>
<td>28,767</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>836,624</td>
<td>1,018,001</td>
<td>(70,688)</td>
<td>201</td>
<td>528</td>
<td>400,952</td>
</tr>
<tr>
<td>Q4</td>
<td>1,072,438</td>
<td>20,031,813</td>
<td>503,040</td>
<td>258</td>
<td>677</td>
<td>671,422</td>
</tr>
<tr>
<td>Residential</td>
<td>376,625</td>
<td>13,438,361</td>
<td>439,669</td>
<td>90</td>
<td>238</td>
<td>294,477</td>
</tr>
<tr>
<td>Low-Income</td>
<td>33,774</td>
<td>2,298,433</td>
<td>102,006</td>
<td>8</td>
<td>21</td>
<td>37,853</td>
</tr>
<tr>
<td>Commercial &amp; Industrial</td>
<td>662,039</td>
<td>4,295,019</td>
<td>(38,635)</td>
<td>159</td>
<td>418</td>
<td>339,092</td>
</tr>
</tbody>
</table>

Please note that the PAs are working with DEP to try to determine the best method for properly and precisely capturing the full impact of energy efficiency measures on GHG emissions. As part of this process, the PAs have included this table on Emissions Reductions, based on continuing discussions with the DEP, and using new factors proposed by DEP, which are based on annual gas, oil, and electric savings. The PAs look forward to discussing these proposed factors with DEP and are committed to ensuring that the full impact of energy efficiency measures on GHG emissions are captured.
<table>
<thead>
<tr>
<th>Study #</th>
<th>Commercial</th>
<th>Residential</th>
<th>Cross Cutting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Impact Evaluation of the Upstream Lighting Program</td>
<td>Regional Lighting Logger Study</td>
<td>Serrafix CMI</td>
</tr>
<tr>
<td>2</td>
<td>Mid-Sized Customer Needs Assessment</td>
<td>Residential New Construction Net Impacts</td>
<td>Umbrella Mktg - 2013 Post Campaign/MassSave Brand Assessment</td>
</tr>
<tr>
<td>4</td>
<td>Existing Building Market Characterization</td>
<td>Lighting Saturation Stagnation Assessment</td>
<td>Efficient Neighborhoods Initiative, Phase II</td>
</tr>
<tr>
<td>5</td>
<td>Lighting Controls Impact Evaluation</td>
<td>Market Lift Assessment</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>6</td>
<td>Whole System Approach Assessment</td>
<td>Multi-Stage Lighting Net-to-Gross Study</td>
<td>Codes &amp; Standards Coordination/Planning</td>
</tr>
<tr>
<td>7</td>
<td>LED Market Effects Study</td>
<td>Equipment Appliance Evaluation</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>8</td>
<td>Boiler Market Characterization</td>
<td>Incremental Cost</td>
<td>Codes &amp; Standards Coordination/Planning</td>
</tr>
<tr>
<td>9</td>
<td>Impact Evaluation of 2012 Custom HVAC Installations</td>
<td>HES Program Delivery Assessment</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>10</td>
<td>C&amp;I Code Compliance Follow-Up</td>
<td>HEAT Loan Process Evaluation</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>11</td>
<td>Impact Evaluation of Prescriptive Non-Lighting Installations</td>
<td>Low Income Multifamily Impact Assessment</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>12</td>
<td>2012 C&amp;I Customer Profile</td>
<td>Multifamily High Rise New Construction Baseline Assessment</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>13</td>
<td>MA C&amp;I Learnings from &quot;Successful&quot; Projects</td>
<td>Residential Customer Profile Study</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>14</td>
<td>How PA Differences Affect Program Outcomes</td>
<td>Trade Ally Panels</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>15</td>
<td>Commercial Real Estate Study</td>
<td>Residential Market Effects Study</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>16</td>
<td>Rooftop Units Baseline Study</td>
<td>Residential Building Market Characterization</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>17</td>
<td>Characterization of Supply Side Population</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>18</td>
<td>Direct Install Process Evaluation</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>19</td>
<td>Impact Evaluation of 2012 Prescriptive Gas Installations</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>20</td>
<td>ESIA T-12 Phase Out Research</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>21</td>
<td>C&amp;I Market Effects Study</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
<tr>
<td>22</td>
<td>Custom Electric Impact Evaluation</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
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<tr>
<td>23</td>
<td>Prescriptive Electric Impact Evaluation</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
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<tr>
<td>24</td>
<td>Custom Gas Impact Evaluation</td>
<td>Characterization of Supply Side Population</td>
<td>Behavioral Programs Persistence Study</td>
</tr>
</tbody>
</table>

The following denote the stages: Stage 1: Conceptual Framework; Stage 2: Preliminary Workplan; Stage 3: Detailed Workplan; Stage 4: In Progress; Stage 5: Reporting; Stage 6: Complete.

* Estimated timelines for each study reflect the best available information, and may be updated in the future.

2/11/2014
<table>
<thead>
<tr>
<th>Study Name</th>
<th>Research Area</th>
<th>Study Type</th>
<th>Study Manager</th>
<th>Overall Evaluation Goal (Project Summary/Purpose)</th>
<th>Expected Outcomes</th>
<th>Current Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Evaluation of the Upstream Lighting Program (P17)</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>Bill Blake</td>
<td>Impact evaluation of the 2012 Bright Opportunities program</td>
<td>The study will provide updated assumptions based on MA-specific research for the following: Application of purchased lamps by facility/space type; Hours of use; baseline replaced lamp; and gross savings realization rates.</td>
<td></td>
</tr>
<tr>
<td>Mid-Sized Customer Assessment (P19)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>Assess whether current program delivery methods are adequately serving the needs of &quot;mid-sized&quot; customers</td>
<td>This study will produce a profile of mid-sized customers across the PAs as well as assess current levels of EE activity/awareness among the mid-sized population and determine if there are specific needs of the population that are not being met by current program offerings and/or delivery methods.</td>
<td>This study, along with several others, is leveraging a single C&amp;I customer general population survey effort.</td>
</tr>
<tr>
<td>Impact Evaluation of 2011-2012 CHP Installations (P20)</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>Erik Mellen</td>
<td>An impact evaluation of 2011-12 CHP installations</td>
<td>The study will provide realization rates for electricity (kWh); net energy (therms) and coincident peak demand.</td>
<td>Builds on impact evaluation of 2010 CHP installations and will examine a census of all CHP systems finalized in 2010-2012.</td>
</tr>
<tr>
<td>Existing Buildings Market Characterization (P21)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>Assess the current market for EE in existing buildings</td>
<td>This study will provide a comprehensive characterization of the C&amp;I market including physical characteristics of buildings, building owner/tenant relationships, inventory of the type of energy equipment by end use, business practices that affect energy use and purchase decisions and recent energy related improvements or renovations.</td>
<td>This study, along with several others, is leveraging a single C&amp;I customer general population survey effort.</td>
</tr>
<tr>
<td>Lighting Controls Impact Evaluation (P22)</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>Bill Blake</td>
<td>Determine why program savings for retrofit lighting controls dropped off significantly in 2010 and 2011</td>
<td>The study will provide an assessment of the type of impact evaluation to apply for the lighting controls program; will make recommendations for changes to future lighting controls programs in light of any new market conditions; and will make recommendations for adjustments to current savings estimation methods.</td>
<td></td>
</tr>
<tr>
<td>Study Name</td>
<td>Research Area</td>
<td>Study Type</td>
<td>Study Manager</td>
<td>Overall Evaluation Goal (Project Summary/Purpose)</td>
<td>Expected Outcomes</td>
<td>Current Notes</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------------</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Whole System Approach (P23)</strong></td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>Assess whole system programs and initiatives offered by other utilities and states.</td>
<td>The study will examine 3 existing program offerings to obtain an understanding of the key program features and best practices for attaining deeper savings from whole system approaches. The study will also attempt to determine the feasibility of a whole system approach for existing buildings in MA.</td>
<td>3 programs are: Pay for Performance (NJ); Heating Optimization (Xcel Energy); Custom Retrofit (ConEdison). Early results were presented at the 2013 IEPEC conference in Chicago.</td>
</tr>
<tr>
<td><strong>LED Market Effects Study (P27)</strong></td>
<td>C&amp;I</td>
<td>Other</td>
<td>Bill Blake</td>
<td>Baseline Market Effects Study of LEDs</td>
<td>This study will establish the baseline penetration of LEDs in both the Residential and Commercial markets.</td>
<td>Joint study between Residential and C&amp;I research areas</td>
</tr>
<tr>
<td><strong>Boiler Market Characterization (P38)</strong></td>
<td>C&amp;I</td>
<td>Other</td>
<td>Mark Sevier</td>
<td>Market Characterization of the gas boiler market</td>
<td>This study will characterize the current boiler market including total size and EE share as well as determine the market share currently influenced by PA programs.</td>
<td>Lays the groundwork for completing a Market Effects Assessment in 2-3 years.</td>
</tr>
<tr>
<td><strong>Impact Evaluation of 2012 Custom HVAC Installations (P29)</strong></td>
<td>C&amp;I</td>
<td>Impact</td>
<td>Erik Mellen</td>
<td>Impact evaluation of 2012 Custom HVAC Installations</td>
<td>This study will provide realization rates for custom HVAC installations.</td>
<td>In order to obtain field measurements during appropriate seasons, this study will take place over a 2 year period with results expected in Q2 2015.</td>
</tr>
<tr>
<td><strong>C&amp;I Code Compliance Follow-up (P24)</strong></td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>Mine the data collected for the 2012 Baseline Code Compliance Study to determine if there is anything to learn about the baseline for program measures</td>
<td>Where possible, this study will verify levels of energy code compliance rates in current construction projects and will support program development efforts for targeted new construction efforts.</td>
<td>The measures studies will be determined during the scoping process. A number of factors will be considered in making this determination, including but not limited to percent of overall savings and evaluability. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td><strong>Impact Evaluation of 2012 Prescriptive Non-Lighting Installations (P30)</strong></td>
<td>C&amp;I</td>
<td>Impact</td>
<td>Whitney Brougher</td>
<td>Impact evaluation of 2012 Prescriptive Non-Lighting Measures</td>
<td>This study will provide revised savings estimates for prescriptive non-lighting measures.</td>
<td>The first year of the study linked PA billing data to PA tracking data and attempted to identify business types for all C&amp;I customers before analyzing program participation across size categories, fuels and PAs. The exact analyses to be conducted in the second year will be determined during project scoping. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td><strong>2012 C&amp;I Customer Profile (P31)</strong></td>
<td>C&amp;I</td>
<td>Other</td>
<td>Whitney Brougher</td>
<td>Characterization of the C&amp;I market using PA billing and project tracking data</td>
<td>This study will provide a profile of the C&amp;I market in MA for the second year in a row.</td>
<td></td>
</tr>
<tr>
<td>Study Name</td>
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<tr>
<td>Learning From Successful Projects (P32)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Erik Mellen</td>
<td>This study will examine the practices and/or characteristics that make a project successful.</td>
<td>TBD</td>
<td>This study is still in the scoping phase. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td>How PA Differences Affect Program Outcomes (P33)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>The goal of this research is to identify the factors that lead to differences in the depth and cost of savings among the PAs.</td>
<td>TBD</td>
<td>This study is still in the scoping phase. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td>Commercial Real Estate Market Assessment (P34)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>To gain an understanding of the complex relationship between building owners, property managers and tenants and identify specific program offerings and points in the leasing process that offer opportunities to capture energy efficiency savings.</td>
<td>TBD</td>
<td>When/If this study moves forward it will be coordinated with the statewide commercial real estate working group so that there is no duplication of effort and that research is being coordinated and leveraged where feasible.</td>
</tr>
<tr>
<td>Roof Top Unit Controller Market Effects (P35)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Gail Azulay</td>
<td>Baseline Market Effects Study of Roof Top Unit Controllers</td>
<td>TBD</td>
<td>This study is still in the scoping phase. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td>Supply Side Population Characterization (P36)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Wendy Todd</td>
<td>Market Characterization of supply side populations</td>
<td>TBD</td>
<td>This study is still in the scoping phase. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td>Direct Install Process Evaluation (P37)</td>
<td>C&amp;I</td>
<td>Process</td>
<td>Dave Weber</td>
<td>Process Evaluation of the Direct Install program</td>
<td>TBD</td>
<td>This study is still in the scoping phase. More detail will be provided in a later summary.</td>
</tr>
<tr>
<td>Impact Evaluation of 2012 Prescriptive Gas Installations (P39)</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>Tony Larson</td>
<td>Impact evaluation of 2012 Prescriptive Gas Measures</td>
<td>TBD</td>
<td>The measures studies will be determined during the scoping process. A number of factors will be considered in making this determination, including but not limited to percent of overall savings and evaluability. More detail will be provided in a later.</td>
</tr>
<tr>
<td>EISA T-12 Phase Out Research (P40)</td>
<td>C&amp;I</td>
<td>Other</td>
<td>Erik Mellen</td>
<td>The overall objective of this study is to research whether or not lighting manufacturers are still producing T-12 lamps despite the phase-out initiated by the EPACT and EISA legislation.</td>
<td>TBD</td>
<td>This study will leverage existing research efforts to conserve evaluation budget and reduce respondent fatigue.</td>
</tr>
<tr>
<td>C&amp;I Market Effects Study</td>
<td>C&amp;I</td>
<td>Other</td>
<td>TBD</td>
<td>The overall objective of this study is to capture the net effects over time of Massachusetts’ programs to promote a technology to be determined by the PAs.</td>
<td>TBD</td>
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<tr>
<td>Impact Evaluation of 2013 Custom Electric Installations</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>TBD</td>
<td>It is expected that a new Custom electric study will be performed on the 2013 program year, and will include any or all of CDA, Process and Compressed Air.</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Impact Evaluation of 2013 Prescriptive Electric Installations</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>TBD</td>
<td>The objective of this impact evaluation is to provide verification or re-estimation of electric energy and demand savings estimates for a subset of Prescriptive electric projects.</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Impact Evaluation of 2013 Custom Gas Installations</td>
<td>C&amp;I</td>
<td>Impact</td>
<td>TBD</td>
<td>In 2014, the evaluation team plans to begin scoping an impact evaluation of 2013 measures, which will include all PAs. This impact evaluation will also include a desk review task to further test this approach for helping to decide when to evaluate these programs.</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Regional Lighting Logger Study</td>
<td>Resi</td>
<td>Impact</td>
<td>Matt Nelson</td>
<td>Coordinated regional operating hours of use study with Connecticut, Rhode Island, and NYSERDA.</td>
<td>The study will provide hours of use of both efficient and non-efficient light bulbs by room and socket type.</td>
<td>Draft report submitted</td>
</tr>
<tr>
<td>Net Impacts</td>
<td>Resi</td>
<td>Impact</td>
<td>Mark Sevier</td>
<td>Assess the impacts the RNC program has had on the marketplace over the past seven years.</td>
<td>The study will provide estimates of free-ridership and spillover.</td>
<td>Draft report submitted</td>
</tr>
<tr>
<td>LI Lighting HOU and Thermostat Study</td>
<td>Resi</td>
<td>Impact</td>
<td>Riley Hastings</td>
<td>Operating hours of use study and secondary heat analysis.</td>
<td>The study will provide hours of use of both efficient and non-efficient light bulbs by room and socket type in LI homes.</td>
<td>Delaying the release of this report to align with Regional Lighting Logger study to ensure consistency in methodology.</td>
</tr>
<tr>
<td>Lighting Market Assessment</td>
<td>Resi</td>
<td>Market Characterization</td>
<td>Matt Nelson</td>
<td>Provide ongoing monitoring of the MA lighting market.</td>
<td>This study will provide an understanding of the current and developing state of the residential lighting market especially as it relates to EISA, including CFL/LED saturation and sales/market share, availability and pricing of efficient lighting, and supplier and consumer attitudes and expectations.</td>
<td></td>
</tr>
<tr>
<td>Lighting Saturation Stagnation Assessment</td>
<td>Resi</td>
<td>Market Characterization</td>
<td>Wendy Todd</td>
<td>Assess possible reasons for the current plateau in CFL saturation as well as to determine ways to accelerate LED adoption.</td>
<td>This study will provide a better understanding of and find ways to overcome stagnation in efficient lighting saturation.</td>
<td></td>
</tr>
<tr>
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<tr>
<td>Market Lift Assessment</td>
<td>Resi</td>
<td>Impact Evaluation</td>
<td>Matt Nelson</td>
<td>Assess the planning and implementation of the Market Lift effort and develop a net-to-gross (NTG) estimate of that effort.</td>
<td>The study will assess whether the Market Lift effort was designed and implemented in a way that ensured clear attribution to the effort and develop a NTG estimate for the effort.</td>
<td></td>
</tr>
<tr>
<td>Multi-Stage Lighting Net-to-Gross Study</td>
<td>Resi</td>
<td>Impact Evaluation</td>
<td>Matt Nelson</td>
<td>Estimate net-to-gross (NTG) ratios for key product types incented in the Residential Lighting Program and to assess the associated strategic implications.</td>
<td>NTG Estimates</td>
<td></td>
</tr>
<tr>
<td>Appliance Program Evaluation</td>
<td>Resi</td>
<td>Impact Evaluation</td>
<td>Wendy Todd</td>
<td>This study will explore changes to the way the Appliance initiative is currently delivered, including new marketing strategies or retail partnerships, updated incentives, and other cost-effective options.</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Incremental Cost Research</td>
<td>Resi</td>
<td>Impact</td>
<td>Gail Azulay</td>
<td>Provide updated incremental cost data for use in cost-effectiveness screening and setting of incentive levels.</td>
<td>The study will provide up-to-date incremental cost data for lighting, appliance and HVAC measures.</td>
<td></td>
</tr>
<tr>
<td>HEHE Impact Evaluation</td>
<td>Resi</td>
<td>Impact</td>
<td>Riley Hastings</td>
<td>Determine gross savings for the HEHE program for a variety of space heating measures.</td>
<td>Gross savings from high efficiency natural gas furnaces and boilers in the HEHE program.</td>
<td>Long-term meters installed</td>
</tr>
<tr>
<td>Ductless Mini-split Heat Pump Assessment</td>
<td>Resi</td>
<td>Impact</td>
<td>Matt Nelson</td>
<td>Determine participant intent in regard to installing ductless mini-split heat pumps (DMSPHPs) through the COOL SMART program</td>
<td>Results will support an impact evaluation of DMSHPs and other cooling measures, beginning in Q2 2014</td>
<td></td>
</tr>
<tr>
<td>Advanced Power Strips Evaluation</td>
<td>Resi</td>
<td>Impact Evaluation</td>
<td>Matt Nelson</td>
<td>The goal of this study is to identify alternative program designs that will generate higher participation and savings per participant.</td>
<td>Recommendations for alternative program designs that will generate higher participation and savings per participant.</td>
<td></td>
</tr>
<tr>
<td>HES Program Delivery Assessment</td>
<td>Resi</td>
<td>Impact and Process Evaluation</td>
<td>Mike Goldman</td>
<td>The study will focus on determining accurate conversion rates and other key performance metrics for HES overall, as well as for LVs and HPCs specifically. The study will also explore opportunities for greater and deeper savings for each program.</td>
<td>Conversion rates and other key performance metrics for HES overall, as well as for LVs and HPCs specifically and recommendations for acheiving greater and deeper savings.</td>
<td></td>
</tr>
<tr>
<td>Study Name</td>
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<tr>
<td>HEAT Loan Process Analysis</td>
<td>Resi</td>
<td>Impact</td>
<td>Mike Goldman</td>
<td>The goal of this study is to understand the extent to which the HEAT Loan influences customer decision-making, relative to the other factors that influence participation and to explore whether the availability of the HEAT Loan impacts contractor pricing.</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Low Income Multifamily Impact Evaluation</td>
<td>Resi</td>
<td>Process/ Impact</td>
<td>Riley Hastings</td>
<td>Inventory of the methods currently used to estimate LIMF savings, explore opportunities for standardization where appropriate, assess whether all data required for evaluation are available, and develop PA- recommendations for improving program delivery.</td>
<td>Statewide methodology for calculating savings and PA-specific realization rates for appropriate measures.</td>
<td></td>
</tr>
<tr>
<td>Multifamily Process</td>
<td>Resi</td>
<td>Process</td>
<td>Kim Crossman</td>
<td>Assess and monitor the current state of the evolution of the Multifamily Program as a process and opportunity for improvement.</td>
<td>Recommendations for improving program delivery</td>
<td></td>
</tr>
<tr>
<td>Multifamily High Rise New Construction Baseline Assessment</td>
<td>Resi</td>
<td>Process</td>
<td>Mark Sevier</td>
<td>Provide a baseline study of new construction building practices in four-story and higher multifamily buildings.</td>
<td>Provide a baseline study of new construction building practices in four-story and higher multifamily buildings that can be used to calculate savings.</td>
<td></td>
</tr>
<tr>
<td>Residential Customer Profile Study</td>
<td>Resi</td>
<td>Market Characterization</td>
<td>Kim Crossman</td>
<td>Compile utility and participant data on residential customers.</td>
<td>Provide insights into levels of participation, energy consumption, and energy savings relative to consumption</td>
<td></td>
</tr>
<tr>
<td>Trade Ally Panels</td>
<td>Resi</td>
<td>Market Evaluation</td>
<td>Melanie Coen</td>
<td>Explore if data quality, response rates, and data collection costs can be improved by a more systematic data collection approach across programs, markets, and evaluations.</td>
<td>Development of trade ally/market actor panels</td>
<td></td>
</tr>
<tr>
<td>Residential Market Effects Study</td>
<td>Resi</td>
<td>Process</td>
<td>TBD</td>
<td>The overall goal of this study is to document and quantify the net effects over time of Massachusetts’ programs to promote a technology to be determined by the PAs.</td>
<td>TBD</td>
<td>Meetings scheduled for week of 2/24</td>
</tr>
<tr>
<td>Serrafix CMI</td>
<td>S/CC</td>
<td>Process</td>
<td>Monica Cohen</td>
<td>Review of the Northampton/Pittsfield CMI initiatives.</td>
<td>Determine if evaluation met specific design metrics.</td>
<td></td>
</tr>
<tr>
<td>Umbrella Mktg - 2013 Post Campaign/MassSave Brand Assessment</td>
<td>S/CC</td>
<td>Other</td>
<td>Phil Moffitt</td>
<td>Assess impact of 2013 marketing campaign and brand effectiveness.</td>
<td>Analysis of post-campaign brand awareness</td>
<td></td>
</tr>
<tr>
<td>Umbrella Mktg - COOL SMART/GasNetworks Brand Assessment</td>
<td>S/CC</td>
<td>Other</td>
<td>Phil Moffitt</td>
<td>Assess brand effectiveness.</td>
<td>Determine brand effectiveness for CS/GN brands.</td>
<td></td>
</tr>
<tr>
<td>Efficient Neighborhood+ Initiative, Phase I</td>
<td>S/CC</td>
<td>Other</td>
<td>Melanie Coen</td>
<td>Evaluation Planning and Readiness.</td>
<td>Define initiative’s success indicators, capture baseline conditions.</td>
<td></td>
</tr>
<tr>
<td>Efficient Neighborhood+ Initiative, Phase II</td>
<td>S/CC</td>
<td>Other</td>
<td>Melanie Coen</td>
<td>Initiative Evaluation.</td>
<td>Assess the performance of the initiative against defined success indicators, and explore opportunities for improvement.</td>
<td>Phase II will start after the completion of Phase I, based on in the field progress.</td>
</tr>
<tr>
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<tr>
<td>Behavioral Program Persistence Study</td>
<td>S/CC</td>
<td>Impact</td>
<td>Mike Goldman</td>
<td>Determine persistence of behavioral program savings.</td>
<td>Determine to what extent program savings persist without treatment, if the savings do persist what is the impact on measure life, and recommend whether PAs can change treatment models based on these results.</td>
<td>Need to have broader group review one-pager</td>
</tr>
<tr>
<td>Codes &amp; Standards Coordination/Planning</td>
<td>S/CC</td>
<td>Other</td>
<td>Bill Blake</td>
<td>Track implementation efforts to coordinate future codes &amp; standards evaluation across research areas.</td>
<td>Evaluation plan for Codes &amp; Standards work</td>
<td></td>
</tr>
<tr>
<td>Market Effects Strategic Planning</td>
<td>S/CC</td>
<td>Other</td>
<td>Kim Crossman</td>
<td>Facilitate the development of a process to evaluate market effects and ensure methodological consistency across research areas/programs.</td>
<td>Clear plan and direction for market effects evaluation efforts; documentation of preferred methodology.</td>
<td></td>
</tr>
<tr>
<td>Net-To-Gross Top-Down NTG Methods</td>
<td>S/CC</td>
<td>Other</td>
<td>Monica Cohen</td>
<td>This study will assess and employ alternative techniques for using top-down modeling to measure net energy impacts.</td>
<td>The long term goal is to develop and apply a top-down method for MA, and to understand the strengths and limitations of that method.</td>
<td></td>
</tr>
<tr>
<td>Net-To-Gross Electric C&amp;I NTG</td>
<td>S/CC</td>
<td>Other</td>
<td>Kim Crossman</td>
<td>Quantify NTGR for electric C&amp;I programs</td>
<td>Updated NTGR ratio for electric C&amp;I programs using current methodology</td>
<td></td>
</tr>
<tr>
<td>Non Energy Impacts - Low Income Health NEIs</td>
<td>S/CC</td>
<td>Other</td>
<td>Marie Abdou</td>
<td>Quantify health related NEIs for LI participants</td>
<td>TBD</td>
<td>Needs review of scope</td>
</tr>
<tr>
<td>Non Energy Impacts - Using C&amp;I NEIs for Project Recruitment</td>
<td>S/CC</td>
<td>Other</td>
<td>Marie Abdou</td>
<td>Use data from C&amp;I Retrofit NEI study to inform marketing strategies for implementation</td>
<td>Data to inform implementation market strategies</td>
<td></td>
</tr>
<tr>
<td>Non Energy Impacts - Quantifying C&amp;I New Construction NEIs</td>
<td>S/CC</td>
<td>Other</td>
<td>Marie Abdou</td>
<td>Quantify participant non-energy impacts associated with commercial and industrial new construction projects</td>
<td>NEI values for C&amp;I New Construction projects.</td>
<td></td>
</tr>
<tr>
<td>Retrospective Electric DRIPE</td>
<td>S/CC</td>
<td>Other</td>
<td>Monica Kachru</td>
<td>Assess the level and accuracy of DRIPE as set forth in the 2011 Avoided Energy Supply Cost Study.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Buildings Market Characterization – C&amp;I Customer On-site Assessments (P41)</td>
<td>C&amp;I</td>
<td>Market Characterization</td>
<td>Bill Blake</td>
<td>The principal objective of the C&amp;I Customer On-site Assessments is to build upon the C&amp;I customer telephone surveys and provide a complete quantitative characterization of Massachusetts C&amp;I customers.</td>
<td>The data will be used to characterize buildings of different types and sizes, as well as examine differences in customer practices.</td>
<td>This study is still in the scoping phase. More detail will be provided in a later summary.</td>
</tr>
</tbody>
</table>