2011 ENERGY EFFICIENCY ANNUAL REPORT

OF

NEW ENGLAND GAS COMPANY

AUGUST 1, 2012

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I. INTRODUCTION

In the second full year of the three-year energy efficiency plans, as reviewed and approved by the Department of Public Utilities (the "Department") in D.P.U. 09-116 through 09-127 (the "Gas and Electric Orders"), program year 2011 continued to build on the successes of program year 2010 and showed remarkable success with respect to goal attainment and achievement of real benefits for the environment and the economy in the Commonwealth of Massachusetts. Among the many awards and accomplishments achieved during program year 2011, the American Council for an Energy-Efficient Economy ranked Massachusetts number one in the nation for its energy efficiency efforts. Collectively, New England Gas Company (the "Company"), along with the other the Program Administrators ("PAs"), were able to deliver on their goals during program year 2011, as established in the Gas and Electric Orders and as submitted in each PA's 2011 Mid-Term Modifications filed on October 29, 2010, while maintaining the balance between meeting the budget for their programs and complying with the directives of the Green Communities Act in ensuring that they make available all cost-effective energy efficiency opportunities.

Overall, the PAs worked diligently with the Department, the Department of Energy Resources ("DOER"), the Energy Efficiency Advisory Council ("EEAC"), and other interested stakeholders to meet what were intentionally designed to be very challenging 2011 program year goals. In many cases, achievements in savings and benefits exceeded those goals. Program year 2011 performance showed that aggressive savings levels were achieved for Residential, Low-Income, and Commercial & Industrial ("C&I") programs. PAs worked well to implement the programs in the field while also continuing the unprecedented ramp up of spending and savings levels for energy efficiency programs so as to meet goals not just for program year 2011, but for the full life of the three-year plans.

The accomplishments of 2011 were achieved despite a struggling economy, a stagnant new construction market, historically low natural gas prices and a significant increase in savings goals. In the wake of challenges, including record setting weather events, the PAs continued to proactively work toward developing new delivery techniques to reach untouched customer sets and to convince customers to move forward with commitments to invest in energy efficiency.

In addition to the achievements for each PA's program implementation efforts, the PAs have made significant progress integrating gas and electric energy efficiency services, and remain committed to furthering progress in both the residential and non-residential sectors. While working to achieve their programmatic goals for 2011, the PAs have worked diligently to establish statewide marketing of energy efficiency program offerings through the use of the Mass Save® label, which won the Association of Energy Services Professionals ("AESP") Outstanding Achievement in Marketing and Communications Award in 2011. Simultaneously, the PAs have engaged in 30 studies across a wide span of program sectors to ensure that the evaluation, measurement and verification ("EM&V") elements of these program offerings remain a critical and vital tool to evaluate and transform measures in the future to meet demand in an ever

changing marketplace. The PAs have worked diligently with financial institutions to explore outside financing options to better serve their C&I customers.

The PAs have continued to be engaged in the monthly EEAC process in 2011, and have worked collaboratively with the EEAC's consultants to meet stringent reporting and data collection deadlines so as to adequately monitor and review where the Plans' efforts have succeeded, and where improvement could be anticipated for the future. In all, while actively involved in program implementation efforts, the PAs have also been heavily immersed in the policy and planning that will allow for accurate data development, evaluation and measurement of successes and areas in need of modification, transparent codes and standards, and the framework necessary to ensure the ability to continue to offer successful and sustainable energy efficiency programs in the Commonwealth.

Given the unprecedented nature of these efforts and the significantly ambitious goals established in these Plans, the PAs contend that the 2011 program year performance has been an unmitigated success and has continued to exceed the expectations established by the Plans. The PAs continue their endeavors to achieve deeper savings from participating customers, and have worked to reach a broader range of customers for the implementation of all cost-effective program offerings.

A. Purpose of Annual Report

New England Gas Company (the "Company") is pleased to provide its Energy Efficiency Annual Report ("Annual Report") for 2011. The purpose of the Annual Report is to:

- Provide a comparison of the Company's planned, preliminary year-end, and evaluated (where applicable) expenses, savings, and benefits at the portfolio, sector, and program levels for the program year.
- Identify significant variances between the Company's planned and evaluated costs, savings, and benefits for the program year, and discuss reasons for such variances.
- Discuss how program performance during the program year informs the Company's proposed modifications to program implementation, if any, during upcoming years.
- Describe the evaluation, measurement and verification ("EM&V") activities undertaken by the Company (both individually and jointly with other Program Administrators ("PAs")) that have not been included in previous Annual Reports, and explain how the results of the EM&V studies impact program cost-effectiveness.
- Describe the performance incentives that the Company proposes to collect.

B. Organization of Annual Report

The Company's 2011 Annual Report is organized as follows:

- Section I.C provides summary information on program performance at the portfolio and sector levels.
- Section II provides detailed information on program performance at the sector and program levels for the residential, low-income, and commercial and industrial ("C&I") sectors.
- Section III provides detailed information on the EM&V studies included in the Annual Report for each sector.
- Section IV addresses statutory budget requirements.
- Section V addresses the performance incentives the Company proposes to collect.
- Section VI addresses energy efficiency audits conducted during the past five years.
- Section VII provides detailed supporting documentation.

C. Summary of Program Portfolio

Tables[1] I.A and I.B provide summary information on program performance at the portfolio and customer sector levels, respectively.

[1] The Company is also providing the Department of Public Utilities (the "Department") with working Microsoft Excel spreadsheets for all of the tables included in this Annual Report. Such tables include all formulas and functions used in each table.

New England Gas Company

I. Executive Summary

Table I.A: Program Portfolio Summary

Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	1,973,917			$1,642,400		-17%
Performance Incentive	$	85,621			$66,150		-23%
Savings & Benefits							
Gas							
Lifetime	therms	4,577,045	5,123,298	12%	3,388,758	-34%	-26%
Annualized	therms	365,784	262,976	-28%	185,515	-29%	-49%
Electric							
Annualized Energy	kWh	0			0	0%	0%
Annualized Demand							
Summer	kW	0			0	0%	0%
Winter	kW	0			0	0%	0%
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	900,392	0%	0%
Cost-Effectiveness							
TRC Benefits	$	6,124,676			4,794,306		-22%
TRC Costs	$	2,521,839			1,947,824		-23%
Net Benefits	$	3,602,837			2,846,482		-21%
BCR	n/a	2.43			2.46		1%

Values in this Annual Report (except as otherwise noted) were submitted to the Department as Attachment A to the Memorandum of Agreement on April 15, 2011 in New England Gas Company, D.P.U. 10-143.

As shown in Table 1.A, significant[2] variances between planned and evaluated values at the portfolio level exist in: the Performance Incentive, Lifetime and Annual Savings, TRC Benefits, TRC Costs, Net Benefits and the overall BCR compared to Planned Value. The reasons behind such variances are as follows:

> Performance Incentive- lower savings, net benefits and performance metrics achieved compared to Plan.
>
> Lifetime and Annual Savings- Overall lower savings due to much lower participation in the Company's Commercial and Industrial programs than planned, as well as, the overall impact of evaluation studies on savings.

[2] Unless otherwise noted, "Significant" variances are defined throughout this Annual Report as variances of +/- 20% or more between the stated values.

TRC Benefits, TRC Costs, Net Benefits and BCR- Overall lower cost-effectiveness due to lower participation in programs, compounded with lower savings due to evaluation studies that impacted the Company's residential and C&I programs

Table I.B: Customer Sector Summary				
Sector	Units	Planned Value	Evaluated Results	
			Value	% Change from Planned
Residential				
TRC Benefits	$	2,481,047	2,935,646	18%
TRC Costs	$	1,194,411	1,131,608	-5%
Net Benefits	$	1,286,636	1,804,038	40%
BCR	n/a	2.08	2.59	25%
Low-Income				
TRC Benefits	$	1,032,959	701,095	-32%
TRC Costs	$	429,252	351,227	-18%
Net Benefits	$	603,707	349,868	-42%
BCR	n/a	2.41	2.00	-17%
C&I				
TRC Benefits	$	2,610,670	1,157,565	-56%
TRC Costs	$	898,176	464,989	-48%
Net Benefits	$	1,712,494	692,576	-60%
BCR	n/a	2.91	2.49	-14%
TOTAL				
TRC Benefits	$	6,124,676	4,794,306	-22%
TRC Costs	$	2,521,839	1,947,824	-23%
Net Benefits	$	3,602,837	2,846,482	-21%
BCR	n/a	2.43	2.46	1%

As shown in Table 1.B, significant variances between planned and evaluated values at the portfolio level exist in all sectors during 2011. The reasons are as follows:

Residential Sector- The residential sector had overall higher results due to the impact of the Home Heating and Water Heating Program which had greater participation than budget. Impact evaluations affected savings, net benefits and the overall BCR for this sector. Expenses were lower than budget by $18,423, not including performance incentives. A more detailed discussion of these variances can be found in Section II.A.1

Low Income Sector- TRC Benefits and Net Benefits were lower due to lower savings of 46% compared to plan. The TRC Benefits were lower due to lower savings yielding lower Net Benefits. A more detailed discussion of these variances can be found in Section II.B.1

Commercial and Industrial Sector-The Company had a significant variance between plan and actual results for both savings and number of participants. This variance yielded

lower than anticipated TRC Benefits, TRC Costs, Net Benefits and a reduced BCR for the New Construction/Renovation and Direct Install Programs. The Company saw success in the C&I Retrofit Program which had 1 significant project in 2011. A more detailed discussion of these variances can be found in Section II.C.1

Residential Sector Highlights – The Company's residential program continued to have strong results during 2011. The GasNetworks® rebate program continues to help customers move to new energy efficient equipment. Residential savings were impacted by evaluation results by (19%) reduction compared to preliminary actual results.

Residential programs with significant variances include:

- Residential New Construction & Major Renovation
- Residential Heating and Water Heating
- Residential Mass Save/ Residential Weatherization
- Residential Multi-Family Retrofit

A more detailed discussion of these variances can be found in Section II.A.1

Low-Income Sector Highlights – The Company works with Self-Help and Citizens for Citizens ("CFC") throughout the territory to deliver energy efficiency programs to qualified low-income customers. The results for 2011 had fewer participants than planned, which correlated to less savings and benefits. Savings in the low income program were affected by evaluation study work during 2011.

Low-Income programs with significant variances include:

- Low-Income Single Family Retrofit
- Low-Income Multi-Family Retrofit

A more detailed discussion of these variances can be found in Section II.B.1

C&I Sector Highlights – Continued economic pressure within the Company's service territory constrained the ability to yield savings within the C&I sector. The economic downturn has made it difficult for businesses to engage in energy saving measures. The Company had one large customer project in 2011 which yielded 95,800 therm savings. The Company did not see success this year in the direct install program which had fewer customers participate.

C&I programs with significant variances include:

- C&I New Construction and Major Renovation
- C&I Retrofit
- C&I Direct Install

A more detailed discussion of these variances can be found in Section II.C.1

II. PROGRAM PERFORMANCE

A. Residential Sector Programs

1. Summary

During 2011 the Company implemented the following residential programs and residential pilots[3]:

Residential Programs

- Residential New Construction and Major Renovation
- Residential Heating and Water Heating
- Residential Mass Save/Weatherization
- Residential Multi-Family Retrofit

Tables II.A.1 provides summary information on the performance of the residential programs at the sector, end use, and program levels, respectively.

Sections II.A.2 provides detailed information on the performance of each residential program and pilot program, respectively.

The Residential Sector saw positive results in preliminary savings while maintaining expenses. Evaluated results saw a decrease in lifetime and annual savings when compared to preliminary saving results of 17% and 19% respectively. This decrease was due to a reduction in the Company's home heating, water heating and thermostat savings based on an evaluation study. The Cost-Effectiveness of this sector was equally impacted by evaluated results, which created variances in the TRC Benefits and Net Benefits. As previously mentioned, costs for this sector were under Plan by 2%, not including performance incentive.

[3] The Company did not offer any pilot programs in the residential sector during 2011.

New England Gas Company

II.A. Residential Program Implementation

Sector Summary

Table II.A.1: Residential Sector Summary

Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	969,601			951,178		-2%
Performance Incentive	$	32,438			31,411		-3%
Savings & Benefits							
Gas							
Lifetime	therms	1,682,749	2,295,760	36%	1,910,714	-17%	14%
Annualized	therms	103,873	120,222	16%	97,568	-19%	-6%
Electric							
Annualized Energy	kWh	0			0	0%	0%
Annualized Demand							
Summer	kW	0			0	0%	0%
Winter	kW	0			0	0%	0%
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	700,331	0%	0%
Cost-Effectiveness							
TRC Benefits	$	2,481,047			2,935,646		18%
TRC Costs	$	1,194,411			1,131,608		-5%
Net Benefits	$	1,286,636			1,804,038		40%
BCR	n/a	2.08			2.59		25%

New England Gas Company

II.A. Residential Program Implementation

Sector Summary

Table II.A.3: Residential Program Summary

Program / Performance Category	Units	Planned Value	Evaluated Results	
			Value	% Change from Planned
Residential New Construction & Major Renovation				
TRC Benefits	$	260,113	142,967	-45%
TRC Costs	$	255,186	129,499	-49%
Net Benefits	$	4,927	13,468	173%
BCR	n/a	1.02	1.10	8%
Residential Heating and Water Heating				
TRC Benefits	$	983,958	1,890,558	92%
TRC Costs	$	336,799	597,535	77%
Net Benefits	$	647,159	1,293,023	100%
BCR	n/a	2.92	3.16	8%
MassSAVE				
TRC Benefits	$	0	0	0%
TRC Costs	$	119,903	79,965	-33%
Net Benefits	$	-119,903	-79,965	
BCR	n/a			
Weatherization Program				
TRC Benefits	$	829,003	782,424	-6%
TRC Costs	$	318,532	203,871	-36%
Net Benefits	$	510,471	578,553	13%
BCR	n/a	2.60	3.84	47%
Multi-Family Retrofit				
TRC Benefits	$	407,973	119,697	-71%
TRC Costs	$	126,741	83,017	-34%
Net Benefits	$	281,232	36,680	-87%
BCR	n/a	3.22	1.44	-55%
Behavior/Feedback Program				
TRC Benefits	$	0	0	0%
TRC Costs	$	0	0	0%
Net Benefits	$	0	0	0%
BCR	n/a	0.00	0.00	0%
Deep Energy Retrofit				
TRC Benefits	$	0	0	n/a
TRC Costs	$	0	0	0%
Net Benefits	$	n/a	0	n/a
BCR	n/a	n/a	#DIV/0!	n/a
Hard-to-Measure Initiatives				
TRC Costs	$	37,250	37,721	1%
TOTAL				
TRC Benefits	$	2,481,047	2,935,646	18%
TRC Costs	$	1,194,411	1,131,608	-5%
Net Benefits	$	1,286,636	1,804,038	40%
BCR	n/a	2.08	2.59	25%

Residential Sector Performance Highlights

During 2011, the Company built upon existing residential programs and significantly expanded initiatives to increase participation in all residential programs. Selected highlights are presented below:

- Residential New Construction and Major Renovation - In 2011, with over 100 communities adopting the Stretch Energy Code, this program, also known as the Massachusetts New Homes with ENERGY STAR program, faced a market in which energy codes continued to change. Single family development remained slow, and opportunities to capture future energy savings were becoming increasingly difficult. To address these barriers the program engaged in code support activities and offered technical assistance as well as incentives to meet this new code. The program also increased market penetration while providing energy savings for residents. During 2011, the program provided multiple trainings and participated in several recruitment events targeted at builders and allies new to performance-based construction. The program continued to participate in three pilots (multi-family new construction, major renovations, and lighting design) to aid in identifying the next generation of energy savings opportunities. Finally, the Program Administrators in western Massachusetts participated in the *Western Massachusetts Storm Recovery Program*. The storm recovery program contacted all of the communities affected by the tornado and distributed thousands of flyers to builders, building code offices, homeowners, tornado relief centers, town meetings/events and churches.

- Residential Heating and Water Heating - In 2011, the PAs collectively achieved over 100 percent of their savings goals within budget due to attractive customer incentives combined with federal tax incentives. The program provided outreach to 300 supply houses and 700 contractors throughout Massachusetts and New England. The PAs continued to successfully utilize extensive contractor outreach via supply houses and big box retailers, which contributed to increased participation levels in this program. PAs sponsored and participated in 22 training events in 2011 and sponsored their 11th Annual GasNetworks Fall Conference and Trade Show on September 22, 2011. Attendees included over 400 HVAC contractors from across the Commonwealth along with 23 exhibitors. The day-long conference featured a myriad of expert trainers and speakers and focused on high efficiency natural gas HVAC equipment and installation practices. The program continued its integration efforts with the Residential Cooling and Heating Equipment ("Cool Smart") program and incorporated breakout sessions to include such topics as electronically commutated motors, brushless fan motor technology, hydronic heating, on-demand water heating, condensing and modulating boilers, near boiler piping, system sizing, renewables and codes and standards. In 2011, program outreach resulted in 1,789 visits and the distribution of 102,825 residential and 21,600 commercial rebates from December 2010 through December 2011.

After embarking on an extensive competitive bidding process, the PAs secured a new rebate processing vendor in 2011. During the transition to the new vendor, the PAs continued to experience steady demand. The transition did present some challenges, which included an increase in year-end claims, the carryover of unprocessed rebate applications from the previous vendor, the design and launch of the 2012 rebate form, and the integration of data systems. Each PA has successfully transitioned to the new vendor.

Mass Save/Weatherization - In 2011 the Mass Save/Residential Conservation Services program was fully integrated with the gas Weatherization program to provide customers with fuel blind energy services through the Home Energy Services ("HES") program. Mid-year, the program transitioned to offering customers one comprehensive Home Energy Assessment ("HEA") and incorporated additional market actors. Two groups of Mass Save participating contractors, Home Performance Contractors ("HPCs") and Independent Installation Contractors ("IICs"), now provide services in addition to those offered by the lead vendor.

After the integration of additional contractors into the program, a Contractor Best Practices Working Group ("BPWG") was developed to continue PA commitment to ongoing communication with participating contractors in the program. The group serves as a forum to provide an open line of communication between PAs, lead vendors, HPCs and IICs to discuss any matters related to the program with an independent third-party facilitator. BPWG achievements in 2011 include:

- Assistance with contractor permit acquisition and a continued focus on improving and streamlining the process
- Subsidized marketing materials offered to both IICs and HPCs
- A contractor portal on the Mass Save website for easy access to contractor relevant documents
- Development of a form and process for pricing adjustments
- Customer acquisition assistance for contractors bringing in customers who move forward implementing weatherization work
- Various lead vendor process enhancements
- Workforce development including subsidies for various trainings:
    - Weatherization Boot Camps
    - Combustion Safety Training
    - Weatherization Crew Chief Training
    - Building Analyst Training

In addition, HEAT Loan offerings were extended to include many gas customers in municipal electric territories to provide qualified customers with zero percent interest loans up to $25,000 with terms up to seven years.

- Multi-Family Retrofit - The Multi-Family Market Integrator continued to be an invaluable resource to the PA multi-family working group in 2011. Monthly activity reports were developed to track program progress. The Multi-Family Market Integrator continued to report a trend of successfully enrolled facilities, which was the result of the relationships they have built with property owners, authorized representatives, and property managers. In addition, the statewide Mass Save advertising campaign was noted as a source of program inquiry.

  Most PAs were close to or exceeded program goals in 2011 with a strong enrollment and high level of pipeline projects into the residential Multi-Family Retrofit program. The PAs continue to integrate the C&I program, where applicable, to better address the whole facility and maximize savings opportunities. Energy efficient lighting, instant savings measures, and weatherization were in high demand from this market sector.

A more detailed program-level discussion can be found in Section A.2.

2. Residential Programs

a. Residential New Construction & Major Renovation

Purpose/Goal: The purpose of the Residential New Construction and Major Renovation program was to capture lost opportunities, encourage the construction of energy-efficient homes, and drive the market to one in which new homes are moving towards net-zero energy.

Targeted Customers: The target market for this program included homebuilders, contractors, architects/designers, trade allies, Home Energy Rating System ("HERS") raters, homebuyers, realtors, developers, low-income and affordable housing developers, code officials, and consumers in the market for new homes or major renovations.

Definition of Program Participant: A participant is defined as a unique gas account served under this program.

Targeted End-Uses:

- Heating
- Air Duct
- Hot Water
- Envelope

Delivery Mechanism: The program was administered by each Program Administrator in its service territory and coordinated regionally through the Joint Management Committee ("JMC"). The JMC contractor was responsible for tracking and reporting program activity and advised the JMC on necessary program changes and enhancements. A separate third-party vendor conducted quality assurance/quality control of field activities. The JMC utilized a market-based network of trained contractors who offered energy efficiency and rating services to homebuilders.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program was discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 135-144 (bates numbering 00136-00145) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 135-144 (bates numbering 00136-00145). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.A.3[4] provides information on the performance of the Residential New Construction & Major Renovation program.

[4] For each program and pilot program, the Company has defined "participant", and updated the "units" column in the program or pilot program table to be consistent with that definition.

New England Gas Company
II.A. Residential Program Implementation
Program Information

Table II.A.4: Residential New Construction & Major Renovation

Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	133,858			80,381		-40%
Performance Incentive	$	1,557			768		-51%
Participants	Individual Location #	36			14		-61%
Program Cost / Participant	$	3,718			5,742		54%
Savings & Benefits							
Gas							
Lifetime	therms	151,438	97,625	-36%	97,625	0%	-36%
Annualized	therms	9,348	4,073	-56%	4,073	0%	-56%
Average Measure Life	yrs	16.2	24.0	48%	24.0	0%	48%
Electric							
Annualized Energy	kWh	0		0%	0		0%
Annualized Demand							
Summer	kW	0		0%	0		0%
Winter	kW	0		0%	0		0%
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	28,197	0%	0%
Cost-Effectiveness							
TRC Benefits	$	260,113			142,967		-45%
TRC Costs	$	255,186			129,499		-49%
Net Benefits	$	4,927			13,468		173%
BCR	n/a	1.02			1.10		8%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

The Company had fewer customers take advantage of the ENERGY STAR® Homes program than anticipated and budgeted; 36 homes were budgeted compared to 14 actual. This is due to a decline in overall new home building within the Company's service territory. The program continues to struggle with additional costs to administer the program. The overall savings, both lifetime and annual, did not meet goal due to significantly fewer participants. The combination of less savings and higher costs to deliver the program resulted in lower TRC Benefits and Net Benefits yielding a cost-effective BCR of 1.11. The Company continues to examine potential ways to reduce costs in this program.

EM&V studies included in the Annual Report that apply to this program:

- *Massachusetts Residential New Construction Home Buyer Survey*
  This study examined what buyers look for in a new home, awareness of ENERGY STAR homes, the role of ENERGY STAR certification in new home shopping, perceptions of

ENERGY STAR homes, and reactions to recent changes in the program. The study also provides updates of similar surveys conducted in 2002, 2003, 2004, and 2006. The results of this study did not impact the 2011 evaluated results. This study is discussed in more detail in Section III, Study 1.

- *Massachusetts Residential New Construction Focus Groups with Participant Builders*
  This study assessed participating builders' experience with the Program and their reactions to changes made in 2011 and changes which may be forthcoming in 2012. The results of this study did not impact the 2011 evaluated results. This study is discussed in more detail in Section III, Study 2.

- *Massachusetts Mini Baseline Study of Homes Built at the End of the 2006 IECC Cycle*
  This study was conducted in partnership with DOER to assess compliance with basic building code prescriptive path requirements at the end of the 2006 International Energy Conservation Code ("IECC") code cycle, provide a preliminary assessment of how current new single-family residential building characteristics compare to current User Defined Reference Home ("UDRH") inputs, and conduct audits of energy efficient lighting and appliances within the homes. The study also compared building practices, equipment efficiencies, and other characteristics in custom versus spec built homes. Results from this study reduced the electric savings based on the penetration rates of high efficiency lighting and appliances. This study is discussed in more detail in Section III, Study 3.

- *Demand Impact Model User Manual*
  The Demand Impact Model User Manual was updated to reflect new load shape data, per-unit measure energy savings, and ISO-NE definitions of peak periods. The results of this study were applied to 2011 study results with the overall effect varying by PA. This study did not impact the Company's 2011 results. This study is discussed in more detail in Section III, Study 9.

Due to the variation of savings results generated by homes in the various tiers during 2010, the program changed the tier structure in 2011. The program now requires each qualifying home to obtain a minimum percent savings over the baseline for each of the incentive tiers. The intent of this change is to produce more consistency in the results.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

b. Residential Heating & Water Heating

Purpose/Goal: The purpose of the Residential Heating and Water Heating program was to overcome market barriers to the installation of energy efficient heating/hot water equipment and to increase program awareness among consumers, plumbing/heating contractors, and home builders/developers, by means of rebates, marketing, and training courses.

Targeted Customers: The program targeted residential home owners with natural gas heating/hot water heating equipment (both new construction and existing homes), home designers/architects, engineers, plumbing and HVAC contractors and technicians, high efficiency heating equipment and related parts/accessory suppliers, manufacturers, and distributors, and new home building and remodeling contractors.

Definition of Program Participant: A participant is defined as the number of measures installed (not including windows).

Targeted End-Uses: Space and Water Heating fueled by natural gas.

Delivery Mechanism: The program was administered by each Program Administrator in its service territory and coordinated regionally through the GasNetworks collaborative. GasNetworks utilized a third-party contractor secured through a competitive bidding process to administer rebate processing. This vendor was also responsible for tracking and reporting program activity to the Program Administrators. The program also has a second third-party contractor who provided trade ally outreach and program participant training to supply houses and manufacturers of natural gas high efficiency heating and water heating equipment.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 108-116 (bates numbering 00109-00117) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 108-116 (bates numbering 00109-00117). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.A.4 provides information on the performance of the Residential Heating & Water Heating Program.

Table II.A.5: Residential Heating and Water Heating							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	326,443			523,141		60%
Performance Incentive	$	12,281			18,456		50%
Participants	Individual Rebate	714			916		28%
Program Cost / Participant	$	457			571		25%
Savings & Benefits							
Gas							
Lifetime	therms	790,385	1,603,860	103%	1,195,794	-25%	51%
Annualized	therms	48,789	88,095	81%	64,049	-27%	31%
Average Measure Life	yrs	16.2	18.2	12%	18.7	3%	15%
Electric							
Annualized Energy	kWh	0			0	0%	0%
Annualized Demand							
Summer	kW	0			0	0%	0%
Winter	kW	0			0	0%	0%
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	512,854	0%	0%
Cost-Effectiveness							
TRC Benefits	$	983,958			1,890,558		92%
TRC Costs	$	336,799			597,535		77%
Net Benefits	$	647,159			1,293,023		100%
BCR	n/a	2.92			3.16		8%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The Residential Heating and Water Heating Program experienced great success in 2011. Participants in the program exceeded budget by 28% driving incentive budgets up and associated savings. This program was impacted significantly by evaluated savings, which decreased preliminary lifetime and annual savings by 25% and 27% respectively. Corresponding TRC Benefits and Net Benefits were impacted by positively compared to plan due to participation and savings.

EM&V study included in the Annual Report that applies to this program:

- *Demand Impact Model User Manual*
  The Demand Impact Model User Manual was updated to reflect new load shape data, per-unit measure energy savings, and ISO-NE definitions of peak periods. The results of this study were applied to 2011 study results with the overall effect varying by PA. This study did not impact the Company's 2011 results. This study is discussed in more detail in Section III, Study 9.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

c. Residential Mass Save/Weatherization (Home Energy Services)

Purpose/Goal: The purpose of the Mass Save/HES program was to provide residential customers with energy efficiency recommendations that enable them to identify and initiate the process of installing cost-effective energy efficiency upgrades.

Targeted Customers: The HES target market is all non-low-income residential customers living in single-family houses or one- to four-unit buildings that are not part of a larger site where an association exists (such as a condo association with multiple four-unit buildings). The program aims to reach the aforementioned customers who are interested in making their homes more energy efficient. The HES program is fuel-blind.

Definition of Program Participant: A participant is defined as the number of insulation and blower door air sealing jobs completed for Weatherization. A participant in Mass Save is defined as the number of instant savings measures (faucet aerators and showerheads) installed.

Targeted End-Uses:

- Building Envelope (Deeper Retrofit Measures)
- HVAC/mechanical systems
- Hot Water

Delivery Mechanism: The Mass Save and gas Weatherization programs were fully integrated in 2011 and were implemented by each PA's competitively procured lead vendor. The PAs incorporated both HPCs (to provide audits and weatherization work) and IICs (to implement weatherization work) into the program.

The program was delivered by lead vendors selected through a competitive bidding process. Lead vendors were responsible for managing and training market based participants such as participating IICs and HPCs. Additional lead vendor responsibilities include:

- Consistent statewide training
- Data reporting
- Achieving aggressive savings

- Customer satisfaction
- Quality Control standards
- Scheduling requirements
- Technical Assistance
- Maintain and report health and safety information

Two groups of Mass Save participating contractors, HPCs and IICs, provided services in addition to those services offered by the lead vendor. All participating contractors had to meet program eligibility and requirements. HPCs independently recruited customers, provided HEAs, and implemented weatherization measures. IICs provided installation of weatherization measures for those customers who received a HEA from the lead vendor. IICs also had the opportunity to independently recruit customers and refer them to the lead vendor for the HEA.

In order to receive incentives or program rebates, customers were required to have an HEA through either the PA's lead vendor or via a participating HPC to identify and prioritize all cost-effective energy efficiency improvements. Insulation work, whether performed by a HPC or IIC, had to have a quality control inspection performed by the PA-vendor or third-party vendor when the work was completed. This ensured high quality was maintained, and installations met Building Performance Institute standards or similar standards set by the PAs.

After a competitive bidding process, the gas and electric PAs contracted with Competitive Resources, Inc., a third-party Quality Control ("QC") vendor responsible for performing QC inspections of program implementation vendors, and participating contractors. The QC vendor provided valuable information and feedback to the HES members on program successes and identified areas of possible improvement.

The HES members are working together toward a "best practices" approach to provide a more coordinated statewide training to reinforce quality installation techniques for the HES program. It is expected that training requirements for contractors to retain their status as a HES participating contractor will increase over time. Additionally, contractors must maintain a high level of customer satisfaction to continue in the program.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009 and the Company's 2011 RCS Budget filing, filed November 1, 2010. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 117-128 (bates numbering 00118-00129) and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 117-128 (bates numbering 00118-00129), and New England Gas Company, D.P.U. 10-RCS-12, respectively. The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area,

D.P.U. 09-123, and on December 29, 2010 in New England Gas Company, 10-RCS-07, respectively.

Table II.A.5 and Table II.A.6 provides information on the performance of the Residential Mass Save and Weatherization programs.

Table II.A.6: MassSAVE							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	119,903			79,965		-33%
Performance Incentive	$	0			0		0%
Participants	Individual Location #	500			274		-45%
Program Cost / Participant	$	240			292		22%
Savings & Benefits							
Gas							
Lifetime	therms	0		0%	0	0%	0%
Annualized	therms	0		0%	0	0%	0%
Average Measure Life	yrs	n/a	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	0	0%	0%
Cost-Effectiveness							
TRC Benefits	$	0			0		0%
TRC Costs	$	119,903			79,965		-33%
Net Benefits	$	-119,903			-79,965		
BCR	n/a	n/a			n/a		

Table II.A.7: Weatherization Program							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	269,568			165,095		-39%
Performance Incentive	$	13,377			11,101		-17%
Participants	Individual Location #	198			268		35%
Program Cost / Participant	$	1,361			616		-55%
Savings & Benefits							
Gas							
Lifetime	therms	484,641	457,919	-6%	519,552	13%	7%
Annualized	therms	29,916	21,856	-27%	24,302	11%	-19%
Average Measure Life	yrs	16.2	21.0	29%	21.4	2%	32%
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	158,748	0%	0%
Cost-Effectiveness							
TRC Benefits	$	829,003			782,424		-6%
TRC Costs	$	318,532			203,871		-36%
Net Benefits	$	510,471			578,553		13%
BCR	n/a	2.60			3.84		47%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The Mass Save® program experienced lower program expenses compared to Plan due to fewer customers taking advantage of the Company's home energy assessment program than anticipated.
- The Company's Weatherization program had lower than anticipated program costs, creating a lower performance incentive. Preliminary lifetime and annualized savings were lower than Plan due to lower saving measures.

EM&V studies included in the Annual Report that apply to this program:

- *Home Energy Services Net-to-Gross Evaluation*
  This impact evaluation determined measure-specific and program-level net-to-gross ("NTG") ratios for the Home Energy Services ("HES") program. The information was gathered through Customer Self-Reporting and Statistical Market Share Modeling/Discrete Choice. The study determined a total average NTG ratio of 113%, but depending on measure mix, the net effect will vary for each PA. The Company saw a net

increase in program savings for the 2011 evaluated results. This study is discussed in more detail in Section III, Study 4.

- *Home Energy Services Packaged Measure Pilot Evaluation*
  This study was designed to evaluate a pilot initiative in the HES program that offered program participants a different incentive structure if they implemented a greater number of measures. Study conclusions and recommendations were based on interviews, surveys, and historical data. This study does not affect 2011 results. This study is discussed in more detail in Section III, Study 13.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

c. Residential Multi-Family Retrofit

Purpose/Goal: The purpose of the Residential Multi-Family Retrofit program was to address the energy efficiency retrofit opportunities in facilities with five or more residential dwelling units in the market rate sector.

Targeted Customers: Residential multi-family facilities with five or more dwelling units were targeted by this program.

Definition of Program Participant: A participant is defined as a residential dwelling unit served under this program.

Targeted End-Uses:

- Lighting
- Heating, Ventilation, and Air Conditioning
- Motors and Drives
- Refrigeration
- Domestic Hot Water
- Building Envelope
- End Use Behavior

Delivery Mechanism: The program was administered cooperatively by the gas and electric Program Administrators. The Multi-Family Market Integrator was responsible for facilitating the delivery of program services as well as acting as the conduit for participant inquiries to ensure that participants were not inconvenienced by having to contact multiple parties directly throughout the project lifecycle.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 145-160 (bates numbering 00146-00161) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 145-160 (bates numbering 00146-00161). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.A.7 provides information on the performance of the Residential Multi-Family Retrofit Program.

Table II.A.8: Multi-Family Retrofit							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	82,579			64,875		-21%
Performance Incentive	$	5,223			1,086		-79%
Participants	Individual Location #	45			1		-98%
Program Cost / Participant	$	1,835			64,875		3435%
Savings & Benefits							
Gas							
Lifetime	therms	256,285	136,356	-47%	97,742	-28%	-62%
Annualized	therms	15,820	6,198	-61%	5,144	-17%	-67%
Average Measure Life	yrs	16.2	22.0	36%	19.0	-14%	17%
Electric							
Annualized Energy	kWh	0			0	0%	0%
Annualized Demand							
Summer	kW	0			0	0%	0%
Winter	kW	0			0	0%	0%
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	532	0%	0%
Cost-Effectiveness							
TRC Benefits	$	407,973			119,697		-71%
TRC Costs	$	126,741			83,017		-34%
Net Benefits	$	281,232			36,680		-87%
BCR	n/a	3.22			1.44		-55%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The Company had 1 participant in the Multi-Family Retrofit program during 2011. The Company continues to work with the Multi-Family Market Integrator ("MMI") to identify customers who would be eligible for the program.

EM&V studies included in the Annual Report that apply to this program:

- *Massachusetts Multifamily Market Characterization and Potential Study*
  The primary objective of this market characterization study was to assess the potential energy efficiency savings available in multifamily buildings within Massachusetts. The results of this study did not impact the 2011 evaluated results but is being used to inform ongoing planning and program design. This study is discussed in more detail in Section III, Study 5.

- *Massachusetts Multifamily Program Process Evaluation*
  This study assessed program processes and developed recommendations for program improvement by interviewing program staff, implementation staff, and customers. The results of this study did not impact the 2011 evaluated results but is being used to inform ongoing program design. This study is discussed in more detail in Section III, Study 6.

- *Massachusetts Multifamily Program Impact Analysis*
  The objective of this impact evaluation was to provide program attribution information and a set of savings approaches that could be used by all PAs. These objectives were accomplished by interviewing key stakeholders, developing conclusions, and offering recommendations for future program improvement. 2011 results were negatively affected by the 18% free-ridership number derived from this study. This study is discussed in more detail in Section III, Study 7.

- *Demand Impact Model User Manual*
  The Demand Impact Model User Manual was updated to reflect new load shape data, per-unit measure energy savings, and ISO-NE definitions of peak periods. The results of this study were applied to 2011 study results with the overall effect varying by PA. This study did not impact the Company's 2011 results. This study is discussed in more detail in Section III, Study 9.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

B. Low-Income Sector Programs

1. Summary

During 2011 the Company implemented the following low-income programs[5]:

- Low-Income Single-Family Retrofit
- Low-Income Multi-Family Retrofit

Tables II.B.1 and II.B.3 provide summary information on the performance of the low-income programs at the sector and program levels, respectively.

Section II.B.2 provides detailed information on the performance of each low-income program.

New England Gas Company
II.B. Low-Income Program Implementation
Sector Summary

Table II.B.1: Low-Income Sector Summary

Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	414,898			340,961		-18%
Performance Incentive	$	17,167			10,266		-40%
Savings & Benefits							
Gas							
Lifetime	therms	768,196	339,964	-56%	416,410	22%	-46%
Annualized	therms	35,730	15,298	-57%	19,120	25%	-46%
Electric							
Annualized Energy	kWh	0.0	n/a	n/a	0.0	n/a	n/a
Annualized Demand							
Summer	kW	0.0	n/a	n/a	0.0	n/a	n/a
Winter	kW	0.0	n/a	n/a	0.0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0	0	0%	200,061	0%	0%
Cost-Effectiveness							
TRC Benefits	$	1,032,959			701,095		-32%
TRC Costs	$	429,252			351,227		-18%
Net Benefits	$	603,707			349,868		-42%
BCR	n/a	2.41			2.00		-17%

[5] The Company did not offer any pilot programs in the low-income sector during 2011.

As noted in Table II.B.1., the Company's Low Income Program had 39 fewer participants than Plan which produced lower savings, Benefits and Net Benefits. The Company continues to work with Self Help and CFC to deliver comprehensive programs to qualified low-income customers.

New England Gas Company

II.B. Low-Income Program Implementation

Sector Summary

Table II.B.3: Low-Income Program Summary

Program / Performance Category	Units	Planned Value	Evaluated Results	
			Value	% Change from Planned
Low-Income Single Family Retrofit				
TRC Benefits	$	540,349	308,835	-43%
TRC Costs	$	200,138	238,691	19%
Net Benefits	$	340,211	70,144	-79%
BCR	n/a	2.70	1.29	-52%
Low-Income MultiFamily Retrofit				
TRC Benefits	$	492,610	392,260	-20%
TRC Costs	$	208,860	93,344	-55%
Net Benefits	$	283,750	298,916	5%
BCR	n/a	2.36	4.20	78%
Hard-to-Measure Initiatives				
TRC Costs	$	20,254	19,192	-5%
TOTAL				
TRC Benefits	$	1,032,959	701,095	-32%
TRC Costs	$	429,252	351,227	-18%
Net Benefits	$	603,707	349,868	-42%
BCR	n/a	2.41	2.00	-17%

Low-Income Sector Performance Highlights

During 2011, the PAs continued to leverage all applicable revenue streams available and built on the current Department of Housing and Community Development low-income energy efficiency program to deepen efficiency penetration consistent with a comprehensive, whole house/building approach. The program was able to leverage American Recovery and Reinvestment Act ("ARRA") funds slated for Public Housing Authority heating system replacements by providing minimal co-payments toward upgrades. This allowed PAs to not only achieve significant savings at a lower cost, but also enabled ARRA funding to stretch further with the replacement of more units. Some of the PAs were close to their goal in terms of therm/kWh savings as well as spending. However, some PAs were notably under in production and spending as a result of the extensive use of available ARRA funding instead of PA funds. Additionally, spending was affected by the composition of customers in each PA's service area, particularly the proportion of low-income customers in the territory.

A more detailed program-level discussion can be found in Section II.B.2.

2. Low-Income Programs

a. Low-Income Single-Family Retrofit

Purpose/Goal: The purpose of the Low-Income Single-Family Retrofit program was to increase energy efficiency and reduce the energy cost burden for income-eligible customers through the installation of gas energy efficiency measures to achieve deeper and broader energy savings consistent with a comprehensive, whole house approach.

Targeted Customers: This program targeted residential gas customers living in one- to four-unit dwellings who are at or below sixty percent of the state median income level and who are qualified to receive fuel assistance and/or utility-discounted rates. For two- to four- unit dwellings, fifty percent of the occupants must qualify as low-income.

Definition of Program Participant: A participant is defined as a unique gas account served under this program.

Targeted End-Uses:

- Heating
- Hot water
- Envelope

Delivery Mechanism: PAs used a lead vendor and/or worked closely with their respective Community Action Program ("CAP") agencies on all aspects of the program design and implementation. All PAs worked in conjunction with the Low-Income Energy Affordability Network ("LEAN"). The lead vendor/CAP agencies were responsible for providing coordination of energy efficiency services to the customers, working with installation contractors to ensure that the proper initiative guidelines were enforced, ensuring that the customers met the eligibility requirements for program participation, and providing the CAP and/or PA with the required documentation of all work performed.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 161-168 (bates numbering 00162-00169) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 161-168 (bates numbering 00162-00169). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.B.3 provides information on the performance of the Low-Income Single-Family Retrofit Program.

New England Gas Company
II.B. Low-Income Program Implementation
Program Information

Table II.B.4: Low-Income Single Family Retrofit

Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	197,322			235,016		19%
Performance Incentive	$	9,057			3,675		-59%
Participants	Individual Location #	48			34		-29%
Program Cost / Participant	$	4,111			6,912		68%
Savings & Benefits							
Gas							
Lifetime	therms	384,098	100,254	-74%	176,700	76%	-54%
Annualized	therms	17,865	5,013	-72%	8,835	76%	-51%
Average Measure Life	yrs	21.5	20.0	-7%	20.0	0%	-7%
Electric							
Annualized Energy	kWh	0.0	n/a	n/a	0.0	n/a	n/a
Annualized Demand							
Summer	kW	0.0	n/a	n/a	0.0	n/a	n/a
Winter	kW	0.0	n/a	n/a	0.0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	94,342	0%	0%
Cost-Effectiveness							
TRC Benefits	$	540,349			308,835		-43%
TRC Costs	$	200,138			238,691		19%
Net Benefits	$	340,211			70,144		-79%
BCR	n/a	2.70			1.29		-52%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The Company had fewer customers compared to Plan for the Single Family low-income program (29% lower). Program Costs were 19% higher than Plan due to higher incentives costs compared to Plan of $20,336. In addition, due to higher program costs, the corresponding TRC Costs were higher than Plan by 19% and resulted in lower Net Benefits.

EM&V studies included in the Annual Report that apply to this program:

- *Massachusetts 2011 Low Income Program Process Evaluation*

This study assessed program processes with a particular focus on identifying similarities and differences in the perspectives and assumptions of program staff, implementation staff, and customers regarding program goals, design and implementation across the PAs. The study produced recommended improvements for process-related issues, identified areas where the program changed in 2011, and followed up on topics initially researched in 2010. This evaluation has no impact on 2011 evaluated results. This study is discussed in more detail in Section III, Study 16.

- *Low Income Single Family Program Impact Evaluation*
  This impact evaluation quantified the gross per-unit savings generated by each Low Income measure. The results of this study were applied to 2011 program results and were determined by utilizing both billing and engineering analyses. The impact of this study varied for each PA based on planning assumptions and measure mix. The 2011 evaluated results had a net decrease for the Company due to this study. This study is discussed in more detail in Section III, Study 17.

- *Additional Non-Energy Impacts for Low Income Programs*
  This additional research clarified and expanded the research performed in the Residential and Low-Income Non-Energy Impacts Evaluation (filed in D.P.U 11 -115). Values were updated for certain additional Non-Energy Impacts. Savings were not impacted by this research, however, there was a net increase to benefits for the Company. The additional research is discussed in more detail in Section III, Study 28.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

b. Low-Income Multi-Family Retrofit

Purpose/Goal: The purpose of the Low-Income Multi-Family Retrofit program was to deliver energy efficient products and services directly to income-eligible residential customers living in multi-family facilities with five or more dwelling units.

Targeted Customers: The program targeted public housing authorities, non-profit housing developers, landlords, property managers, and residential customers at, or below, 60 percent of median income living in multi-family properties consisting of five or more units.

Definition of Program Participant: Depending on the PA, a participant is considered either a dwelling unit or a unique gas account number served in a facility with five or more units.

Targeted End-Uses:

- Heating
- Hot water
- Envelope

Delivery Mechanism: PAs used a lead vendor and/or worked closely with their respective CAP agencies on all aspects of the program design and implementation. All PAs worked in conjunction with LEAN as well as the Multi-Family Advisory Committee comprised of LEAN, Community Development Corporations, Public Housing Authorities and other nonprofit owners of low-income non-institutional multi-family housing. The Multi-Family Advisory Committee was tasked with prioritizing low-income multi-family projects for each PA, using benchmarking software called WegoWise. The lead vendor/CAP agencies were responsible for providing coordination of energy efficiency services to the customers, working with installation contractors to ensure that the proper initiative guidelines were enforced, ensuring that the customers met the eligibility requirements for program participation, as well as providing the CAP and/or PA with the required documentation of all work performed.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 177-190 (bates numbering 00178-00191) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 177-190 (bates numbering 00178-00191). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.B.4 provides information on the performance of the Low-Income Multi-Family Retrofit Program.

Table II.B.5: Low-Income MultiFamily Retrofit							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	197,322			86,753		-56%
Performance Incentive	$	8,110			6,591		-19%
Participants	Individual Location #	50			25		-50%
Program Cost / Participant	$	3,946			3,470		-12%
Savings & Benefits							
Gas							
Lifetime	therms	384,098	239,710	-38%	239,710	0%	-38%
Annualized	therms	17,865	10,285	-42%	10,285	0%	-42%
Average Measure Life	yrs	21.5	23.3	8%	23.3	0%	8%
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	105,719	0%	0%
Cost-Effectiveness							
TRC Benefits	$	492,610			392,260		-20%
TRC Costs	$	208,860			93,344		-55%
Net Benefits	$	283,750			298,916		5%
BCR	n/a	2.36			4.20		78%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The Multi-Family Low Income program had fewer participants than plan which reduced expenses and created the Program Cost/Participant to be lower. In concert with fewer actual customers is a reduced number of lifetime and annual savings compared to plan, which was decreased by 38% and 42% respectively. TRC Benefits and TRC Costs were lower than plan but produced an overall positive Net Benefit which was higher than plan.

EM&V studies included in the Annual Report that apply to this program:

- *Massachusetts Multifamily Market Characterization and Potential Study*
  The primary objective of this market characterization study was to assess the potential energy efficiency savings available in multifamily buildings within Massachusetts. The results of this study did not impact the 2011 evaluated results but is being used to inform ongoing planning and program design. This study is discussed in more detail in Section III, Study 5.

- *Massachusetts 2011 Low Income Program Process Evaluation*
  This study assessed program processes with a particular focus on identifying similarities and differences in the perspectives and assumptions of program staff, implementation

staff, and customers regarding program goals, design and implementation across the PAs. The study produced recommended improvements for process-related issues, identified areas where the program changed in 2011, and followed up on topics initially researched in 2010. This evaluation has no impact on 2011 evaluated results. This study is discussed in more detail in Section III, Study 16.

- *Additional Non-Energy Impacts for Low Income Programs*
  This additional research clarified and expanded the research performed in the Residential and Low-Income Non-Energy Impacts Evaluation (filed in D.P.U 11 -115). Values were updated for certain additional Non-Energy Impacts. Savings were not impacted by this research, however, there was a net increase to benefits for the Company. The additional research is discussed in more detail in Section III, Study 28.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

C. Commercial & Industrial Sector Programs

1. Summary

During 2011 the Company implemented the following Commercial & Industrial ("C&I") programs and pilots:[6]

C&I Programs

- C&I New Construction and Major Renovation
- C&I Retrofit
- C&I Direct Install

Tables II.C.1 and II.C.3 provide summary information on the performance of the C&I programs at the sector and program levels, respectively.

Sections II.C.2 and II.C.3 provide detailed information on the performance of each C&I program and pilot program, respectively.

[6] The Company did not offer any pilot programs in the C&I sector during 2011.

New England Gas Company
II.C. C&I Program Implementation
Sector Summary

Table II.C.1: C&I Sector Summary

Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	589,418			350,261		-41%
Performance Incentive	$	36,016			24,473		-32%
Savings & Benefits							
Gas							
Lifetime	therms	2,126,100	2,487,574	17%	1,061,634	-57%	-50%
Annualized	therms	226,181	127,457	-44%	68,827	-46%	-70%
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0	0	0%	0	0%	0%
Cost-Effectiveness							
TRC Benefits	$	2,610,670			1,157,565		-56%
TRC Costs	$	898,176			464,989		-48%
Net Benefits	$	1,712,494			692,576		-60%
BCR	n/a	2.91			2.49		-14%

New England Gas Company

II.C. C&I Program Implementation

Sector Summary

Table II.C.3: C&I Program Summary

Program / Performance Category	Units	Planned Value	Evaluated Results	
			Value	% Change from Planned
C&I New Construction and Major Renovation				
TRC Benefits	$	1,904,658	234,976	-88%
TRC Costs	$	677,015	144,347	-79%
Net Benefits	$	1,227,643	90,629	-93%
BCR	n/a	2.81	1.63	-42%
C&I Retrofit				
TRC Benefits	$	475,954	902,967	90%
TRC Costs	$	145,239	230,768	59%
Net Benefits	$	330,715	672,199	103%
BCR	n/a	3.28	3.91	19%
C&I Direct Install				
TRC Benefits	$	230,058	19,622	-91%
TRC Costs	$	48,962	60,988	25%
Net Benefits	$	181,096	-41,366	-123%
BCR	n/a	4.70	0.32	-93%
Deep Energy Retrofit				
TRC Benefits	$	0	0	n/a
TRC Costs	$	0	0	0%
Net Benefits	$	n/a	n/a	n/a
BCR	n/a	n/a	#DIV/0!	n/a
Hard-to-Measure Initiatives				
TRC Costs	$	26,960	28,886	7%
TOTAL				
TRC Benefits	$	2,610,670	1,157,565	-56%
TRC Costs	$	898,176	464,989	-48%
Net Benefits	$	1,712,494	692,576	-60%
BCR	n/a	2.91	2.49	-14%

C&I Sector Performance Highlights

During 2011, the Company built upon existing C&I programs and significantly expanded initiatives to increase participation in all C&I programs. Building on the transition which took place in 2010, gas and electric integration continued to grow and run smoothly as the gas and electric Program Administrators became more comfortable identifying leads and sharing them

with their counterparts in the same service territory. Innovative agreements with large C&I customers, which focus on long-term energy savings, continued to expand across the Commonwealth.

Responding to the maturity of the Large Retrofit program, the Program Administrators began to adopt a new strategy which focused on specific niche sectors of customers and offered an expanded variety of cost-effective solutions. Many of these solutions involved deeper measures that, in addition to energy savings, provided additional customer benefits.

As higher energy costs generally motivate customers to invest in energy conservation, 2011 proved to be a challenging year given the relatively low cost of gas.

In response to customer acquisition concerns, specifically for large, time sensitive capital gas projects unique to the New Construction & Major Renovation program, the Program Administrators agreed to support a community initiative in the cities of Northampton and Pittsfield. The purpose of this initiative is to test the hypothesis that cities building on relationships with their constituents could, with the assistance of a customer concierge service, help the Program Administrators identify more comprehensive gas energy efficiency projects. This year-long initiative, rolled out in August of 2011, was designed with specific metrics and will undergo an evaluation by the Program Administrators to determine its effectiveness in meeting its objectives.

The Company continues to work with the business community to promote and help implement energy efficiency programs despite continued economic challenges. The Company did complete one custom project within the C&I Retrofit category, which delivered a high level of savings despite a 48% reduction due to evaluated savings.

A more detailed program-level discussion can be found in the following section.

2. C&I Programs

a. C&I New Construction & Major Renovation

Purpose/Goal: The C&I New Construction and Major Renovation program was designed to optimize the efficiency of equipment, building design and systems in new construction and renovation of commercial, industrial, institutional and government facilities. Focusing on offering a comprehensive set of electric and gas efficiency options specific to the needs unique to each customer, the program also targeted the brief window of opportunity to install premium grade replacements when equipment fails or is near the end of its useful life. In doing so, the Program Administrators worked to ensure that the best practices propagated by the program are ultimately built into the evolution of better building requirements.

Targeted Customers: The target market for this program was all time-dependent gas and electric energy efficiency opportunities in the C&I sector – commercial, industrial, institutional, and government customers.

Definition of Program Participant: A program participant is by counted as an individual rebate.

Targeted End-Uses: End uses targeted by the program included:

- Lighting
- Motors & Drives
- HVAC
- Refrigeration
- Envelope
- Compressed Air
- Hot Water
- Process
- Combined Heat & Power

Delivery Mechanism: The Program Administrators worked together to market and implement the program as a unitary statewide effort to maximize the acquisition of potential energy savings (gas and electric) in the ongoing market for new facilities and replacement equipment in the Commonwealth.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where the Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 203-214 (bates numbering 00204-00215) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 203-214 (bates numbering 00204-00215). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.C.3 provides information on the performance of the C&I New Construction and Major Renovation Program.

New England Gas Company
II.C. C&I Program Implementation
Program Information

Table II.C.4: C&I New Construction and Major Renovation							
Performance Category	**Units**	**Planned Value**	**Preliminary Year-End Results**		**Evaluated Results**		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	428,413			105,974		-75%
Performance Incentive	$	22,570			3,427		-85%
Participants	Individual Location # or Individual Rebate	176			47		-73%
Program Cost / Participant	$	2,434			2,255		-7%
Savings & Benefits							
Gas							
Lifetime	therms	955,500	382,544	-60%	224,525	-41%	-77%
Annualized	therms	101,649	19,405	-81%	11,539	-41%	-89%
Average Measure Life	yrs	9.4	19.7	110%	19.5	-1%	107%
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	0	0%	0%
Cost-Effectiveness							
TRC Benefits	$	1,904,658			234,976		-88%
TRC Costs	$	677,015			144,347		-79%
Net Benefits	$	1,227,643			90,629		-93%
BCR	n/a	2.81			1.63		-42%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The C&I New Construction segment saw minimal activity during 2011. As mentioned above, the Company's current economic climate is presenting challenges for customers to take advantage of energy efficiency programs. The Company is actively working with businesses to find opportunities that can produce savings and value. All categories within this segment were affected, including participants, program costs, and performance incentives, which were all lower than Plan. The Cost-Effectiveness measures were lower than Plan due to lower savings yielding lower TRC Benefits, lower TRC Costs and lower Net Benefits.

EM&V studies included in the Annual Report that apply to this program:

- *Massachusetts Large Commercial & Industrial Process Evaluation*
  The study examines key process topics identified by the EEAC, PAs and the DOER including how to improve integration and coordination, concerns about the adequacy of

staffing levels, how to achieve deeper savings, whether medium-sized C&I customers are being adequately served by the programs, the adequacy of program tracking databases, and program satisfaction. The results of this study did not impact the 2011 evaluated results. The study is discussed in more detail in Section III, Study 22.

- *HVAC Market Characterization and Penetration Analysis*
  This study estimates the market penetration of energy-efficient equipment in the Massachusetts commercial HVAC market, gauges the level of large C&I program influence on market penetration, and characterizes the market for emergency replacement. The results of this study did not impact the 2011 evaluated results. The study is discussed in more detail in Section III, Study 23.

- *Prescriptive Gas Final Program Evaluation Report*
  This study produced retrospective and prospective estimates of annual therm savings for those prescriptive gas projects in the condensing boiler, condensing furnace, infrared heating and indirect water heating measure categories. The net effect on each PA's program is dependent on the difference between the new savings estimate and the previous savings estimate incorporated into each PA's screening tool, and may therefore differ. The net effect for the Company was to decrease energy savings for this program. The study is discussed in more detail in Section III, Study 24.

- *Impact Evaluation of 2010 Custom Gas Projects*
  This study produced realization rates for annual therms for custom gas projects. The net effect on each PA's program is dependent on the difference between the new realization rate and the previous realization rate incorporated into each PA's screening tool, and may therefore differ. The net effect for the Company was to decrease energy savings for this program. The study is discussed in more detail in Section III, Study 25.

- *C&I Gas Net-to-Gross Study, 2011 Projects*
  This study quantified the net impacts of the commercial and industrial natural gas programs by estimating the extent of free-ridership and spillover. As results were PA-specific, the results of this study on the program differed for each PA. For the Company, the study decreased savings. The study is discussed in more detail in Section III, Study 29.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

b. C&I Retrofit

Purpose/Goal: The C&I Retrofit program focused on comprehensive gas and electric energy efficiency opportunities associated with mechanical, electrical, and thermal systems in existing commercial, industrial, governmental and institutional buildings. Through this program, technical assistance and incentives were provided to encourage retrofitting of equipment that continued to function, but was outdated and inefficient, and could be replaced with a premium efficient product. In addition, this program helped participants identify specific peak load management opportunities and assisted occupants in improving their ongoing operation and maintenance practices.

Targeted Customers: The target market for this program was all non-residential customers – commercial, industrial, governmental, and institutional.

Definition of Program Participant: A program participant is as a rebate or by a custom project.

Targeted End-Uses:

- Lighting
- Motors and Drives
- HVAC
- Compressed Air and Processes
- Envelope
- Water Heating

Delivery Mechanism: Program Administrator staff, trade allies, and project administrators performed most sales, marketing, program administration, and implementation functions, while outside contractors were retained for technical review of applications, on-site energy analysis, technical and design assistance for comprehensive projects, project commissioning services, and the actual measure installations, including turn-key services.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 191-202 (bates numbering 00192-00203) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 191-202 (bates numbering 00192-00203). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.C.4 provides information on the performance of the C&I Retrofit Program.

Table II.C.5: C&I Retrofit							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	91,969			155,689		69%
Performance Incentive	$	8,917			19,770		122%
Participants	Individual Location # or Individual Rebate	373			86		-77%
Program Cost / Participant	$	247			1,810		634%
Savings & Benefits							
Gas							
Lifetime	therms	792,777	2,078,395	162%	816,466	-61%	3%
Annualized	therms	84,338	104,247	24%	54,339	-48%	-36%
Average Measure Life	yrs	9.4	19.9	112%	15.0	-25%	60%
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	0	0%	0%
Cost-Effectiveness							
TRC Benefits	$	475,954			902,967		90%
TRC Costs	$	145,239			230,768		59%
Net Benefits	$	330,715			672,199		103%
BCR	n/a	3.28			3.91		19%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The Company's C&I Retrofit program saw success in 2011 due to 1 large custom commercial project which yielded significant savings. These savings were not fully realized due to the effect of evaluation studies. The corresponding performance incentive was higher than budget. Annual Savings were lower than Plan but lifetime savings were 3% higher.

EM&V studies included in the Annual Report that apply to this program:

- *Massachusetts Large Commercial & Industrial Process Evaluation*
  The study examines key process topics identified by the EEAC, PAs and the DOER including how to improve integration and coordination, concerns about the adequacy of staffing levels, how to achieve deeper savings, whether medium-sized C&I customers are being adequately served by the programs, the adequacy of program tracking databases, and program satisfaction. The results of this study did not impact the 2011 evaluated results. The study is discussed in more detail in Section III, Study 22.

- *HVAC Market Characterization and Penetration Analysis*
  This study estimates the market penetration of energy-efficient equipment in the Massachusetts commercial HVAC market, gauges the level of large C&I program influence on market penetration, and characterizes the market for emergency replacement. The results of this study did not impact the 2011 evaluated results. The study is discussed in more detail in Section III, Study 23.

- *Prescriptive Gas Final Program Evaluation Report*
  This study produced retrospective and prospective estimates of annual therm savings for those prescriptive gas projects in the condensing boiler, condensing furnace, infrared heating and indirect water heating measure categories. The net effect on each PA's program is dependent on the difference between the new savings estimate and the previous savings estimate incorporated into each PA's screening tool, and may therefore differ. The net effect for the Company was to decrease energy savings for this program. The study is discussed in more detail in Section III, Study 24.

- *Impact Evaluation of 2010 Custom Gas Projects*
  This study produced realization rates for annual therms for custom gas projects. The net effect on each PA's program is dependent on the difference between the new realization rate and the previous realization rate incorporated into each PA's screening tool, and may therefore differ. The net effect for the Company was to decrease energy savings for this program. The study is discussed in more detail in Section III, Study 25.

- *C&I Gas Net-to-Gross Study, 2011 Projects*
  This study quantified the net impacts of the commercial and industrial natural gas programs by estimating the extent of free-ridership and spillover. As results were PA-specific, the results of this study on the program differed for each PA. For the Company, the study decreased savings. The study is discussed in more detail in Section III, Study 29.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was cost-effective for 2011, and the Company does not intend to discontinue the program.

c. C&I Direct Install

Purpose/Goal: The primary objective of the C&I Direct Install Program was to provide cost-effective, comprehensive electric and gas retrofit services to business customers on a turnkey basis using the same delivery model throughout the Commonwealth.

Targeted Customers: The target market for this program was direct install retrofit business customers with electric consumption below 300kW.

Definition of Program Participant: A program participant is defined as a unique customer with measures installed.

Targeted End-Uses:

- Lighting
- HVAC
- Hot Water
- Motors & Drives
- Refrigeration
- Envelope

Delivery Mechanism: Vendors were selected through a competitive bidding process to implement the program. These vendors marketed the program, performed facility audits, and offered recommendations to customers while completing audit forms and questionnaires. In addition, the same vendors purchased materials, installed measures, loaded data into a database, and prepared progress reports for the Program Administrators on a regular basis.

Significant Differences in Actual Program Design from Approved Program Design: None.

Docket/Exhibit where Program is Discussed and Approved: The program is discussed in detail in the Company's 2010-2012 Three-Year Gas Energy Efficiency Plan, filed October 30, 2009. See New England Gas Company- Fall River Service Area, D.P.U. 09-122, Exhibit NEGC-Fall River-1, pages 215-219 (bates numbering 00216-00220) and New England Gas Company-North Attleboro Service Area, D.P.U. 09-123, Exhibit NEGC-North Attleboro-1, pages 215-219 (bates numbering 00216-00220). The program was approved by the Department on January 28, 2010 in New England Gas Company- Fall River Service Area, D.P.U. 09-122 and New England Gas Company- North Attleboro Service Area, D.P.U. 09-123.

Table II.C.5 provides information on the performance of the C&I Direct Install Program.

Table II.C.6: C&I Direct Install							
Performance Category	Units	Planned Value	Preliminary Year-End Results		Evaluated Results		
			Value	% Change from Planned	Value	% Change from Preliminary	% Change from Planned
Expenses							
Total Program Costs	$	42,076			59,712		42%
Performance Incentive	$	4,529			1,276		-72%
Participants	Individual Location #	152			14		-91%
Program Cost / Participan	$	277			4,265		1441%
Savings & Benefits							
Gas							
Lifetime	therms	377,823	26,635	-93%	20,642	-23%	-95%
Annualized	therms	40,194	3,805	-91%	2,949	-23%	-93%
Average Measure Life	yrs	9.4	7.0	-26%	7.0	0%	-26%
Electric							
Annualized Energy	kWh	0	n/a	n/a	0	n/a	n/a
Annualized Demand							
Summer	kW	0	n/a	n/a	0	n/a	n/a
Winter	kW	0	n/a	n/a	0	n/a	n/a
Non-Gas Non-Electric Resources (Lifetime)	$	0		0%	0	0%	0%
Cost-Effectiveness							
TRC Benefits	$	230,058			19,622		-91%
TRC Costs	$	48,962			60,988		25%
Net Benefits	$	181,096			-41,366		-123%
BCR	n/a	4.70			0.32		-93%

The Company had significant variances between planned, preliminary year-end and evaluated values due to the following reasons:

- The C&I Direct Install program had higher administrative costs allocated during 2011 and lower savings than plan due to fewer participants. There was a performance incentive earned due to the Company meeting the threshold direct install performance metric. Lower savings for both lifetime and annual reflected the current challenging economic climate. The Cost-Effectiveness Measures also reflect the lack of savings, which corresponds to lower TRC Benefits, higher TRC Costs and lower Net Benefits.

EM&V study included in the Annual Report that applies to this program:

- *C&I Gas Net-to-Gross Study, 2011 Projects*
  This study quantified the net impacts of the commercial and industrial natural gas programs by estimating the extent of free-ridership and spillover. As results were PA-specific, the results of this study on the program differed for each PA. For the Company, the study decreased savings. The study is discussed in more detail in Section III, Study 29.

The program's performance and the results of the impact evaluations described above will be used to adjust the planning estimates for the program in the next three-year plan for 2013-2015. Changes to this program are not currently expected to result in a mid-term modification for the remainder of the current three-year plan. A mid-term modification was submitted for this program in the Company's 2012 Mid-Term Modification filed with the Department on October 28, 2011 in New England Gas Company, D.P.U. 11-115.

This program was not cost-effective for 2011 due to a lower number of participants than planned, with a resultant increase in administrative cost. The program also suffered from the current challenging economic climate, particularly in the Company's service area. The Company does not intend to discontinue the program at this time but will continue to monitor customer participation and associated costs in 2012 in order to become cost-effective going forward. The Company, along with the other Program Administrators, is in the process of modifying this program for 2013-2015. The C&I Direct Install program was cost-effective in 2010.

III. EVALUATION MEASUREMENT AND VERIFICATION ACTIVITIES

A. Summary

The Massachusetts Program Administrators completed thirty evaluation studies for the 2011 Annual Report. The following is a statewide summary of the subset of these evaluation studies that had significant impact on the final evaluated data.

The studies that had the most significant impact for gas Program Administrators were:

- Massachusetts Special and Cross-Sector Studies Area, Residential and Low-Income Non-Energy Impacts (NEI) Evaluation and Additional Non-Energy Impacts for Low Income Programs
- Low Income Single Family Program Impact Evaluation
- The 2011 Commercial and Industrial Natural Gas Programs Free-ridership and Spillover Study
- The Large C&I Custom Gas Measures Impact Evaluation

In the Massachusetts Special and Cross-Sector Studies area, *the Residential and Low Income Non-Energy Impacts (NEI) study* had a large impact on overall residential and low income sector benefits based on the previously filed study in New England Gas Company, D.P.U. 11-115. The supplemental research on non-energy impacts for low-income programs includes additional low income benefits that clarifies and expands the prior research performed in the *Residential and Low-Income Non-Energy Impacts Evaluation*. The additional information focused on lighting quality, refrigerator recycling, price hedging, and economic development, and the results have a significant positive impact on the benefits attributable to low-income programs. Additional information on the updated non energy benefit values for the low-income program can be found in Appendix C, Study 28.

The Low Income Single Family Program Impact Evaluation quantified the gross per-unit savings generated by each low-income measure through billing and engineering analyses. Depending on planning assumptions and measure mix, this study had a different impact on each of the Program Administrators because the results varied by measure. This study is discussed in more detail in Appendix C, Study 17.

The 2011 Commercial and Industrial Natural Gas Programs Free-ridership and Spillover Study quantified the net impacts of the commercial and industrial natural gas energy efficiency programs by estimating the extent of program free-ridership, early participant spillover, and nonparticipant spillover. The final statewide net-to-gross ratio was 78.7 percent. Between individual Program Administrators, the rate varied from 59.7 percent to 108 percent. This study is discussed in more detail in Appendix C, Study 29.

The Large C&I Custom Gas Measures Impact Evaluation determined realization rates at the PA level and statewide level. Evaluation activities included visual inspection of the installed measures, acquisition of nameplate data, spot measurements of boiler efficiencies, interviews with knowledgeable site staff, review of plans, and placement of logger equipment. Depending upon the measure under evaluation, loggers were placed to calculate a variety of custom measures. Overall, the statewide realization rate of 67.6 percent decreased the savings for custom gas measures. The specific results of the realization rate impact vary by Program Administrator such that if a Program Administrator had been carrying a higher realization rate than was produced in this study, the affected program's savings would decrease once the new realization rate was incorporated. This study is discussed in more detail in Appendix C, Study 26.

Table III.A summarizes the EM&V studies that have not been included in previous Annual Reports. Please note: Studies 8, 10, 15, 18, 19, 20, 21, and 23 apply to electric energy efficiency programs only and are, therefore, not included in the table below.

Table III.A: Evaluation Studies in Annual Report

Studies	Location of Complete Study in Annual Report	Docket & Exhibit Approving Planned Evaluation Studies	Implemented as Approved? (yes/no)
Residential Program Studies			
Massachusetts Residential New Construction Home Buyer Survey	App. C, Study 1	Study is pending approval of the 2010 Annual Reports ("AR"), D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	All studies are implemented as planned
Massachusetts Residential New Construction Focus Groups with Participant Builders	App. C, Study 2	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	
Massachusetts Mini Baseline Study of Homes Built at the End of the 2006 IECC Cycle	App. C, Study 3	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	
Home Energy Services Net-to-Gross Evaluation	App. C, Study 4	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	
Massachusetts Multifamily Market Characterization and Potential Study	App. C, Study 5	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	
Massachusetts Multifamily Program Process Evaluation	App. C, Study 6	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	

Table III.A: Evaluation Studies in Annual Report			
Studies	**Location of Complete Study in Annual Report**	**Docket & Exhibit Approving Planned Evaluation Studies**	**Implemented as Approved? (yes/no)**
Massachusetts Multifamily Program Impact Analysis	App. C, Study 7	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	
Demand Impact Model User Manual	App. C, Study 9	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	
Residential Pilot Studies			
Major Renovations Pilot Evaluation	App. C, Study 11	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	All studies are implemented as planned
Massachusetts Residential New Construction Four to Eight Story Multifamily Pilot Interview Findings	App. C, Study 12	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	
Home Energy Services Packaged Measure Pilot Evaluation	App. C, Study 13	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	
Heat Pump Water Heaters Evaluation of Field Installed Performance	App. C, Study 14	Study is planned but not yet submitted for approval	
Low-Income Program Studies			
Massachusetts 2011 Low Income Program Process Evaluation	App. C, Study 16	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	All studies are implemented as planned
Low Income Single Family Program Impact Evaluation	App. C, Study 17	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	
Commercial & Industrial Program Studies			
Process Evaluation of the Large Commercial and Industrial Energy Efficiency Programs	App. C, Study 22	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	All studies are implemented as planned
Large C&I - Prescriptive Gas Measures Impact Evaluation	App. C, Study 24	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	
Large C&I - Custom Gas Measures Impact Evaluation	App. C, Study 25	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	
Special & Cross Sector Studies			

Table III.A: Evaluation Studies in Annual Report			
Studies	**Location of Complete Study in Annual Report**	**Docket & Exhibit Approving Planned Evaluation Studies**	**Implemented as Approved? (yes/no)**
Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report	App. C, Study 26	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	All studies are implemented as planned
Massachusetts Umbrella Marketing Evaluation Report	App. C, Study 27	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	
Additional Non-Energy Impacts for Low Income Programs	App. C, Study 28	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	
C&I Gas Net-to-Gross Study 2011 Projects	App. C, Study 29	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	
Community-Based Partnerships 2011 Evaluation Final Report	App. C, Study 30	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	

B. Residential Program Studies

1. Massachusetts Residential New Construction Home Buyer Survey

Type of Study: Market Assessment

Objective of the Study: Examine what buyers look for in a new home, awareness of ENERGY STAR homes, the role of ENERGY STAR certification in new home shopping, perceptions of ENERGY STAR homes, and reactions to recent changes in the program. The study also provides updates of similar surveys conducted in 2002, 2003, 2004, and 2006.

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Low-Income Residential New Construction (Electric)

Recommendations Derived from the Study: There are no recommendations. This study was informational, conducted to assess the role of energy efficiency in shopping for a newly constructed home as well as awareness and perceptions about the program.

#	Finding
1	The importance of getting a more efficient home with lower energy bills has steadily risen for all buyers of new homes from 2002 to 2010 with the mean ranking, using a

	scale from 0 to 10 where 0 is one of the least important factors and 10 is one of the most important factors, rising from 7.2 in 2002 to 9.0 in 2010.
2	Close to three out of five buyers of new homes are now aware of the ENERGY STAR label on new homes; this is more than twice the percentage who were aware at the time of the first Massachusetts home buyer survey in 2002; most of the increase in awareness occurred between 2006 and 2010.
3	Home buyers in 2010 are significantly more likely to discuss the energy efficiency of the new home, how much it would cost to heat and cool the home, and green building while shopping for or building a new home than they were in 2006. The percentage discussing energy efficiency in 2010 is 60% up from 37%; heating and cooling costs is 53% up from 25%; and green building is 26% up from 9%.
4	More than seven out of ten (72%) home buyers aware of ENERGY STAR homes believe they provide a little or a lot more value for the money, up from just over one-half (53%) in 2006.
5	Overall satisfaction with the program has remained high with nearly three-quarters of buyers of new ENERGY STAR homes who know they have ENERGY STAR homes saying they are 'satisfied' or 'extremely satisfied'. Asked to rate the importance of going through the Massachusetts program, after changes that do not require ENERGY STAR certification, three out of ten (30%) respondents say that going through the program would be very important if they were building or buying a new home today and an additional one-third (34%) believe program participation would be somewhat important.

How the Study Came to the Recommended Conclusions: Findings are based on telephone surveys of recent buyers of newly constructed homes in Massachusetts that were conducted from June through September of 2011. Surveys were completed with 100 households who had bought ENERGY STAR certified homes and 118 households who had bought homes that did not participate in the program.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: Though there were no specific recommendations from this study, the Findings indicate a positive trend. This upward trend in the growing importance of energy efficiency in new home purchases is communicated through mid stream actors such as real estate agents and mortgage bankers/brokers about long term affordability. The program continues to tap into the strong ally relationships it has formed with the Real Estate and Mortgage industry to continue to provide trainings and marketing assistance on the importance of energy efficient new construction.

A copy of the complete study can be found in Appendix C, Study 1.

2. Massachusetts Residential New Construction Focus Groups with Participant Builders

Type of Study: Market Assessment

Objective of the Study: The objective of the study was to assess the participating builders' experience with the program and their reactions to changes made in 2011 and changes which may be forthcoming in 2012.

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Low-Income Residential New Construction (Electric)

Recommendations Derived from the Study:

#	Recommendation
1	Capitalize on the theme that the program differentiates home builders in a positive manner throughout the marketplace. – On-going task
2	Continue to educate home buying consumers on the characteristics of energy-efficient homes and potential savings associated with living in an energy-efficient home. – Working with Real Estate market – mid stream marketing.
3	If program Tiers and HERS rating scores are mentioned at all in marketing materials to the home-buying consumer, provide simple and clear explanations of their significance.
4	Incorporate additional educational information into marketing materials for program participants. Further outreach is necessary to raise the awareness of participant builders with respect to changes in the program.
5	If the shift to an open HERS rater market occurs, provide clear marketing materials to builders emphasizing the advantages offered by HERS raters. Builders should also be made aware that HERS raters operate in a competitive market, charging varying fees and offering different services.

How the Study Came to the Recommended Conclusions: Findings are based on two focus groups conducted in June of 2011 with home builders who participated in the program before 2011.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: The program has incorporated the above recommendations as follows:

- By leveraging the National EPA ENERGY STAR Homes program websites Builder Partner Resource Center and Massachusetts specific builder marketing support, the program continues to assist and provide builder partners resources to stand out from their competitors. This is done through online support, marketing materials and through technical and sales trainings.

- Through the utilization of mid stream allies such as real estate professionals and mortgage brokers the program continues to educate the new residential home buying market on the benefits of purchasing an energy efficient new home. Value added benefits such as long term affordability, comfort and durability are discussed.

- Currently the program does not provide HERS Rating or Tier achievement directly to home buying consumers, however individual Raters may provide this information as part of their services, but this is decided outside of the programs requirements. All homes do receive a sticker indicating that it has participated in the program along with the final HERS Index and if it achieved ENERGY STAR.

- The program continues to provide several channels to distribute marketing materials, educational opportunities and programmatic updates. In 2011 the program launched a Massachusetts specific HERS Rater Website and Portal. The Portal allows program Raters to download the most recent program documentation, upload applications and incentive worksheets, report completions, view upcoming events and trainings and it also allows for the exchange of best practices and technical assistance on its message board. The program still also communicates information through email and fax blasts.

- Although the program currently provides Raters with an incentive to participate, the builder is made aware of this amount when they receive their participation confirmation letter. This shows not only the incentive the rater is receiving; it helps to establish a value and cost associated with the services provided. This will be beneficial in the upcoming years as the program moves towards decreasing Rater incentives.

A copy of the complete study can be found in Appendix C, Study 2.

3. Massachusetts Mini Baseline Study of Homes Built at the End of the 2006 IECC Cycle

Type of Study: Impact Evaluation

Objective of the Study: Homes were inspected between April and June of 2011 with three primary tasks in mind:

- Conducting a full HERS rating using REM/Rate software

- Filling out the 2006 IECC checklist developed by PNNL

- Providing program Sponsors with a mini baseline study of 50 non-ENERGY STAR-qualified homes completed at the end of the 2006 IECC code cycle

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Low-Income Residential New Construction (Electric)

Results of the Study and How the Study Determined those Results: This study was conducted in partnership with DOER to assess compliance with basic building code prescriptive path requirements at the end of the 2006 International Energy Conservation Code ("IECC") code cycle, provide a preliminary assessment of how current new single-family residential building characteristics compare to current User Defined Reference Home ("UDRH") inputs, and conduct audits of energy efficient lighting and appliances within the homes. The study also compared building practices, equipment efficiencies, and other characteristics in custom versus spec built homes.

#	Finding
1	Some current UDRH inputs may underestimate and others overestimate the energy efficiency of current building practices or equipment. Heating system efficiency inputs—the average efficiencies of gas (natural gas and propane) furnaces and boilers in inspected homes are higher than the current UDRH inputs, but wall, floor and ceiling insulation levels are lower.
2	The 2006 IECC prescriptive path insulation requirements for wood-frame walls, floors over unconditioned space and ceilings are, respectively, R-19, R-30 or cavity filled (minimum R-19), and R-38 with an allowance for R-30 in up to 500 feet of cathedral ceiling area. (*Note that a home failing to meet one or more 2006 prescriptive path requirements does not mean the home failed to comply with building code—the home may have complied under a performance-based compliance path that allows trade—offs.*) Most homes with wood framed walls (84%) had R-19 or higher insulation, 28% of homes with floors over unconditioned basements met the 2006 IECC prescriptive insulation requirement, 22% of homes with flat ceilings had R-38 or higher insulation, and no cathedral ceilings had R-38 insulation. However, 67% of homes with cathedral ceilings met the 2006 IECC prescriptive insulation requirement by having a total of 500 square feet or less of cathedral ceiling area insulated to R-30.
3	Twenty-one percent of the total number of bulbs counted in the non- ENERGY STAR Homes were energy efficient.
4	The majority of refrigerators and dishwashers installed in the non-ENERGY STAR homes were ENERGY STAR (73% and 89% respectively).

In most cases the difference between custom and spec homes is minimal. Custom homes tend to have higher R-value conditioned/ambient wall and flat ceiling insulation, while spec homes tend to have higher R-value floor and foundation wall insulation. Custom homes have slightly more efficient heating systems and spec homes have slightly more efficient water heating systems. Spec homes have lower duct leakage and air infiltration. Custom homes have more energy-efficient light bulbs and slightly higher percentages of ENERGY STAR refrigerators and dishwashers. As an overall indicator of a home's energy efficiency, the HERS ratings conducted on the 50 inspected homes suggest there is little difference between the energy efficiency of custom homes (average HERS 85) and spec homes (average HERS 83); this difference is not statistically significant at the 90% confidence level.

How the Results of the Study Impact each Identified Program's Savings: Due to the penetration rate of energy efficient bulbs and appliances program savings from these measures are reduced accordingly.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): The penetration rates are incorporated into the savings calculations as free-ridership, accordingly the appropriate formula is as follows:

kWh savings = (1 – Free-ridership + Spillover)

kW savings = (1 – Free-ridership + Spillover)

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: References to energy characteristics were not incorporated into the UDRH as this study looked at homes built under the 2006 IECC; the current code in Massachusetts is the 2009 IECC. The UDRH will be updated with results from the Full Baseline study, which looked at homes built under the 2009 IECC and will be completed during the summer of 2012.

A copy of the complete study can be found in Appendix C, Study 3.

4. 2011 Home Energy Services Net-to-Gross Evaluation

Type of Study: Impact Evaluation

Objective of the Study: To determine measure-specific and program-level net-to-gross ("NTG") values for several of the measures installed in the Home Energy Services program using information gathered from program tracking systems, participant surveys, and non-participant surveys.

Programs to which the Results of the Study Apply:

- Mass Save (Electric)
- Weatherization (Gas)

Results of the Study and How the Study Determined those Results:

Measure Category	Measure	Participant Free-ridership	Participant Spillover	Non-participant Spillover	NTG
Direct Installs	CFL	29%	2.5%	N/R	73%
	Air Sealing	8%	8%	28%	129%
Measures for which an Incentive was Offered	Insulation	25%	20%	28%	123%
	Refrigerator	14%	N/R	N/A*	86%
Overall					113%

Note: N/R = Not Reported, N/A = Not Available

The evaluation findings are based on results from an array of data collection activities and evaluation tasks, including participant and non-participant surveys and self-report and discrete choice (DC)-based assessments of measure-level NTG ratios.

How the Results of the Study Impact each Identified Program's Savings: The results of this study will be used to derive net energy savings by multiplying the gross reported savings by the NTG factors.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s):
NTG = 1 – FR + PS + NPS

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: The results of the study are adopted with the following exception. The NTG factors for CFLs were also based on this study but modified by agreement with the EEAC consultants on July 2, 2012 to account for the potential of participants who would have bought CFLs outside of the HES program but through the Upstream Lighting program, which was estimated to be 5%.

A copy of the complete study can be found in Appendix C, Study 4.

5. Massachusetts Multi-Family Market Characterization and Potential Study

Type of Study: Market Characterization

Objective of the Study: The objective of this study was to assess the potential energy efficiency savings available in multi-family buildings within Massachusetts. The results of this study will be used to inform ongoing energy efficiency planning and program design by identifying the quantity of available potential and determining how it is distributed across end uses in multi-family buildings.

Programs to which the Results of the Study Apply:

- Multi-Family Retrofit (Electric and Gas)

- Low-Income Multi-Family Retrofit (Electric and Gas)

Recommendations Derived from the Study: There are no recommendations from this study as the main purpose was to derive potential savings from multi-family buildings within Massachusetts.

How the Study Came to the Recommended Conclusions: Not Applicable.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: Not Applicable.

A copy of the complete study can be found in Appendix C, Study 5.

6. Massachusetts Multi-Family Retrofit Program Process Evaluation

Type of Study: Process Evaluation

Objective of the Study: The objective of this study was to assess program processes and identify similarities and differences between the perspectives and assumptions of program staff, implementation staff, and customers regarding program goals, design, and implementation.

Primary activities for this study were: (1) report the opinions and perspectives gathered through the interview process; (2) draw conclusions based on the information obtained; and (3) offer specific, actionable recommendations for future program improvement.

Programs to which the Results of the Study Apply:

- Multi-Family Retrofit (Electric & Gas)

Recommendations Derived from the Study:

#	Recommendations
1	Develop a comprehensive statewide Multi-family program marketing and outreach plan that leverages a range of channels to make initial contact with both property managers and tenants and condo owners.
2	Continue to simplify the process for property managers. Via the Mass Save and/or PA Multi-family websites, provide prospective participants with more detail on exactly how the program works, what measures could be included, the incentive levels, and sample proposals, in advance of calling the MMI.
3	Consider the costs, benefits, and appropriate incentives for additional standard program measures.

4	With each thermostat, leave behind easy to understand programming instructions in multiple languages.
5	Research and test program design and financing options with the aim of both increasing program participation and increasing savings from each property.
6	Provide materials (technical specifications, instructions) and websites for program participants to obtain technical information on measures and ensure that participants understand that they can contact the MMI for technical support.
7	Track program participation with unique identifiers for the building/facility (facility ID) and participating tenant units (unit #s and/or electric and gas account numbers for individually metered units).

How the Study Came to the Recommended Conclusions: The process evaluation focused on two key activities: (1) Assessing program processes; and (2) Identifying similarities in and differences between the perspectives and assumptions of program staff, implementation staff, and customers regarding program goals, design, and implementation.

The focus of this study was to report the opinions and various perspectives gathered through interviews with program stakeholders. Conclusions and recommendations were developed based on diverse opinions and perspectives.

Evaluation Task	Details
PA Program Manager Interviews (n=6)	Provided insight into PA's perspective of the Multi-family program in 2011, the overall process of participation in the program, any changes that occurred over the last year, any issues or key topics that emerged, and the current status of the program.
Implementer and Multi-family Market Integrator Interviews (n=4)	Provided insight into program implementation, the data collection and reporting process, and statewide program collaboration.
Literature Review / Benchmarking	Explored common industry practices and innovative approaches that are being undertaken by MF programs throughout North America.
Property Manager Survey (n=64)	Provided insight into satisfaction at the property management level, program delivery (in process), measure verification and persistence, and freeridership and spillover.
Tenant / Condo-owner Survey (n=73)	Provided insight into satisfaction at the individual tenant level, program delivery, verification and persistence of measures installed

	in tenant spaces, freeridership of tenant space CFLs, and spillover.
Property Manager Focus Group (n=9)	Provided additional insight into the validity of and rationales behind the measure verification, persistence, and net-to-gross results from the survey, as well as further discussion of key topics and testing alternative program design strategies identified during the literature review/benchmarking task

Program Database and Audit Data Review	Conducted a thorough review of program tracking databases, and a related review of program audit data not contained in the program tracking databases to determine what data are collected, understand the data details, determine the appropriate baseline for estimating measure-specific savings generated, and to determine the best way to aggregate and analyze the program data. The data review informed the subsequent engineering review (results of the engineering review are provided in a separate report.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: All recommendations are being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program design and operations. Recommendations will be considered for implementation consistent with the 2013-2015 Three-Year Energy Efficiency Plan.

A copy of the complete study can be found in Appendix C, Study 6.

7. Massachusetts Multi-Family Retrofit Program Impact Analysis

Type of Study: Impact Analysis

Objective of the Study: This impact analysis has two primary objectives. First, the impact work aimed to provide a set of savings approaches (i.e., algorithms and deemed values) that can be used by all PAs (statewide) in future program years. Second, the analysis collected information to inform program attribution, including the measurement of installation rates, persistence, free-ridership, and spillover.

Programs to which the Results of the Study Apply:

- Multi-Family Retrofit Program (Gas and Electric)

Results of the Study and How the Study Determined those Results:

Measure Installation, Persistence, and Freeridership

Measure	PA Data Source	Installation Rate	Persistence Rate	FR (Weighted)	FR (n)
Common Area CFLs	All (except NSTAR)	91%	100%	31%	9
Dwelling CFLs	All (except NSTAR)	98%	99%	12%	3[1]
Dwelling CFLs	All (except NSTAR)	98%	99%	51%	49
Other CFLs	NSTAR	89%	100%	27%	6
Common Area Lighting Fixtures	All PAs	100%[2]	99%	20%	27
Dwelling Lighting Fixtures	All PAs	99%	100%	16%	31
Total Lighting (except CFLs in units where the occupant pays the electric bill)		**96%**	**100%[3]**	**18%**	**63**
Insulation/Air Sealing	All PAs	100%	100%	19%	22
Showerheads	Showerheads and aerators combined	100%	93%	15%	15
Aerators	Showerheads and aerators combined	100%	96%	15%	15
Programmable Thermostats	All PAs	100%	69%[4]	24%	20
Total (All)		**97%**	**100%[3]**	**18%**	**63**

1. For property managers that pay for dwelling electricity; 2. One respondent reported installing more measures than PA participant tracking data, 100% assumes respondent recall was inaccurate; 3. PM and Tenant combination 4. Installed and programmed;

	Based on PM Survey Responses
	Based on Tenant/Condo Owner Survey Responses

Summary of Proposed Savings Approaches

Measure Category	Primary Algorithm	Alternative Approach
Lighting – CFLs	$\Delta kWh = \frac{N \times (Watts_{pre} - Watts_{post}) \times Hrs}{1000} ISR$	$\Delta kWh = \frac{N * (Watts_{post}) \times \Delta WattsMult \times Hrs}{1000} ISR$
Lighting – Linear Fluorescents	$\Delta kWh = \frac{(\#N_{pre} * Watts_{pre}) - (\#N_{post} * Watts_{post})) \times Hrs}{1000}$	Same algorithm, but deemed values are provided for baseline wattage and operational hours.
Lighting – LED Exit Signs	$\Delta kWh = \frac{n \times (Watts_{pre} - Watts_{post}) \times Hrs}{1000}$	Same algorithm but, some deemed input values are provided.
Lighting – Metal	$\Delta kWh = \frac{(\#N_{pre} * Watts_{pre}) - (\#N_{post} * Watts_{post})) \times Hrs}{1000}$	Same algorithm, but deemed values are provided for baseline wattage and operational hours.

Halides		
Lighting – Occupancy Sensors	$\Delta kWh = \frac{(Watts_{controlled}) \times Hrs \times avg}{1{,}000}$	Same algorithm, but some deemed input values are provided.
Refrigerators	*Refrigerator Recycling* $\Delta kWh = \left[\left((kWh_{pre} - kWh_{std})\right) \times \frac{(12-8)}{12} + \left((kWh_{std} - kWh_{ee})\right) \times \frac{8}{12}\right] \times F_{use}$ *No Recycling* $\Delta kWh = (kWh_{std} - kWh_{ee}) \times F_{use}$	Same algorithm, but some deemed input values are provided.
Attic Insulation Basement Insulation Wall Insulation (gas)	$MMBtu_{annual} = \frac{\left(\frac{1}{R_{exist}} - \frac{1}{R_{new}}\right) \times HDD \times 24 \times Area}{1{,}000{,}000 \times \eta_{heat}}$	Same algorithm, but some deemed input values are provided.
Attic Insulation Basement Insulation Wall Insulation (electric)	*Air Conditioning Savings:* $kWh_{annual} \frac{\left(\frac{1}{R_{exist}} - \frac{1}{R_{new}}\right) \times CDH \times DDA \times Area}{1{,}000 \frac{Btu}{kBtu} \times \eta_{cool}}$ *Electric Heating Savings:* $kWh_{annual} \frac{\left(\frac{1}{R_{exist}} - \frac{1}{R_{new}}\right) \times HDD \times 24 \times Area}{1{,}000{,}000 \times \eta_{heat}} \times 293.1$	Same algorithm, but some deemed input values are provided.
Other Insulation (electric)	Deemed annual kWh savings = 137 kWh.	
Other Insulation (gas)	Deemed annual MMBtu savings = 1.2 MMBtu.	
Air sealing (electric)	$\Delta kWh = \frac{Vol \times \Delta ACH \times 0.018 \times HDD \times \frac{24}{\eta_{heating}}}{3413}$	Same algorithm producing a deemed savings approach per 1000 ft^2 based on zip code and heating type
Air Sealing (gas)	$\Delta MMBtu = \frac{Vol \times \Delta ACH \times 0.018 \times HDD \times \frac{24}{\eta_{heating}}}{1{,}000{,}000}$	Same algorithm producing a deemed savings approach per 1000 ft^2 based on zip code and heating type
Thermostats (electric)	Deemed annual kWh savings = 282 kWh.	
Thermostats (gas)	Deemed annual MMBtu savings = 2.4 MMBtu.	
Heat pump tune-up	$kWh = tons \times 12 \frac{kBtuh}{ton} \times \left(\frac{1}{SEER} \times Hours_{cooling} + \frac{1}{HSPF} \times Hours_{heating}\right) \times \%savings$ $kWh = kBtuh \times \left(\frac{1}{SEER} \times Hours_{cooling} + \frac{1}{HSPF} \times Hours_{heating}\right) \times \%savings$	ΔkWhdwelling = 180 kWh ΔkWhCommonArea = 325 kWh
Aerators (electric)	Deemed annual kWh savings = 41.7 kWh.	
Aerators	Deemed annual MMBtu savings = 0.36 MMBtu.	

(gas)		
Showerheads (electric)	Deemed annual kWh savings = 55.6 kWh.	
Showerheads (gas)	Deemed annual MMBtu savings = 0.48 MMBtu.	
Pipe Wrap (electric)	Deemed annual kWh savings = 55.6 kWh	
Pipe Wrap (gas)	Deemed annual MMBtu savings = 0.48 MMBtu.	
Tank Wrap (electric)	$\Delta MWh = MWh_{base} \times \left(\frac{EF_{new} - EF_{base}}{EF_{new}} \right)$	Deemed savings per wrap = 31.5 kWh

These results were determined by reviewing program audit data and also reviewing the measure-specific engineering savings estimates contained in each PA's program tracking database, and their relationships to the per unit values in PA Benefit-Cost Ratio (BCR) models and to the methods described in the Technical Reference Manual (TRM). Also, a review of third party algorithms from other Technical Resource Manuals or from recent studies to get another perspective of how various jurisdictions calculate savings for similar measures was conducted. These reviews included both local sources (within Massachusetts or New England utilities), as well as outside sources like the Database for Energy Efficient Resources (DEER), the Ohio TRM, and the New York TRMs.

How the Results of the Study Impact each Identified Program's Savings:
The results of this study were used to derive net energy savings by multiplying the gross reported savings by the NTG factors. The impact of this study was a decrease in the reported net savings.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s):
The report includes all required algorithms and calculations to interpret and verify results.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: The NTG results were adopted. The proposed savings approaches will be used in 3-year planning.
A copy of the complete study can be found in Appendix C, Study #7.

8. Brushless Fan Motors Impact Evaluation

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

9. Demand Impact Model Update User Manual

Type of Study: Impact

Objective of the Study: Update the existing residential demand impact model originally created by Quantec in 2001 with an improved interface and more recent Massachusetts- or New England-specific load shape data.

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Low-Income Residential New Construction (Electric)
- Residential Cooling & Heating Equipment (Electric)
- Multi-Family Retrofit (Electric Only)
- Mass Save (Electric)
- Behavior/Feedback Program (Electric Only)
- ENERGY STAR® Lighting (Electric)
- ENERGY STAR® Appliances (Electric)
- Low-Income Single Family Retrofit (Electric and Gas)
- Low-Income Multi Family Retrofit (Electric Only)

Results of the Study and How the Study Determined those Results: The updated model utilizes the best available load shape data, per-unit measure energy savings, and ISO-NE definitions of peak period to allow PAs to dynamically calculate demand impacts.

How the Results of the Study Impact each Identified Program's Savings: The model can be used to assess demand impacts for any of the residential or Low-Income programs. This model will be utilized where demand impacts are not calculated in a typical impact evaluation. The results of this study only affect demand and energy calculations, not savings. Gas programs are minimally impacted by the outcome of this study.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): Not Applicable

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: The results of the study are adopted.

A copy of the complete study can be found in Appendix C, Study 9.

10. Massachusetts Residential Retail ENERGY STAR® Lighting Evaluation

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

C. Residential Pilot Studies

11. Memo: Major Renovations Pilot Evaluation

Type of Study: Process Evaluation

Objective of the Study: As follow up to the preliminary report on non-participant interviews issued in 2011, this memo briefly summarizes findings from interviews with homeowners, architects and builders involved with projects completed by the end of 2011. The memo focuses on satisfaction with the Pilot and suggestions for how the Pilot could be improved or made more user-friendly. In addition, it summarizes a discussion with a HERS rater who worked with 5 of the 11 completed projects.

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Low-Income Residential New Construction (Electric)

Recommendations Derived from the Study:

#	Recommendation
1	Make requirements for participating in the Pilot clearer
2	Encourage further energy-efficiency upgrades and address smaller projects.
3	Make clear what programs a project qualifies for and if it can participate in multiple programs.
4	Speed up the administration process—minimize delays in issuing incentives.

How the Study Came to the Recommended Conclusions: Recommendations are based on findings from discussion with a HERS rater who worked with five of the eleven completed projects and in-depth interviews conducted with eight homeowners, three architects and three builders. In most cases the interviewees played more than one role on the projects they were involved in. For example, the owner may have been the architect and/or been the one who applied to participate in the Pilot. The builder may have been hired by the applicant or submitted the application for the project to participate in the Pilot. The architect may have also been the general contractor or builder and may have submitted the application for the project to participate in the Pilot. All interviewees were asked to provide suggestions for how the Pilot could be improved or made more user-friendly.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: The Major Renovations pilot went through an update in early 2012 to make adjustments based on lessons-learned and to address the findings from interviews with homeowners, architects and builders.

One adjustment was that the pilot became a contractor-focused program rather than a homeowner-focused program. The change was made in response to homeowner comments that the pilot requirements were unclear. Homeowners were struggling to understand and manage the technical requirements of the pilot, while a contractor should have greater familiarity with the requirements.

Another adjustment was that the eligibility requirements changed to allow major renovations of any size to participate. This change ensured there would not be a gap between the Home Energy Services program and the Major Renovations pilot, where people would not qualify for either program.

A copy of the complete study can be found in Appendix C, Study 11.

12. Massachusetts Residential New Construction Four to Eight Story Multi-family Pilot Interview Findings

Type of Study: Process Evaluation

Objective of the Study: Assess the strengths and areas in need of improvement of the three year pilot that was introduced to serve smaller, four to eight story buildings that do not qualify for ENERGY STAR certification but are too small for commercial programs. The report focuses on the lessons learned from the pilot about addressing the energy efficiency potential of the mid-rise multi-family new construction market.

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Low-Income Residential New Construction (Electric)

Recommendations Derived from the Study:

#	Recommendation
1	Offer a performance-based program for the mid-rise multi-family new construction market, or possibly the entire multi-family market over three stories.
2	The pilot's verification of ventilation and infiltration rates for individual units through the High Performance Building Adder is a positive innovation. Given that quality installation of insulation and air sealing have shown to be important in single family structures, multi-family programs should continue to fund and encourage these measures.
3	Offer a long-term program. Ideally, a program would run for a longer period of time and be renewed annually, so that prospective participants know that the program will be in place when their projects complete. With a longer-term

	program, implementers should focus their efforts on reaching projects at the earliest stage possible.
4	Try to identify and recruit more projects with less of an energy efficiency or green building tilt. Expanding relationship-based marketing focused on the design community would enable programs to reach more projects and provide the assistance they need to incorporate higher levels of energy efficiency.
5	Consider offering assistance and support for the design team, especially as more projects with less of a green tilt are recruited.
6	Consider efforts to address market concerns and misperceptions about energy-efficient building practices. Participant interviews identified a number of concerns particular to this market, notably that more efficient systems need more sophisticated staffs and training for building operation and that it would be more difficult to obtain replacement parts.

How the Study Came to the Recommended Conclusions: Recommendations are based on findings from fourteen interviews conducted with the pilot's sponsors (three interviews), implementer (two interviews), and participants with completed projects (nine interviews representing fourteen projects). The interviews examined the pilot's goals and objectives, the process of signing up and completing verification, outreach and the timing of projects served, the measures covered, the measures installed, barriers to energy efficient multi-family new construction, and satisfaction.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: With the goal of transitioning the current Massachusetts Multi-family New Construction Pilot to a full program, the following program design features which incorporate the above recommendations are being explored. The proposed program will continue to provide a single point of contact for the participants and provide service for all fuel sources and meter configurations. To address the issue of long development timelines, a suite of program offerings will provide a stepped enrollment mechanism for pre-bid and post-bid projects. (The bid process is the project milestone after which efforts to influence energy efficiency are no longer possible.) The first offering will include a simple prescriptive application to service post-bid projects. The goal will be to maximize the capture of energy savings from established designs with a focus on residentially metered electric savings.

In tandem with this simple prescriptive offering, a whole building prescriptive program and an interactive savings tool are being developed for pre-bid projects. Third party verification and commissioning activities will continue to be incentivized. In total, these approaches will be capable of servicing multi-family projects from 4 stories and up. These combinations of measures, in conjunction with the transition mechanism, will allow the program to offer cost-effective incentives that will move projects to achieve higher levels of energy efficiency and pave the way to recruit and educate more first-time program participants.

A copy of the complete study can be found in Appendix C, Study 12.

13. 2011 Home Energy Services Packaged Measure Pilot Evaluation

Type of Study: Pilot Evaluation

Objective of the Study: The evaluation was a review to determine whether the additional customer incentives offered in an effort to achieve deeper savings at one time in the Home Energy Services program made a difference in the customer's willingness to move forward with installation of energy efficient measures, meeting the pilot's stated goal, as well as assessing the delivery of the pilot itself.

Programs to which the Results of the Study Apply:

- Mass Save (Electric)
- Weatherization (Gas)

Recommendations Derived from the Study:

#	Recommendation
1	The Cadmus Team suggests that if the PAs reissue the pilot, they consider additional package combinations, such as an all-insulation package. PAs might also consider a package option without the heating system requirement, which is the highest cost item.
2	The Cadmus Team suggests that the PAs and vendors market the pilot and continue to encourage the HES auditors to explain fully the benefits of the pilot when conducting HES audits.

How the Study Came to the Recommended Conclusions: The recommendations are based on PA program manager interviews, program vendor staff interviews, participant and nonparticipant customer surveys, and a review of pilot and historical program data.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why:

1	If the PAs decide to reissue the pilot, additional package combinations will be discussed for appropriateness and cost effectiveness.
2	The PAs will look into the best approach for handling this recommendation if the pilot is reissued.

A copy of the complete study can be found in Appendix C, Study 13.

14. Heat Pump Water Heaters Evaluation of Field Installed Performance

Type of Study: Technology Evaluation

Objective of the Study: The objective of this study was to quantify the in-situ performance of three types of heat pump water heaters ("HPWH"). The study was also meant to answer questions on the efficiency, reliability, and performance of the three types of HPWHs.

Programs to which the Results of the Study Apply: This is a new pilot measure that will not directly affect savings from any program during this annual report year. Going forward, this is likely to affect only electric programs.

Results of the Study: This study did not have recommendations per se, but rather quantified the results of HPWH use that can be used in the analysis of potential HPWH measures.

	Small Tank (50-60 gal)	Large Tank (80 gal)
Measure Life	10 years	10 years
Incremental Cost	$1,510	$2,610
Mean Annual kWh Saved over ERWH	1,687	2,670
Annual Energy Usage		
HPWH; Monitored (kWh)	734-4,035 [1643][1]	1,200-2,040 [1579][1]
ERWH; EF=0.91 (kWh)	1,898-5,813 [3330][1]	3,110-6,078 [4249][1]
Gas, Oil, or Propane; EF=0.56 (MMBTU)	1,289-3,105 [1950][1]	1,880-3,226 [2410][1]
Gas, Oil, or Propane; EF=0.67 (MMBTU)	9,57-2,664 [1577][1]	1,510-2,757 [1987][1]
Mean Winter Peak Demand Reduction over ERWH[2]	374.1 W	
Mean Summer Peak Demand Reduction over ERWH[3]	174.8 W	

[1] Minimum – Maximum [Mean]

[2] June-August, Weekdays, 1pm-5pm

[3] December – January, Weekdays, 5pm-7pm

How the Study Determined Those Results: The study came to its conclusions through evaluating the in-situ performance of three types of HPWH products. Fourteen units were monitored for over one year.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: There are not any strict recommendations to adopt from this study but the PAs will use the results from this study in future analysis of HPWH measures.

A copy of the complete study can be found in Appendix C, Study 14

15. Solar Hot Water Program Pilot Evaluation

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

C. Low-Income Program Studies

16. Massachusetts 2011 Low Income Program Process Evaluation

Type of Study: Process Evaluation

Objective of the Study: The focus for this process evaluation was to report the opinions and various perspectives gathered through interviews with program stakeholders. The key objectives for the 2011 program process evaluation were as follows:

- Follow up on topics discussed during the 2010 process evaluation, such as progress in standardization goals, internal and external QA/QC processes, and participant waitlists;
- Identify and discuss areas where the program changed in 2011 and reason(s) for the changes; and
- Recommend improvements for process-related issues and suggest ways to standardize or streamline processes between agencies/PAs.

Programs to which the Results of the Study Apply:

- Low Income Single-Family Retrofit (Electric & Gas)
- Low Income Multi-family Retrofit (Electric & Gas)

Recommendations Derived from the Study:

Low Income Single Family Program Process Evaluation Recommendations

#	Recommendation
1	If not already, all PAs should provide savings goals to their lead agencies to improve transparency between PAs and program implementers. Lead vendors should then provide all sub-agencies information about annual savings goals, especially in cases where it is a challenge to meet the PAs' savings goals. Furthermore, it may prove beneficial for all agencies to track certain savings performance indicators in a manner similar to that of how they track budgets and spending. If indicators for savings performance currently do not exist, this should be a topic for discussion in the Best Practices working group meetings.
2	The PAs should establish an approval system that does not cause significant delays the PAs ability to provide program budgets to implementers. The process should be set up in a way that PAs can provide contracts and budget information to the agencies in advance of program [start date] year, to provide services to customers in a timely and effective manner and ensure agencies can plan effectively. Multi-year contracts and budgets should be implemented, when possible, with any subsequent revisions negotiated in advance of existing contract expiration dates.
3	Through the Best Practices working group, standardize a streamlined approval process for repairs that works for the agencies and PAs.
4	Through the Best Practices working group (including the PAs), develop, document and put into practice both (a) a standardized definition of the waitlist; and (b) standardized methods for tracking and reporting this information. One suggested definition for wait list is the number of eligible low income customers who have completed all the necessary paperwork to participate and are awaiting an audit.
5	Coordinated and developed through the Best Practices working group, PAs should investigate funding a statewide energy education curriculum, including leave-behind materials and energy saving tips. This effort should aim to increase the depth of energy savings resulting from behavior change, and provide thorough and consistent energy conservation messages to participants.
6	An assessment of necessary or recommended trainings should be discussed through the Best Practices Group to ensure quality auditors and contractors while also maintaining cost-effectiveness.
7	Through the Best Practices working group (or sub-committee) including CRI and DHCD, discuss ways to further streamline the QA/QC process so it serves the needs of the PA-funded program while minimizing participant intrusion. The objectives of the discussion should be: a. Clearly articulate the objectives of multiple QA/QC visits to a participant's

	home. b. Establish the value of agencies conducting 100% post inspections versus redirecting resources to serve more homes. c. Determine where the objectives of the DHCD and CRI inspections align and identify if there are opportunities for collaboration and coordination. d. Assess how changes in federal funding levels are expected to affect DHCD inspections and what affect that has on collaboration or coordination opportunities. e. Findings from this discussion should be clearly documented and action items to improve QA/QC process should be adopted.

Low Income Multi-family Retrofit Program Process Evaluation Recommendations

#	Recommendation
1	The LIMF Advisory Committee should encourage more standardization across PAs by developing standardized project screening criteria or a tool to determine savings and cost effectiveness for both gas and electric projects.
2	Identify one single representative program to remain involved with during the entire participation process with building managers. Consider looking to the Multi-family Market Integrator used in the market rate multi-family program as a model.
3	Update program materials, including the Program Guide, and clarify the role of each PA's branded benchmarking software tool. To ensure continued participation and energy savings into the future, plan for the need to increase participation in the LIMF program by raising awareness among potential participants of their eligibility and the existence of the program. Facilitate this effort by developing marketing collateral, such as leave-behind materials, that help to clarify and differentiate the LIMF program eligibility and requirements from other potential funding sources that may commonly be offered to participants.
4	Develop data formats to track program savings and administer the program more consistently. To prepare for any future audit or evaluation efforts, all implementers should collect and store building manager contact information as part of the program tracking data, then share those details with the PAs.

How the Study Came to the Recommended Conclusions: The recommendations were developed through 77 interviews with program stakeholders.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why:

Low Income Single-Family Program Process Evaluation Recommendations Responses:

#	Recommendation	PA Response
1	If not already, all PAs should provide savings goals to their lead agencies to improve transparency between PAs and program implementers. Lead vendors should then provide all sub-agencies information about annual savings goals, especially in cases where it is a challenge to meet the PAs' savings goals. Furthermore, it may prove beneficial for all agencies to track certain savings performance indicators in a manner similar to that of how they track budgets and spending. If indicators for savings performance currently do not exist, this should be a topic for discussion in the Best Practices working group meetings.	PAs have been and will continue to provide savings goals to lead vendors to the best of their ability. Often, lead vendors not only manage the overall spend of the program between the various agencies implementing the program but also their performance as it relates to savings goals for PA's territory.
2	PAs should establish a system that does not cause significant delays to the PAs ability to provide program budgets to implementers. The process should be set up in a way that PAs can provide contracts and budget information to the agencies in advance of program [start date] year, to provide services to customers in a timely and effective manner and ensure agencies can plan effectively. Multi-year contracts and budgets should be implemented, when possible, with any subsequent revisions negotiated in advance of existing contract expiration dates.	The PAs are always willing to work with the DPU to establish a regulatory approval system that does not cause significant delays in program delivery.
3	Through the Best Practices working group, standardize a streamlined approval process for repairs that works for the agencies and PAs.	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program

		design and operations.
4	Through the Best Practices working group (including the PAs), develop, document and put into practice both (a) a standardized definition of the waitlist; and (b) standardized methods for tracking and reporting this information. One suggested definition for wait list is the number of eligible low income customers who have completed all the necessary paperwork to participate and are awaiting an audit.	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program design and operations.
5	Coordinated and developed through the Best Practices working group, PAs should investigate funding a statewide energy education curriculum, including leave-behind materials and energy saving tips. This effort should aim to increase the depth of energy savings resulting from behavior change, and provide thorough and consistent energy conservation messages to participants.	PAs are in process of reviewing current marketing collateral and energy education materials that is used by the PAs and/or agencies. Once the analysis of what is currently available is complete, the PAs will determine if the recommendation for the development and/or utilization of statewide materials should be adopted.
6	An assessment of necessary or recommended trainings should be discussed through the Best Practices Group to ensure quality auditors and contractors while also maintaining cost-effectiveness.	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program design and operations.
7	Through the Best Practices working group (or sub-committee) including CRI and DHCD, discuss ways to further streamline the QA/QC process so it serves the needs of the PA-funded program while minimizing participant intrusion. The objectives of the discussion should be: • Clearly articulate the objectives of multiple	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program

	QA/QC visits to a participant's home. • Establish the value of agencies conducting 100% post inspections versus redirecting resources to serve more homes. • Determine where the objectives of the DHCD and CRI inspections align and identify if there are opportunities for collaboration and coordination. • Assess how changes in federal funding levels are expected to affect DHCD inspections and what affect that has on collaboration or coordination opportunities. Findings from this discussion should be clearly documented and action items to improve QA/QC process should be adopted.	design and operations.

Low Income Multi-family Retrofit Program Process Evaluation Recommendations Responses:

#	Recommendation	PA Response
1	The LIMF Advisory Committee should encourage more standardization across PAs by developing standardized project screening criteria or a tool to determine savings and cost effectiveness for both gas and electric projects.	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program design and operations.
2	Identify one single representative program to remain involved with during the entire participation process with building managers. Consider looking to the Multi-family Market Integrator used in the market rate multi-family program as a model.	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program design and operations.
3	Update program materials, including the Program Guide, and clarify the role of each PA's branded benchmarking software tool. To ensure continued participation and energy savings into the future, plan	PAs are in process of reviewing current marketing collateral and energy education materials that is

	for the need to increase participation in the LIMF program by raising awareness among potential participants of their eligibility and the existence of the program. Facilitate this effort by developing marketing collateral, such as leave-behind materials, that help to clarify and differentiate the LIMF program eligibility and requirements from other potential funding sources that may commonly be offered to participants.	used by the PAs and/or agencies. Once the analysis of what is currently available is complete, the PAs will determine if the recommendation for the development and/or utilization of statewide materials should be adopted.
4	Develop data formats to track program savings and administer the program more consistently. To prepare for any future audit or evaluation efforts, all implementers should collect and store building manager contact information as part of the program tracking data, then share those details with the PAs.	This recommendation is being considered for adoption at this time. The PAs have not formally adopted or rejected any recommendations that require changes to program design and operations.

A copy of the complete study can be found in Appendix C, Study 16.

17. Low Income Single Family Program Impact Evaluation

Type of Study: Impact Evaluation

Objective of the Study: The objective of the study was to determine gross per-unit savings generated by each Low Income program measure.

Programs to which the Results of the Study Apply:

- Low-Income Single Family Retrofit (Electric & Gas)

Results of the Study and How the Study Determined those Results: The PA-weighted Massachusetts-wide per-unit gross *ex post* energy savings (by measure and primary fuel type of treated homes) are summarized below.

Category	Measure	Natural Gas (Therms/year)	Electric (kWh/year)	Oil (MMBTUs/ year)
Insulation and Air	Insulation and Air Sealing (overall)	263*	1,616	28.1

Category	Measure	Natural Gas (Therms/year)	Electric (kWh/year)	Oil (MMBTUs/ year)
Sealing	Air Sealing	105	501	9.9
	Attic Insulation	83	1,071	11.6
	Wall Insulation	115	824	11.2
	Basement Ceiling Insulation	15	30	2.9
	Basement Wall Insulation	13	37	0.2
	Furnace Fan (due to weatherization)	206 (kWh)	--	224 (kWh)
	Cooling (due to weatherization)	138 (kWh)	--	153 (kWh)
Heating System	Heating System Replacement	199*	--	18.4
	Boiler Reset Controls	--	--	4.4
	Programmable Thermostat	--	--	3.1
	Furnace Fan (due to furnace replacement)	172 (kWh)	--	132 (kWh)
Appliances	Refrigerator Replacement	--	762	--
	Second Refrigerator Removal	--	1,180	--
	Freezer Replacement	--	239	--
	Window AC Replacement	--	204	--
Lighting	CFLs	--	45	--
	Torchieres	--	211	--

Category	Measure	Natural Gas (Therms/year)	Electric (kWh/year)	Oil (MMBTUs/ year)
	Fixtures	--	140	--
Domestic Hot Water	Domestic Hot Water (overall)	5	128	0.7
	Low-Flow Showerhead	9	188	1.1
	Faucet Aerator	2	40	0.2
	Pipe Wrap	4	41	0.4
Distribution	Duct Insulation	55	--	4.3
	Duct Sealing	33	--	3.3
Other	Baseload (TLC Kits)	--	25**	--

* Indicates this number is based on billing analysis. All other measure results through engineering analysis (simulation or algorithms).

** Reflects MA-wide average based on each PA's kit contents and participation.

How the Results of the Study Impact each Identified Program's Savings: Please refer to the table in Section II.B.5

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): A complete set of measure-specific engineering algorithms are provided in the appendix of the report.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: The results of the study are adopted.

A copy of the complete study can be found in Appendix C, Study 17.

D. C&I Program Studies

18. Non-Controls Lighting Evaluation for the Massachusetts Small Business Direct Install Program: Multi-Season Study

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

19. 2010 Combined Heat and Power Impact Evaluation Methodology and Analysis Memo

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

20. Impact Evaluation of 2010 Custom Process and Compressed Air Installations

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

21. Impact Evaluation of 2010 Custom Lighting Installations

This study applies to electric energy efficiency programs only and is, therefore, not included in the Company's Annual Report.

22. Massachusetts Large Commercial & Industrial Process Evaluation

Type of Study: Process Evaluation

Objective of the Study: The study is a process evaluation of the Massachusetts Large Commercial and Industrial energy efficiency programs. The study examines key process topics identified by the EEAC, PAs and the DOER including how to improve integration and coordination, concerns about the adequacy of staffing levels, how to achieve deeper savings, whether medium-sized C&I customers are being adequately served by the programs, the adequacy or program tracking databases, and program satisfaction. This study was conducted on behalf of the PAs and the Energy Efficiency Advisory Council ("EEAC").

Programs to which the Results of the Study Apply:

- C&I New Construction and Major Renovation (Electric & Gas)
- C&I Retrofit (Electric & Gas)

Recommendations Derived from the Study:

#	Recommendation
1	Target participants with more sophisticated audits and technical assistance.
2	PAs should be more proactive in reaching out to the trade allies.
3	The PAs need to simplify paperwork and accelerate rebate processing.
4	Reach out to trade ally organizations to disseminate program information and

	identify contractors who would promote the programs.
5	A standard lifecycle cost tool would probably be well-received.
6	Market the reduced interest financing option to dormant participants.
7	The vendor interviews reaffirmed previous process evaluation findings that PAs need to work closely with architects and engineers who specify the new construction and major renovation projects.
8	The PAs should implement a means of combining small jobs into a bigger pool.
9	The program needs to do a better job of warning program vendors about changes in program funding.
10	In order to clearly identify projects by end-use, the PARIS categories should be adopted, and data entry constrained to the following values.
11	Measure Categories should be used to indicate how projects are treated within these end-uses, according to the list of measures in the TRM.
12	A set of core data should be collected for all projects and included in tracking systems.
13	All data that is collected on customer application forms should be captured in tracking systems so that it is available for analysis.
14	Create or populate a field with consistent business type names.
15	Define Custom vs. Prescriptive projects based on savings calculation
16	Define C&I customer size categories by rate class instead of program.
17	Enter data project data or create queries that extract files in such a way that each record represents a single customer site, project and type of measure.
18	Save the queries or code used to produce extract files from one year to the next.
19	Develop a statewide security policy and practice to allow all project and customer data to be delivered at once.
20	Build the capability to link gas and electric customer projects.
21	Provide a mechanism for linking billing and tracking data.
22	Add quality control through rule-based data entry screens that prevent invalid

	combinations of program, end use and measure category.
23	Calculate savings through lookup tables, wherever possible.
24	Provide premise number instead of account number where available.

How the Study Came to the Recommended Conclusions: The study draws on multiple sources of information including: In-depth interviews with EEAC consultants, C&I program managers and staff, participating and nonparticipating trade allies, trade association representatives, and participating customers; Focus group discussions with participating customers; Computer-Aid Telephone Interview ("CATI") surveys with hundreds of participants including both recent (2010-2011) participants and "dormant" participants who have not participated in the C&I programs since 2008-2009; and an examination of the various PA program tracking databases.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: As this report was recently issued, the recommendations are currently under consideration.

A copy of the complete study can be found in Appendix C, Study 22.

23. HVAC Market Characterization and Penetration Analysis – Final Report

Type of Study: Process Evaluation

Objective of the Study: The objective of the study was to estimate the market penetration of energy-efficient equipment in the Massachusetts commercial HVAC market, gauge the level of large C&I program influence on market penetration, and characterize the market for emergency replacement.

Programs to which the Results of the Study Apply:

- C&I New Construction and Major Renovation (Electric & Gas)
- C&I Retrofit (Electric & Gas)

Recommendations Derived from the Study:

#	Recommendation
1	Consider raising efficiency levels for condensing gas boilers. Given the high market penetration for high-efficiency condensing gas boilers reported by both participating contractors (84%-90%) and non-participants (90%-100%), it appears that the program could benefit from raising efficiency levels.

2	Consider offering stocking incentives to distributors. One-half of respondents believe that availability is an important factor in selecting new equipment in emergency replacement situations. In order to ensure the wide availability of high-efficiency models, consider offering stocking incentives to distributors to maintain an inventory of high-efficiency equipment.

How the Study Came to the Recommended Conclusions: The evaluation included telephone interviews with commercial HVAC contractors and distributors in Massachusetts. The evaluation had a goal of completing 80 interviews, however only 51 were completed. Each respondent was asked to estimate the market penetration for their firm. This figure was then rolled up to estimate market penetration for the entire market.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: As this report was recently issued, the recommendations are currently under consideration.

A copy of the complete study can be found in Appendix C, Study 23.

24. Prescriptive Gas Final Program Evaluation Report

Type of Study: Impact Evaluation

Objective of the Study: The study's objective was to produce revised annual therm savings estimates for program administrators' condensing boiler, condensing furnace, infrared heater and indirect water heater prescriptive gas projects for both prospective and retrospective savings. An 80% confidence interval was set in the sample design. Therm savings were to be produced at the individual PA level and also at the statewide level.

Programs to which the Results of the Study Apply:

- C&I New Construction and Major Renovation (Gas Only)
- C&I Retrofit (Gas Only)

Results of the Study and How the Study Determined those Results:

Recommended Condensing Boiler Savings

Size Category	Revised Capacity (MBtu)	AFUE	EFLH	Original Savings (ΔMMBtu/Unit/yr)	Evaluated (Retrospective) Savings (ΔMMBtu/Unit/yr)	Recommended Prospective Savings (ΔMMBtu/Unit/yr)
Capacity ≤ 300	209.6	88.9%	1400	22.1	29.8	29.4
300 < Capacity < 500	400	88.9%	1400	42.3	56.9	56.1
500 ≤ Capacity < 1000	735	88.9%	1400	77.1	104.6	103.0
1000 ≤ Capacity ≤ 1700	1350	88.9%	1400	142.6	192.1	189.2
1700 < Capacity	2363	88.9%	1400	249.0	336.2	331.2

Recommended Condensing Furnace Savings

Furnace Efficiency	Original Savings (ΔMMBtu/Unit/yr)	Evaluated (Retrospective) Savings (ΔMMBtu/Unit/yr)	Recommended Prospective Savings (ΔMMBtu/Unit/yr)
Furnace AFUE =>92%	21.1	5.9	13.5
Furnace AFUE =>92% w/ECM	19.6	5.5	12.5
Furnace AFUE =>94% w/ECM	23.6	6.2	14.9

Recommended Infrared Heater Savings

Measure Type	Original Savings (ΔMMBtu/Unit/yr)	Evaluated (Retrospective) Savings (ΔMMBtu/Unit/yr)	Recommended Prospective Savings (ΔMMBtu/Unit/yr)
Infrared Heater	74.4	22.3	48.3

Recommended Indirect Water Heater Savings

Measure Type	Original Savings (ΔMMBtu/Unit/yr)	Evaluated (Retrospective) Savings (ΔMMBtu/Unit/yr)	Recommended Prospective Savings (ΔMMBtu/Unit/yr)
Indirect Water Heater	30.4	20.7	20.7

The study determined therm savings estimates at the statewide level. The evaluation consisted of on-site monitoring and verification of the savings for a sample of participants for four of the top five measures installed, in terms of savings. The sample sites were monitored for approximately eight weeks in an attempt to capture seasonally sensitive variations in energy consumption between the winter and swing seasons. The first monitoring equipment was installed in early February 2012 and recovery was completed during the second week of April 2012. The on-site sample design was designed to achieve a relative precision of ± 20% at the 80% confidence interval using a two-tail test for the overall program savings.

How the Results of the Study Impact each Identified Program's Savings: How the results impact each program's savings is a function of the previous realization rates that were being incorporated into each PA's savings models. For instance, if a PA had been carrying a higher realization rate than was produced in this study, the affected program's savings would decrease once the new realization rate was incorporated.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): Net Savings = Gross Savings x Gross Realization Rate[7] x (1 – Freeridership Rate + Spillover Rate). Further information can be found in the Massachusetts Technical Reference Manual for Estimating Savings from Energy Efficiency Measures 2011 Program Year – Report Version.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: N/A – This study has been adopted by all PAs.

[7] Realization rate determined by this study.

A copy of the complete study can be found in Appendix C, Study 24.

25. Impact Evaluation of 2010 Custom Gas Installations

Type of Study: Impact Evaluation

Objective of the Study: The study's objective was to produce annual therm savings realization rates for program administrators' custom gas projects. An 80% confidence interval was set in the sample design. Realization rates were to be produced at the individual PA level and also at the statewide level.

Programs to which the Results of the Study Apply:

- C&I New Construction and Major Renovation (Gas Only)
- C&I Retrofit (Gas Only)

Results of the Study and How the Study Determined those Results:

Statistic	Annual Therms
All Program Administrators	
Total Tracking Savings	4,427,361
Total Measured Savings	2,991,776
Realization Rate	67.6%
Relative Precision at 80% Confidence	±9.0%
Error Bound at 80% Confidence	268,703
Sample Size	48
Error Ratio	0.50

PA	Annual Therms	PA	Annual Therms
Berkshire Gas		**National Grid**	
Total Tracking Savings	89,684	Total Tracking Savings	1,710,500
Total Measured Savings	34,660	Total Measured Savings	1,172,176
Realization Rate	38.6%	Realization Rate	68.5%
Relative Precision at 80% Confidence	±0.8%	Relative Precision at 80% Confidence	±17.4%
Error Bound at 80% Confidence	276	Error Bound at 80% Confidence	203,593
Sample Size	2	Sample Size	17
Error Ratio	0.02	Error Ratio	0.62
Columbia Gas		**NSTAR**	
Total Tracking Savings	1,553,740	Total Tracking Savings	938,625
Total Measured Savings	1,293,037	Total Measured Savings	444,200
Realization Rate	83.2%	Realization Rate	47.3%
Relative Precision at 80% Confidence	±12.9%	Relative Precision at 80% Confidence	±11.2%
Error Bound at 80% Confidence	167,329	Error Bound at 80% Confidence	49,693
Sample Size	13	Sample Size	13
Error Ratio	0.42	Error Ratio	0.39
New England Gas		**Unitil**	
Total Tracking Savings	23,400	Total Tracking Savings	111,412
Total Measured Savings	12,902	Total Measured Savings	34,801
Realization Rate	55.1%	Realization Rate	31.2%
Relative Precision at 80% Confidence	±0.0%	Relative Precision at 80% Confidence	±48.3%
Error Bound at 80% Confidence	-	Error Bound at 80% Confidence	16,807
Sample Size	1	Sample Size	2
Error Ratio	0.00	Error Ratio	0.86

The study determined realization rates at the PA level and statewide level. Evaluation activities included visual inspection of the installed measures, acquisition of nameplate data, spot measurements of boiler efficiencies, interviews with knowledgeable site staff, review of plans, and placement of logger equipment. Depending upon the measure under evaluation, loggers were placed to measure parameters such as supply air temperatures, return and supply water temperatures, and motor runtime profiles. The study design provided for a longer than normal two week logging period. Loggers were left in place for a minimum of a week and for as much as eight weeks. When possible, trend data was secured from the building automation system. Capturing distribution company billing data for all the affected meters at a site was a goal as well. The engineer selected from a variety of analytical techniques as appropriate for the measure including eQuest building simulation models and bin temperature models. Customer gas bills were used to calibrate bills, corroborate savings, and in some cases used as the primary means of determining savings impacts.

PAs represented in the study sample were Berkshire Gas, Columbia Gas, New England Gas, National Grid, NSTAR and Unitil. The study produced statewide results that are reliable (±9.0%) at 80% confidence. In addition, the precision levels for several PAs (National Grid: ±17.4%, Columbia Gas: ±12.9%, and NSTAR: ±11.2%) are sufficient to warrant application of the three individual PA realization results to the 2011 results according to the protocol established in the November 2010 Protocol memo, which stated that individual realization rates may be applied for those PAs with more than ten sites and a final precision better than ±9.0%.

How the Results of the Study Impact each Identified Program's Savings: How the results impact each program's savings is a function of the previous realization rates that were being incorporated into each PA's savings models. For instance, if a PA had been carrying a higher realization rate than was produced in this study, the affected program's savings would decrease once the new realization rate was incorporated.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): Net Savings = Gross Savings x Gross Realization Rate[8] x (1 – Freeridership Rate + Spillover Rate). Further information can be found in the Massachusetts Technical Reference Manual for Estimating Savings from Energy Efficiency Measures 2011 Program Year – Report Version.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: N/A – This study has been adopted by all PAs.

A copy of the complete study can be found in Appendix C, Study 25.

F. Special and Cross Sector Studies

26. Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report

Type of Study: Impact and Process Evaluation

Objective of the Study:

This report provides the findings from the 2011 annual impact and process evaluation of the Massachusetts Behavioral programs. This represents the second formal report of the three-year evaluation under the Massachusetts Cross-Cutting evaluation area. This report covers two of three behavior programs or pilots implemented between 2009 and 2011: the Behavior/Feedback programs administered by National Grid and NSTAR which are both implemented by OPOWER, and the Behavior/Feedback pilot administered by WMECo, called Western Mass Saves and implemented by C3.

The study evaluates the savings impacts of the two behavior programs or pilots during the 2011 program year. The report also includes a demographic analysis of the savings for the Behavior/Feedback program administered by National Grid. The report also includes a process evaluation of the Behavior/Feedback pilot administered by WMECo, which included a customer survey and web statistics.

Additionally, the report investigates a number of research questions related to behavior programs, such as: How do savings differ by opt-in or opt-out programs? Will the savings persist with or without treatment? Do these programs lead to additional participation in other programs and what are the associated energy savings? Are there specific population characteristics that lead to greater savings?

[8] Realization rate determined by this study.

Programs to which the Impact Results of the Study Apply:

- Behavior/Feedback (Electric & Gas)

Results of the Study and How the Study Determined those Results:

Behavior/Feedback Electric Results:

PA	Cohort or Measure Name	Program Year	Base Usage	Annualized Net Savings per HH	Net Savings %	Total Evaluated Participants
National Grid	2009	PY2	10,825 kWh	223 kWh	2.06 %	23,309
National Grid	2010	PY2	12,051 kWh	196 kWh	1.63 %	67,980
National Grid	2010 Add	PY1	15,008 kWh	240 kWh	1.60 %	23,557
National Grid	2011	PY1	9,767 kWh	134 kWh	1.37 %	94,322

Behavior/Feedback Gas Results:

PA	Cohort or Measure Name	Program Year	Base Usage	Annualized Net Savings per HH	Net Savings %	Total Evaluated Participants
National Grid	2009	PY2	137.2 MMBTUs	1.72 MMBTU	1.25 %	23,685
National Grid	2010	PY1	139.9 MMBTUs	1.69 MMBTU	1.21 %	74,138
National Grid	2011	PY1	102.7 MMBTUs	1.02 MMBTU	0.99 %	87,691
NSTAR	Wave I	PY1	55.7 MMBTUs[a]	0.53 MMBTU	0.94 %	22,840

NSTAR	Wave II	PY1	121.5 MMBTUs	1.82 MMBTU	1.50 %	22,108

Complete results of the impact evaluation can be found in Section 5 of "Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report."

Net program savings were determined by conducting billing analysis to estimate annual electric and therm savings. Average annual net savings attributable to the behavioral program were determined using a linear fixed effects regression analysis of customer billing data that included billing data from behavioral program participants (who received the Home Energy Reports), and a matched comparison group of residential customers. The billing analysis approach is described in Section 3.4 of "Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report."

In addition, net program savings were also determined by conducting a channeling analysis where net program savings determined by billing analysis were adjusted by factoring out deemed savings values counted in other programs. Therefore, the savings values cited here reflect only those program savings directly obtained by the Behavior/Feedback program, factoring out savings jointly attributable to the Behavior/Feedback program *and* other energy efficiency programs. This adjustment is described in Section 3.3 of "Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report."

How the Results of the Study Impact each Identified Program's Savings: Please see Table II.A.08 in National Grid's and Western Massachusetts Electric Company's 2011 Energy Efficiency Annual Reports and Table II.A.9 in NSTAR Gas Company's 2011 Energy Efficiency Annual Report.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): Please see the Massachusetts Technical Reference Manual for Estimating Savings from Energy Efficiency Measures 2011 Program Year – Report Version.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why:

Impact results for the Behavior/Feedback programs are being adopted.

Programs to which the *Process* Results of the Study Apply:

- Behavior/Feedback Pilots (Electric Only)
- Behavior/Feedback Programs(Electric & Gas)

Recommendations Derived from the Study:

The process evaluation identified recommendations in two areas: (1) program design and evaluation for opt-in programs, (2) evaluating persistence.

#	Recommendation
1	Program design and evaluation for opt-in programs: • Waitlisted or delayed treatment participants should be used whenever possible to establish a comparison group. • In the absence of a waitlist or delayed treatment, Variability in Adoption ("VIA") designs are the most appropriate for quasi-experiments. • Ensure that the "treatment effects" do not occur prior to treatment, indicating a pre-existing saving trajectory (no treatment effects seem to occur prior to treatment). • Employ surveys and other qualitative research techniques to assess what customers would have done in the absence of the program. • Evaluation must also consider the effects of feedback in keeping customers on a trajectory. • Consider adjusting the impact models to account for self-selection bias.
2	Evaluating persistence: • Persistence should be examined in two ways: (1) with program treatment, and (2) without program treatment. • All behavioral programs should be continually evaluated for persistence; however opt-in models have little data to date that document persistence beyond one year. • Evaluating/measuring participants' and non-participants' attitudes and intentions using a tested conceptual model can provide confidence in interpreting statistical results.

How the Study Came to the Recommended Conclusions: The study developed the recommendations by researching and citing best practices for evaluating quasi-experimental design and persistence in behavior programs.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why:

The Company will adopt the recommendations from the study because they will help maintain evaluation best practices.

A copy of the complete study can be found in Appendix C, Study 26.

27. Massachusetts Umbrella Marketing Evaluation Report

Type of Study: Process Evaluation

Objective of the Study: The objective of this study was to establish baseline campaign awareness in advance of the 2012 marketing campaign. The report also builds on an interim evaluation of the 2010 Massachusetts Umbrella Mass Save Statewide Marketing Campaign, which focused on documenting the campaign's organizational structure and initial strategy.

Programs to which the Results of the Study Apply:

- Residential New Construction & Major Renovation (Electric and Gas)
- Residential Cooling & Heating Equipment (Electric)
- Multi-Family Retrofit (Electric and Gas)
- Mass Save (Electric and Gas)
- Behavior/Feedback Program (Electric and Gas)
- ENERGY STAR® Lighting (Electric)
- ENERGY STAR® Appliances (Electric)
- Residential Heating and Water Heating (Gas)
- Weatherization Program (Gas)
- C&I New Construction & Major Renovation
- C&I Retrofit

Recommendations Derived from the Study: There are no recommendations from this report as it was designed to establish baseline campaign awareness.

How the Study Came to the Recommended Conclusions: Not Applicable

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: Not Applicable

A copy of the complete study can be found in Appendix C, Study 27.

28. Additional Non-Energy Impacts for Low Income Programs

Type of Study: Impact

Objective of the Study: This study includes additional investigation that clarifies and expands the research performed in the Residential and Low-Income Non-Energy Impacts Evaluation. The additional information focused on refrigerator recycling, lighting quality, price hedging, and economic development.

Programs to which the Results of the Study Apply:

- Low-Income Single Family Retrofit (Electric and Gas)
- Low-Income Multi Family Retrofit (Electric and Gas)

Results of the Study and How the Study Determined those Results: The results have a positive impact on the benefits attributable to low income programs. The results were arrived at through a process of meeting and building consensus among Program Administrators, LEAN, and the EEAC.

Lighting Quality:

Item	NEI
Increased Lighting Quality	$56/participant

Refrigerator Recycling

Item	NEI
Avoided Landfill Space	$1.06
Plastics & Glass Recycling	$1.25
Incineration Insulating Foam	$170.22

Price Hedging

Item	NEI
Hedge against volatile prices	$0.76/MMBTU of gas

Item	NEI
	$0.005/kWh

Economic Development

Massachusetts – Gas Estimate					
Increase in GSP (Billion $) (1)	Savings (Tbtu) (2)	Savings (therms) (3)	Economic output per therm (4)	11% for low income (5)	Inflated from 2008 to 2011$ (6)
28	664	6,640,000,000	$4.22	$0.46	$0.486
(1) Energy Efficiency: Engine of Economic Growth; ENE; October 2009; page 49.					
(2) Energy Efficiency in Massachusetts: Engine of Economic Growth; ENE; October 2009; page 2.					
(3) Tbtu times 10,000,000					
(4) Calculated as Increase in GSP/Savings (therms)					
(5) Multiply economic output per therm by 11%; assumes 11% inures to the benefit of low-income (the low-income fraction of population).					
(6) Uses an inflation rate of 1.85% from BCR models.					

Massachusetts – Electric Estimate				
Increase in GSP (Billion $) (1)	Savings (GWh) (2)	Savings (kWh) (3)	Economic output per therm (4)	11% for low income (5) (6)
70	217,300	217,300,000,000	$0.32	$0.04
(1) Energy Efficiency: Engine of Economic Growth; ENE; October 2009; page 47.				
(2) Energy Efficiency in Massachusetts: Engine of Economic Growth; ENE; October 2009; page 2.				
(3) GWh times 1,000,000				
(4) Calculated as Increase in GSP/Savings (kWh)				
(5) Multiply economic output per therm by 11%; assumes 11% inures to the benefit of low-income (the low-income fraction of population).				
(6) Using an inflation rate of 1.85% from BCR models does not change the estimate of $0.04/kWh from 2008 to 2011$.				

How the Results of the Study Impact each Identified Program's Savings: This additional research will result in an increase in benefits in the Low-Income Programs.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s): Not Applicable.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why: The results of the study are adopted.

A copy of the complete study can be found in Appendix C, Study 28.

29. 2011 Commercial and Industrial Natural Gas Programs Free-ridership and Spillover Study

Type of Study: Impact Evaluation

Objective of the Study: The primary objective of the 2011 program year Free-ridership and Spillover Study was to assist the Massachusetts PAs in quantifying the net impacts of their

commercial and industrial natural gas energy efficiency programs by estimating the extent of Program free-ridership, Early participant "like" and "unlike" spillover, and Nonparticipant "like" spillover.

Programs to which the Results of the Study Apply:

- C&I New Construction & Lost Opportunity (Gas Only)
- C&I Retrofit (Gas Only)
- C&I Direct Install (Gas Only)

Results of the Study and How the Study Determined those Results:

PA	Program Type	Surveyed	Population	Population Savings	Free-ridership Rate	90% Margin Error (±)	Participant "Like" Spillover Rate	90% Margin Error (±)	Nonparticipant Spillover Rate	Net-to-Gross Rate[9]
Berkshire Gas	Custom	11	30	99,832	3.5%	7.2%	13.6%	13.5%	0.0%	110.1%
	Prescriptive	24	74	41,089	46.9%	13.8%	49.4%	13.8%	0.2%	102.7%
	Total	**35**	**104**	**140,921**	**16.1%**	**8.3%**	**24.0%**	**9.7%**	**0.1%**	**108.0%**
Columbia Gas	Custom	27	147	1,081,175	7.8%	7.7%	1.7%	3.6%	0.4%	94.2%
	Prescriptive	41	205	55,642	24.0%	9.8%	0.2%	0.9%	1.1%	77.2%
	Total	**68**	**352**	**1,136,817**	**8.6%**	**5.0%**	**1.6%**	**2.2%**	**0.4%**	**93.4%**
National Grid	Custom	47	254	3,361,773	27.9%	9.7%	9.6%	6.4%	1.0%	82.7%
	Prescriptive	287	1,886	960,498	19.5%	3.5%	7.4%	2.3%	0.2%	88.2%
	Total	**334**	**2,140**	**4,322,271**	**25.7%**	**3.6%**	**9.0%**	**2.4%**	**0.8%**	**84.1%**
New England Gas	Custom	0	2	95,831	NA	NA	NA	NA	3.1%	NA
	Prescriptive	12	30	22,417	23.0%	15.5%	0.0%	0.0%	0.5%	77.5%
	Total	**12**	**32**	**118,248**	**23.0%**	**15.8%**	**0.0%**	**0.0%**	**2.6%**	**79.6%**

[9] Net-to-Gross Rate is calculated as (1-Free-ridership Rate) + Participant "Like" Spillover Rate.

NSTAR	Custom	23	89	2,050,931	57.5%	14.6%	11.4%	9.4%	0.8%	54.7%
	Prescriptive	88	755	425,092	16.0%	6.0%	3.9%	3.2%	0.3%	88.2%
	Total	**111**	**844**	**2,476,023**	**51.3%**	**7.3%**	**10.3%**	**4.4%**	**0.7%**	**59.7%**
Unitil	Custom	0	2	32,377	NA	NA	NA	NA	0.0%	NA
	Prescriptive	16	33	47,610	24.5%	12.7%	0.0%	0.0%	0.2%	75.7%
	Total	**16**	**35**	**79,987**	**24.5%**	**13.0%**	**0.0%**	**0.0%**	**0.2%**	**75.7%**
Statewide	Custom	108	524	6,721,919	33.1%	6.6%	8.8%	4.0%	0.8%	76.5%
	Prescriptive	468	2,983	1,552,349	19.8%	2.8%	7.4%	1.8%	0.3%	88.0%
	Total	**576**	**3,507**	**8,274,268**	**30.5%**	**2.9%**	**8.5%**	**1.7%**	**0.7%**	**78.7%**

The methodology used for this study follows the standardized methodology developed in 2010 and 2011 for the Massachusetts PAs[10] for use in situations where end-users are able to report on program impacts via self-report methods. Telephone surveys were conducted with 2011 program participants in each of the PA's C&I natural gas programs and with design professionals and equipment vendors involved in these 2011 installations.

How the Results of the Study Impact each Identified Program's Savings:

As this study produced PA-specific results, each PA will see a different impact for the study. Each identified programs used net to gross rates of 100% for planning values in 2011, so most PAs saw a decrease in program savings due to this study however, one PA (Berkshire Gas), saw an increase as their NTG rate is greater than 100%.

Formulas Necessary to Understand the Impact of the Study on the PA's Program(s):

Gross Savings * Realization Rate * Net-to-Gross Rate = Net Program Savings. This study updated the Net-to-Gross Rate for all Gas Program Administrators.

If the Results of the Study Are Not Adopted by the PA, Fully Explain Why:

N/A – This study has been adopted by all PAs.

A copy of the complete study can be found in Appendix C, Study 29.

[10] "Cross-Cutting C&I Free-Ridership and Spillover Methodology Study Final Report", prepared for the Massachusetts Program Administrators by Tetra Tech, KEMA, and NMR, May 20, 2011.

30. Community Based Partnership Interim Process Evaluation

Type of Study: Process

Objective of the Study: The overall objective of this evaluation is to assess the effectiveness of each community-based partnership that falls within the scope of the evaluation and determine its potential for replication and/or full-scale implementation.

The *Community-Based Partnerships 2011 Evaluation Final Report* provides an overview of each effort's structure and performance against the goals, presents findings from the research activities conducted with a goal of providing feedback and identifying areas for program improvement. The report also presents comparative analysis of community-based efforts under evaluation with the goal of developing best practices for design and implementation of such efforts.

Programs to which the Results of the Study Apply:

- Renew Boston (Electric and Gas)
- New Bedford Community Mobilization Initiative (Electric and Gas)

Recommendations Derived from the Study:

#	Finding
1	Determine the goals of each community-based effort (and how it complements the overall portfolio) upfront.
2	Be strategic with the selection of communities.
3	Understand the targeted population and barriers that might prevent the achievement of goals. Clearly document how the community-based initiative seeks to intervene prior to launch.
4	Establish metrics before launching the effort, and track metrics consistently across community-based initiatives.
5	Consider most efficient and cost-effective delivery structure that would align with the effort's goals.
6	Require that all costs and resources required for support be clearly documented and tracked.
7	For future evaluation efforts explicitly evaluate participation trends; marketing efforts and conversion rates; and the full costs of these partnerships, including resources expended by the PAs, implementers and community groups.

How the Study Came to the Recommended Conclusions: The findings presented in the study were developed through analysis of program materials and tracking databases, in-depth interviews with the PA staff, in-depth interviews with program stakeholders and community groups, historical participation analysis (for one effort), and participant interviews. As part of the research, the evaluation team has also conducted a literature review of community-based programs implemented across the United States, and developed both partnership-specific logic models and an overarching theory of change for community-based partnerships.

Explain Whether or Not the PA Decided to Adopt Recommendations from the Study, and Why: These findings are targeted at future efforts, and will be considered by the PAs and interested stakeholders as additional efforts are launched.

A copy of the complete study can be found in Appendix C, Study 30.

E. Future Studies

Table III.B summarizes the studies expected to be included in next year's Annual Report.[11]

Table III.B: Evaluation Studies in Next Annual Report		
Studies	**Docket & Exhibit Approving Planned Evaluation Studies**	**Expected to be Implemented as Approved? (yes/no)**
Residential Studies		
RNC Net Impact Study	Study is planned but not yet submitted for approval	Yes
RNC Incremental Cost Study	Study is planned but not yet submitted for approval	Yes
RNC Baseline Study/Code Compliance Assessment*	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	Yes
Home Energy Services: Contractor Charettes in Support of Lost Opportunity Metric*	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	Yes
Net-to-Gross study on Residential Cooling & Heating Equipment (Cool Smart)*	Study is pending approval of the 2010 AR, D.P.U. 11-63 through D.P.U. 11-73 and D.P.U. 11-126	Yes

[11] See D.P.U. 09-116 through D.P.U. 09-120, at 132; D.P.U. 09-121 through D.P.U. 09-128, at 122.

Table III.B: Evaluation Studies in Next Annual Report		
Studies	**Docket & Exhibit Approving Planned Evaluation Studies**	**Expected to be Implemented as Approved? (yes/no)**
NTG study of the High Efficiency Heating Equipment (HEHE) program*	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	Yes
Home Energy Services: Impact Evaluation*	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	Yes
Residential Pilot Studies		
Process and Impact Evaluation of the WI FI Thermostat Pilot*	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	Yes
Electronically Commutated Motor (ECM) Circulator Pump Pilot Program*	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	Yes
Impact Evaluation of the 2011-2012 Boiler Reset Control Pilot Program*	Study is planned but not yet submitted for approval	Yes
Commercial & Industrial Studies		
Small C&I Billing Analysis	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	Yes
Large C&I - Potential Study to assess the mid-sized C&I customers	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	Yes
Large C&I - 2011 Custom Gas Impact Evaluation	Study is planned but not yet submitted for approval	Yes
Large C&I - 2011 Prescriptive Gas Impact Evaluation	Study is planned but not yet submitted for approval	Yes
Large C&I - C&I Customer Profile	Study is planned but not yet submitted for approval	Yes
Large C&I - Existing Building Market Characterization	Study is planned but not yet submitted for approval	Yes
Large C&I - Whole System Approach Assessment	Study is planned but not yet submitted for approval	Yes
Large C&I - New Construction Market Characterization	Study is planned but not yet submitted for approval	Yes

Table III.B: Evaluation Studies in Next Annual Report		
Studies	**Docket & Exhibit Approving Planned Evaluation Studies**	**Expected to be Implemented as Approved? (yes/no)**
Large C&I - New Construction Baseline Code Compliance Study*	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	Yes
Special & Cross-Cutting Studies		
Non-Energy Impacts 2011 - C&I*	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	Yes
Education Program Process (Literature Review)*	Study is planned but not yet submitted for approval	Yes
Residential Smart Energy Monitoring Pilot Impact Evaluation (CLC)	Study is pending approval of the 2011 MTM, D.P.U. 10-140 through D.P.U. 10-150	Yes
Community-Based Inititative: Northampton/Pittsfield	Study is planned but not yet submitted for approval	Yes
Umbrella Marketing Post-Campaign Study	Study is planned but not yet submitted for approval	Yes
Job Creation Study*	Study is pending approval of the 2012 MTM, D.P.U. 11-106 through D.P.U. 11-116	Yes
*The PAs anticipate filing these studies with the 2013-15 Three Year Plan		

IV. STATUTORY BUDGET REQUIREMENTS

A. Introduction

The Green Communities Act requires that energy efficiency programs minimize administrative costs, utilize competitive procurement processes, and spend a certain amount on low-income programs. G.L. c. 25 §§ 19(a)-(c).

For each sector, Tables IV.A through IV.C summarize and compare planned and actual program planning and administration ("PP&A") costs, outsourced activities, and budget allocation, respectively.

B. Minimization of Administrative Costs

The most significant factor in the PA approach to minimizing administrative costs in 2011 was the statewide collaborative process, which was used by the Program Administrators to coordinate planning, the adoption of consistent programs and processes, program design, EM&V studies, statewide marketing, regulatory proceedings, and the development and sharing of all best practices. Sharing of these costs, which would otherwise be borne by each Program Administrator individually, resulted in economies of scale that reduced the cost for each Program Administrator. For example, the joint release of many RFPs led to minimization of administrative costs in that the costs for preparation and release of the RFPs were shared by the PAs. The Program Administrators also minimized administrative costs by coordinating energy efficiency program delivery, where appropriate, with other customer service activities such as customer acquisition, key account management and trade ally relationships.

Notwithstanding any appropriate coordination with other customer service departments, it was necessary and appropriate for all Program Administrators to maintain a skilled and dedicated administrative staff in order to ensure successful delivery of programs, compliance with the GCA, timely responses to the directives of the Council, Department, and DOER; and documentation and achievement of substantial savings. The Program Administrators sought to balance the need to minimize administrative costs to the extent prudent with the need to maximize program quality and oversight. Councilors have emphasized the need to devote sufficient administrative resources to successfully implement the aggressive programs called for in the 2010-2012 Three-Year Energy Efficiency Plan.

While the economies of scale and other steps taken by the PAs to minimize costs in 2011 were effective, and administrative costs incurred by the PAs are transparent and are presented in each Program Administrator's narrative and supporting tables (see Appendix B), exact quantification of the minimization of administrative costs is not possible in a meaningful way. This is because the continuous scaling up and evolution of the Program Administrators' energy efficiency plans make it impossible to establish a solid baseline for a comparison. When the variables are constantly (and necessarily) shifting, there is no opportunity to make a meaningful quantitative comparison or to estimate a counterfactual. Further, a direct quantitative comparison would not

be useful because it would only provide a comparison of two points in time; the mandate of the GCA, however, is to seek administrative efficiencies, which is a continuous process that evolves along with energy efficiency planning and programming, whereas costs and administrative efficiency opportunities are always changing. The Program Administrators sought to minimize costs at all available opportunities, and not just from one point in time to another.

Differences between Planned and Actual C&I PP&A expenses were due to lower program costs than originally anticipated.

New England Gas Company

IV. Budget

Table IV.A: Program Planning and Administration Costs

Customer Sector / Program	Planned		Actual		Change from Planned to Actual	
	Value ($)	% of Total Program Costs	Value ($)	% of Total Program Costs	Value	% Change
Residential						
Residential New Construction & Major Renovations	10,792	8%	22,732	28%	11,940	20%
Residential Heating and Water Heating	54,619	17%	22,732	4%	-31,887	-12%
MassSAVE	45,353	38%	43,642	55%	-1,711	17%
Weatherization Program	31,972	12%	22,732	14%	-9,240	2%
Multifamily Retrofit	10,542	13%	22,732	35%	12,190	22%
Behavior/Feedback Program	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Deep Energy Retrofit	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Residential Building Practices and Demonstration Program	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Energy Analysis: Internet Audit Program	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Community Based Pilots	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Workforce Development	1,600	100%	0	#DIV/0!	-1,600	#DIV/0!
Statewide Marketing & Education	0	0%	0	0	0	0
EEAC Consultants	2,766	100%	5,309	100%	2,543	0%
DOER Assessment	6,223	100%	11,074	100%	4,851	0%
Sponsorships & Subscriptions	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Residential Total	**163,867**	**17%**	**150,953**	**16%**	**-12,914**	**-1%**
Low-Income						
Low-Income Single Family Retrofit	21,586	11%	38,183	16%	16,597	5%
Low-Income Multi Family Retrofit	21,586	11%	38,182	44%	16,596	33%
Statewide Marketing & Education	0	0%	0	0%	0	0%
Low-Income Energy Affordability Network Funding	0	0%	0	0%	0	0%
DOER Assessment	3,113	58%	5,537	100%	2,424	42%
Low-Income Total	**46,285**	**11%**	**81,902**	**24%**	**35,617**	**13%**
Commercial & Industrial						
C&I New Construction & Major Renovation	144,662	34%	31,752	30%	-112,910	-4%
C&I Retrofit	38,932	42%	31,752	20%	-7,180	-22%
C&I Direct Install	11,974	28%	31,752	53%	19,778	25%
Workforce Development	1,811	100%	0	#DIV/0!	-1,811	#DIV/0!
Business Energy Analyzer	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Deep Energy Retrofit	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
Statewide Marketing & Education	0	0%	0	0%	0	0%
EEAC Consultants	2,766	100%	1,384	100%	-1,382	0%
DOER Assessment	6,223	100%	11,074	100%	4,851	0%
Sponsorships & Subscriptions	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!
C&I Total	**206,368**	**35%**	**107,714**	**31%**	**-98,654**	**-4%**
GRAND TOTAL	**416,520**	**$0**	**340,569**	**$0**	**-75,951**	**0%**

C. Competitive Procurement

New England Gas Company

IV. Budget

Table IV.B: Outsourced & Competitively Procured Services

Customer Sector	In-House Activities		Outsourced Activities						TOTAL Activities
			Competitively Procured		Non-Competitively Procured		Total Outsourced Activities		
	$	% of Total Activities	$	% of Total Outsourced	$	% of Total Outsourced	$	% of Total Activities	$
Residential									
Planned	$151,309	35%	$191,600	68%	$89,797	32%	$281,397	65%	$432,706
Actual	$137,570	40%	$189,377	90%	$21,258	10%	$210,635	60%	$348,205
% Difference from Planned to Actual		5%		22%		-22%		-5%	
Low-Income									
Planned	$43,172	30%	$11,765	11%	$91,195	89%	$102,960	70%	$146,132
Actual	$76,365	49%	$9,145	12%	$68,974	88%	$78,119	51%	$154,484
% Difference from Planned to Actual		20%		0%		0%		-20%	
Commercial & Industrial									
Planned	$195,568	63%	$77,740	67%	$39,145	33%	$116,885	37%	$312,453
Actual	$95,256	48%	$52,988	52%	$49,757	48%	$102,745	52%	$198,001
% Difference from Planned to Actual		-14%		-15%		15%		14%	
TOTAL									
Planned	$390,049	44%	$281,105	56%	$220,137	44%	$501,242	56%	$891,291
Actual	$309,191	44%	$251,510	64%	$139,989	36%	$391,499	56%	$700,690
% Difference from Planned to Actual		0%		8%		-8%		0%	

The difference between actual versus planned for the Low-Income sector is due to higher administrative expenses than planned, lower sales, technical assistance and training expenses, and lower statewide marketing expenses.

D. Low-Income Spending

New England Gas Company
IV. Budget

Table IV.C: Customer Sector Budget Allocation

Customer Sector	Planned		Actual		Change from Planned to Actual	
	Total Program Costs	% of Total Program Costs	Total Program Costs	% of Total Program Costs	Value	% Change
Residential	$969,601	49%	$951,178	58%	-$18,423	9%
Low-Income	$414,898	21%	$340,961	21%	-$73,937	0%
Commercial & Industrial	$589,418	30%	$350,261	21%	-$239,157	-9%
TOTAL	$1,973,917	100%	$1,642,400	100%	-$331,517	0%

The Company met the statutory requirement of spending a minimum of 20% of the amount expended for energy efficiency programs towards the Low- Income program.

V. PERFORMANCE INCENTIVES

The performance incentive mechanism includes three components: the Savings Mechanism, the Value Mechanism, and other Performance Metrics. The Savings Mechanism provides an incentive for achieving dollar benefits from energy efficiency program efforts at or above threshold levels. The Value Mechanism provides an incentive for achieving net benefits equal to or in excess of the threshold level of performance. Performance metrics establish a focus on specified program outcomes or plan development, with each metric stating the specific requirements for reaching each level of the metric. Table V summarizes the performance incentives earned by the Company by component for its successful delivery of energy efficiency programs in 2011.

New England Gas Company

V. Performance Incentives

Table V: Performance Incentives Summary

Incentive Components	Threshold	Design	Exemplary	Actual Incentive
Savings Mechanism	27,992	37,323	46,654	31,772
Value Mechanism	17,690	23,586	29,483	20,843
Performance Metrics	18,532	24,709	30,886	13,535
Total Incentive (before-tax)	64,214	85,618	107,023	66,150
Total Incentive (after-tax)	39,026	52,034	65,043	40,203

NOTES:

1. Applied Corporate tax rate of 0.39225

The planned values referenced in the Performance Incentives Summary Table above were originally filed in the performance incentives model set forth at Attachment B to the Memorandum of Agreement filed with the Department on April 15, 2011 in New England Gas Company, D.P.U. 10-143 ("2011 MOA"). The tax rate used to calculate the after-tax total incentive is 0.39225.

All supporting documentation for each performance incentive component, including detailed information one the Company's clear and distinct role in achieving the performance metrics, can be found in Appendix D. The Company applied the 25 percent EM&V impact bandwidth to the savings and/or value mechanisms, as shown on Attachment D-1.

For the Savings and Value components of the performance incentive, the Company calculated its earned performance incentive in accordance with the incentive mechanism included in the 2011 MOA, using the post-evaluation benefits and taking into account the 25 percent EM&V impact bandwidth. The Company achieved 104% of its planned benefits and 110% of its planned net benefits at the portfolio level, surpassing the 75% threshold required in order to earn both the savings and value mechanisms of the performance incentive. Using evaluated results (subject to the +/- 25 percent impact bandwidth), the Company calculated the lifetime benefits and net benefits that each program achieved. The benefits were multiplied by the savings payout rate of $0.0060939 and the net benefits were multiplied by the value payout rate of $0.0063946 per the 2011 MOA. Although performance under both the Savings and Value Mechanisms is assessed at the portfolio level, this calculation was done at the sector level, as shown in Appendix D, to

facilitate the allocation of earned performance incentives in the cost-effectiveness calculations. The incentive dollars earned from performance metrics were allocated to sectors consistent with the allocation presented in the 2011 MOA. A model illustrating the calculation of the performance incentives in accordance with this methodology is included in Attachment D-1.

A summary of the Company's performance for each Performance Metric is set forth below. Achievement of performance metrics relate to the metrics filed in Attachment B to the 2011 MOA. Additional supporting documentation related to performance metrics is included at Appendix D, Attachment D-2.

a. RESIDENTIAL

METRIC NUMBER AND NAME	ACHIEVEMENT LEVEL	NOTES
1. MassSAVE/Weatherization: Deeper Savings {Electric & Gas} – Statewide	Design-100%	See Attachment D-2(a)
2. Community Outreach {Electric & Gas} – Statewide	Did Not Achieve	N/A

b. LOW-INCOME

METRIC NUMBER AND NAME	ACHIEVEMENT LEVEL	NOTES
1. Hard to Reach Landlords {Electric & Gas} – Statewide	Threshold-75%	See Attachment D-2(b)
2. Best Practices Program Strategies Research & Technical Review of Potential New Measures	Exemplary-125%	See Attachment D-2(b)
3. Multi-family Building Inventory	Threshold-75%	See Attachment D-2(b)

c. COMMERCIAL & INDUSTRIAL

METRIC NUMBER AND NAME	ACHIEVEMENT LEVEL	NOTES
C&I #1 Retrofit -- Depth of savings	Did Not Achieve	No participants
C&I #2 New Construction -- Comprehensiveness and depth of savings	Did Not Achieve	No participants
C&I #3 Direct Install Electric and Gas Integration	Threshold- 75%	9% See Attachment D-2(c)
C&I #4 Combined Heat & Power	Did Not Achieve	N/A

d. ALL SECTOR

METRIC NUMBER AND NAME	ACHIEVEMENT LEVEL	NOTES
1. "Other financing capital" metric	Did Not Achieve	N/A
2. Cost Efficiency of Program Expenditures	Design	96% See Attachment D-2(d)

Please see Attachments D-2(a), D-2(b), D-2(c), and D-2(d).

VI. AUDITS

The Company has not had an audit specifically related to its energy efficiency activities during the last five years (2007-2011).

VII. APPENDICES

APPENDIX A: Glossary of Defined Terms

1. Types of Costs in each Budget Category

Please see the following descriptions of budget cost categories. The categories described below are generally consistent among all Program Administrators, with the exception of the categorization of employee salaries and related expenses. This difference is due to different historical practices and differing staff sizes and staff assignments, as well as internal tracking mechanisms. The Company has accounted for all employee labor costs and related expenses in the PP&A category.

The Company and the other electric and gas Program Administrators have worked together to develop consistent cost categories to the extent that they are efficient and appropriate for each Program Administrator, and the Program Administrators will continue to strive for consistency in this area.

Costs that cannot be assigned directly to a program are allocated among relevant programs on an appropriate basis and tracked accordingly.

Planning and Administration include costs associated with developing program plans, including market transformation plans, research and development (excluding R&D assigned to Evaluation & Market Research), and day-to-day program administration, including labor, benefits, expenses, materials, supplies, and overhead costs, and any regulatory costs associated with energy efficiency activities. Also includes costs for energy efficiency services contracted to non-affiliated companies such as outside consultants used to prepare plans, screen programs, improve databases, and perform legal services.

Marketing and Advertising includes costs to advertise, through television, radio, billboards, brochures, telemarketing, web-sites, and mailings, the existence and availability of energy efficiency programs or technologies, and to induce customers or trade allies to participate in energy efficiency programs.

Participant Incentives are funds paid by the reporting Program Administrator to customers or trade allies as rebates or in other forms.

Sales, Technical Assistance & Training are administration, sales technical assistance and training costs to motivate (1) customers to install energy efficiency products and services, (2) retailers to stock energy efficiency products, (3) trade professionals to offer energy efficiency services, (4) manufactures to make energy efficiency products; and (5) vendor services and supplies that demonstrate benefits of energy efficiency.

Evaluation and Market Research include costs associated with evaluation activities, including costs related to cost-effectiveness evaluation, market research (e.g., baseline studies, market assessments, surveys), impact and process evaluation reports, tracking and reporting program

inputs and outputs, funding studies, and other costs clearly associated with evaluating the program.

Performance Incentives are funds earned by a Program Administrator based on its performance in implementing its Energy Efficiency programs and shall be determined pursuant to § 3.6 of the Department's Energy Efficiency Guidelines.

2. Glossary of Terms and Abbreviations

GLOSSARY OF TERMS AND ABBREVIATIONS	
AB	Advanced Buildings
ABCD	Action for Boston Community Development
Act	An Act Relative to Green Communities, Chapter 169 of the Acts of 2008. Signed into law on July 2, 2008.
AE	Account Executive
AESC	Avoided Energy Supply Component
AESP	Association of Energy Service Professionals
AFUE	Annual Fuel Utilization Efficiency
AIA	American Institute of Architects
ARRA	American Recovery and Reinvestment Act
BCR	Benefit/Cost Ratio
BPI	Building Performance Institute
C&F	Chain & Franchise
C&I	Commercial and Industrial
CAP	Community Action Program
CDA	Comprehensive Design Approach
CFL	Compact Fluorescent Light
CHP	Combined Heat and Power
CMI	Community Mobilization Initiatives
Consultants	Consultants employed by the Energy Efficiency Advisory Council
Council	Energy Efficiency Advisory Council
Department	Massachusetts Department of Public Utilities
DER	Deep Energy Retrofit
DHCD	Massachusetts Department of Housing and Community Development
DOE	Department of Energy
DOER	Massachusetts Department of Energy Resources
DPU	Massachusetts Department of Public Utilities
DSM	Demand-Side Management
ECM	Electronically Commutated Motor
EEAC	Energy Efficiency Advisory Council
EM&V	Evaluation, Monitoring, and Verification

ENERGY STAR®	Brand name for the voluntary energy efficiency labeling initiative sponsored by the U.S. Environmental Protection Agency and Department of Energy.
EPA	U.S. Environmental Protection Agency
FR	Free Rider
Free Riders	Customers who participate in an energy efficiency program but would have installed the same measure(s) on their own if the program had not been available.
Free-Ridership Rate	The percent of savings attributable to Free Riders.
Gas and Electric Orders	Orders of the Department dated January 28, 2010 in D.P.U. 09-116 through 09-127 approving the Program Administrators' Three-Year Plans
GHGs	Greenhouse Gas Emissions
Green Communities Act	An Act Relative to Green Communities, Chapter 169 of the Acts of 2008. Signed into law on July 2, 2008.
HEHE	High Efficiency Heating and Water Heating
HERS	Home Energy Rating System
HPCs	Home Performance Contractors
HVAC	Heating, Ventilation, and Air Conditioning
IECC	International Energy Conservation Code
Impact Factor	Generic term for persistence, realization rates, in-service rates, non-coincident connected demand factors, etc., developed during the evaluation of energy efficiency programs and used to calculate net savings.
ISO-NE	Independent System Operation – New England
JMC	Joint Management Committee of utility and non-utility parties that manages the ENERGY STAR® Homes Program.
LEAN	The Low-Income Energy Affordability Network
LED	Light Emitting Diode
LBR	Lost Base Revenue (For companies not operating under decoupled rate structure, these costs account for revenues not collected by the Company's distribution business as a result of the energy efficiency undertaken during the program year)
LCIEC	Large Commercial & Industrial Evaluation Contractor
Lifetime	The expected length of time, in years, that an installed measure will be in service and producing savings.
Measure	Specific technology or practice that produces energy and/or demand savings for which the Company provides financial incentives.
MMI	Multi-Family Market Integrator
MTM	Mid-Term Modification

NBI	National Building Institute
NEEP	Northeast Energy Efficiency Partnerships
NEI	Non-Energy Impact
Net to Gross Ratio or NTGR	A factor representing net program savings divided by gross program savings that is applied to gross program impacts to convert them into net program load impacts.
Network	Low-Income Weatherization and Fuel Assistance Program Network
NPS	Non Participant Spillover
NTG	Net-to-Gross
PAs or Program Administrators	Utilities and municipal aggregators that offer energy efficiency programs.
Participant Cost	The total cost of a project or measure less the customer incentive.
Performance Incentive (PI)	Compensation for the Company's successful execution of the energy efficiency programs during the program year as determined by Massachusetts Department of Public Utilities.
Plan	Three-Year Energy Efficiency Plan approved by the Department by its Orders, dated January 28, 2010, in dockets D.P.U. 09-121 to D.P.U. 09-128 and D.P.U. 09-116 to D.P.U. 09-120.
PP&A	Program Planning and Administration
QC	Quality Control
RCS	Residential Conservation Services
RFP	Request For Proposal
RGGI	Regional Greenhouse Gas Initiative
RMC	Residential Management Committee
SO	Participant Spillover
Spillover	Additional energy efficient equipment installed by customers that was influenced by the Company's sponsored program, but without direct financial or technical assistance from the program. Spillover is separated into Participant and Non-participant factors. Non-participating customers may be influenced by product availability, publicity, education and other factors that are affected by the program.
Spillover Rate	Estimate of energy savings attributable to spillover effects expressed as a percent of savings installed by participants through an energy efficiency program.
T&D	Transmission and Distribution
Term	Three-year term of the energy efficiency plan

Three-Year Plans	Three-Year Energy Efficiency Plans approved by the Department by its Orders, dated January 28, 2010, in dockets D.P.U. 09-121 to D.P.U. 09-128 and D.P.U. 09-116 to D.P.U. 09-120.
TRC	Total Resource Cost
TRM	Technical Reference Manual
WAP	Weatherization Assistance Program

APPENDIX B: Cost-Effectiveness Supporting Tables and Documentation

1. D.P.U. 08-50-C Supporting Tables

Please see the tables attached hereto as Attachment B-1.

New England Gas Company
IV.C. Gas PA Budgets
1. Summary Table

Program Administrator Budget, Planned (1)								
Customer Sector / Program	Program Costs							
	Program Planning and Administration	Marketing and Advertising	Participant Incentive	Sales, Technical Assistance & Training	Evaluation and Market Research	Total Program Costs	Performance Incentive (2)	Total PA Budget (3)
Residential (total)	$163,867	$53,436	$536,895	$175,969	$39,434	$969,601	$32,438	$1,002,039
Residential New Construction & Major Renovations	$10,792	$5,925	$65,200	$40,521	$11,420	$133,858	$1,557	$135,415
Residential Heating and Water Heating	$54,619	$5,925	$231,415	$21,948	$12,536	$326,443	$12,281	$338,724
MassSAVE	$45,353	$9,000	$0	$62,050	$3,500	$119,903	$0	$119,903
Weatherization Program	$31,972	$4,528	$184,688	$39,226	$9,154	$269,568	$13,377	$282,945
Multifamily Retrofit	$10,542	$1,397	$55,592	$12,224	$2,824	$82,579	$5,223	$87,802
Behavior/Feedback Program	$0	$0	$0	$0	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0	$0	$0	$0	$0
Residential Building Practices and Demonstration Program	$0	$0	$0	$0	$0	$0	$0	$0
Energy Analysis: Internet Audit Program	$0	$0	$0	$0	$0	$0	$0	$0
Community Based Pilots	$0	$0	$0	$0	$0	$0	$0	$0
Workforce Development	$1,600	$0	$0	$0	$0	$1,600	$0	$1,600
Statewide Marketing & Education	$0	$26,661	$0	$0	$0	$26,661	$0	$26,661
EEAC Consultants	$2,766	$0	$0	$0	$0	$2,766	$0	$2,766
DOER Assessment	$6,223	$0	$0	$0	$0	$6,223	$0	$6,223
Sponsorships & Subscriptions	$0	$0	$0	$0	$0	$0	$0	$0
Low Income (total)	$46,285	$19,609	$268,766	$64,400	$15,838	$414,898	$17,167	$432,065
Low-Income Single Family Retrofit	$21,586	$3,922	$134,383	$29,512	$7,919	$197,322	$9,057	$206,379
Low-Income Multi Family Retrofit	$21,586	$3,922	$134,383	$29,512	$7,919	$197,322	$8,110	$205,432
Statewide Marketing & Education	$0	$11,765	$0	$0	$0	$11,765	$0	$11,765
Low-Income Energy Affordability Network Funding	$0	$0	$0	$5,376	$0	$5,376	$0	$5,376
DOER Assessment	$3,113	$0	$0	$0	$0	$3,113	$0	$3,113
Commercial & Industrial (total)	$206,368	$26,900	$276,965	$57,500	$21,685	$589,418	$36,016	$625,434
C&I New Construction & Major Renovation	$144,662	$3,813	$222,830	$48,469	$8,639	$428,413	$22,570	$450,983
C&I Retrofit	$38,932	$3,813	$33,435	$9,031	$6,758	$91,969	$8,917	$100,886
C&I Direct Install	$11,974	$3,114	$20,700	$0	$6,288	$42,076	$4,529	$46,605
Workforce Development	$1,811	$0	$0	$0	$0	$1,811	$0	$1,811
Business Energy Analyzer	$0	$0	$0	$0	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0	$0	$0	$0	$0
Statewide Marketing & Education	$0	$16,160	$0	$0	$0	$16,160	$0	$16,160
EEAC Consultants	$2,766	$0	$0	$0	$0	$2,766	$0	$2,766
DOER Assessment	$6,223	$0	$0	$0	$0	$6,223	$0	$6,223
Sponsorships & Subscriptions	$0	$0	$0	$0	$0	$0	$0	$0
GRAND TOTAL	**$416,520**	**$99,945**	**$1,082,626**	**$297,869**	**$76,957**	**$1,973,917**	**$85,621**	**$2,059,538**

Program Administrator Budget, Actual (1)								
Program	Program Costs							
	Program Planning and Administration	Marketing and Advertising	Participant Incentive	Sales, Technical Assistance & Training	Evaluation and Market Research	Total Program Costs	Performance Incentive (2)	Total PA Budget (3)
Residential (total)	$150,953	$38,313	$605,967	$124,506	$31,439	$951,178	$31,411	$982,589
Residential New Construction & Major Renovations	$22,732	$5,625	$23,050	$21,037	$7,937	$80,381	$768	$81,149
Residential Heating and Water Heating	$22,732	$5,625	$474,050	$12,900	$7,834	$523,141	$18,456	$541,597
MassSAVE	$43,642	$100	$0	$36,223	$0	$79,965	$0	$79,965
Weatherization Program	$22,732	$5,625	$83,026	$45,878	$7,834	$165,095	$11,101	$176,196
Multifamily Retrofit	$22,732	$0	$25,841	$8,468	$7,834	$64,875	$1,086	$65,961
Behavior/Feedback Program	$0	$0	$0	$0	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0	$0	$0	$0	$0
Residential Building Practices and Demonstration Program	$0	$0	$0	$0	$0	$0	$0	$0
Energy Analysis: Internet Audit Program	$0	$0	$0	$0	$0	$0	$0	$0
Community Based Pilots	$0	$0	$0	$0	$0	$0	$0	$0
Workforce Development	$0	$0	$0	$0	$0	$0	$0	$0
Statewide Marketing & Education	$0	$21,338	$0	$0	$0	$21,338	$0	$21,338
EEAC Consultants	$5,309	$0	$0	$0	$0	$5,309	$0	$5,309
DOER Assessment	$11,074	$0	$0	$0	$0	$11,074	$0	$11,074
Sponsorships & Subscriptions	$0	$0	$0	$0	$0	$0	$0	$0
Low Income (total)	$81,902	$9,145	$186,477	$42,633	$20,804	$340,961	$10,266	$351,227
Low-Income Single Family Retrofit	$38,183	$0	$154,719	$31,712	$10,402	$235,016	$3,675	$238,691
Low-Income Multi Family Retrofit	$38,182	$0	$31,758	$6,411	$10,402	$86,753	$6,591	$93,344
Statewide Marketing & Education	$0	$9,145	$0	$0	$0	$9,145	$0	$9,145
Low-Income Energy Affordability Network Funding	$0	$0	$0	$4,510	$0	$4,510	$0	$4,510
DOER Assessment	$5,537	$0	$0	$0	$0	$5,537	$0	$5,537
Commercial & Industrial (total)	$107,714	$30,846	$152,260	$21,494	$37,947	$350,261	$24,473	$374,734
C&I New Construction & Major Renovation	$31,752	$4,806	$49,965	$6,802	$12,649	$105,974	$3,427	$109,401
C&I Retrofit	$31,752	$4,806	$102,295	$4,187	$12,649	$155,689	$19,770	$175,459
C&I Direct Install	$31,752	$4,806	$0	$10,505	$12,649	$59,712	$1,276	$60,988
Workforce Development	$0	$0	$0	$0	$0	$0	$0	$0
Business Energy Analyzer	$0	$0	$0	$0	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0	$0	$0	$0	$0
Statewide Marketing & Education	$0	$16,428	$0	$0	$0	$16,428	$0	$16,428
EEAC Consultants	$1,384	$0	$0	$0	$0	$1,384	$0	$1,384
DOER Assessment	$11,074	$0	$0	$0	$0	$11,074	$0	$11,074
Sponsorships & Subscriptions	$0	$0	$0	$0	$0	$0	$0	$0
GRAND TOTAL	**$340,569**	**$78,304**	**$944,704**	**$188,633**	**$90,190**	**$1,642,400**	**$66,150**	**$1,708,550**

Program Administrator Budget, Percent Variance (1)								
Program	Program Costs							
	Program Planning and Administration	Marketing and Advertising	Participant Incentive	Sales, Technical Assistance & Training	Evaluation and Market Research	Total Program Costs	Performance Incentive (2)	Total PA Costs (3)
Residential (total)	-8%	-28%	13%	-29%	-20%	-2%	-3%	-2%
Residential New Construction & Major Renovations	111%	-5%	-65%	-48%	-30%	-40%	-51%	-40%
Residential Heating and Water Heating	-58%	-5%	105%	-41%	-38%	60%	50%	60%
MassSAVE	-4%	-99%	0%	-42%	-100%	-33%	0%	-33%
Weatherization Program	-29%	24%	-55%	17%	-14%	-39%	-17%	-38%
Multifamily Retrofit	116%	-100%	-54%	-31%	177%	-21%	-79%	-25%
Behavior/Feedback Program	0%	0%	0%	0%	0%	0%	0%	0%
Deep Energy Retrofit	0%	0%	0%	0%	0%	0%	0%	0%
Residential Building Practices and Demonstration Program	0%	0%	0%	0%	0%	0%	0%	0%
Energy Analysis: Internet Audit Program	0%	0%	0%	0%	0%	0%	0%	0%
Community Based Pilots	0%	0%	0%	0%	0%	0%	0%	0%
Workforce Development	-100%	0%	0%	0%	0%	-100%	0%	-100%
Statewide Marketing & Education	0%	-20%	0%	0%	0%	-20%	0%	-20%
EEAC Consultants	92%	0%	0%	0%	0%	92%	0%	92%
DOER Assessment	78%	0%	0%	0%	0%	78%	0%	78%
Sponsorships & Subscriptions	0%	0%	0%	0%	0%	0%	0%	0%
Low Income (total)	77%	-53%	-31%	-34%	31%	-18%	-40%	-19%
Low-Income Single Family Retrofit	77%	-100%	15%	7%	31%	19%	-59%	16%
Low-Income Multi Family Retrofit	77%	-100%	-76%	-78%	31%	-56%	-19%	-55%
Statewide Marketing & Education	0%	-22%	0%	0%	0%	-22%	0%	-22%
Low-Income Energy Affordability Network Funding	0%	0%	0%	-16%	0%	-16%	0%	-16%
DOER Assessment	78%	0%	0%	0%	0%	78%	0%	78%
Commercial & Industrial (total)	-48%	15%	-45%	-63%	75%	-41%	-32%	-40%
C&I New Construction & Major Renovation	-78%	26%	-78%	-86%	46%	-75%	-85%	-76%
C&I Retrofit	-18%	26%	206%	-54%	87%	69%	122%	74%
C&I Direct Install	165%	54%	-100%	0%	101%	42%	-72%	31%
Workforce Development	-100%	0%	0%	0%	0%	-100%	0%	-100%
Business Energy Analyzer	0%	0%	0%	0%	0%	0%	0%	0%
Deep Energy Retrofit	0%	0%	0%	0%	0%	0%	0%	0%
Statewide Marketing & Education	0%	2%	0%	0%	0%	2%	0%	2%
EEAC Consultants	-50%	0%	0%	0%	0%	-50%	0%	-50%
DOER Assessment	78%	0%	0%	0%	0%	78%	0%	78%
Sponsorships & Subscriptions	0%	0%	0%	0%	0%	0%	0%	0%
GRAND TOTAL	-18%	-22%	-13%	-37%	17%	-17%	-23%	-17%

Notes:

(1) All parties would refer to common definitions (in Appendix) for allocation of costs.

(2) Values listed in this table represent pre-tax performance incentive amounts. See Section IV.H. Shareholder Performance Incentives for supporting calculations.

(3) The Total PA Budget is the sum of Total Program Costs and Performance Incentives.

New England Gas Company
IV.D. Cost Effectiveness
1. Summary Table

Total Resource Cost Test, Planned				
Sector	**B/C Ratio**	**Net Benefits**	**Benefits**	**Costs**
Residential	**2.08**	**$1,286,636**	**$2,481,047**	**$1,194,411**
Residential New Construction & Major Renovations	1.02	$4,927	$260,113	$255,186
Residential Heating and Water Heating	2.92	$647,159	$983,958	$336,799
MassSAVE	0.00	-$119,903	$0	$119,903
Weatherization Program	2.60	$510,471	$829,003	$318,532
Multifamily Retrofit	3.22	$281,232	$407,973	$126,741
Behavior/Feedback Program	#DIV/0!	$0	$0	$0
Deep Energy Retrofit	#DIV/0!	$0	$0	$0
Residential Building Practices and Demonstration Program	#DIV/0!	$0	$0	$0
Energy Analysis: Internet Audit Program	#DIV/0!	$0	$0	$0
Community Based Pilots	#DIV/0!	$0	$0	$0
Workforce Development	0.00	-$1,600	$0	$1,600
Statewide Marketing & Education	0.00	-$26,661	$0	$26,661
EEAC Consultants	0.00	-$2,766	$0	$2,766
DOER Assessment	0.00	-$6,223	$0	$6,223
Sponsorships & Subscriptions	#DIV/0!	$0	$0	$0
Low Income	**2.41**	**$603,707**	**$1,032,959**	**$429,252**
Low-Income Single Family Retrofit	2.70	$340,211	$540,349	$200,138
Low-Income MuiltiFamily Retrofit	2.36	$283,750	$492,610	$208,860
Statewide Marketing & Education	0.00	-$11,765	$0	$11,765
Low-Income Energy Affordability Network Funding	0.00	-$5,376	$0	$5,376
DOER Assessment	0.00	-$3,113	$0	$3,113
Commercial & Industrial	**2.91**	**$1,712,494**	**$2,610,670**	**$898,176**
C&I New Construction & Major Renovation	2.81	$1,227,643	$1,904,658	$677,015
C&I Retrofit	3.28	$330,715	$475,954	$145,239
C&I Direct Install	4.70	$181,096	$230,058	$48,962
Workforce Development	0.00	-$1,811	$0	$1,811
Business Energy Analyzer	#DIV/0!	$0	$0	$0
Deep Energy Retrofit	#DIV/0!	$0	$0	$0
Statewide Marketing & Education	0.00	-$16,160	$0	$16,160
EEAC Consultants	0.00	-$2,766	$0	$2,766
DOER Assessment	0.00	-$6,223	$0	$6,223
Sponsorships & Subscriptions	#DIV/0!	$0	$0	$0
GRAND TOTAL	**2.43**	**$3,602,837**	**$6,124,676**	**$2,521,839**

Total Resource Cost Test, Evaluated				
Sector	**B/C Ratio**	**Net Benefits**	**Benefits**	**Costs**
Residential	**2.59**	**$1,804,038**	**$2,935,646**	**$1,131,608**
Residential New Construction & Major Renovations	1.10	$13,468	$142,967	$129,499
Residential Heating and Water Heating	3.16	$1,293,023	$1,890,558	$597,535
MassSAVE	0.00	-$79,965	$0	$79,965
Weatherization Program	3.84	$578,553	$782,424	$203,871
Multifamily Retrofit	1.44	$36,680	$119,697	$83,017
Behavior/Feedback Program	#DIV/0!	$0	$0	$0
Deep Energy Retrofit	#DIV/0!	$0	$0	$0
Residential Building Practices and Demonstration Program	#DIV/0!	$0	$0	$0
Energy Analysis: Internet Audit Program	#DIV/0!	$0	$0	$0
Community Based Pilots	#DIV/0!	$0	$0	$0
Workforce Development	#DIV/0!	$0	$0	$0
Statewide Marketing & Education	0.00	-$21,338	$0	$21,338
EEAC Consultants	0.00	-$5,309	$0	$5,309
DOER Assessment	0.00	-$11,074	$0	$11,074
Sponsorships & Subscriptions	#DIV/0!	$0	$0	$0
Low Income	**2.00**	**$349,868**	**$701,095**	**$351,227**
Low-Income Single Family Retrofit	1.29	$70,144	$308,835	$238,691
Low-Income MuiltiFamily Retrofit	4.20	$298,916	$392,260	$93,344
Statewide Marketing & Education	0.00	-$9,145	$0	$9,145
Low-Income Energy Affordability Network Funding	0.00	-$4,510	$0	$4,510
DOER Assessment	0.00	-$5,537	$0	$5,537
Commercial & Industrial	**2.49**	**$692,576**	**$1,157,565**	**$464,989**
C&I New Construction & Major Renovation	1.63	$90,629	$234,976	$144,347
C&I Retrofit	3.91	$672,199	$902,967	$230,768
C&I Direct Install	0.32	-$41,366	$19,622	$60,988
Workforce Development	#DIV/0!	$0	$0	$0
Business Energy Analyzer	#DIV/0!	$0	$0	$0
Deep Energy Retrofit	#DIV/0!	$0	$0	$0
Statewide Marketing & Education	0.00	-$16,428	$0	$16,428
EEAC Consultants	0.00	-$1,384	$0	$1,384
DOER Assessment	0.00	-$11,074	$0	$11,074
Sponsorships & Subscriptions	#DIV/0!	$0	$0	$0
GRAND TOTAL	**2.46**	**$2,846,482**	**$4,794,306**	**$1,947,824**

Total Resource Cost Test, Percent Variance				
Sector	**B/C Ratio**	**Net Benefits**	**Benefits**	**Costs**
Residential	**25%**	**$0**	**$0**	**$0**
Residential New Construction & Major Renovations	8%	173%	-45%	-49%
Residential Heating and Water Heating	8%	100%	92%	77%
MassSAVE	0%	-33%	0%	-33%
Weatherization Program	47%	13%	-6%	-36%
Multifamily Retrofit	-55%	-87%	-71%	-34%
Behavior/Feedback Program	#DIV/0!	0%	0%	0%
Deep Energy Retrofit	#DIV/0!	0%	0%	0%
Residential Building Practices and Demonstration Program	#DIV/0!	0%	0%	0%
Energy Analysis: Internet Audit Program	#DIV/0!	0%	0%	0%
Community Based Pilots	#DIV/0!	0%	0%	0%
Workforce Development	0%	-100%	0%	-100%
Statewide Marketing & Education	0%	-20%	0%	-20%
EEAC Consultants	0%	92%	0%	92%
DOER Assessment	0%	78%	0%	78%
Sponsorships & Subscriptions	#DIV/0!	0%	0%	0%
Low Income	**-17%**	**-42%**	**-32%**	**-18%**
Low-Income Single Family Retrofit	-52%	-79%	-43%	19%
Low-Income MuiltiFamily Retrofit	78%	5%	-20%	-55%
Statewide Marketing & Education	0%	-22%	0%	-22%
Low-Income Energy Affordability Network Funding	0%	-16%	0%	-16%
DOER Assessment	0%	78%	0%	78%
Commercial & Industrial	**-14%**	**-60%**	**-56%**	**-48%**
C&I New Construction & Major Renovation	-42%	-93%	-88%	-79%
C&I Retrofit	19%	103%	90%	59%
C&I Direct Install	-93%	-123%	-91%	25%
Workforce Development	0%	-100%	0%	-100%
Business Energy Analyzer	#DIV/0!	0%	0%	0%
Deep Energy Retrofit	#DIV/0!	0%	0%	0%
Statewide Marketing & Education	0%	2%	0%	2%
EEAC Consultants	0%	-50%	0%	-50%
DOER Assessment	0%	78%	0%	78%
Sponsorships & Subscriptions	#DIV/0!	0%	0%	0%
GRAND TOTAL	**1%**	**-21%**	**-22%**	**-23%**

New England Gas Company
IV.D. Cost Effectiveness
2.1. Cost Summary Table

TRC Costs Summary, Planned

Programs	Program Costs (1)	Performance Incentive (2)	Participant Costs	Total Resource Costs (3)
Residential	**$969,601**	**$32,438**	**$192,372**	**$1,194,411**
Residential New Construction & Major Renovations	$133,858	$1,557	$119,771	$255,186
Residential Heating and Water Heating	$326,443	$12,281	-$1,925	$336,799
MassSAVE	$119,903	$0	$0	$119,903
Weatherization Program	$269,568	$13,377	$35,587	$318,532
Multifamily Retrofit	$82,579	$5,223	$38,939	$126,741
Behavior/Feedback Program	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0
Residential Building Practices and Demonstration Program	$0	$0	$0	$0
Energy Analysis: Internet Audit Program	$0	$0	$0	$0
Community Based Pilots	$0	$0	$0	$0
Workforce Development	$1,600	$0	$0	$1,600
Statewide Marketing & Education	$26,661	$0	$0	$26,661
EEAC Consultants	$2,766	$0	$0	$2,766
DOER Assessment	$6,223	$0	$0	$6,223
Sponsorships & Subscriptions	$0	$0	$0	$0
Low Income	**$414,898**	**$17,167**	**-$2,813**	**$429,252**
Low-Income Single Family Retrofit	$197,322	$9,057	-$6,241	$200,138
Low-Income MuiltiFamily Retrofit	$197,322	$8,110	$3,428	$208,860
Statewide Marketing & Education	$11,765	$0	$0	$11,765
Low-Income Energy Affordability Network Funding	$5,376	$0	$0	$5,376
DOER Assessment	$3,113	$0	$0	$3,113
Commercial & Industrial	**$589,418**	**$36,016**	**$272,742**	**$898,176**
C&I New Construction & Major Renovation	$428,413	$22,570	$226,032	$677,015
C&I Retrofit	$91,969	$8,917	$44,353	$145,239
C&I Direct Install	$42,076	$4,529	$2,357	$48,962
Workforce Development	$1,811	$0	$0	$1,811
Business Energy Analyzer	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0
Statewide Marketing & Education	$16,160	$0	$0	$16,160
EEAC Consultants	$2,766	$0	$0	$2,766
DOER Assessment	$6,223	$0	$0	$6,223
Sponsorships & Subscriptions	$0	$0	$0	$0
GRAND TOTAL	**$1,973,917**	**$85,621**	**$462,301**	**$2,521,839**

TRC Costs Summary, Evaluated

Programs	Program Costs (1)	Performance Incentive (2)	Participant Costs	Total Resource Costs (3)
Residential	**$951,178**	**$31,411**	**$149,019**	**$1,131,608**
Residential New Construction & Major Renovations	$80,381	$768	$48,350	$129,499
Residential Heating and Water Heating	$523,141	$18,456	$55,938	$597,535
MassSAVE	$79,965	$0	$0	$79,965
Weatherization Program	$165,095	$11,101	$27,675	$203,871
Multifamily Retrofit	$64,875	$1,086	$17,056	$83,017
Behavior/Feedback Program	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0
Residential Building Practices and Demonstration Program	$0	$0	$0	$0
Energy Analysis: Internet Audit Program	$0	$0	$0	$0
Community Based Pilots	$0	$0	$0	$0
Workforce Development	$0	$0	$0	$0
Statewide Marketing & Education	$21,338	$0	$0	$21,338
EEAC Consultants	$5,309	$0	$0	$5,309
DOER Assessment	$11,074	$0	$0	$11,074
Sponsorships & Subscriptions	$0	$0	$0	$0
Low Income	**$340,961**	**$10,266**	**$0**	**$351,227**
Low-Income Single Family Retrofit	$235,016	$3,675	$0	$238,691
Low-Income MuiltiFamily Retrofit	$86,753	$6,591	$0	$93,344
Statewide Marketing & Education	$9,145	$0	$0	$9,145
Low-Income Energy Affordability Network Funding	$4,510	$0	$0	$4,510
DOER Assessment	$5,537	$0	$0	$5,537
Commercial & Industrial	**$350,261**	**$24,473**	**$90,255**	**$464,989**
C&I New Construction & Major Renovation	$105,974	$3,427	$34,946	$144,347
C&I Retrofit	$155,689	$19,770	$55,309	$230,768
C&I Direct Install	$59,712	$1,276	$0	$60,988
Workforce Development	$0	$0	$0	$0
Business Energy Analyzer	$0	$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0
Statewide Marketing & Education	$16,428	$0	$0	$16,428
EEAC Consultants	$1,384	$0	$0	$1,384
DOER Assessment	$11,074	$0	$0	$11,074
Sponsorships & Subscriptions	$0	$0	$0	$0
GRAND TOTAL	**$1,642,400**	**$66,150**	**$239,274**	**$1,947,824**

TRC Costs Summary, Percent Variance				
Programs	**Program Costs (1)**	**Performance Incentive (2)**	**Participant Costs**	**Total Resource Costs (3)**
Residential	-2%	-3%	-23%	-5%
Residential New Construction & Major Renovations	-40%	-51%	-60%	-49%
Residential Heating and Water Heating	60%	50%	-3006%	77%
MassSAVE	-33%	0%	0%	-33%
Weatherization Program	-39%	-17%	-22%	-36%
Multifamily Retrofit	-21%	-79%	-56%	-34%
Behavior/Feedback Program	0%	0%	0%	0%
Deep Energy Retrofit	0%	0%	0%	0%
Residential Building Practices and Demonstration Program	0%	0%	0%	0%
Energy Analysis: Internet Audit Program	0%	0%	0%	0%
Community Based Pilots	0%	0%	0%	0%
Workforce Development	-100%	0%	0%	-100%
Statewide Marketing & Education	-20%	0%	0%	-20%
EEAC Consultants	92%	0%	0%	92%
DOER Assessment	78%	0%	0%	78%
Sponsorships & Subscriptions	0%	0%	0%	0%
Low Income	-18%	-40%	-100%	-18%
Low-Income Single Family Retrofit	19%	-59%	0%	19%
Low-Income MuiltiFamily Retrofit	-56%	-19%	0%	-55%
Statewide Marketing & Education	-22%	0%	0%	-22%
Low-Income Energy Affordability Network Funding	-16%	0%	0%	-16%
DOER Assessment	78%	0%	0%	78%
Commercial & Industrial	-41%	-32%	-67%	-48%
C&I New Construction & Major Renovation	-75%	-85%	-85%	-79%
C&I Retrofit	69%	122%	25%	59%
C&I Direct Install	42%	-72%	-100%	25%
Workforce Development	-100%	0%	0%	-100%
Business Energy Analyzer	0%	0%	0%	0%
Deep Energy Retrofit	0%	0%	0%	0%
Statewide Marketing & Education	2%	0%	0%	2%
EEAC Consultants	-50%	0%	0%	-50%
DOER Assessment	78%	0%	0%	78%
Sponsorships & Subscriptions	0%	0%	0%	0%
GRAND TOTAL	-17%	-23%	-48%	-23%

Notes:

(1) Program Costs include Program Planning and Administration, Marketing and Advertising, Program Incentive, Sales, Technical Assistance & Training, Evaluation and Market Research (See Table IV.C.1, Budget Summary)

(2) Values listed in this table represent pre-tax performance incentive amounts. See Section IV.H. Shareholder Performance Incentives for supporting calculations.
(3) This represents the total TRC Test costs, which does not include LBR.

New England Gas Company
IV.D. Cost Effectiveness
3.1. Benefits Summary Table

Gas Benefits, Planned (Lifetime $)

Program	Gas	Electric			Non-Gas Non-Electric									TOTAL TRC Benefits
					Resource									
		Summer Capacity	Winter Capacity	Energy	No. 2 Distillate	No. 4 Fuel Oil	No. 6 Fuel Oil	Propane	Wood	Water	Kerosene	Non-Resource	TOTAL	
Residential	**$2,481,047**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,481,047**
Residential New Construction & Major Renovations	$260,113												$0	$260,113
Residential Heating and Water Heating	$983,958												$0	$983,958
MassSAVE	$0												$0	$0
Weatherization Program	$829,003												$0	$829,003
Multifamily Retrofit	$407,973												$0	$407,973
Behavior/Feedback Program	$0												$0	$0
Deep Energy Retrofit	$0												$0	$0
Residential Building Practices and Demonstration Program	$0												$0	$0
Energy Analysis: Internet Audit Program	$0												$0	$0
Workforce Development	$0												$0	$0
Low Income	**$1,032,959**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,032,959**
Low-Income Single Family Retrofit	$540,349												$0	$540,349
Low-Income MultiFamily Retrofit	$492,610												$0	$492,610
Commercial & Industrial	**$2,610,670**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,610,670**
C&I New Construction & Major Renovation	$1,904,658												$0	$1,904,658
C&I Retrofit	$475,954												$0	$475,954
C&I Direct Install	$230,058												$0	$230,058
Workforce Development	$0												$0	$0
Business Energy Analyzer	$0												$0	$0
Deep Energy Retrofit	$0												$0	$0
GRAND TOTAL	**$6,124,676**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$6,124,676**

Gas Benefits, Evaluated (Lifetime $)

Program	Gas	Electric			Non-Gas Non-Electric									TOTAL TRC Benefits
					Resource									
		Summer Capacity	Winter Capacity	Energy	No. 2 Distillate	No. 4 Fuel Oil	No. 6 Fuel Oil	Propane	Wood	Water	Kerosene	Non-Resource	TOTAL	
Residential	**$2,235,314**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$201**	**$0**	**$700,130**	**$700,331**	**$2,935,645**
Residential New Construction & Major Renovations	$114,769	$0	$0	$0						$201		$27,996	$28,197	$142,966
Residential Heating and Water Heating	$1,377,704	$0	$0	$0						$0		$512,854	$512,854	$1,890,558
MassSAVE	$0	$0	$0	$0						$0		$0	$0	$0
Weatherization Program	$623,676	$0	$0	$0						$0		$158,748	$158,748	$782,424
Multifamily Retrofit	$119,165	$0	$0	$0						$0		$532	$532	$119,697
Behavior/Feedback Program	$0	$0	$0	$0						$0		$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0						$0		$0	$0	$0
Residential Building Practices and Demonstration Program	$0	$0	$0	$0						$0		$0	$0	$0
Energy Analysis: Internet Audit Program	$0	$0	$0	$0						$0		$0	$0	$0
Workforce Development	$0	$0	$0	$0						$0		$0	$0	$0
Low Income	**$501,037**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$200,061**	**$200,061**	**$701,098**
Low-Income Single Family Retrofit	$214,496	$0	$0	$0						$0		$94,342	$94,342	$308,838
Low-Income MultiFamily Retrofit	$286,541	$0	$0	$0						$0		$105,719	$105,719	$392,260
Commercial & Industrial	**$1,157,565**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,157,565**
C&I New Construction & Major Renovation	$234,976	$0	$0	$0						$0		$0	$0	$234,976
C&I Retrofit	$902,967	$0	$0	$0						$0		$0	$0	$902,967
C&I Direct Install	$19,622	$0	$0	$0						$0		$0	$0	$19,622
Workforce Development	$0	$0	$0	$0						$0		$0	$0	$0
Business Energy Analyzer	$0	$0	$0	$0						$0		$0	$0	$0
Deep Energy Retrofit	$0	$0	$0	$0						$0		$0	$0	$0
GRAND TOTAL	**$3,893,916**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$201**	**$0**	**$900,191**	**$900,392**	**$4,794,308**

Gas Benefits, Percent Variance (Lifetime $)

Program	Gas	Electric			Non-Gas Non-Electric									TOTAL TRC Benefits
					Resource									
		Summer Capacity	Winter Capacity	Energy	No. 2 Distillate	No. 4 Fuel Oil	No. 6 Fuel Oil	Propane	Wood	Water	Kerosene	Non-Resource	TOTAL	
Residential	**-10%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**18%**
Residential New Construction & Major Renovations	-56%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-45%
Residential Heating and Water Heating	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	92%
MassSAVE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Weatherization Program	-25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-6%
Multifamily Retrofit	-71%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-71%
Behavior/Feedback Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Deep Energy Retrofit	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Residential Building Practices and Demonstration Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy Analysis: Internet Audit Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Workforce Development	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Low Income	**-51%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**-32%**
Low-Income Single Family Retrofit	-60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-43%
Low-Income MultiFamily Retrofit	-42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-20%
Commercial & Industrial	**-56%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**-56%**
C&I New Construction & Major Renovation	-88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-88%
C&I Retrofit	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	90%
C&I Direct Install	-91%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-91%
Workforce Development	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Business Energy Analyzer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Deep Energy Retrofit	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GRAND TOTAL	**-36%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**-22%**

New England Gas Company
IV.D. Cost Effectiveness
3.2. Savings Summary Table

Gas Savings (Annualized), Planned

Program	# of Participants	Gas Annualized Savings (MMBTU)	Gas Annualized Savings (Therms)	Gas Lifetime Savings (Therms)	Electric			Non-Gas Non-Electric *							
								Resource							
								MMBTU						Gallons	Non-Resource (1)
					Summer Capacity (kW)	Winter Capacity (kW)	Energy (kWh)	No. 2 Distillate	No. 4 Fuel Oil	No. 6 Fuel Oil	Propane	Wood	Kerosene	Water	
Residential	**1,493**	**10,387**	**103,873**	**1,682,749**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Residential New Construction & Major Renovations	36	935	9,348	151,438										0	0
Residential Heating and Water Heating	714	4,879	48,789	790,385											0
MassSAVE	500	-	-	-											
Weatherization Program	198	2,992	29,916	484,641											0
Multifamily Retrofit	45	1,582	15,820	256,285											0
Behavior/Feedback Program		-													
Deep Energy Retrofit		-													
Residential Building Practices and Demonstration Program		-													
Energy Analysis: Internet Audit Program		-													
Community based pilots		-													
Workforce Development		-													
Low Income	**98**	**3,573**	**35,730**	**768,196**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Low-Income Single Family Retrofit	48	1,787	17,865	384,098											0
Low-Income MuiltiFamily Retrofit	50	1,787	17,865	384,098											0
Commercial & Industrial	**701**	**22,618**	**226,181**	**2,126,100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
C&I New Construction & Major Renovation	176	10,165	101,649	955,500											0
C&I Retrofit	373	8,434	84,338	792,777											0
C&I Direct Install	152	4,019	40,194	377,823											0
Workforce Development		-													0
Business Energy Analyzer		-													
Deep Energy Retrofit		-													
GRAND TOTAL	**2,292**	**36,578**	**365,784**	**4,577,045**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Gas Savings (Annualized), Evaluated

Program	# of Participants	Gas Annualized Savings (MMBTU)	Gas Annualized Savings (Therms)	Gas Lifetime Savings (Therms)	Electric			Non-Gas Non-Electric *							
								Resource							
								MMBTU						Gallons	Non-Resource (1)
					Summer Capacity (kW)	Winter Capacity (kW)	Energy (kWh)	No. 2 Distillate	No. 4 Fuel Oil	No. 6 Fuel Oil	Propane	Wood	Kerosene	Water	
Residential	**1,473**	**9,757**	**97,568**	**1,910,714**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**90,300**	**178,272**
Residential New Construction & Major Renovations	14	407	4,073	97,625	-	-	-							90300	9763
Residential Heating and Water Heating	916	6,405	64,049	1,195,794	-	-	-								106780
MassSAVE	274	0	0	0	-	-	-								
Weatherization Program	268	2,430	24,302	519,552	-	-	-								51955
Multifamily Retrofit	1	514	5,144	97,742	-	-	-								9774
Behavior/Feedback Program	0	0	0	0	-	-	-								
Deep Energy Retrofit	0	0	0	0	-	-	-								
Residential Building Practices and Demonstration Program	0	0	0	0	-	-	-								
Energy Analysis: Internet Audit Program	0	0	0	0	-	-	-								
Community based pilots	0	0	0	0	-	-	-								
Workforce Development	0	0	0	0	-	-	-								
Low Income	**59**	**1,912**	**19,120**	**416,410**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**41,641**
Low-Income Single Family Retrofit	34	884	8,835	176,700	-	-	-							-	17670
Low-Income MuiltiFamily Retrofit	25	1,029	10,285	239,710	-	-	-							-	23971
Commercial & Industrial	**147**	**6,883**	**68,827**	**1,061,634**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**106,884**
C&I New Construction & Major Renovation	47	1,154	11,539	224,525	-	-	-								23173
C&I Retrofit	86	5,434	54,339	816,466	-	-	-								81647
C&I Direct Install	14	295	2,949	20,642	-	-	-								2064
Workforce Development	0	0	0	0	-	-	-								
Business Energy Analyzer	0	0	0	0	-	-	-								
Deep Energy Retrofit	0	0	0	0	-	-	-								
GRAND TOTAL	**1,679**	**18,552**	**185,515**	**3,388,758**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**90,300**	**326,797**

Gas Savings (Annualized), Percent Variance																
Program	# of Participants	Gas Annualized Savings (MMBTU)	Gas Annualized Savings (Therms)	Gas Lifetime Savings (Therms)	Electric			Non-Gas Non-Electric *								
								Resource								
								MMBTU							Gallons	Non-Resource (1)
					Summer Capacity (kW)	Winter Capacity (kW)	Energy (kWh)	No. 2 Distillate	No. 4 Fuel Oil	No. 6 Fuel Oil	Propane	Wood	Kerosene		Water	
Residential	**-1%**	**-6%**	**-6%**	**14%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**		**0%**	**0%**
Residential New Construction & Major Renovations	-61%	-56%	-56%	-36%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Residential Heating and Water Heating	28%	31%	31%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
MassSAVE	-45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Weatherization Program	35%	-19%	-19%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Multifamily Retrofit	-98%	-67%	-67%	-62%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Behavior/Feedback Program	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Deep Energy Retrofit	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Residential Building Practices and Demonstration Program	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Energy Analysis: Internet Audit Program	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Community based pilots	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Workforce Development	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Low Income	**-40%**	**-46%**	**-46%**	**-46%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**		**0%**	**0%**
Low-Income Single Family Retrofit	-29%	-51%	-51%	-54%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Low-Income MuiltiFamily Retrofit	-50%	-42%	-42%	-38%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Commercial & Industrial	**-79%**	**-70%**	**-70%**	**-50%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**		**0%**	**0%**
C&I New Construction & Major Renovation	-73%	-89%	-89%	-77%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
C&I Retrofit	-77%	-36%	-36%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
C&I Direct Install	-91%	-93%	-93%	-95%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Workforce Development	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Business Energy Analyzer	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
Deep Energy Retrofit	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
GRAND TOTAL	**-27%**	**-49%**	**-49%**	**-26%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**		**0%**	**0%**

NOTES
*where applicable

New England Gas Company
IV. I. Cost Recovery
1. Calculation of LBR Savings

Residential Savings - Heating

Month			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Year			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Annual Installed Savings (therms)			16,300	10,622	9,988	72	34	17	83	27	48	39	0	58
Monthly Percent of Annual			21.96%	19.27%	16.93%	10.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.43%	19.06%
Residential Monthly Savings														
Install		Annualized	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Month	Year	Savings (therms)	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Jan	2011	16,300	3,579	3,141	2,760	1,685	0	0	0	0	0	0	2,026	3,107
Feb	2011	10,622		2,047	1,798	1,098	0	0	0	0	0	0	1,320	2,025
Mar	2011	9,988			1,691	1,033	0	0	0	0	0	0	1,242	1,904
Apr	2011	72				7	0	0	0	0	0	0	9	14
May	2011	34					0	0	0	0	0	0	4	6
Jun	2011	17						0	0	0	0	0	2	3
Jul	2011	83							0	0	0	0	10	16
Aug	2011	27								0	0	0	3	5
Sep	2011	48									0	0	6	9
Oct	2011	39										0	5	7
Nov	2011	0											0	0
Dec	2011	58												11
Savings Total			3,579	5,188	6,249	3,823	0	0	0	0	0	0	4,627	7,107

Low-Income Savings - Heating

Month			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Year			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Annual Installed Savings (therms)			981	266	5,949	0	0	4	0	0	0	0	0	0
Monthly Percent of Annual			21.96%	19.27%	16.93%	10.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.43%	19.06%
Low-Income Monthly Savings														
Install		Annualized	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Month	Year	Savings (therms)	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Jan	2011	981	215	189	166	101	0	0	0	0	0	0	122	187
Feb	2011	266		51	45	28	0	0	0	0	0	0	33	51
Mar	2011	5,949			1,007	615	0	0	0	0	0	0	739	1,134
Apr	2011	0				0	0	0	0	0	0	0	0	0
May	2011	0					0	0	0	0	0	0	0	0
Jun	2011	4						0	0	0	0	0	0	1
Jul	2011	0							0	0	0	0	0	0
Aug	2011	0								0	0	0	0	0
Sep	2011	0									0	0	0	0
Oct	2011	0										0	0	0
Nov	2011	0											0	0
Dec	2011	0												0
Savings Total			215	240	1,218	744	0	0	0	0	0	0	894	1,373

C&I Savings - Heating

Month			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Year			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Annual Installed Savings (therms)			0	211	236	0	0	0	0	0	0	0	0	0
Monthly Percent of Annual			21.96%	19.27%	16.93%	10.34%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.43%	19.06%
C&I Monthly Savings														
Install		Annualized	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Month	Year	Savings (therms)	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Jan	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	2011	211		41	36	22	0	0	0	0	0	0	26	40
Mar	2011	236			40	24	0	0	0	0	0	0	29	45
Apr	2011	0				0	0	0	0	0	0	0	0	0
May	2011	0					0	0	0	0	0	0	0	0
Jun	2011	0						0	0	0	0	0	0	0
Jul	2011	0							0	0	0	0	0	0
Aug	2011	0								0	0	0	0	0
Sep	2011	0									0	0	0	0
Oct	2011	0										0	0	0
Nov	2011	0											0	0
Dec	2011	0												0
Savings Total			0	41	76	46	0	0	0	0	0	0	55	85

Resident

Residential Savings - Non-Heating													
Month			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Year			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Annual Installed Savings (therms)														
Monthly Percent of Annual			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ial Monthly Savings														
Install			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Month	Year	Annualized Savings (therms)	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Jan	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	2011	0		0	0	0	0	0	0	0	0	0	0	0
Mar	2011	0			0	0	0	0	0	0	0	0	0	0
Apr	2011	0				0	0	0	0	0	0	0	0	0
May	2011	0					0	0	0	0	0	0	0	0
Jun	2011	0						0	0	0	0	0	0	0
Jul	2011	0							0	0	0	0	0	0
Aug	2011	0								0	0	0	0	0
Sep	2011	0									0	0	0	0
Oct	2011	0										0	0	0
Nov	2011	0											0	0
Dec	2011	0												0
Savings Total			0	0	0	0	0	0	0	0	0	0	0	0

Low-Income Savings Non-Heating													
Month			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Year			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Annual Installed Savings (therms)														
Monthly Percent of Annual			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Low-Income Monthly Savings														
Install			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Month	Year	Annualized Savings (therms)	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Jan	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	2011	0		0	0	0	0	0	0	0	0	0	0	0
Mar	2011	0			0	0	0	0	0	0	0	0	0	0
Apr	2011	0				0	0	0	0	0	0	0	0	0
May	2011	0					0	0	0	0	0	0	0	0
Jun	2011	0						0	0	0	0	0	0	0
Jul	2011	0							0	0	0	0	0	0
Aug	2011	0								0	0	0	0	0
Sep	2011	0									0	0	0	0
Oct	2011	0										0	0	0
Nov	2011	0											0	0
Dec	2011	0												0
Savings Total			0	0	0	0	0	0	0	0	0	0	0	0

C&I Savings - Non-Heating													
Month			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Year			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Annual Installed Savings (therms)														
Monthly Percent of Annual			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
C&I Monthly Savings														
Install			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Month	Year	Annualized Savings (therms)	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Jan	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	2011	0		0	0	0	0	0	0	0	0	0	0	0
Mar	2011	0			0	0	0	0	0	0	0	0	0	0
Apr	2011	0				0	0	0	0	0	0	0	0	0
May	2011	0					0	0	0	0	0	0	0	0
Jun	2011	0						0	0	0	0	0	0	0
Jul	2011	0							0	0	0	0	0	0
Aug	2011	0								0	0	0	0	0
Sep	2011	0									0	0	0	0
Oct	2011	0										0	0	0
Nov	2011	0											0	0
Dec	2011	0												0
Savings Total			0	0	0	0	0	0	0	0	0	0	0	0

New England Gas Company
V.D. Competitive Procurement Process
1. Outsourced Services Table

Outsourced Services Planned, 2011

Program	Outsourced?	Program Planning and Administration	Marketing and Advertising	Sales, Technical Assistance & Training	Evaluation and Market Research	TOTAL
Residential						
Residential New Construction & Major Renovations	Yes	$0	$5,925	$40,521	$11,420	$57,866
	No	$10,792	$0	$0	$0	$10,792
	% Outsourced	0%	100%	100%	100%	84%
Residential Heating and Water Heating	Yes	$0	$5,925	$21,948	$12,536	$40,409
	No	$54,619	$0	$0	$0	$54,619
	% Outsourced	0%	100%	100%	100%	43%
MassSAVE	Yes	$0	$9,000	$62,050	$3,500	$74,550
	No	$45,353	$0	$0	$0	$45,353
	% Outsourced	0%	100%	100%	100%	62%
Weatherization Program	Yes	$1,969	$4,528	$39,226	$9,154	$54,877
	No	$30,003	$0	$0	$0	$30,003
	% Outsourced	6%	100%	100%	100%	65%
Multifamily Retrofit	Yes	$0	$1,397	$12,224	$2,824	$16,445
	No	$10,542	$0	$0	$0	$10,542
	% Outsourced	0%	100%	100%	100%	61%
Behavior/Feedback Program	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Deep Energy Retrofit	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Residential Building Practices and Demonstration Program	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Energy Analysis: Internet Audit Program	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Community based pilots	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Workforce Development	Yes	$1,600	$0	$0	$0	$1,600
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Statewide Marketing & Education	Yes	$0	$26,661	$0	$0	$26,661
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	100%	#DIV/0!	#DIV/0!	100%
EEAC Consultants	Yes	$2,766	$0	$0	$0	$2,766
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
DOER Assessment	Yes	$6,223	$0	$0	$0	$6,223
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Sponsorships & Subscriptions	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Residential TOTAL	**Yes**	**$12,558**	**$53,436**	**$175,969**	**$39,434**	**$281,397**
	No	**$151,309**	**$0**	**$0**	**$0**	**$151,309**
	% Outsourced	**8%**	**100%**	**100%**	**100%**	**65%**
Low Income						
Low-Income Single Family Retrofit	Yes	$0	$3,922	$29,512	$7,919	$41,353
	No	$21,586	$0	$0	$0	$21,586
	% Outsourced	0%	100%	100%	100%	66%
Low-Income MuiltiFamily Retrofit	Yes	$0	$3,922	$29,512	$7,919	$41,353
	No	$21,586	$0	$0	$0	$21,586
	% Outsourced	0%	100%	100%	100%	66%
Statewide Marketing & Education	Yes	$0	$11,765	$0	$0	$11,765
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	100%	#DIV/0!	#DIV/0!	100%
Low-Income Energy Affordability Network Funding	Yes	$0	$0	$5,376	$0	$5,376
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	100%	#DIV/0!	100%
DOER Assessment	Yes	$3,113	$0	$0	$0	$3,113
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Low Income TOTAL	**Yes**	**$3,113**	**$19,609**	**$64,400**	**$15,838**	**$102,960**
	No	**$43,172**	**$0**	**$0**	**$0**	**$43,172**
	% Outsourced	**7%**	**100%**	**100%**	**100%**	**70%**
Commercial & Industrial						
C&I New Construction & Major Renovation	Yes	$0	$3,813	$48,469	$8,639	$60,921
	No	$144,662	$0	$0	$0	$144,662
	% Outsourced	0%	100%	100%	100%	30%
C&I Retrofit	Yes	$0	$3,813	$9,031	$6,758	$19,602
	No	$38,932	$0	$0	$0	$38,932
	% Outsourced	0%	100%	100%	100%	33%
C&I Direct Install	Yes	$0	$3,114	$0	$6,288	$9,402
	No	$11,974	$0	$0	$0	$11,974
	% Outsourced	0%	100%	#DIV/0!	100%	44%
Workforce Development	Yes	$1,811	$0	$0	$0	$1,811
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Business Energy Analyzer	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Deep Energy Retrofit	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Statewide Marketing & Education	Yes	$0	$16,160	$0	$0	$16,160
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	100%	#DIV/0!	#DIV/0!	100%
EEAC Consultants	Yes	$2,766	$0	$0	$0	$2,766
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
DOER Assessment	Yes	$6,223	$0	$0	$0	$6,223
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Sponsorships & Subscriptions	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
C&I TOTAL	**Yes**	**$10,800**	**$26,900**	**$57,500**	**$21,685**	**$116,885**
	No	**$195,568**	**$0**	**$0**	**$0**	**$195,568**
	% Outsourced	**5%**	**100%**	**100%**	**100%**	**37%**
TOTAL						
GRAND TOTAL	**Yes**	**$26,471**	**$99,945**	**$297,869**	**$76,957**	**$501,242**
	No	**$390,049**	**$0**	**$0**	**$0**	**$390,049**
	% Outsourced	**6%**	**100%**	**100%**	**100%**	**56%**

Outsourced Services Actual, 2011						
Program	**Outsourced?**	**Program Planning and Administration**	**Marketing and Advertising**	**Sales, Technical Assistance & Training**	**Evaluation and Market Research**	**TOTAL**
Residential						
Residential New Construction & Major Renovations	Yes	$0	$5,625	$21,037	$7,937	$34,599
	No	$22,732	$0	$0	$0	$22,732
	% Outsourced	0%	100%	100%	100%	60%
Residential Heating and Water Heating	Yes	$0	$5,625	$12,900	$7,834	$26,359
	No	$22,732	$0	$0	$0	$22,732
	% Outsourced	0%	100%	100%	100%	54%
MassSAVE	Yes	$0	$100	$36,223	$0	$36,323
	No	$46,642	$0	$0	$0	$46,642
	% Outsourced	0%	100%	100%	#DIV/0!	44%
Weatherization Program	Yes	$0	$5,625	$45,878	$7,834	$59,337
	No	$22,732	$0	$0	$0	$22,732
	% Outsourced	0%	100%	100%	100%	72%
Multifamily Retrofit	Yes	$0	$0	$8,462	$7,834	$16,296
	No	$22,732	$0	$0	$0	$22,732
	% Outsourced	0%	#DIV/0!	100%	100%	42%
Behavior/Feedback Program	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Deep Energy Retrofit	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Residential Building Practices and Demonstration Program	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Energy Analysis: Internet Audit Program	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Community based pilots	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Workforce Development	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Statewide Marketing & Education	Yes	$0	$21,338	$0	$0	$21,338
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	100%	#DIV/0!	#DIV/0!	100%
EEAC Consultants	Yes	$5,309	$0	$0	$0	$5,309
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
DOER Assessment	Yes	$11,074	$0	$0	$0	$11,074
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Sponsorships & Subscriptions	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Residential TOTAL	**Yes**	**$16,383**	**$38,313**	**$124,500**	**$31,439**	**$210,635**
	No	**$137,570**	**$0**	**$0**	**$0**	**$137,570**
	% Outsourced	**11%**	**100%**	**100%**	**100%**	**60%**
Low Income						
Low-Income Single Family Retrofit	Yes		$0	$31,712	$10,402	$42,114
	No	$38,183	$0	$0	$0	$38,183
	% Outsourced	0%	#DIV/0!	100%	100%	52%
Low-Income MuiltiFamily Retrofit	Yes	$0	$0	$6,411	$10,402	$16,813
	No	$38,182	$0	$0	$0	$38,182
	% Outsourced	0%	#DIV/0!	100%	100%	31%
Statewide Marketing & Education	Yes	$0	$9,145	$0	$0	$9,145
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	100%	#DIV/0!	#DIV/0!	100%
Low-Income Energy Affordability Network Funding	Yes	$0	$0	$4,510	$0	$4,510
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	100%	#DIV/0!	100%
DOER Assessment	Yes	$5,537	$0	$0	$0	$5,537
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Low Income TOTAL	**Yes**	**$5,537**	**$9,145**	**$42,633**	**$20,804**	**$78,119**
	No	**$76,365**	**$0**	**$0**	**$0**	**$76,365**
	% Outsourced	**7%**	**100%**	**100%**	**100%**	**51%**
Commercial & Industrial						
C&I New Construction & Major Renovation	Yes	$0	$4,806	$6,802	$12,649	$24,257
	No	$31,752	$0	$0	$0	$31,752
	% Outsourced	0%	100%	100%	100%	43%
C&I Retrofit	Yes	$0	$4,806	$4,187	$12,649	$21,642
	No	$31,752	$0	$0	$0	$31,752
	% Outsourced	0%	100%	100%	100%	41%
C&I Direct Install	Yes	$0	$4,806	$10,505	$12,649	$27,960
	No	$31,752	$0	$0	$0	$31,752
	% Outsourced	0%	100%	100%	100%	47%
Workforce Development	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Business Energy Analyzer	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Deep Energy Retrofit	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Statewide Marketing & Education	Yes	$0	$16,428	$0	$0	$16,428
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	100%	#DIV/0!	#DIV/0!	100%
EEAC Consultants	Yes	$1,384	$0	$0	$0	$1,384
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
DOER Assessment	Yes	$11,074	$0	$0	$0	$11,074
	No	$0	$0	$0	$0	$0
	% Outsourced	100%	#DIV/0!	#DIV/0!	#DIV/0!	100%
Sponsorships & Subscriptions	Yes	$0	$0	$0	$0	$0
	No	$0	$0	$0	$0	$0
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
C&I TOTAL	**Yes**	**$12,458**	**$30,846**	**$21,494**	**$37,947**	**$102,745**
	No	**$95,256**	**$0**	**$0**	**$0**	**$95,256**
	% Outsourced	**12%**	**100%**	**100%**	**100%**	**52%**
TOTAL						
GRAND TOTAL	**Yes**	**$34,378**	**$78,304**	**$188,627**	**$90,190**	**$391,499**
	No	**$309,191**	**$0**	**$0**	**$0**	**$309,191**
	% Outsourced	**10%**	**100%**	**100%**	**100%**	**56%**

Outsourced Services Percent Variance, 2011						
Program	**Outsourced?**	**Program Planning and Administration**	**Marketing and Advertising**	**Sales, Technical Assistance & Training**	**Evaluation and Market Research**	**TOTAL**
Residential						
Residential New Construction & Major Renovations	Yes	0%	-5%	-48%	-30%	-40%
	No	111%	0%	0%	0%	111%
	% Outsourced	0%	0%	0%	0%	-28%
Residential Heating and Water Heating	Yes	0%	-5%	-41%	-38%	-35%
	No	-58%	0%	0%	0%	-58%
	% Outsourced	0%	0%	0%	0%	26%
MassSAVE	Yes	0%	-99%	-42%	-100%	-51%
	No	3%	0%	0%	0%	3%
	% Outsourced	0%	0%	0%	#DIV/0!	-30%
Weatherization Program	Yes	-100%	24%	17%	-14%	8%
	No	-24%	0%	0%	0%	-24%
	% Outsourced	-100%	0%	0%	0%	12%
Multifamily Retrofit	Yes	0%	-100%	-31%	177%	-1%
	No	116%	0%	0%	0%	116%
	% Outsourced	0%	#DIV/0!	0%	0%	-31%
Behavior/Feedback Program	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Deep Energy Retrofit	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Residential Building Practices and Demonstration Program	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Energy Analysis: Internet Audit Program	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Community based pilots	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Workforce Development	Yes	-100%	0%	0%	0%	-100%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Statewide Marketing & Education	Yes	0%	-20%	0%	0%	-20%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	0%	#DIV/0!	#DIV/0!	0%
EEAC Consultants	Yes	92%	0%	0%	0%	92%
	No	0%	0%	0%	0%	0%
	% Outsourced	0%	#DIV/0!	#DIV/0!	#DIV/0!	0%
DOER Assessment	Yes	78%	0%	0%	0%	78%
	No	0%	0%	0%	0%	0%
	% Outsourced	0%	#DIV/0!	#DIV/0!	#DIV/0!	0%
Sponsorships & Subscriptions	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Residential TOTAL	**Yes**	**30%**	**-28%**	**-29%**	**-20%**	**-25%**
	No	**-9%**	**0%**	**0%**	**0%**	**-9%**
	% Outsourced	**39%**	**0%**	**0%**	**0%**	**-7%**
Low Income						
Low-Income Single Family Retrofit	Yes	0%	-100%	7%	31%	2%
	No	77%	0%	0%	0%	77%
	% Outsourced	0%	#DIV/0!	0%	0%	-20%
Low-Income MuiltiFamily Retrofit	Yes	0%	-100%	-78%	31%	-59%
	No	77%	0%	0%	0%	77%
	% Outsourced	0%	#DIV/0!	0%	0%	-53%
Statewide Marketing & Education	Yes	0%	-22%	0%	0%	-22%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	0%	#DIV/0!	#DIV/0!	0%
Low-Income Energy Affordability Network Funding	Yes	0%	0%	-16%	0%	-16%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	0%	#DIV/0!	0%
DOER Assessment	Yes	78%	0%	0%	0%	78%
	No	0%	0%	0%	0%	0%
	% Outsourced	0%	#DIV/0!	#DIV/0!	#DIV/0!	0%
Low Income TOTAL	**Yes**	**78%**	**-53%**	**-34%**	**31%**	**-24%**
	No	**77%**	**0%**	**0%**	**0%**	**77%**
	% Outsourced	**1%**	**0%**	**0%**	**0%**	**-28%**
Commercial & Industrial						
C&I New Construction & Major Renovation	Yes	0%	26%	-86%	46%	-60%
	No	-78%	0%	0%	0%	-78%
	% Outsourced	0%	0%	0%	0%	46%
C&I Retrofit	Yes	0%	26%	-54%	87%	10%
	No	-18%	0%	0%	0%	-18%
	% Outsourced	0%	0%	0%	0%	21%
C&I Direct Install	Yes	0%	54%	0%	101%	197%
	No	165%	0%	0%	0%	165%
	% Outsourced	0%	0%	#DIV/0!	0%	6%
Workforce Development	Yes	-100%	0%	0%	0%	-100%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	0%	#DIV/0!	0%
Business Energy Analyzer	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Deep Energy Retrofit	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0%
Statewide Marketing & Education	Yes	0%	2%	0%	0%	2%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	0%	#DIV/0!	#DIV/0!	0%
EEAC Consultants	Yes	-50%	0%	0%	0%	-50%
	No	0%	0%	0%	0%	0%
	% Outsourced	0%	#DIV/0!	#DIV/0!	#DIV/0!	0%
DOER Assessment	Yes	78%	0%	0%	0%	78%
	No	0%	0%	0%	0%	0%
	% Outsourced	0%	#DIV/0!	#DIV/0!	#DIV/0!	0%
Sponsorships & Subscriptions	Yes	0%	0%	0%	0%	0%
	No	0%	0%	0%	0%	0%
	% Outsourced	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
C&I TOTAL	**Yes**	**15%**	**15%**	**-63%**	**75%**	**-12%**
	No	**-51%**	**0%**	**0%**	**0%**	**-51%**
	% Outsourced	**121%**	**0%**	**0%**	**0%**	**39%**
TOTAL						
GRAND TOTAL	**Yes**	**30%**	**-22%**	**-37%**	**17%**	**-22%**
	No	**-21%**	**0%**	**0%**	**0%**	**-21%**
	% Outsourced	**57%**	**0%**	**0%**	**0%**	**-1%**

New England Gas Company
VII. Appendix
B.1. Master Summary

Gas PA's Master Summary of Energy Efficiency Activities

Sector	TRC Benefits ($)							TRC Costs ($)			TRC B/C Ratio	Net Benefits
	Gas	Electric			Non-gas Non-elec Resource	Non-Resource	TOTAL BENEFITS	PA	Customer	TOTAL		
		Summer Capacity	Winter Capacity	Energy								
Planned												
Residential	$2,481,047	$0	$0	$0	$0	$0	$2,481,047	$1,002,039	$192,372	$1,194,411	2.08	$1,286,636
Low Income	$1,032,959	$0	$0	$0	$0	$0	$1,032,959	$432,065	-$2,813	$429,252	2.41	$603,707
C&I	$2,610,670	$0	$0	$0	$0	$0	$2,610,670	$625,434	$272,742	$898,176	2.91	$1,712,494
TOTAL	$6,124,676	$0	$0	$0	$0	$0	$6,124,676	$2,059,538	$462,301	$2,521,839	2.43	$3,602,837
Evaluated												
Residential	$2,235,314	$0	$0	$0	$201	$700,130	$2,935,645	$982,589	$149,019	$1,131,608	2.59	$1,804,038
Low Income	$501,037	$0	$0	$0	$0	$200,061	$701,098	$351,227	$0	$351,227	2.00	$349,868
C&I	$1,157,565	$0	$0	$0	$0	$0	$1,157,565	$374,734	$90,255	$464,989	2.49	$692,576
TOTAL	$3,893,916	$0	$0	$0	$201	$900,191	$4,794,308	$1,708,550	$239,274	$1,947,824	2.46	$2,846,482
Perent Variance												
Residential	-10%	0%	0%	0%	0%	0%	18%	-2%	-23%	-5%	25%	40%
Low Income	-51%	0%	0%	0%	0%	0%	-32%	-19%	-100%	-18%	-17%	-42%
C&I	-56%	0%	0%	0%	0%	0%	-56%	-40%	-67%	-48%	-14%	-60%
TOTAL	-36%	0%	0%	0%	0%	0%	-22%	-17%	-48%	-23%	1%	-21%

Notes:
(1) GHG for information purposes only; it is not included in TRC test

New England Gas Company
VII. Appendix
B.1. Master Summary

Gas PA's Master Summary of Energy Efficiency Activities

Sector	Savings										Avg Measure Life (yrs.)	TR Energy Cost ($/Lifetime-Therms saved)	Emissions Reductions (Short Tons) (1)				Participants
	Gas (Therms)		Electric Energy (kWh)		Summer Electric Capacity (MW)		Winter Electric Capacity (MW)		Non-gas non-elec Resources				NOx	SO2	GHG Reductions (MA Based)	GHG Reductions (Regional	
	Annualized	Lifetime (2)	Annualized	Lifetime	Annualized	Lifetime	Annualized	Lifetime	Annualized	Lifetime							
Planned																	
Residential	103,873	1,682,749	-	-	-	-	-	-	-	-	16.2	$0.71	NA	NA	9,831	9,831	1,493
Low Income	35,730	768,196	-	-	-	-	-	-	-	-	21.5	$0.56	NA	NA	4,488	4,488	98
C&I	226,181	2,126,100	-	-	-	-	-	-	-	-	9.4	$0.42	NA	NA	12,421	12,421	701
TOTAL	365,784	4,577,045	-	-	-	-	-	-	-	-	12.5	$0.55	NA	NA	26,740	26,740	2,292
Evaluated																	
Residential	97,568	1,910,714	-	-	-	-	-	-	-	-	19.6	$0.59	NA	NA	11,163	11,163	1,473
Low Income	19,120	416,410	-	-	-	-	-	-	-	-	21.8	$0.84	NA	NA	2,433	2,433	59
C&I	68,827	1,061,634	-	-	-	-	-	-	-	-	15.4	$0.44	NA	NA	6,202	6,202	147
TOTAL	185,515	3,388,758	-	-	-	-	-	-	-	-	18.3	$0.57	NA	NA	19,798	19,798	1,679
Perent Variance																	
Residential	-6%	14%	0%	0%	0%	0%	0%	0%	0%	0%	21%	-17%	NA	NA	13.5%	13.5%	-1%
Low Income	-46%	-46%	0%	0%	0%	0%	0%	0%	0%	0%	1%	51%	NA	NA	-45.8%	-45.8%	-40%
C&I	-70%	-50%	0%	0%	0%	0%	0%	0%	0%	0%	64%	4%	NA	NA	-50.1%	-50.1%	-79%
TOTAL	-49%	-26%	0%	0%	0%	0%	0%	0%	0%	0%	46%	4%	NA	NA	-26.0%	-26.0%	-27%

Notes:
(1) GHG for information purposes only; it is not included in TRC test
(2) Lifetime therm savings have been updated from what filed with DPU 09-122 and 09-123. The calculation error has been corrected.These values are also consistent with 2011 quarterly report previously filed EEAC

GHG Reductions /Lt Therm: 0.00584219

	NOX	SO2	GHG Reductions (MA Based)	GHG Reductions (Regional Based)	
elec	0.0003100	0.0008530	0.535842294	0.4697133	per lifetime mwh
gas			0.0058422	0.0058422	per lifetime therm
oil			0.0810706	0.0810706	per lifetime mmbtu

2. Screening Tool

Please see Attachment B-2, the screening tool in Microsoft Excel format, on CD-ROM.

3. Technical Reference Manual

The Massachusetts Technical Reference Manual for Estimating Savings from Energy Efficiency Measures ("TRM") documents how the Program Administrators consistently, reliably, and transparently calculate savings resulting from the installation of prescriptive energy efficiency measures. The TRM provides methods, formulas, and default assumptions for estimating energy, peak demand, and other resource impacts from energy efficiency measures.

Each TRM is associated with a specific program year and version. There are two versions for each program year: the "Plan Version," which is filed with the PA plans prior to the program year, and the "Report Version," which includes updates to the "Plan Version" and is filed with the PAs' annual reports. Changes between the 2011 - Plan Version and 2011 - Report Version of the TRM are made primarily to incorporate the results of EM&V studies that were finalized in 2011 following the submission of the 2011 - Plan Version TRM, and in advance of the filing of the 2011 Annual Report. The EM&V studies included in the 2011 TRM - Report Version are included herewith as Appendix C (Program and Pilot Program EM&V Studies) and are summarized in Section III (describing EM&V activities). In addition to a summary of each of the evaluation studies, Section III includes a statewide summary that highlights evaluation studies that had significant impacts on final evaluated data.

Each measure included in the TRM is associated with one or more programs. Section II, Program Performance, includes a discussion of the impact to evaluated program results as a result of the EM&V studies in Appendix C.

The table below shows the EM&V studies discussed in the TRM - Report Version and included herewith that affected evaluated results, along with the relevant programs that were impacted.

Studies	Gas/Electric or Both	Program(s)
Massachusetts Mini Baseline Study of Homes Built at the End of the 2006 IECC Cycle	Both	Residential New Construction & Major Renovation
Home Energy Services Net-to-Gross Evaluation	Both	MassSAVE
Massachusetts Multifamily Program Impact Analysis	Both	Multi-Family Retrofit
Brushless Fan Motors Impact Evaluation	Electric	Residential Cooling & Heating Equipment
Demand Impact Model User Manual	Both	Residential New Construction & Major Renovation, Residential Cooling & Heating Equipment, Multi-Family Retrofit, MassSAVE, ENERGY STAR® Lighting, ENERGY STAR® Appliances, Behavior/Feedback Pilot or Program, Low-Income Residential New Construction, Low-Income 1 to 4 Family Retrofit, Low-Income MultiFamily Retrofit
Low Income Single Family Program Impact Evaluation	Both	Low-Income 1 to 4 Family Retrofit
Non-Controls Lighting Evaluation for the Massachusetts Small Business Direct Install Program: Multi-Season Study	Electric	C&I Small Retrofit
2010 Combined Heat and Power Impact Evaluation Methodology and Analysis Memo	Electric	C&I New Construction and Major Renovation and C&I Large Retrofit
Impact Evaluation of 2010 Custom Process and Compressed Air Installations	Electric	C&I New Construction and Major Renovation and C&I Large Retrofit
Impact Evaluation of 2010 Custom Lighting Installations	Electric	C&I New Construction and Major Renovation and C&I Large Retrofit
Large C&I - Prescriptive Gas Measures Impact Evaluation	Gas	C&I New Construction and Major Renovation and C&I Large Retrofit
Large C&I - Custom Gas Measures Impact Evaluation	Gas	C&I New Construction and Major Renovation and C&I Large Retrofit
Massachusetts Three Year Cross-Cutting Behavioral Program Evaluation Integrated Report	Both	Behavior/Feedback Pilot or Program
Additional Non-Energy Impacts for Low Income Programs	Both	Low-Income Residential New Construction, Low-Income 1 to 4 Family Retrofit, Low-Income MultiFamily Retrofit
C&I Gas Net-to-Gross Study 2011 Projects	Gas	C&I New Construction and Major Renovation, C&I Retrofit, and C&I Direct Install

Please see Attachment B-3 for the 2011 - Report Version of the TRM.

APPENDIX C: Program and Pilot Program EM&V Studies

Please see VOLUME II, Appendix C (Evaluation Studies)

APPENDIX D: Performance Incentives Supporting Documentation

1. Model

Please see Attachment D-1.

New England Gas Company

2011 Performance Incentive supporting information

Program	Evaluated Results		Earned Performance Incentives [1]			
	Savings (therms)	Net Benefit	Savings	Net Benefits (Value)	Metrics	Total
Residential (total)	97,568	$1,953,136	**$16,397**	**$10,171**	**$4,843**	**$31,410**
Residential New Construction & Major Renovations	4,073	$14,236	$684	$74	$9	**$768**
Residential Heating and Water Heating	64,049	$1,311,479	$10,764	$6,829	$863	**$18,456**
MassSAVE	0	$0	$0	$0	$0	**$0**
Weatherization Program	24,302	$589,655	$4,084	$3,071	$3,946	**$11,101**
Multifamily Retrofit	5,144	$37,766	$864	$197	$25	**$1,086**
O Power	0	$0	$0	$0	$0	**$0**
Low Income (total)	19,120	$379,326	**$3,110**	**$1,083**	**$6,073**	**$10,266**
Low-Income Single Family Retrofit	8,835	$73,819	$1,437	$211	$2,027	**$3,675**
Low-Income MultiFamily Retrofit	10,285	$305,507	$1,673	$872	$4,046	**$6,591**
Commercial & Industrial (total)	68,827	$745,975	**$12,265**	**$9,589**	**$2,619**	**$24,473**
C&I New Construction & Major Renovation	11,539	$94,056	$2,056	$1,209	$162	**$3,427**
C&I Retrofit	54,339	$691,969	$9,683	$8,895	$1,192	**$19,770**
C&I Direct Install	2,949	-$40,050	$526	-$515	$1,265	**$1,276**
GRAND TOTAL	**185,515**	**$3,078,437**	**$31,772**	**$20,843**	**$13,535**	**$66,150**

Notes:
[1] Earned Performance Incentives are based on "Achieved Benefits", see "PI Cap calc" tab

Performance Metric Allocation				Achieved level	Achieved %
All Sector Metrics					
1. Financing Metric				None	0%
2. Funding Metric					
3. Cost Efficiency of Program Expenditures				96%	96%
Total All Sector Metrics					
Remaining Peformance Metrics after all sector metrics					
Residential					
1. MassSAVE/Weatherization: Deeper Savings				Design	100%
2. Community Outreach				NO	0%
Low Income					
1. Hard to Reach Landlords				Threshold	75%
2. Best Practices Technical Review Sub-committee/New Measures				Exemplary	125%
3. Multi-Family Building Inventory				Threshold	75%
Commercial & Industrial					
1. Retrofit -- Depth of Savings				NO	0%
2. New Construction -- Comprehensiveness and depth of savings				NO	0%
3. Direct Install Electric & Gas Integration				Threshold	75%
4. Combined Heat and Power				NO	0

Program			All Sector Metrics		Residential		Low Income			Commercial & Industrial			
	Net Benefit		1.	3.	1.	2.	1.	2.	3.	1.	2.	3.	Achieved Total
Residential (total)	$1,953,136	PI Goal	$445	$1,334	$3,558	$3,558							$4,843
Residential New Construction & Major Renovations	$14,236		$0	$9		$0							$9
Residential Heating and Water Heating	$1,311,479		$0	$863		$0							$863
Weatherization Program	$589,655		$0	$388	$3,558	$0							$3,946
Multifamily Retrofit	$37,766		$0	$25		$0							$25
O Power	$0		$0	$0		$0							$0
Low Income (total)	$379,326	PI Goal	$346	$1,038			$1,845	$1,845	$1,845				$6,073
Low-Income Single Family Retrofit	$73,819		$0	$195			$1,384	$449					$2,027
Low-Income MuiltiFamily Retrofit	$305,507		$0	$805				$1,857	$1,384				$4,046
Commercial & Industrial (total)	$745,975	PI Goal	$445	$1,334						$1,779	$1,779	$1,779	$2,619
C&I New Construction & Major Renovation	$94,056		$0	$162						$0			$162
C&I Retrofit	$691,969		$0	$1,192							$0		$1,192
C&I Direct Install	-$40,050		$0	-$69								$1,334	$1,265
GRAND TOTAL	$3,078,437		$1,236	$3,706									$13,535

New England Gas Performance Incentive Cap Calculation for 2011 Annual Report					
New England Gas Company		**Residential**	**Low Income**	**C&I**	**Total**
Preliminary Benefits		$ 2,690,711	$ 408,238	$ 2,683,530	$ 5,782,479
Evaluated Benefits		$ 2,935,645	$ 701,095	$ 1,157,565	$ 4,794,305
		109%	172%	43%	
Achieved Benefits	Cap at 75% or 125%	$ 2,690,711	$ 510,297.50	$ 2,012,648	$ 5,213,656
Savings Payout Rate 2011		0.0061	0.0061	0.0061	0.0061
Savings Incentives		**$ 16,397**	**$ 3,110**	**$ 12,265**	**$ 31,772**
Actual Cost		$ 1,100,196	$ 340,961	$ 513,044	$ 1,954,201
Achieved Net Benefits		$ 1,590,515	$ 169,337	$ 1,499,604	$ 3,259,455
Value Payout Rate 2011		0.0064	0.0064	0.0064	0.0064
Value Incentives		**$ 10,171**	**$ 1,083**	**$ 9,589**	**$ 20,843**

Used Post Evaluated Costs
Used Pre-Evaluated Costs

2. Metrics

Please see Attachments D-2(a), D-2(b), D-2(c), and D-2(d) for supporting documentation regarding performance metrics.

Residential Metric #1
Mass Save/Weatherization:
Deeper Savings

NEG 2011 Major Measure Recommendation and Installation Summary

Households which received a recommendation and installed a weatherization measure in 2011

Period	Audits	Recommendations	Installations	Installed Savings	Installation Rate	Savings Per Customer
Program Year 2011 - Installations through 1/31/12	266	176	48	10,148.8	27.3%	211.4333333
Program Year 2010	249	154	28	5833	18%	208.3321429
Percentage Change	7%	14%	71%	74%	50%	1.5%

Low Income #1
Hard to Reach Landlords

2011 Low Income Metric One

Berkshire Gas Company, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR Electric & Gas, Unitil Service Corporation, and Western Massachusetts Electric Company are submitting this report to update the Low Income Energy Affordability Network (LEAN) on the status of the 2011 Low Income metric number one.

1) Hard to Reach Landlords {Electric & Gas} – Statewide

Threshold To broaden and deepen savings, this metric targets low-income tenants of one-to-four unit buildings where the owner owns an inefficient heating system but has no incentive to upgrade it because the tenant pays for heat. Such landlords have not been frequently reached by the program as of last year (2009). Apply lessons learned from the 2010 Hard to Reach Landlord Initiative to increase outreach efforts to hard to reach landlords. Outreach shall continue throughout January-April 2011 with agency input. Marketing shall be diversified to incorporate other methodologies not previously used to attract landlords. The utilities shall document all heating system installations by utility including the projected savings. The Utilities shall compile a progress report from the administration of the Initiative by the end of the second quarter of 2011.

Design Based upon the 2010 lessons learned and progress report which will include recommendations received from agencies, landlords, auditors, heating system contractors, and others involved in the administration of the Initiative, the Utilities in conjunction with LEAN shall modify the Initiative accordingly and utilize appropriate marketing methodologies to continue the Initiative into the winter of 2011-2012. Each PA to successfully replace a minimum number of inefficient heating systems as indicated below and based on a total statewide goal of 100 replacements in 1-4 unit buildings where tenants pay for heat, in 2011.

Program Administrator	% Allocation	# of Heating System Replacements
Berkshire Gas	**1%**	**1**
Columbia Gas	**8%**	**8**
National Grid Electric	**32%**	**32**
National Grid Gas	**21%**	**21**
New England Gas	**1%**	**1**
NSTAR Electric	**23%**	**23**
NSTAR Gas	**7%**	**7**
Unitil Electric	**1%**	**1**
Unitil Gas	**1%**	**1**
WMECO	**5%**	**5**
Total	**100%**	**100**

Exemplary The PA's, in conjunction, with LEAN will create a final report documenting the impact of the Initiative in their respective service territories by February 28, 2012. The report will highlight marketing changes that were implemented and the manner they affected the Initiative's penetration levels into this Hard to Reach Landlord segment of the low income housing inventory.

Clear & Distinct Role: Each PA must expand its updated PA specific database and target market within their respective territory and make comparisons of lessons learned/recommendations to be considered for moving forward. Verification Plan: Databases, marketing plan and lessons learned analysis. Baseline Information: Databases of landlords where tenants pay for heat.

We believe that per this status report dated February 28, 2012 including completion and documentation of these tasks, Berkshire Gas Company, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR Electric & Gas, Unitil Service Corporation, and Western Massachusetts Electric Company have completed the 2011 low income metric number one and has reached the level of the metric listed below.

Berkshire Gas - Threshold
Columbia Gas of Massachusetts – Threshold
National Grid – Threshold
National Grid Gas - Exemplary
New England Gas – Threshold
NSTAR Electric & Gas – Exemplary
Unitil Service Corporation – Threshold
Western Massachusetts Electric Company – Design

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2011 Low Income Metric One

THRESHOLD:
In coordination with LEAN (Low Income Energy Affordability Network), PA's applied lessons learned from the 2010 Hard to Reach Landlord initiative in order to try and increase outreach efforts to hard to reach landlords throughout 2011 and include other methodologies not previously used. Please refer to ***Attachment A*** for the second quarter progress report filed on June 30, 2011 by the PA's indicating such lessons learned.

In summation, lessons learned include:

- There were issues pertaining to the reliability of the Utility & Landlord data available including missing and/or inaccurate landlord data within the utility databases, privacy laws regarding customer information through LIHEAP (Low Income Home Energy Assistance Program) and utility databases, as well as the inability for the utilities to track and report this Metric via a standard method.
- Utility direct mailings to try and connect with potential landlords caused an adverse affect as the Community Action Agencies spent time chasing bad leads which diverted resources from the core goals and objectives of the program and the initiative.
- Statewide, the Community Action Agencies are a trusted local resource in their communities and continue to be the customers' first and best point of contact for energy efficiency and social service programs.

Based upon the lessons learned as stated above, the PA's altered efforts in 2011 to increase outreach via the following:

- The PA's decided to forego addressing this initiative via a mass marketing approach due to inaccurate data and the inability to effectively target the applicable customers.
- The PA's determined that working directly with the local Community Action Agencies to incorporate outreach efforts of this initiative via their current ongoing communications and interactions with their tenant/landlord customers at a more localized and direct level would be a much more effective approach of targeting the most appropriate clients. The Community Action Agencies are better equipped to manage a tenant/landlord relationship, determine heating system eligibility, market the program to qualified landlords and tenants and manage the program and their workloads.
- The PA's determined that the weatherization audit was the best opportunity to market this initiative since the heating system would be evaluated at this time and the Community Action Agencies would be able to quickly and accurately determine the most appropriate candidates.

DESIGN:
Each PA successfully replaced inefficient heating systems in 2011 as indicated in the chart below by utility including the projected savings and based upon a total statewide goal of 100 replacements in 1-4 unit buildings where tenants pay for heat.

2011	Goal		Actual	Projected Savings			
Program Administrator	% Allocation	# of Heating System Replacements	# of Heating System Replacements	Annual		Lifetime	
Berkshire Gas	1%	1	0	0	Therms	0	Therms
Columbia Gas	8%	8	2	716	Therms	14,322	Therms
National Grid Electric	32%	32	9	1,746	kWh	34,532	kWh
National Grid Gas	21%	21	27	3,294	Therms	64,172	Therms
New England Gas	1%	1	0	0	Therms	0	Therms
NSTAR Electric	23%	23	50	9,700	kWh	174,600	kWh
NSTAR Gas	7%	7	58	17,400	Therms	338,400	Therms
Unitil Electric	1%	1	0	0	Therms	0	Therms
Unitil Gas	1%	1	0	0	Therms	0	Therms
WMECO	5%	5	5	970	kWh	17,460	kWh
Total	100%	100	151	21,410	Therms	416,894	Therms
				12,416	kWh	226,592	kWh

EXEMPLARY:
All PA's have agreed that due to the success of the initiative in varied territories, continued landlord interest, and untapped market potential, we will move forward by incorporating the landlord heating system replacement initiative for 1-4 family buildings into the Low Income Program for 2012.

Below is a recap on the impact of the initiative in each PA's respective service territory, including the specific PA database of heating system replacements and marketing outreach/changes that were implemented.

Berkshire Gas

- Berkshire Gas, through its Community Action Program agencies, identified potential opportunities to replace old inefficient heating systems for this initiative early on in 2011. By March 2011, Berkshire Community Action Council had three leads that were put out for bid by April 2011. Assuming that these projects would go through, Berkshire Gas advised its Community Action Program agencies to reduce efforts seeking potential participants. Later in 2011, all three leads fell through due to code issues identified by the contactor which resulted in additional, unexpected funds required from landlord. By then it was too late to find another eligible customer and have the heating system replacement completed before the end of the year.

Columbia Gas

- Columbia Gas's tactic relied on the Community Action Program agencies to identify potential opportunities to replace old inefficient heating systems for this initiative. However, the Company/Community Action Program Agencies encountered many challenges in attempting to achieve this metric. These challenges included the Community Action Program agencies finding:
    - Interested landlords where the heating systems did not qualify for replacement because the heating system did not meet the efficiency replacement guidelines of the initiative.
    - Qualified systems where landlords were not interested in replacing heating units due to unwillingness to contribute any funds for the heating system, remove asbestos, or open themselves up to potential code violations.
    - Interested landlords and a qualifying system where the high efficiency system was not feasible given the location of the heating unit.

- The following were the two landlord heating system replacements for Columbia Gas:

Columbia Gas
2011 Goal = 8 Heating System Replacements

City	# of Heating System Replacements
Lawrence	2
Total	**2**

New England Gas

- While the low income program routinely replaces heating systems in our service territory, the units that would qualify for this metric are limited and, as defined, hard to reach. Through discussions with the local Community Action Program agencies, we have fostered a better understanding of our goals to reach these landlords. The local agencies now look to report these opportunities to us as they become aware of them.
- During the first half of the year, we were able to locate a job that would meet the criteria specified in the metric. The landlord was very interested in taking advantage of this opportunity. However, code issues (or rather more specifically, the timing to resolve existing code issues) prevented the project from moving forward in 2011. This project is still active and is anticipated to be done in 2012.

NSTAR

- NSTAR in conjunction with our lead Community Action Program Agency, ABCD (Action for Boston Community Development, Inc.) did a great job in reaching this market since over 80% of the clients we service are renters on fuel assistance. This facilitated in, determining opportunities to replace inefficient heating systems in one to four unit buildings in which the renters pay for heat, yet the heating system is owned by the landlord. NSTAR was the 1st utility to begin assisting renters in this capacity and has found great success in achieving kWh/Therm savings by doing so. Therefore, replacing inefficient heating systems in one to four unit buildings where the renters pay for heat has become and will continue to be a standard practice within the energy conservation programs implemented through ABCD for NSTAR.
- NSTAR and ABCD provided information regarding our heating system replacement program in many fuel assistance outreach initiatives throughout the year including:
    - Educational Flyers - All clients who received an electrical appliance audit (approximately 2,200) received a Fuel Assistance Educational Flyer with fuel assistance information including the heating system replacement program. Additionally, flyers were also sent to oil vendors for distribution to their customer base.
    - Intake sites – 15 Area Planning Action Councils, Neighborhood Service Centers, Family Service Centers and town halls as well as 18 additional Fuel Assistance intake sites were provided with fuel assistance information including the heating system replacement program for outreach opportunities. This brings the total number of intake sites with applicable program information to 33 plus there was one additional agency with this information as well which provides Home Visits for the homebound.
    - Website – ABCD provided information on fuel assistance including the heating system replacement program within the Fuel and Energy section on their website. http://www.bostonabcd.org/fuel-and-energy.aspx

- Referral Programs – ABCD has referral programs in which eligible, low-income clients looking for fuel assistance including heating system replacements are referred directly to ABCD. These programs include:
  - Citizens Energy Oil Discount Referral Program - Citizens Energy uses revenues from commercial enterprises to develop charitable programs within the US. Information on fuel assistance including heating system replacements is provided on their website at http://www.citizensenergy.com/english/pages/117/massachusetts.
  - City of Boston Referral Program – ABCD has a referral program with the Mayor's Office in which services for heating and fuel assistance is referred directly to ABCD. Information on the Low-Income Home Energy Assistance Program is provided on their website at http://www.cityofboston.gov/environmentalandenergy/HomeHeating/winterheating.asp
  - Mass Energy Referral Program – Mass Energy is a consumers' alliance non-profit organization that collaborates directly with ABCD to refer and serve income eligible clients with energy programs. Information on the heating system replacement program is provided on their website at http://www.massenergy.org/energy-efficiency/landlords%2526tenants
- Human Services Agency Mailings – ABCD mailed fuel assistance information including the heating system replacement program to 250 human service agencies including hospitals, schools, churches, etc. on a monthly basis
- Agency Network Meetings – ABCD provided fuel assistance information including the heating system replacement program at informational sharing meetings (both formal and informal) with human service agencies throughout the year.
- Signage – ABCD provided posters and signage regarding Energy Programs to all ABCD Intake Sites as well as displaying such signage within a glass enclosed bulletin within the Lobby at ABCD on Tremont St.
- Trainings – ABCD provided training as well as an informational letter to all ABCD employees on the various programs offered including the heating system replacement program within the fuel assistance overview. This provided the employees with the knowledge and appropriate information in order to present the program to applicable clients.

- NSTAR's specific database of inefficient heating system replacements in 2011 of one-to-four unit buildings where the tenant pays for heat is listed below. NSTAR Electric serviced a total of 50 customers through this program while NSTAR Gas serviced a total of 58 customers.

NSTAR Electric
2011 Goal = 23 Heating System Replacements

City	# of Heating System Replacements
ARLINGTON	1
ASHLAND	1
BOSTON	26
CHELSEA	2
DORCHESTER	7
JAMAICA PLAIN	1
MATTAPAN	3
NATICK	2
NEW BEDFRD	2
ROSLINDALE	2
SOMERVILLE	1
WATERTOWN	1
WESTPORT	1
Total	**50**

NSTAR Gas
2011 Goal = 7 Heating System Replacements

City	# of Heating System Replacements
DEDHAM	1
FRAMINGHAM	1
HUDSON	1
HYDE PARK	1
MARLBORO	1
MILLBURY	1
NATICK	2
NEW BEDFRD	2
WORCESTER	48
Total	**58**

National Grid

- National Grid worked together with its Lead Vendor, Action Inc., and the Community Action Program agencies to identify any opportunity during scheduled energy audits for replacement of inefficient heating systems, to notify the respective tenant and to contact the landlord to describe the benefit of replacement through the opportunity offered by the Income Eligible program. In the process of achieving the metric, it became evident that there was a greater opportunity available in the gas heated homes than in the oil or deliverable fuel homes based on the pool of customers being served during the 2011 program year. The decision was made to continue beyond the Gas Heating System replacement goal while continuing to identify replacement opportunities for the deliverable fuel homes. The spirit of this metric was based on an assumption of available inefficient systems that proved to be higher than expected in the Gas program and lower than expected in the Electric Program during 2011. (Oil/Propane)
- National Grid's specific database of inefficient heating system replacements in 2011 of one-to-four unit buildings where the tenant pays for heat is listed below. National Grid Electric serviced a total of 9 customers through this program, and National Grid Gas serviced a total of 27 customers

National Grid Electric
2011 Goal = 32 Heating System Replacements

City	# of Heating System Replacements
Adams	1
Beverly	1
Haverhill	2
Lawrence	1
Lynn	1
North Adams	1
Oxford	1
Rockport	1
Total	**9**

National Grid Gas
2011 Goal = 21 Heating System Replacements

City	# of Heating System Replacements
Dorchester	8
East Boston	1
Gloucester	1
Haverhill	10
Mattapan	3
Roxbury	1
Salem	2
Worchester	1
Total	**27**

Unitil

- Although Unitil had sent out a mailer, and tried to work with our Community Action Program agency to identify systems, we did not have the opportunity to change out a system owned by a landlord with the heat paid by the tenant.

WMECO

- WMECo worked closely with Springfield Partners for Community Action Inc., Community Action! and Berkshire Community Action Council, Inc. to market and attract landlords into the heating system replacement program. All agencies strongly recommended that the program was only marketed through the weatherization program. All of the agencies felt mass marketing the program would have been counter productive due to qualified audit staff and heating contractors being overextended with existing obligations of ARRA funding and increased state and utility budgets.
- The program was much more manageable and effective as auditors identified good candidates and confirmed eligible tenants. The typical landlord that showed interest owned a few smaller buildings, typically duplexes to four-plexes built pre WW II with very old oil heating systems. The Community Action Agencies fully explained the program to the potential landlords including details such as tenant income verification; tenant requirement to pay their own fuel costs; a one year rent freeze requirement; a system inspection prior to approval; a bidding requirement for the system replacement; and a potential landlord co-pay if any additional expenses such as asbestos removal, installation of a chimney liner and any other code requirements would be necessary. Some landlords may have shown initial interest but decided they may not want to participate after fully learning about the program's requirements. Other landlords went through the entire process only to walk away deciding to spend their limited funding on other maintenance priorities.
- In addition to marketing through the weatherization programs, WMECo and the community action agencies discussed the landlord program with fuel assistance and HEARTWAP (Heating Emergency Assistance Retrofit Task Weatherization Assistance Program) providers in their territories. WMECo held a Commercial and Industrial Energy Efficiency Program event on April 6th, 2011 at the Basketball Hall of Fame. A WMECo representative met with interested landlords that attended that session. Local organizations such as Habitat for Humanity, Rebuilding Together Springfield and the Tornado Relief Fund were told about the program. WMECo discussed the program at the 'Energy Efficiency Incentives for Property Managers in the Pioneer Valley' meeting on October 21st, 2011. In December 2011, WMECo was contacted by a representative of the Franklin County Regional Housing & Redevelopment Authority requesting a representative from WMECo to speak at their landlord advisory meeting in January 2012. Community Action! spoke to the group about all landlord energy efficiency programs.
- WMECo chose not to expand its database. After discussing this with the Community Action Agencies, they would not have been able to expand marketing efforts or conduct any more audits from referrals. Due to ARRA funding and increased state and utility budgets, the qualified audit staff and heating contractor base was overextended with existing obligations. When a landlord contacted the Community Action Agency about the program or an auditor identified a possible candidate when performing a weatherization audit, it was followed up and either the system was replaced, the system may have not qualified, or existing code violations were too cost prohibitive to the landlord and the system was not replaced. WMECO met the requirement and installed 5 heating systems.

WMECo
2011 Goal = 5 Heating System Replacements

City	# of Heating System Replacements
Pittsfield	4
Greenfield	1
Total	**5**

CLEAR AND DISTINCT ROLE

Berkshire Gas

- Periodic status update from Community Action Program agencies about potential leads
- Direct contact with some landlords about eligibility for the promotion
- Reviewed and provided input into metric documentation.

Columbia Gas

- Communicated with Lead Vendor to work with Community Action Program Agencies to find candidates
- Offered to help Community Action Program Agencies with any necessary outreach materials.
- Direct contact with some landlords about eligibility for the initiative
- Attended best practices and participated in discussions with Community Action Program Agencies and Lead Vendors to help learn better ways to recruit more participants
- Tracked and monitored heating system replacements
- Reviewed and provided input into metric documentation.

New England Gas

- Calls and meetings with local agencies to discuss the initiative and goals for the Company.
- Presentations and materials made available for attendees at a number of Neighborhood Association meetings, Chamber of Commerce events, and community events to provide information and promote energy efficiency measures.
- One on one discussion with several landlords in regards to opportunities and potential road blocks (and resolutions) for implementation.
- Reviewed and provided input into metric documentation.

NSTAR

- NSTAR was the PA lead to compile and finalize metric documentation including comments, direction, and edits from the other PA's.
- NSTAR effectively managed the heating system replacement program throughout 2011 to ensure that the allocated number of heating system replacements was met for both NSTAR Electric and NSTAR Gas.
- NSTAR directed the creation of outreach materials including signage, letters, mailings, brochures, flyers, etc. to ensure accuracy of information.
- NSTAR initiated participation and assistance of outreach activities to engage more clients
- NSTAR proactively communicated with ABCD via conference calls, meetings and emails throughout 2011 regarding outreach success and additional opportunities of outreach for the initiative.

- NSTAR provided utility specific data of low-income customers on a regular basis to cross-reference with ABCD client data and determine potential outreach opportunities for new low-income clients.
- NSTAR reviewed, provided input and guidance in finalizing metric documentation

National Grid

- Communicated regularly with Action Inc throughout 2011 regarding outreach opportunities
- Attendance and participation at Best Practices Working Group meetings
- Tracked and monitored heating system replacements
- Reviewed and provided input and guidance in finalizing metric documentation.

Unitil

- Developed mailer to send to landlords
- Periodic status update from Community Action Program agencies about potential leads
- Reviewed and provided input into metric documentation.

WMECO

- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011 at which the metrics were discussed.
- If landlords had both oil and natural gas heating systems, the gas company was notified about the replacement opportunity
- Reviewed and provided input for the metric documentation.
- Provided active support to community action agencies and interested landlords to improve enrollment into the program. The feedback that was received from WMECo Community Action Agencies were shared with utility PA's to enhance the landlord heating system programs.

Attachment A – Second Quarter Progress Report

June 30, 2011

2011 Low Income Metrics
1. Hard to Reach Landlords {Electric & Gas} – Statewide

Threshold To broaden and deepen savings, this metric targets low-income tenants of one-to-four unit buildings where the owner owns an inefficient heating system but has no incentive to upgrade it because the tenant pays for heat. Such landlords have not been frequently reached by the program as of last year (2009). Apply lessons learned from the 2010 Hard to Reach Landlord Initiative to increase outreach efforts to hard to reach landlords. Outreach shall continue throughout January-April 2011 with agency input. Marketing shall be diversified to incorporate other methodologies not previously used to attract landlords. The utilities shall document all heating system installations by utility including the projected savings. The Utilities shall compile a progress report from the administration of the Initiative by the end of the second quarter of 2011.

Lessons Learned In the Fall and Winter of 2010, the utilities and their Community Action Agency (CAA) partners have been actively marketing the Heating System Early Retirement Initiative to landlords through direct mailings and presentations at local landlord association events. One newspaper, the Berkshire Eagle, ran an article about the initiative in a November 2010 issue.

The Electric and Gas utilities have compiled the following observations and recommendations regarding the 2010 Metric. These categories highlight the experience the utilities have collectively had since the initiative's inception.

Observations and Recommendations based on Lessons Learned:

- The landlord heating system campaign has received more responses that anticipated. Some utility PA's and CAA's have attended local landlord association events. They have been well received and all flyers describing the program were taken. There is a definite need and interest from landlords.
- Landlords that are advocates for energy efficiency have been an asset to getting the word out about all programs through word of mouth.
- This initiative has very stringent requirements which are hard to address in a mass marketing appeal.
- The Community Action Agencies are a trusted local resource in their communities.
- Based upon the issues and lessons learned, the Utilities believe the local CAA's are better equipped to manage a tenant/landlord relationship, determine heating system eligibility, market the program to qualified landlords and tenants versus utility database lists and mailings, and manage this program and their workloads throughout the year. The most appropriate candidates will be identified and the process will be smoother and easier to manage budgets and resources. This will allow PA's to control cost, quantity, exposure and relieve resources of following poor leads.

Utility	% Allocation	# of Heating Replacements	# of Heating Replacements in Progress 063011	# of Heating Replacements Completed 063011	*Projected Annual Savings on Completed Replacements
NSTAR Electric	23%	23	3	11	2134 kWh
National Grid Electric	32%	32	0	0	
WMECO	5%	5	7	0	
Unitil Electric	1%	1	0	0	
NSTAR Gas	7%	7	3	6	1800 therms
National Grid Gas	21%	21	0	0	
Columbia Gas	8%	8	9	0	
Berkshire Gas	1%	1	2	0	
New England Gas	1%	1	1	0	
Unitil Gas	1%	1	1	0	

Note: * Systems that are being considered for replacement are typically operating between 50% to 60 % efficiency. Systems that are 70 years old or older may be closer to 30%.

Marketing Efforts per Utility

WMECo: In 2011, the three community action agencies that administer WMECo's low income Energy Savings weatherization program, namely, Springfield Partners for Community Action, Inc., Berkshire Community Action Council, Inc., and Community Action continue to pursue 2010 & 2011 landlord inquiries. Landlords have requested their properties' heating systems be considered as a direct result of the 2010 direct utility outreach and marketing campaigns & 2011 word of mouth and auditor efforts. Currently, if all heating system inquires are approved, WMECo will exceed its heating system replacement goal.

National Grid: Currently lead vendor marketing consists of outreach to the CAP agencies who are now including the heating system replacement as a recommendation after the auditor's findings for not only home owners but tenants as well. The CAP agencies will then reach out to the landlords to explain the program eligibility. Further marketing efforts will be done by the lead vendor/local agency if deemed necessary.

NSTAR: In the fourth quarter of 2010, NSTAR and their lead vendor ABCD brainstormed on how to reach landlords regarding their tenant properties. An outreach was initiated through CSG using the latest list of low income tenants supplied by NSTAR who had not had any type of weatherization measures done in the past including replacement of heating systems. NSTAR anticipates exceeding its heating system replacements in 2011 for both the gas and electric goals.

Unitil: Since late 2010, Unitil has been working closely with our lead vendor MOC to identify outreach methods designed to target-market to HTR Landlords. An updated qualifying customer list was provided to MOC in Q1 2011 and we will continue our collaboration with the Mass Rental Housing Association, MOC, and New England Farm Workers Council (first tenant point of contact for income qualification) to identify and

subsequently enroll qualifying properties that have not historically participated in the program.

Berkshire Gas: Berkshire Gas has been working with its own IT department to update current landlord list. The Company is planning on comparing internal information with CAP agencies' database. It has been also working with the City of Pittsfield, possibly targeting certain neighborhoods with higher percentage of low-income population and as a result potentially reaching some landlords. These efforts may not result in any implementation until next year when data will be looked at in further detail.

Columbia Gas: Agencies are in the field working to find appropriate candidates for the initiative. Some agencies are still following up with 2010 leads. Using agency auditors to identify tenant heating systems in need of replacement continues to be the best alternative at this point given the Company's goal and the available resources. Additional marketing efforts will be considered as needed.

New England Gas: In 2011, New England Gas Company has reached out to the local CAP agencies in an effort to expand the list of potential hard to reach landlords. In the past this information was discarded by the agency, or occasionally placed into a hold file in case an opportunity arose or circumstances changed. New England Gas Company asked the agencies to forward any potential new lead. The agencies have responded favorably and will continue to add to this list as they become aware of any potential opportunities for this program.

Low Income #2
Best Practices Program Strategies Research & Technical Review of Potential Measures

TO:	Massachusetts Energy Efficiency Advisory Council
FROM:	Berkshire Gas Company, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR Electric & Gas, Unitil Service Corporation, and Western Massachusetts Electric Company
CC:	Massachusetts Low Income Energy Affordability Network
DATE:	March 30, 2012
RE:	2011 Low Income Metric Two New Measures – Results and Findings

2011 Low Income Metric Two: Best Practices Program Strategies Research & Technical Review of Potential New Measures

> ***Exemplary*** *– By February 28th, 2012, a report of all measures that were reviewed in 2011 by the Best Practices Working Group and Sub-Committee will be developed to support Utility program adoption or non-inclusion. For each new measure that passes the Common Assumptions screening, field testing of the measure as a standard measure will be implemented no later than two months after the relevant Common Assumptions report, including installation in appropriate cases. In a memo to EEAC consultants by April 1, 2012, each PA (Program Administrator) will document results and findings, including savings and feasibility. Each PA to submit documentation showing its performance relative to targets.*

In 2011, the following measures were reviewed for possible inclusion within the Low Income program: Aerogel, Heat Pump Water Heaters, LED CR6, Foundation Foam, Roof Insulation Materials, Ductless Mini-Split Electric Space Heater, Behavior-based Pilot Measures (GroundedPower), and Brushless Fan Motors.

Measures deemed cost-effective:

Of those measures reviewed, the three measures listed below have passed the cost effectiveness screening by the Common Assumptions Group and have become standard measures within the Low Income program when specific parameters are met. For each new measure that passed the Common Assumptions screening, field testing of the measure as a standard measure was implemented and the new measure was included within the standard program offering, subject to PA specific budget impacts.

- **Heat Pump Water Heaters:** Heat pump water heaters (HPWH) use electricity to move heat from one place to another instead of generating heat directly. They can be two to three times more energy efficient than conventional electric resistance water heaters. Heat Pump Water Heaters were initially screened for the Residential Conservation Services (RCS) program utilizing the incremental cost and were deemed cost effective. The measure was then added to the Massachusetts Technical Reference Manual 2012 Plan for use within the RCS Program as part of an on going pilot study and the savings provided are based upon preliminary results and engineering estimates. As it relates to the low income program, this electric measure was screened utilizing the full cost and was still deemed cost effective by the common assumptions group for the Low Income

program when replacing an electric resistance water heater only. This measure did not pass when replacing oil water heating in Low Income. WMECo was successful in installing an Energy Star qualified State EXP 80 DHPT HPWH in a customer's home in Ludlow in March 2012. The 80 gallon hot water heat pump unit replaces a 120 gallon electric hot water heater. Field testing and performance analysis on this unit will continue throughout 2012 and results will be documented within the 2012 metric report. It is important to note that this measure was just recently screened in January 2012 for the low income program; therefore, with guidance from the Best Practices Working Group, PA's are currently in the process of reviewing additional potential field testing opportunities for this specific measure and will document results and findings within the 2012 metric report.

- **LED CR6:** The CR6 is an LED (Light-emitting diode) down light for use in residential and light commercial applications. It easily installs into most standard six inch recessed IC (Insulated Ceiling) or non-IC housings. It has an input power of 10.5 watts and delivers 575 lumens. This measure is deemed cost effective by the common assumptions group for replacing a 65w incandescent recessed down light with a 10.5 w LED down light (54.5w diff).

  In-field testing on the LED CR6 began at the tail-end of 2010 and has continued throughout 2011, as WMECo installed four CREE CR6 LED recessed downlights in a customer's home in Pittsfield, MA. The LED's were installed into existing kitchen soffit downlights, replacing four 100-watt flood type bulbs used for general and task lighting. The customers report they are very satisfied with the color of the light, the increased light spread versus a flood type bulb, as well as with the appearance and quality of the product. The bulbs have not required any maintenance and have been fully functional throughout the year. The customers are extremely satisfied and have recommended these lights to several friends. Estimated savings for the installations of these 4 LED CR6s total 316 kWh annually and 7,900 kWh per lifetime utilizing the deemed value per the Common Assumptions Group's Measure Screening Report.

  NSTAR conducted field testing on the LED CR6. NSTAR installed two LED CR6 recessed downlights in a customer's home in Dorchester, MA. While a six inch recessed IC or non-IC housing is the most suitable for this type of light, these were installed into existing cans with a 5.5" diameter. The fit was tight but workable. The cans were 9" deep with the wires entering the can from the top as the LED CR6 lights require a minimum depth of 7". Time to install was 2 to 3 minutes each which was very fast and easy; however, this may depend on the existing can design, as they all seem to be different. The light quality was fantastic and immediately bright at 575 lumens using just 10.5 Watts, approximately 84 percent less energy than a comparable incandescent. Additionally, the dimming was comparable to an incandescent, cutting out at about 5% of light value as claimed in the documentation. Estimated savings for the installations of these 2 LED CR6s total 158 kWh annually and 3,950 kWh per

lifetime utilizing the deemed value with assumptions of operating 4 hours per day; 365 days per year replacing a 65w incandescent recessed down light.

- **Brushless Fan Motors:** A Brushless Fan Motor is the high-efficiency replacement for a standard blower motor, much like using a compact-fluorescent replacement for a typical incandescent light bulb. It uses proven ECM (electronically commutated motor) technology to save money every time an HVAC system is operating. The Brushless Fan Motor operates continuously between heating and cooling cycles delivering better comfort and indoor air quality more efficiently. Although this measure was screened and deemed cost effective by the Common Assumptions Group for use within the Low Income program, concerns regarding the applicability of this measure have been raised. First, it has been determined that in the majority of cases in which an HVAC system requires a replacement to the standard blower motor, the system in its entirety requires replacement due to age of the unit and/or inoperability rather than simply requiring replacement of the blower motor only. Additionally, there are explicit specifications necessary for the installation of this measure.

  NSTAR attempted to install this measure within four separate customer sites. Within customer site 1 (in Hyde Park, MA), the furnace at this site was belt-driven while the authorized motors for the program are direct-drive only. Within customer site 2 (in Roslindale, MA), the Total Static pressure exceeded the maximum allowed as part of the program. The maximum for this application is .70” while the measured total of this particular unit was .95” w.c. Within customer site 3 (Hyde Park, MA), the Total Static pressure also exceeded the maximum allowed as the measured total was 1.05” w.c. Within customer site 4 (Roslindale, MA), they also displayed a high static pressure at .97" total and additionally had A/C which needed to be below .50" but wasn’t. Unfortunately, most sites cannot be verified without taking a static pressure measurement on site; therefore, there is no way to screen these ahead of time.

  After several attempts to field test existing heating systems with this technology, the Best Practices Working Group determined that this measure was not practical or cost-effective to install at the sites that were identified as potentially appropriate. The Best Practices Working Group therefore concluded that the Brushless Fan Motor is most appropriate and should be limited to an upgrade of a heating system replacement, rather than as a stand-alone retrofit.

  At the time the metric documentation was prepared, ABCD (NSTAR’s Lead Vendor) had confirmed that the Brushless Fan Motor had been installed at 21 customer sites throughout NSTAR’s territory. Estimated savings for these installations total 12,600 kWh annually and 226,800 kWh per lifetime.

The Low Income Best Practices Working Group will continue to discuss this measure in 2012 and the PA's will continue to pursue opportunities for installation within heating system replacements requiring upgrades as needed.

Measures deemed not cost-effective:

The following measures did not pass cost effectiveness screening and therefore will not be offered in the Low-Income program:

- **Foundation Foam:** For this evaluation, the foam board under consideration was an XEPS (Extruded Polystyrene) foam board. To make XEPS, the polystyrene pellets are mixed with various chemicals to liquefy them. A blowing agent is then injected into the mixture, forming gas bubbles. The foaming, thick liquid is then forced through a shaping die. When cooled, the panel is cut as required. Foam densities are typically 1.5 pounds per cubic foot (0.21 kilograms per cubic meter). LEAN used three screening models to test the cost effectiveness for this measure – EQUIP (for multi-family), NEAT, and HEAT. It was also modeled as a single measure, as combining the measure with anything else caused a scaling effect that made it even less cost efficient. In addition to the fact that it did not pass any of the models for cost effectiveness by itself, the additional costs associated with installation and building codes, concerns about longevity, and historical issues with perimeter installations were barriers for this measure. After evaluation by the LEAN network, it was determined that Foundation Foam was not cost effective for this program and was not referred to the Common Assumptions Group for further analysis.

- **Roof Insulation Materials:** The Low Income Best Practices Working Group expressed interest in replacing roofs for Low Income customers in need of a full roof replacement with superinsulation materials. Superinsulation is an approach to building design, construction, and retrofitting that dramatically reduces heat loss (and gain) by using much higher levels of insulation and airtightness than normal. There were few, if any, ideal situations for the superinsulation roof materials to be considered for test sites. Cost was also a significant barrier. As additional layers of insulation are added, the law of diminishing returns operates until, at some point, one of the additional layers does not constitute value for money. The Working Group decided that the high additional cost for such an efficiency measure would be put to better use by serving more customers in need of basic, less extravagant weatherization measures. After review of the savings compared to the cost, along with the very limited applications, the measure was rejected by LEAN as not cost-effective and not referred to the Common Assumptions Group for further analysis.

- **Ductless Mini-Split Electric Space Heater:** Ductless Heat Pumps, or Mini-Split Heat Pumps, are highly efficient heating and cooling systems and are an especially effective solution for electrically heated homes. A ductless heat pump works by transferring heat using refrigerant expansion and compression, the same

way a refrigerator operates. This measure was reviewed as a supplement to resistance heating and some cooling benefit but is not effective below 10-20 degrees. Additionally, since Cape Light Compact reported a BCR of 0.87 and did not pass at the current costs, this measure was rejected for the Low Income program as not cost-effective and was not referred to the Common Assumptions Group.

Measures deferred to 2012:

The following measures have been deferred to 2012 for review:

- **Aerogel:** For our purposes, the Low Income Best Practices Working group is testing Aerogel via Thermal wrap blankets as an option in Multi-family buildings when conventional insulation installations are not possible. With limited information currently available as to the projected savings from this measure, the Best Practices Working Group decided to defer consideration of Aerogel to 2012 as a CEC/DOE SERC project (MA Clean Energy Center/US Department of Energy/Sustainable Energy Resources for Consumers) starting in 2011 and piloting 3 wall installations will be evaluated for savings over the current heating season.

- **Behavior-based Pilot Measure (GroundedPower):** The behavior-based measure analyzed by the Best Practice Working Group was GroundedPower, an approach to integrating proven behavioral change principles with web, mobile and mail applications to provide new opportunities to improve the efficacy and penetration of such programs. One area which remains an opportunity for innovation in low income programs is post audit follow-up and behavior based energy savings. GroundedPower provides a "turn-key" program and technology to address the issue of behavior change as a follow-up service to the existing energy efficiency audit and retrofit services. GroundedPower was acquired in 2011 by a larger company (Tendril) and has been unresponsive to date in pursuing this endeavor; therefore, the Best Practice Working Group has decided to defer this measure to 2012/2013 in the hopes of reigniting the interest of partnering together on the program.

Please note that three weatherization materials were reviewed in 2011: Foundation Foam, Roof Insulation Materials and Aerogel; however, due to the fact that none of these weatherization materials passed the cost effectiveness screening in 2011, gas utilities were unable to field test any of the approved electricity savings measures. The purpose of the Best Practices forum is for program standardization and communication between PA's and agencies and the review of new measures for possible inclusion into the program. Field testing is only to be done if the measure is deemed cost affective by the Common Assumptions Group.

2011 Low Income Metric Two

Berkshire Gas Company, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR Electric & Gas, Unitil Service Corporation, and Western Massachusetts Electric Company are submitting this report to update the Low Income Energy Affordability Network (LEAN) on the status of the 2011 Low Income metric number two.

2) Best Practices Program Strategies Research & Technical Review of Potential New Measures

Threshold In coordination with LEAN, develop and implement a research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE).

In coordination with LEAN, implement Best Practices to achieve deeper energy savings by screening new practices and measures to further increase the comprehensiveness of what is already a comprehensive whole-building approach. The Best Practices Working Group, with each PA participating, shall perform due-diligence reviews of proposed new products/technologies and practices in support of the Utility energy efficiency programs. These due-diligence reviews will be focused on determining if a technology/product not presently being utilized in the Utility weatherization programs is suitable and applicable for incorporation into the Utility programs. PA's will contribute their expertise, including from the disciplines of engineering, utility energy efficiency program planning, evaluation, power, demand resources, construction, weatherization, weatherization auditing and assessment, and training, and will seek outside expertise as appropriate. Best Practices meets regularly for this purpose, including selecting new measures for review. PA's will provide written updates on meetings, technical analyses performed, and additional Best Practices implemented. Each PA will accept an assignment with respect to written products and will submit documentation showing performance of these tasks.

Design Study possible new program measures and practices not now included in the utility program. This will specifically include, but not be limited to: Aerogel, heat pump water heaters, LED CR6, foundation foam, roof insulation materials, ductless mini-splits, behavior-based pilot measures (if feasible and available), and brushless fan motors. Cost-effectiveness analysis will be conducted by the PA Common Assumptions group, or the equivalent, which shall include LEAN for this purpose, within eight weeks of referral by Best Practices, with first reports of analysis no later than June 15, 2011. All feasible non-pilot cost-effective measures to be included in standard program offering within 3 months, subject to PA specific budget impacts. Each PA will submit documentation showing its performance of these tasks.

Exemplary By February 28th, 2012, a report of all measures that were reviewed in 2011 by the Best Practices Working Group and Sub-Committee will be developed to support Utility program adoption or non-inclusion. For each new measure that passes the Common Assumptions screening, field testing of the measure as a standard measure will be implemented no later than two months after the relevant Common Assumptions report, including installation in appropriate cases. In a memo to EEAC consultants by April 1, 2012, each PA will document results and findings, including savings and feasibility. Each PA to submit documentation showing its performance relative to targets.

Clear & Distinct Role: Each utility must produce a Best Practices document, participate in the Common Assumptions group with LEAN, and field test new measures. Verification Plan: Best Practices document, Common Assumptions analyses, field test results. Baseline Information: Baseline for each of these measures is that they are now not part of the program.

We believe that by completion and documentation of these tasks detailed within this report on February 28, 2012, Berkshire Gas Company, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR Electric & Gas, Unitil Service Corporation, and Western Massachusetts Electric Company have completed the 2011 low income metric number two and have reached the level of the metric listed below.

Berkshire Gas – Exemplary
Columbia Gas of Massachusetts – Exemplary
National Grid Electric & Gas – Exemplary
New England Gas – Exemplary
NSTAR Electric & Gas – Exemplary
Unitil Service Corporation Electric & Gas – Exemplary
Western Massachusetts Electric Company – Exemplary

Respectfully submitted by:

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2011 Low Income Metric Two

THRESHOLD:
In coordination with LEAN (Low Income Energy Affordability Network), PA's have developed and implemented a research survey to identify potential new technologies, measures, and program strategies for consideration in future program offerings and to assess a cross section of low-income programs being offered around the country. The Low Income Program Measure Assessment was conducted in conjunction with LEAN and the Massachusetts Residential Retrofit and Low Income Evaluation Team by The Cadmus Group, Inc, an Architecture/Engineering and Environmental Consulting Firm and is summarized below. We have also included the actual memo and related information in ***Attachment A***.

- ***Step 1: Development of Initial List of Measures***
  - LEAN and the evaluation team identified a broad list of 34 measures for consideration. The list was developed based upon a review of relevant studies from the Consortium for Energy Efficiency and the American Council for an Energy Efficient Economy as well as a review of measure offerings in several other states including California, Oregon, Ohio, Wisconsin, Washington, and Utah. Web searches and telephone or e-mail communication were used to identify measures from the following sources, among others: the Energy Trust of Oregon, Northwest Regional Technical Forum, Ohio Energy Efficiency Collaborative, Energy Center of Wisconsin, and California Best Practices.

- **Step 2: Qualitative Screening**
  - The PA's tasked Cadmus to perform qualitative screening on the initial list of measures in conjunction with LEAN and PA EM&V (Evaluation, Measurement and Verification) representatives.
  - Qualitative screeners included factors such as: limited applicability, better measures available on the market, immature or unproven technology, poor customer acceptance, health and environmental concerns, difficulty of quantifying savings, and end-use service degradation. Other factors, including whether or not a given measure had been researched and accepted or denied through the Best Practices meetings was also taken into consideration.
  - Once the qualitative screening was complete, selected measures continued on to the economic research phase.

- **Step 3: Inputs for Testing Cost Effectiveness**
  - For each of the technologies that passed the qualitative screening phase, the evaluation team performed the research necessary to develop inputs for testing the cost effectiveness of the measures including installed measure costs, annual energy and dollar savings, and expected measure lives. Energy and dollar savings were provided for multiple fuel types, including electricity, natural gas, fuel oil and propane. Installed measure costs comprised of measure material costs and labor costs and the sources of the information that provided the basis for the input values are fully documented.
  - It was also important to note any limitations to implementation of the measures (i.e. not all measures are applicable in all low income residential settings). Measure applicability factors such as seasonality, housing stock, existing energy usage, heating and water heating fuel types, and other pre-existing or market conditions were documented where appropriate.

- Several teleconferences were held throughout the project between LEAN, the evaluation team, and representatives from the PA's to discuss progress and initial findings.

- **Step 4: Findings**
  - The PA's used the information from the qualitative screening and the inputs required for testing the cost-effectiveness of these measures in order to run each of the measures through the benefit-cost ratio model and determine whether each measure is cost-effective and feasible to offer through the low income program in future program years. The complete list of measures that passed qualitative screening and the inputs required are included in the back-up section of this document

- **Step 5: Best Practices Working Group Review**
  - The Best Practices Working Group performed due-diligence reviews of proposed new products/technologies and practices for possible incorporation into the Utility programs. New measures and technical analysis was performed and discussed at Best Practice meetings throughout the year. PA's worked collectively to ensure that these measures were reviewed in a thorough and timely manner by the Common Assumptions Group at each Best Practice meeting.
  - Best Practices met on a regular basis on the following dates throughout the year:
    - January 10, 2011
    - May 11, 2011
    - August 10, 2011
    - September 26, 2011
    - November 10, 2011
  - Best Practice meeting summaries, documentation of best practices implemented, and technical analyses performed are provided in ***Attachment B***.

DESIGN:
While cost-effectiveness analysis was to be conducted by the PA Common Assumptions group, within eight weeks of referral by Best Practices, with first reports of analysis due no later than June 15, 2011, a first report of analysis was not completed at this time since there were no measures referred to the PA Common Assumptions group as of June 15th. Please refer to the documentation in ***Attachment C*** verifying this.

Following June 15th each PA, in participation with LEAN and the Best Practices working group, selected and agreed to screen the following measures: Aerogel, heat pump water heaters, LED CR6, foundation foam, roof insulation materials, ductless mini-splits, behavior-based pilot measures (if feasible and available), and brushless fan motors. All measures were initially screened by LEAN and then if deemed cost effective were screened by the Common Assumptions group. Each PA was assigned a lead role in documenting each of the measures/technologies. Measure information prepared for and/or by LEAN is included in ***Attachment D***.

- **Aerogel (Berkshire Gas & Unitil)** – Aerogel is produced by removing the liquid molecules from silica and replacing them with a gas, resulting in a material that is extremely resistant to conductive heat transmission. Aerogel is reusable, safe for human and ecological systems, and is manufactured with little to no impact on the environment. Manufactured in sheets known as Thermal wrap blankets, product can be cut, sewn, or

laminated for a variety of applications, including exterior wall insulation, similar to rigid foam board. Also manufactured in particle form, aerogel can be installed as a loose fill product similar in application to cellulose; either open blown, or dense packed. Aerogel has an approximate R value of R-10, more than twice most low density foams, cellulose and fiberglass. For our purposes, the Low Income Best Practices Working group is testing Aerogel via Thermal wrap blankets as an option in Multi-family buildings when conventional insulation installations are not possible. With limited information currently available as to the projected savings from this measure, the Best Practices Working Group decided to defer consideration of Aerogel to 2012 as a CEC/DOE SERC project (MA Clean Energy Center/US Department of Energy/Sustainable Energy Resources for Consumers) starting in 2011 and piloting 3 wall installations will be evaluated for savings over the current heating season.

- **Heat Pump Water Heaters (National Grid) -** Heat pump water heaters (HPWH) use electricity to move heat from one place to another instead of generating heat directly. They can be two to three times more energy efficient than conventional electric resistance water heaters. A low-pressure liquid refrigerant is vaporized in the heat pump's evaporator and passed into the compressor. As the pressure of the refrigerant increases, so does its temperature. The heated refrigerant runs through a condenser coil within the storage tank, transferring heat to the water stored there. As the refrigerant delivers its heat to the water, it cools and condenses, and then passes through an expansion valve where the pressure is reduced and the cycle starts over. The HPWH is deemed cost effective by the common assumptions group for the Low Income program when replacing an electric resistance water heater.

- **LED CR6 (National Grid) -** The CR6 is an LED (Light-emitting diode) down light for use in residential and light commercial applications. It easily installs into most standard six inch recessed IC (insulated Ceiling) or non-IC housings. It has an input power of 10.5 watts and delivers 575 lumens. This measure is deemed cost effective by the common assumptions group for replacing a 65w incandescent recessed down light with a 10.5 w LED down light (54.5w diff).

- **Foundation Foam (New England Gas)** – Even though many foam insulation products are more expensive than other types of insulating materials, such as fiberglass, cellulose, etc., they are commonly used in buildings where there are space limitations or where very high R-values are desirable. Foam insulation R-values range from R-4 to R-8 per inch of thickness (2.54 cm), which is 2 to 3 times greater than most other insulating materials of the same thickness. Several variables affect the installed R-value of foam insulation, including: the initial density of the foam; the blowing gas used (CFC, HCFC, CO2, air, or a number of other gases); how the foam insulation is handled (dents and chips adversely effect the R-value); the type of facing (if any) used; and the conditions in which the foam is installed. Foam insulation is often made with one of three materials: molded expanded polystyrene (MEPS), extruded expanded polystyrene (XEPS) or polyurethane, polyisocyanurate, or a related chemical mixture. Some are installed as a liquid while other types come as factory made panels or foam board. Also, per code for residential foundation insulation, all foams require thermal protection equal to ½ inch gypsum wall board when installed on the interior of a building.

  For this evaluation, the foam board under consideration was an XEPS foam board. To make XEPS, the polystyrene pellets are mixed with various chemicals to liquefy them. A

blowing agent is then injected into the mixture, forming gas bubbles. The foaming, thick liquid is then forced through a shaping die. When cooled, the panel is cut as required. Foam densities are typically 1.5 pounds per cubic foot (0.21 kilograms per cubic meter).

LEAN used three screening models to test the cost effectiveness for this measure – EQUIP (for multi-family), NEAT, and HEAT. It was also modeled as a single measure, as combining the measure with anything else caused a scaling effect that made it even less cost efficient. In addition to the fact that it did not pass any of the models for cost effectiveness by itself, the additional costs associated with installation and building codes, concerns about longevity, and historical issues with perimeter installations were barriers for this measure.

After evaluation by the LEAN network, it was determined that Foundation Foam was not cost effective for this program and was not referred to the Common Assumptions Group for further analysis.

- **Roof Insulation Materials (Columbia Gas)** - The Low Income Best Practices Working Group expressed interest in replacing roofs for Low Income customers in need of a full roof replacement with superinsulation materials. Superinsulation is an approach to building design, construction, and retrofitting that dramatically reduces heat loss (and gain) by using much higher levels of insulation and airtightness than normal. Materials could include products (or a combination of products) such as icynene, cellulose or fiberglass. For the purposes of researching the measure, the Working Group defined superinsulation for replacement roofs as having at least an R-50 value. Identifying good candidates proved to be challenging. There were few, if any, ideal situations for the superinsulation roof materials to be considered for test sites. Cost was also a significant barrier. As additional layers of insulation are added, the law of diminishing returns operates until, at some point, one of the additional layers does not constitute value for money. The Working Group decided that the high additional cost for such an efficiency measure would be put to better use by serving more customers in need of basic, less extravagant weatherization measures. After review of the savings compared to the cost, along with the very limited applications, the measure was rejected by LEAN as not cost-effective and not referred to the Common Assumptions Group for further analysis.

- **Ductless Mini-Split Electric Space Heater (WMECO)** - Ductless Heat Pumps, or Mini-Split Heat Pumps, are highly efficient heating and cooling systems and are an especially effective solution for electrically heated homes. A ductless heat pump works by transferring heat using refrigerant expansion and compression, the same way a refrigerator operates. They work like a refrigerator in the summer to cool, but more importantly, work in reverse in the winter to provide ample amounts of heat. Ductless heat pumps have three main parts; an indoor unit which mounts on the wall, an outdoor unit which sits on the ground and a remote control that operates the unit. The indoor and outdoor units are connected by small refrigerant lines. A small hole through the wall is required to connect the two units. The outside unit is responsible for cycling the refrigerant to and from inside unit. The indoor unit then distributes the heated or cooled air into the room. This type of system allows for easy installation, and eliminates the need for expensive and invasive ductwork. This measure was reviewed as a supplement to resistance heating and some cooling benefit but is not effective below 10-20 degrees. Additionally, since Cape Light Compact reported a BCR of 0.87 and did not pass at the

current costs, this measure was rejected for the Low Income program as not cost-effective and was not referred to the Common Assumptions Group.

- **Behavior-based Pilot Measures (LEAN)** – The behavior-based measure analyzed by the Best Practice Working Group was GroundedPower, an approach to integrating proven behavioral change principles with web, mobile and mail applications to provide new opportunities to improve the efficacy and penetration of such programs. One area which remains an opportunity for innovation in low income programs is post audit follow-up and behavior based energy savings. GroundedPower provides a "turn-key" program and technology to address the issue of behavior change as a follow-up service to the existing energy efficiency audit and retrofit services. The goal is to deliver a higher level of savings through engagement, education and persistent behavior change via multi channel outreach and feedback process such as internet or mobile access. GroundedPower was acquired in 2011 by a larger company (Tendril) and has been unresponsive to date in pursuing this endeavor; therefore, the Best Practice Working Group has decided to defer this measure to 2012/2013 in the hopes of reigniting the interest of partnering together on the program.

- **Brushless Fan Motors - (NSTAR)** – The blower motor is the heart of a furnace or air handler, forcing the air through your ductwork to warm or cool your home. A Brushless Fan Motor is the high-efficiency replacement for a standard blower motor, much like using a compact-fluorescent replacement for a typical incandescent light bulb. It uses proven ECM (electronically commutated motor) technology to save money every time an HVAC system is operating. The Brushless Fan Motor operates continuously between heating and cooling cycles delivering better comfort and indoor air quality more efficiently. The brushless furnace fan motor was screened by the Common Assumptions Group and is deemed cost effective for use in heating only systems as well as combined heating and cooling systems as the benefits are greater than the costs. It is not deemed cost effective for a cooling only system.

EXEMPLARY:
The following measures have passed the cost effectiveness screening by the Common Assumptions Group and have become standard measures within the program when specific parameters are met. The screening reports completed by the Common Assumptions Group are included in ***Attachment E***.

- **Heat Pump Water Heaters** – Heat Pump Water Heaters were initially screened for the RCS program utilizing the incremental cost and were deemed cost effective. The measure was then added to the Massachusetts TRM 2012 Plan for use within the RCS Program as part of an on going pilot study and the savings provided are based upon preliminary results and engineering estimates.

  As it relates to the low income program, this electric measure was screened utilizing the full cost and was still deemed cost effective by the common assumptions group for the Low Income program when replacing an electric resistance water heater only. This measure did not pass when replacing oil water heating in Low Income.

  It is important to note that this measure was just recently screened in January 2012 for the low income program; therefore, with guidance from the Best Practices Working Group,

the PA's plan to field test this specific measure within 2012 and document results and findings within the 2012 metric report.

- **LED CR6 –** In-field testing on the LED CR6 began at the tail-end of 2010 and has continued throughout 2011, as WMECo installed four CREE CR6 LED recessed downlights in a customer's home in Pittsfield, MA. The LED's were installed into existing kitchen soffit downlights, replacing four 100-watt flood type bulbs used for general and task lighting. The customers report they are very satisfied with the color of the light, the increased light spread versus a flood type bulb, as well as with the appearance and quality of the product. The bulbs have not required any maintenance and have been fully functional throughout the year. The customers are extremely satisfied and have recommended these lights to several friends. NSTAR also conducted field testing on the LED CR6. NSTAR installed two LED CR6 recessed downlights in a customer's home in Dorchester, MA. While a six inch recessed IC or non-IC housing is the most suitable for this type of light, these were installed into existing cans with a 5.5" diameter. The fit was tight but workable. The cans were 9" deep with the wires entering the can from the top as the LED CR6 lights require a minimum depth of 7". Time to install was 2 to 3 minutes each which was very fast and easy; however, this may depend on the existing can design, as they all seem to be different. The light quality was fantastic and immediately bright at 575 lumens using just 10.5 Watts, approximately 84 percent less energy than a comparable incandescent. Additionally, the dimming was comparable to an incandescent, cutting out at about 5% of light value as claimed in the documentation.

  Based upon this field testing, the LED CR6 was adopted by the Massachusetts utilities as a standard measure offered within the Low Income electric program.

- **Brushless Fan Motors –** Although this measure was screened and deemed cost effective by the Common Assumptions Group for use within the Low Income program, concerns regarding the applicability of this measure have been raised. First, it has been determined that in the majority of cases in which an HVAC system requires a replacement to the standard blower motor, the system in its entirety requires replacement due to age of the unit and/or inoperability rather than simply requiring replacement of the blower motor only.

  Additionally, there are explicit specifications necessary for the installation of this measure. NSTAR attempted to install this measure within four separate customer sites. Within customer site 1 (in Hyde Park, MA), the furnace at this site was belt-driven while the authorized motors for the program are direct-drive only. Within customer site 2 (in Roslindale, MA), the Total Static pressure exceeded the maximum allowed as part of the program. The maximum for this application is .70" while the measured total of this particular unit was .95" w.c. Within customer site 3 (Hyde Park, MA), the Total Static pressure also exceeded the maximum allowed as the measured total was 1.05" w.c. Within customer site 4 (Roslindale, MA), they also displayed a high static pressure at .97" total and additionally had A/C which needed to be below .50" but wasn't. Unfortunately, most sites cannot be verified without taking a static pressure measurement on site; therefore, there is no way to screen these ahead of time.

  After several attempts to field test existing heating systems with this technology, the Best Practices Working Group determined that this measure was not practical or cost-effective

to install at the sites that were identified as potentially appropriate. The Best Practices Working Group therefore concluded that the Brushless Fan Motor is most appropriate and should be limited to an upgrade of a heating system replacement, rather than as a stand-alone retrofit.

At the time this documentation report was issued, ABCD confirmed that the Brushless Fan Motor has been installed at 21 customer sites throughout NSTAR's territory.

The Low Income Best Practices Working Group will continue to discuss this measure in 2012 and the PA's will continue to pursue opportunities for additional installations within heating system replacements requiring upgrades as needed.

The following measures did not pass cost effectiveness screening and therefore will not be offered in the Low-Income program:

- Foundation Foam
- Roof Insulation Materials
- Ductless Mini-Split Electric Space Heater

The following measures have been deferred to 2012 for review:

- Aerogel
    - With limited information currently available as to the projected savings from this measure, the Best Practices Working Group decided to defer consideration of Aerogel to 2012 as a CEC/DOE SERC project (MA Clean Energy Center/US Department of Energy/Sustainable Energy Resources for Consumers) starting in 2011 and piloting 3 wall installations will be evaluated for savings over the current heating season.

- Behavior-based Pilot Measure (GroundedPower) if available and feasible
    - GroundedPower was acquired in 2011 by a larger company (Tendril) and has been unresponsive to date in pursuing this endeavor; therefore, the Best Practice Working Group has decided to defer this measure to 2012/2013 in the hopes of reigniting the interest of partnering together on the program.

Please note that three weatherization materials were reviewed in 2011: Foundation Foam, Roof Insulation Materials and Aerogel; however, due to the fact that none of these weatherization materials passed the cost effectiveness screening in 2011, gas utilities were unable to field test any of the approved electricity savings measures. With direction from the Best Practices Working Group, the gas utilities have achieved the Exemplary level of performance on this metric since field testing was not required. The purpose of the Best Practices forum is for program standardization and communication between PA's and agencies and the review of new measures for possible inclusion into the program. Field testing is only to be done if the measure is deemed cost affective by the Common Assumptions Group. Please refer to the memo from LEAN in ***Attachment F*** for further validation.

CLEAR AND DISTINCT ROLE

Berkshire Gas

- In conjunction with Unitil, took the co-lead PA role in providing the metric documentation for the Aerogel technology
- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011
- Supported the Cadmus Group in the Low-Income Program Measure Assessment Survey
- Reviewed and provided input into metric documentation

Columbia Gas

- Took the lead PA role in providing the metric documentation for the Roof Insulation technology
- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, September 26th, and November 10th, 2011
- Hosted Best Practice meetings held on January 10th, May 11th, August 10th, and September 26th.
- Supported the Cadmus Group in the Low-Income Program Measure Assessment Survey
- Reviewed and provided input into metric documentation

New England Gas

- Took the lead PA role in providing the metric documentation for the Foundation Foam technology
- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011
- Hosted the best practice meeting held on November 10th 2011
- Supported the Cadmus Group in the Low-Income Program Measure Assessment Survey
- Reviewed and provided input into metric documentation

NSTAR

- NSTAR was the lead PA in providing the metric documentation for the Brushless Fan Motor technology
- NSTAR was the lead PA and the primary liaison in working with The Cadmus Group on the Low-Income Program Measure Assessment Survey:
    - NSTAR coordinated all communication between PA's, LEAN and Cadmus
    - NSTAR finalized the research measure list in conjunction with the Cadmus Group and representatives from LEAN during a meeting held at NSTAR
    - NSTAR initiated writing of final memo detailing activities performed
- NSTAR was the PA lead to compile and finalize metric documentation including, comments, direction, and edits from the other PA's.
- NSTAR attended and was quite active in participating in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011
- NSTAR reviewed, provided input and guidance in finalizing metric documentation

National Grid

- Took the lead PA role in providing the metric documentation for the Heat Pump Water Heaters and LED CR6 technologies
- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011
- Supported the Cadmus Group in the Low-Income Program Measure Assessment Survey
- Successfully completed and documented screening of new measures: LED CR6, Heat Pump Water Heaters and Brushless Fan Motor
- Reviewed and provided input into metric documentation

Unitil

- In conjunction with Berkshire Gas, took the co-lead PA role in providing the metric documentation for the Aerogel technology
- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011
- Supported the Cadmus Group in the Low-Income Program Measure Assessment Survey
- Reviewed and provided input into metric documentation

WMECO

- Attendance and active participation in all of the best practice meetings held throughout the year on January 10th, May 11th, August 10th, September 26th, and November 10th, 2011.
- Supported the Cadmus Group in the Low-Income Program Measure Assessment Survey.
- Investigated 'cool roofing' products as a potential new measure when installing a replacement roof. The investigation showed the technology to be appropriate for southern climates only and the measure was not adopted.
- Investigated the CREE CR 6 LED Down-Light Fixture as an additional lighting measure to the CREE LR 6 LED Down-Light Fixture approved in 2010. This measure was deemed cost effective and was incorporated into the program
- Investigated the Phillips A19 LED bulb as an additional lighting measure to CFLs. This measure was under consideration within the Best Practices Working Group in anticipation of a price decrease on the unit.
- Investigated the potential for including thermometer/humidistats in the program TLC kits. Upon further product review, the best practices group determined not to incorporate the measure into the program offerings.
- Reviewed and provided input into metric documentation

Attachments

- Attachment A: The Cadmus Group Low Income Program Measure Assessment
- Attachment B: Best Practice Meetings Documentation & Back-up
- Attachment C: Communication verifying the elimination of the June 15, 2011 Screening Report Analysis
- Attachment D: Initial measure information prepared for/by LEAN
- Attachment E: Common Assumptions Group Screening Reports
- Attachment F: Memo from LEAN regarding Gas Utilities meeting Exemplary

Attachment A

THE CADMUS GROUP, INC.

Date: **December 2011**
To: **The Massachusetts Program Administrators; LEAN**
From: **The MA RR&LI Evaluation Team**
Re: **Low Income Program Measure Assessment**

Introduction

In coordination with LEAN, the Massachusetts Residential Retrofit and Low Income Evaluation Team ("the evaluation team") assessed a cross-section of low-income program measures offered across the country. This review fulfills the PA "metric two – threshold," which reads as follows:

> 2. Best Practices Program Strategies Research & Technical Review of Potential New Measures
> Threshold**: *In coordination with LEAN, develop and implement a research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE).***

LEAN and the evaluation team's research and technical review of potential new measures will be used by the PA's to identify potential new technologies, measures, and program strategies for consideration as future program offerings.

This memo details the methodology used to complete this research and summarizes findings. Complete findings are included in the attached Excel workbook.

This research was conducted in three steps: 1) develop a list of possible measures; 2) conduct a qualitative screening of those measures to obtain a list of potentially viable measures; 3) develop inputs for the measures to support assessment of their cost effectiveness. Each of these steps is discussed briefly below followed by the outputs from the research.

Develop a List of Measures

First, LEAN and the evaluation team identified a broad list of 34 measures for consideration. The list of measures was developed based on a review of measure offerings in several other states including California, Oregon, Ohio, Wisconsin, Washington, and Utah. Web searches and telephone or e-mail communication were used to identify measures from the following sources, among others: the Energy Trust of Oregon, Northwest Regional Technical Forum, Ohio Energy Efficiency Collaborative, Energy Center of Wisconsin, and California Best Practices.
The initial list of measures and associated sources is provided in Attachment A.

Qualitative Screening

Once the initial list of 34 measures was put together, Cadmus, LEAN and a PA representative from NSTAR had a teleconference to discuss each of the proposed measures and perform a

qualitative screening. This task consisted of discussing each of the measures and narrowing down the list to a smaller group of measures to continue on towards economic screening phase.

Qualitative screeners included factors such as: limited applicability, better measures available on the market, immature or unproven technology, poor customer acceptance, health and environmental concerns, difficulty of quantifying savings, and end-use service degradation. Other factors, including whether or not a given measure had been researched and accepted or denied through the Best Practices meetings was also taken into consideration.
Once the qualitative screening was complete, 11 measures continued on to the economic research phase:

1. Heat Pump Water Heaters
2. Direct-vent Fireplace
3. Make-Up Air Units
4. High Efficiency Clothes Washers
5. Bi-Level Stairwell Lighting Controls
6. Photocells
7. Occupancy Sensors
8. Duct Repair
9. Combined Heat & Hot Waters
10. High Efficiency Dehumidifiers
11. LED Lights

Inputs for Testing Cost Effectiveness
For each of the 11 technologies that passed the qualitative screening phase, the evaluation team performed the research necessary to develop inputs for testing the cost effectiveness of the measures including installed measure costs, annual energy and dollar savings, and expected measure lives. Energy and dollar savings were provided for multiple fuel types, including electricity, natural gas, fuel oil and propane. Installed measure costs comprise of measure material costs and labor costs. Sources of the information that provided the basis for the input values are fully documented.
It was also important to note any limitations to implementation of the measures (i.e. not all measures are applicable in all low income residential settings). Measure applicability factors such as seasonality, housing stock, existing energy usage, heating and water heating fuel types, and other pre-existing or market conditions were documented where appropriate.
LEAN, the evaluation team, and representatives from the PA's held several teleconferences throughout the project to discuss progress and initial findings.

Findings
The completed list of measures that passed the qualitative screening and the inputs required for testing the cost-effectiveness of these measures are included in Attachment B. The PA's will use this information to run each of the 11 measures through the benefit-cost ratio model and determine whether each measure is cost-effective and feasible to offer through the low income program in future program years.

Below is the initial list of 34 measures prior to the qualitative screening phase.

LI WX Emerging Residential Technologies and Measures					
Measure Information					
Measure Source (Program)	**Category**	**Measure**	**Status**	**Replaces**	**Notes**
CA Best Practices/ Itron	Heating Plant	Retrocommissioning	Available	Building Controls, Smart Meters, Flexible Rate Designs	paybacks range from 1 month to 1-2 years, see LBNL 2007 study at: http://cacx.org/calendar/meetings/2007-04-12/CCC-Mills-3.pdf
Energy Trust of Oregon	DHW	Heat Pump Water Heaters	Available	Electric Direct Storage DHW	$900.00 to $2,700.00 installed cost range
Energy Trust of Oregon	Renewable Energy	Solar DHW	Available	Direct Storage DHW	$6,100.00-$9,500 installed cost range, MTC LI 2006-2010 program
Energy Trust of Oregon	DHW	Tankless Water Heaters	Available	Direct Storage DHW	$800.00-$1,150.00 - http://www.consumerreports.org/cro/appliances/heating-cooling-and-air/water-heaters/tankless-water-heaters/overview/tankless-water-heaters-ov.htm
Energy Trust of Oregon	Heating Plant	Gas Hearths	Available	Wood Stoves	$500.00 - $2,400.00 - http://wcfcourier.com/lifestyles/home-and-garden/decorating/living/article_5be8934e-f1b6-11df-baeb-001cc4c002e0.html
Energy Trust of Oregon	Ventilation	MAU	Available	MAU	Custom Costs
Energy Trust of Oregon	Heating/ Cooling	Heat Pump Upgrade	Available	HSPF 7.7 to 9.5	Rebates of $200.00 - $450.00 - Energy Trust of Oregon - http://energytrust.org/residential/incentives/heating-and-cooling/heatpumps1
CA Best Practices/ Itron/ Energy Trust of Oregon	Heating/ Cooling	Ductless Mini Split Systems	Available	All Electric Heating & AC	$1,500.00 - $2,000.00 per ton - http://www.energysavers.gov/your_home/space_heating_cooling/index.cfm/mytopic=12630
Energy Trust of Oregon	Heating Plant	Ductless Heat Pumps	Available	Secondary Heat	$3,000.00 - $5,000.00 - http://www.goingductless.com/faq.html

Energy Trust of Oregon	Appliance	HiE Clothes Washer	Available	Standard Clothes Washer	$500.00 - $1,100.00 - http://www.rwah2o.org/rwa/files/ToolKit/For%20the%20Home/Clothes%20Washer%20Rebate%20Brochure%20(color).pdf
CA Best Practices/ Itron	Renewable Energy	Passive Solar	Available	GRID	Custom Costs
CA Best Practices/ Itron/Ohio EE Collaborative	Lighting	Controls - Wireless- Vacancy Sensors - Dimmers-	Available	GRID	$15.00-$30.00
CA Best Practices/ Itron	Roofing	Cool Roof Coatings	Available	NA	$5.00 - $10.00/sf - www.replyroofing.com/.../cool-roof-spray-foam-roof-price...
CA Best Practices/ Itron	Cooling	HiE Air Conditioners	Available	Existing AC	$150.00-$700.00
Energy Trust of Oregon	Distribution	Duct Repair	Available	NA	Custom Costs
Energy Trust of Oregon	Heating/Cooling	GSHP	Available	Air Source Heat Pump	$20,000.00 - $35,000.00 - MA MTC 2006-2010 LI Program
Energy Trust of Oregon	Ventilation	Heat Recovery Ventilation	Available	NA	$600.00 - $1,500.00 - http://www.nextag.com/heat-recovery-ventilation/shop-html
Energy Trust of Oregon	Heat & DHW	Combined Heat & Hot Water	Available	Independent Heating & DHW Units	$7,200.00 - $7,300.00
Proctor Engineering Group	Heating/Cooling	BFM/BPM	Available	Existing Furnace Fan Motor	$150.00 - $300.00
Ohio EE Collaborative	Lighting	LED Exit Signs	Available	Incandescent	$39.95 - $200.00 - http://www.grainger.com/Grainger/wwg/search.shtml?searchQuery=Led+Exit+Lights&op=search&Ntt=Led+Exit+Lights&N=0&st=All&cm_guid=4-_-5456209662-_-383498118-_-p&cm_mmc=PPC%3A+MSN-_-TPN+-+Lighting_Nov+%2710-_-Lighting-_-led%20exit%20light
Wisconsin Energy Center	Client Education	Dehumidifier	Available	Dehumidifier - Reduce Use	$178.00 - $600.00 - http://products.howstuffworks.com/dehumidifier-reviews.htm
Wisconsin Energy Center	DHW	Solar DHW	Available	Traditional Fuel Source DHW	$6,100.00-$9,500 installed cost range, MTC LI 2006-2010 program

Energy Trust of Oregon	DHW	Heat Recovery Chillers	Available	NA	MF Garages Hot Water HR
CA Best Practices/ Itron	LOAD Management	Pricing Strategies- Wireless Controls	Pilots/ Available	GRID	
CA Best Practices/ Itron	Architectural	Reflective Roof Shingles	Prototype	Current Roofing Materials	$17.00 per sf material
CA Best Practices/ Itron	Renewable Energy	PV -Carbon Nanotubes - Modular Concentrators - Hybrid PV-Space Heating	Prototype	GRID	SB a low cost alternative to Silicon
CA Best Practices/ Itron	DHW	Super Efficient Gas Water Heater	R&D	Current DHW @ 30% Increase in efficiency	$3, 153.90 - http://www.amazon.com/American-Water-Heaters-PGC3-34130-2NV-Efficiency/dp/B003WUDIFO
CA Best Practices/ Itron	Cooling	Night Cooling	R&D	Refrigerated AC Systems	
CA Best Practices/ Itron	Lighting	LED	R&D	CFL/Incandescent	2015-2020 availability - $35.00 - $120.00 - WMECO Program
CA Best Practices/ Itron	Lighting	HIF	R&D	HID	$250.00 - HIF Lighting Guide - PDF available
CA Best Practices/ Itron	Lighting	LED	R&D - 2015-2020 availability	CFL/Incandescent	$35.00 - $120.00 - WMECO Program
Washington State/BU	Lighting	SL-I Smart Light, (LED), IP Enabled LED prototype	Research/ Pilot	Incandescent	http://www.bu.edu/smartlighting/research/smart-light-prototype
Ohio EE Collaborative	Solar Thermal	Passive solar wall	Available	Heating Load	
Regional Technical Forum	Plug load	Smartstrips	Available	Standard power strip	http://www.nwcouncil.org/energy/rtf/measures/measure.asp?id=150

Below is the final researched list of 11 measures that passed both the qualitative and economic screening phases.

Measure Information								
Measure	Measure Description	Replaces (Baseline)	Segment	Enduse	Enduse Fuel Type	Measure Fuel Type	Equipment Status	Measure Source (Program)
Heat Pump Water Heater	Heat Pump Water Heaters; Energy Factor (EF) = 2.0	Existing Electric Storage Water Heat	Single Family	Water Heat	Electric	Electric	Available	Energy Trust of Oregon
Fireplace	Direct-Vent Gas Fireplace, Fuel Efficiency (FE) = 65.0	Open Vent Fire Place	Single Family	Space Heat	Gas	Gas	Available	Energy Trust of Oregon
MAU - Make-up Air Units	Incorporate Heat or Energy Recovery Unit (Strategy 1)	No heat or energy recovery unit	Multifamily	Space Heat	Gas	Gas	Available	
	Replace Unit w/ More Efficient Model (Strategy 2) - Heating	Low / Standard Efficiency Unit	Multifamily	Space Heat	Gas	Gas	Available	
	Replace Unit w/ More Efficient Model (Strategy 2) - Cooling	Low / Standard Efficiency Unit	Multifamily	Space Cool	Electric	Electric	Available	
	Demand Control Ventilation (Strategy 3)	No demand control ventilation scheme	Multifamily	Space Heat	Gas	Gas	Available	Energy Trust of Oregon
Clothes Washer - ENERGY STAR MEF=2.0, WF=6.0	w/ Gas Dryer & Gas Water Heater	Standard Clothes Washer w/ Gas Dryer & Gas DHW	Single Family	Appliance	Gas	Electric	Available	Energy Trust of Oregon
	w/ Gas Dryer & Electric Water Heater	Standard Clothes Washer w/ Gas Dryer & Electric DHW	Single Family	Appliance	Electric	Electric	Available	Energy Trust of Oregon
	w/ Electric Dryer & Gas Water Heater	Standard Clothes Washer w/ Electric Dryer & Gas DHW	Single Family	Appliance	Gas	Electric	Available	Energy Trust of Oregon
	w/ Electric Dryer & Electric Water Heater	Standard Clothes Washer w/ Electric Dryer & Electric	Single Family	Appliance	Electric	Electric	Available	Energy Trust of Oregon

		DHW						
	w/ Gas Dryer & Gas Water Heater	Standard Clothes Washer w/ Gas Dryer & Gas DHW	Multifamily	Appliance	Gas	Electric	Available	Energy Trust of Oregon
	w/ Gas Dryer & Electric Water Heater	Standard Clothes Washer w/ Gas Dryer & Electric DHW	Multifamily	Appliance	Electric	Electric	Available	Energy Trust of Oregon
	w/ Electric Dryer & Gas Water Heater	Standard Clothes Washer w/ Electric Dryer & Gas DHW	Multifamily	Appliance	Electric	Electric	Available	Energy Trust of Oregon
	w/ Electric Dryer & Electric Water Heater	Standard Clothes Washer w/ Electric Dryer & Electric DHW	Multifamily	Appliance	Electric	Electric	Available	Energy Trust of Oregon
Bi-Level Controls	Bi-Level Stairwell Controls	No Stairwell Controls	Multifamily	Lighting	Electric	Electric	Available	CA Best Practices/Itron/Ohio EE Collaborative
Photocell	Photocell - Exterior	No Exterior Controls On 240 Watt Fixture	Multifamily	Lighting	Electric	Electric	Available	CA Best Practices/Itron/Ohio EE Collaborative
	Photocell - Exterior	No Exterior Controls On 60 Watt Fixture	Single Family	Lighting	Electric	Electric	Available	CA Best Practices/Itron/Ohio EE Collaborative
Occupancy Sensors	Occupancy Sensors - Common Area	Manual Switches	Multifamily	Lighting	Electric	Electric	Available	CA Best Practices/Itron/Ohio EE Collaborative
Duct Repair	Duct Repair	Unrepaired Ducts	Single Family	Space Heat	Gas	Gas	Available	Energy Trust of Oregon
	Duct Repair	Unrepaired Ducts	Single Family	Space Cool	Electric	Electric	Available	Energy Trust of Oregon
Combined Heat & Hot Water	Combination Space Heating Water Heating - Individual multifamily unit	Independent Heating & Water Heater Units	Multifamily	Space Heat & Water Heat	Gas	Gas	Available	Energy Trust of Oregon
	Combination Space Heating Water Heating - Whole building	Independent Heating & Water Heater Units	Multifamily	Space Heat & Water Heat	Gas	Gas	Available	

	Combination Space Heating Water Heating	Independent Heating & Water Heater Units	Single Family	Space Heat & Water Heat	Gas	Gas	Available	Energy Trust of Oregon
ES Dehumidifier	ENERGY STAR Dehumidifier EF 1.2- 2.5	Standard Dehumidifier EF 1.1 - 1.9	Single Family	Plug Load	Electric	Electric	Available	Wisconsin Energy Center
	ENERGY STAR Dehumidifier EF 1.2- 2.5	Standard Dehumidifier EF 1.1 - 1.9	Multifamily	Plug Load	Electric	Electric	Available	Wisconsin Energy Center
LED	LED In 2011 - NPV of Reoccurring CFL Installation Over 20 Years	CFL	R&D	Lighting	Electric	Electric	R&D - 2011 Availability	CA Best Practices/Itron
	LED In 2015 - NPV of Reoccurring CFL Installation Over 20 Years	CFL	R&D	Lighting	Electric	Electric	R&D - 2015 Availability	CA Best Practices/Itron
	LED In 2020 - NPV of Reoccurring CFL Installation Over 20 Years	CFL	R&D	Lighting	Electric	Electric	R&D - 2020 Availability	CA Best Practices/Itron

Measure Information		**Measure Analysis**								
Measure	**Measure Description**	**Measure Material Cost**	**Measure Labor Cost**	**Installed Measure Cost**	**Measure Annual Energy Savings, kWh**	**Measure Annual Energy Savings, Therms**	**Natural Gas Savings in Dollars ($)**	**Fuel Oil Savings in Dollars ($)**	**Propane Savings in Dollars ($)**	**Measure Life**
Heat Pump Water Heater	Heat Pump Water Heaters; Energy Factor (EF) = 2.0	$ 1,343.25	$ 500.00	$ 1,843.25	1,166.93	-	$ -	$ -	$ -	13
Fireplace	Direct-Vent Gas Fireplace, Fuel Efficiency (FE) = 65.0	$ 2,043.10	$ 525.00	$ 2,568.10	(100.00)	27.82	$ 23.88	$ 67.41	$ 100.09	10

MAU - Make-up Air Units	Incorporate Heat or Energy Recovery Unit (Strategy 1)	-	-	$12,500 and up for ductwork and $4.68 per supply CFM for heat exchanger	-	Up to 50%-85% efficiency for energy heat recovery unit	-	-	-	15
	Replace Unit w/ More Efficient Model (Strategy 2) - Heating	-	-	$3317 to $38419	-	5% of existing	-	-	-	15
	Replace Unit w/ More Efficient Model (Strategy 2) - Cooling	-	-	$3317 to $38419	0 to 41% of existing	-	-	-	-	15
	Demand Control Ventilation (Strategy 3)	-	-	$700 to $1200 per zone for controls	-	$0.05 to $1.00 per square foot of affected area	-	-	-	15
Clothes Washer - ENERGY STAR MEF=2.0, WF=6.0	w/ Gas Dryer & Gas Water Heater	$ 750.00	$ 86.00	$ 836.00	47.50	17.90	$ 15.36	$ 8.21	$ 64.39	11
	w/ Gas Dryer & Electric Water Heater	$ 750.00	$ 86.00	$ 836.00	115.10	14.82	$ 12.72	$ -	$ 53.32	11
	w/ Electric Dryer & Gas Water Heater	$ 750.00	$ 86.00	$ 836.00	434.90	3.08	$ 2.64	$ 8.21	$ 11.07	11
	w/ Electric Dryer & Electric Water Heater	$ 750.00	$ 86.00	$ 836.00	502.50	-	$ -	$ -	$ -	11
	w/ Gas Dryer & Gas Water Heater	$ 2,019.18	$ 146.00	$ 2,165.18	115.11	43.37	$ 37.22	$ 19.89	$ 156.04	11
	w/ Gas Dryer & Electric Water Heater	$ 2,019.18	$ 146.00	$ 2,165.18	278.94	35.92	$ 30.82	$ -	$ 129.22	11
	w/ Electric Dryer & Gas Water Heater	$ 2,019.18	$ 146.00	$ 2,165.18	1,053.97	7.46	$ 6.40	$ 19.89	$ 26.82	11
	w/ Electric Dryer & Electric Water Heater	$ 2,019.18	$ 146.00	$ 2,165.18	1,217.79	-	$ -	$ -	$ -	11
Bi-Level Controls	Bi-Level Stairwell Controls	$ 175.00	$ 50.00	$ 225.00	115.27	-	$ -	$ -	$ -	12

Photocell	Photocell - Exterior	$ 73.38	$ 71.19	$ 144.57	210.24	-	$ -	$ -	$ -	10
	Photocell - Exterior	$ 36.69	$ 35.60	$ 72.28	26.28	-	$ -	$ -	$ -	10
Occupancy Sensors	Occupancy Sensors - Common Area	$ 29.04	$ 35.60	$ 64.64	98.70	-	$ -	$ -	$ -	10
Duct Repair	Duct Repair	$ 85.44	$ 600.76	$ 686.20	-	114.55	$ 98.31	$ 305.57	$ 412.12	18
	Duct Repair	$ 85.44	$ 600.76	$ 686.20	212.00	-	$ -	$ -	$ -	18
Combined Heat & Hot Water	Combination Space Heating Water Heating - Individual multifamily unit	$ 5,086.00	$ 914.00	$ 6,000.00	-	152.61	$ 130.98	$ 407.11	$ 549.07	20
	Combination Space Heating Water Heating - Whole building	$11,172.00	$ 1,828.00	$ 13,000.00	-	763.05	$ 654.89	$2,035.54	$2,745.33	20
	Combination Space Heating Water Heating	$ 5,086.00	$ 914.00	$ 6,000.00	-	217.22	$ 186.43	$ 579.46	$ 781.51	20
ES Dehumidifier	ENERGY STAR Dehumidifier EF 1.2- 2.5	$ 186.30	$ -	$ 186.30	143.00	-	$ -	$ -	$ -	12
	ENERGY STAR Dehumidifier EF 1.2- 2.5	$ 186.30	$ -	$ 186.30	143.00	-	$ -	$ -	$ -	12
LED	LED In 2011 - NPV of Reoccurring CFL Installation Over 20 Years	$ 30.28	$ -	$ 30.28	-	-	$ -	$ -	$ -	20
	LED In 2015 - NPV of Reoccurring CFL Installation Over 20 Years	$ 8.56	$ -	$ 8.56	6.82	-	$ -	$ -	$ -	20
	LED In 2020 - NPV of Reoccurring CFL Installation Over 20 Years	$ (1.28)	$ -	$ (1.28)	8.24	-	$ -	$ -	$ -	20

THE CADMUS GROUP, INC.

Date: **November 25, 2011**
To: **Jerry Oppenheim, Art Wilcox**
From: **The Cadmus Group**
Re: **Make-up Air Unit Energy Savings Applications for Massachusetts Low Income Program**

Introduction & Summary

A Make-up Air Unit (MAU) is considered an air handler that supplies conditioned fresh air exclusively, with no re-circulated air being introduced to the supply air stream.
Cadmus researched Make-up Air Units (MAU) as a potential measure offering for the Massachusetts Low Income program. Cadmus considers MAU measures custom (rather than prescriptive) because applications and usage are very diverse. Savings values can vary widely based on climate, exterior envelope conditions, loads, and control sequences. Likewise, retrofit costs associated with these measures can greatly vary based on existing equipment condition, site logistics, and existing energy usage. Cadmus' recommendation persists that the MAU measure should be assessed on a site-by-site basis as a custom measure to appropriately determine cost effectiveness.

This memo identifies several low income multifamily (5 or more units) potential applications for MAUs. Associated energy savings, measure costs (including labor) and measure lives are provided for the most likely application (summarized below in Table 1). Note that we do not anticipate this measure being suitable in any low income single family applications. As such, this memo focuses on multifamily applications only.

As shown in Table 1, MAUs used to supply conditioned fresh air to common areas, hallways, gyms, and laundry rooms are the most likely potential application to be found in Massachusetts low income residences. In an effort to mitigate some of the variance in the savings from site to site, potential energy savings is expressed as a percentage of the existing energy usage.

Table 1. Summary of Make-up Air Likely Applications in Massachusetts Application/Savings Scenario	Estimated Energy Savings (% of existing)	Estimated Installation Cost (Including Labor and Material Costs)
Used to supply conditioned fresh air to common areas, hallways, gyms, and laundry rooms		
Strategy 1: Incorporate heat or energy recovery unit on exhaust stream to condition intake stream. May not be cost effective to implement due to ductwork logistics (exhaust in proximity to supply, space to install, etc.).	Custom for each site[1]	$12,500 and up[2] for ductwork Custom for unit, but can around $4.68 per supply CFM[3]
Strategy 2: Replace unit with more efficient model	5% of annual heating[4] 0% to 41% of annual cooling[5]	$3,317 - 38,491[6]
Strategy 3: Confirm the unit is not supplying more outside air than is required or desired. If desired ventilation level is above code, switch to a demand control ventilation scheme if possible (with minimum operating levels set at code required values for unoccupied periods).	Custom for each site[7]	$700 to $1200 per zone for controls[8] Custom for ductwork, dampers, remediation.

The following energy saving strategies were compiled using industry experience, manufacturer data, and historical climate data. Potential MAU applications presented may utilize a combination of these strategies.

1. ***Incorporate heat or energy recovery unit on exhaust stream to condition intake stream:*** Custom calculation depending on existing MAU, existing ductwork conditions and climate.

2. ***Replace unit with more efficient model:***

[1] Custom savings depends on existing MAU, existing ductwork conditions and climate. Savings will vary by site, energy heat recovery unit can achieve upwards of 50%-85% efficiency in certain applications; http://www.mcquay.com/mcquaybiz/marketing_tools/mt_corporate/EngNews/0701.pdf

[2] Based on 2004 RS Means, with minimum ductwork package assumed at roof level. Includes material and labor, and presumes Worcester, MA install.

[3] DEER 2008 material and labor cost per supply CFM.

[4] Based on climate analysis and manufacturer data / support (Greenheck, Trane).

[5] Based on SEER analysis, with static load and SEER 10 replacement by SEER 17.

[6] Presumes audit & design costs are excluded from this item, and existing ductwork is unaltered. Based on 2004 RS Means data. Figures assume single zone 0.92 ton ($3317) unit for low end and multi-zone 5.50 ton ($38,491) unit for high end. Both with electric cooling and indirect gas fired heat, and Worcester, MA install.

[7] Potential energy savings could range from $0.05 to $1.00 per square foot of affected area per http://www1.eere.energy.gov/femp/pdfs/fta_co2.pdf.

[8] Based on control contractor estimates, http://www1.eere.energy.gov/femp/pdfs/fta_co2.pdf.

a. Using a baseline of an older indirect fired with a presumed efficiency of 75%, a new indirect fired model could achieve 80% efficiency. A new direct fired unit could achieve 92% efficiency, but would not be right for all applications (combustion waste products in the supply air stream). Assuming all other factors are constant (electric load, etc.), this (same technology) replacement could yield heating savings of 5% of annual heating energy costs.
b. Cooling mode, if applicable, would yield minimal and/or custom savings– cooled make-up air to residential common areas will ultimately take on the load of the unconditioned adjacent dwellings, minimizing outdoor air temperature as a predictor of load and making run time less predictable.

3. ***If desired ventilation level is above code, switch to a demand control ventilation scheme if possible (with minimum operating levels set at code required values for unoccupied periods):*** *Custom calculation* based upon space owner's requirements and governing building/energy code.

4. ***Set [heating] discharge temperature to 50-55 degrees Fahrenheit:***
Using baseline 65 deg. F setting, and assuming disabled May thru September, Massachusetts savings percentage is approximated at 37% of annual heating energy cost.

5. ***Use time clock to only operate make-up air unit during occupied periods:***
Using baseline of uncontrolled MAU with static setpoint (base 65 deg. F) and 8:00 am to 8:00 pm occupied period, heating savings could approach 50 % of annual MAU heating energy cost. This value is based on the assumption that space exhaust is similarly controlled to unoccupied mode, and that pool and space heating are static and achieved through other systems. Cooling savings are approximated at 4% of annual MAU cooling energy cost.

Make-up Air Unit Applications

We do not anticipate this measure being suitable in any low income single family applications. The following potential MAU applications focus on low income multifamily (5 or more units per building). A brief description of the application, the likelihood of the application's relevance for MA Low Income, and a number of energy saving strategies are provided for each application

1. **Common Areas, Hallways, Gyms, and Laundry Rooms**
   - Used to supply conditioned fresh air to common areas, hallways, gyms, and laundry rooms
   - Most likely application. In large/new/tight buildings, the centralized mechanical systems that serve common areas could include make-up air units to introduce conditioned fresh air. Hallways, assembly spaces, coin-operated laundry rooms and health club aerobics/weight rooms require 0.06 CFM/sq. ft. of outside air [per ICC Mechanical 2012 403.3].
     a) (Strategy 1) Energy saving strategy: incorporate heat or energy recovery unit on exhaust stream to condition intake stream. May not be cost effective to implement due to ductwork logistics (exhaust in proximity to supply, space to install, etc.).
     b) (Strategy 2) Energy saving strategy: replace unit with more efficient model
     c) (Strategy 3) Energy saving strategy: confirm the unit is not supplying more outside air than is required or desired. If desired ventilation level is above

code, switch to a demand control ventilation scheme if possible (with minimum operating levels set at code required values for unoccupied periods).

2. **Commercial Exhaust**
   - Used to balance commercial exhaust (lab, etc.)
   - None application anticipated.

3. **Commercial Kitchen Hoods**
   - Used to balance commercial kitchen hoods (mixed-use residential)
   - Unit should be interlocked with exhaust hood and only in use during occupied periods. Discharge setpoint should be static (always occupied when enabled). No energy efficiency action anticipated.

4. **Rooms with Combustion Source**
   - Used to provide conditioned fresh air to room with combustion source (fireplace, mechanical room, etc.)
   - Unlikely application. Mechanical rooms are most often unconditioned. Fireplaces in low income units are unlikely, and make-up air units tend to serve larger loads (i.e. common areas), and it would be unusual to find individual units for each dwelling (with a fireplace). Further, older buildings tend to rely on passive ventilation (rather than active ventilation via a make-up air unit), so only newer, tight buildings would be suitable cause for this type of unit. In that new/tight building case, it is likely that some amount of recirculated (return) air would be introduced to the supply air stream, since it is expensive and impractical to use 100% outside air for a residential setting.
     d) (Strategy 4) Energy saving strategy: Set [heating] discharge temperature to 50-55 degrees Fahrenheit for mechanical spaces. Conditioned air may be for freeze protection on water systems, to supplement other heat sources in the room – setting the discharge temperature low will address functional/safety concerns, but save energy from higher temperature settings which may be derived from occupant thermal comfort (less of a priority in a mechanical space).
     e) (Strategy 4) Energy saving strategy: Rooms with a fireplace and a make-up air unit are most likely new construction natural gas fireplaces. Confirm the burner is interlocked with the make-up air unit, so the unit is only energized when the fireplace is in use. Confirm the discharge air temperature is reasonably low (since the fireplace will be providing a large heat load).

5. **Indoor Pool**
   - Used to provide conditioned fresh air to an indoor pool area
   - Unlikely application. Swimming pool areas require 0.48 CFM/sq. ft. of outdoor air [per ICC Mechanical 2012 403.3].
     f) (Strategy 1) Energy saving strategy: incorporate heat or energy recovery unit on exhaust stream to condition intake stream. May not be cost effective to implement due to ductwork logistics (exhaust in proximity to supply, space to install, etc.).
     g) (Strategy 2) Energy saving strategy: replace unit with more efficient model
     h) (Strategy 5) Energy saving strategy: use time clock to only operate make-up air unit during occupied periods

6. **Indoor Parking Garage**

- Used to provide conditioned fresh air to an indoor parking garage
- Unlikely application.
    i) (Strategy 2) Energy saving strategy: replace unit with more efficient model
    j) (Strategy 4) Energy saving strategy: Set [heating] discharge temperature to 50-55 degrees Fahrenheit.

7. Ventilation in Dwellings

- Used to provide ventilation to dwellings in new construction
- Unlikely application. Ventilation standards in new construction is required to be 5 air changes per hour or greater [when tested with a blower door, per ICC Mechanical 2012 401.2]. If tested at less, mechanical ventilation is required. For dwelling living areas, 0.35 air changes per hour (but not less than 15 CFM/person) is required [per ICC Mechanical 2012 403.3], with exhaust requirements in garages, kitchen, and bathrooms. No energy saving strategy recommended - occupancy sensors not recommended for dwelling ventilation (contaminant buildup until occupied mode kicks in).

Attachment B

BEST PRACTICE MEETING DOCUMENTATION

From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
Sent: Sunday, January 09, 2011 10:45 PM
To: tobin@bostonabcd.org; wells@bostonabcd.org; maclellan@bostonabcd.org; craig@actioninc.org; ritac@actioninc.org; Elj@actioninc.org; DBuchler@nisource.com; kgray@nisource.com; msommer@berkshiregas.com; rgyurjan@berkshiregas.com; Ken.Rauseo@state.ma.us; AMickee@GLCAC.Org; rbechtold@haconcapecod.org; NDAVISON@haconcapecod.org; bruceledgerwood@comcast.net; artwillcox@yahoo.com; PWingate@communityaction.us; jhowat@nclc.org; Diana.Duffy@us.ngrid.com; Lynn.Ross@us.ngrid.com; dave.legg@us.ngrid.com; michael.rossacci@us.ngrid.com; Azulay, Gail; Lopes, Diane; pjackson@smoc.org; kimball@unitil.com; aginkt@nu.com; oswalrl@nu.com; sasde@nu.com; walshj@nu.com; danielle.rathbun@state.ma.us; jeanne.cherry@sug.com; James.Carey@sug.com; trish.walker@sug.com; jglivermore@yahoo.com; pahorowitz@earthlink.com; Mary Gianetti; Margaret M. Song; Debra Hall; Hastings, Christine (Riley)
Subject: Low Income Best Practices agenda (with assignments and agreements from October 13) -- Monday, January 10 at 10 AM at WMECo, Hadley
Proposed agenda:

LOW INCOME BEST PRACTICES DRAFT AGENDA FOR January 10, 2011
At WMECo, 55 Russell St. (Rte. 9), Hadley

1. Preliminaries: note taker, next meeting, amendments to agenda, corrections to notes of last meeting, corrections to e-list

2. List of Working Groups: John L. circulated res. WGs 2/23/10 (John on sabbatical through March); others?

3. Contractor training and recruitment, Auditor training, DHCD Report -- Craig and Ken
    a. NEW MEASURE: air sealing of windows -- Paul and Art to spec a loose window in order to test air sealing savings
    b. Owens Corning webinar re: air sealing?

4. Health and cost issues regarding borate and aluminum sulfate in insulation products -- presentation at October meeting by Chris White, National Insulation Products, and discussion of relative costs, what DOE does and does not require, i.e., State Code
    a. Chris was to send detail about which states/programs have adopted borate -- has anyone heard from him?
    b. Leads were to check with their contractors -- what are they using? will they switch?
    c. Ruth checking on Chicago litigation

5. Repairs -- WMECo evaluation

6. Program issues
    a. Aluminum sulfate (above)
    b. SDHW - coordinate with CEC? (Bruce, Art)

7. New measures, including consideration for 2011 Metric (*)
    a. Pilot heating distribution system replacement in non-profit MF steam buildings to see if it can be cost-effective (possible funding from NSTAR)
    b. *Hybrid electric water heaters, ductless air source heat pump -- awaiting Steven Winter evaluation of CLC pilot
    c. Outdoor re-sets (Common Assumptions confirmed rejection at TRC BCR = 0.97 with conservative assumptions; reconsider since so close?)
    d. *Innovative roofing materials, super insulation (when roof replaced anyway) -- Kara, Debi
    e. Grounded Power demand control pilot -- Art, Jerry -- Common Assumptions issue over treatment as pilot with 5 year amortization of cost
    f. *Options for 2" foam on foundation -- Art re BCR, verification of price
    g. Air sealing around windows (above)
    h. *LED downlights -- has CREE been discontinued? substitute? any other LED products worth analyzing? (e.g., CR6 downlight?)
    i. MCHP furnaces
    j. *Ductless mini-split electric space heaters
    k. *Brushless fan motors
    l. *Survey a cross section of US low-income programs to identify potential new technologies, measures, program strategies
    m. *Aerogel (after tested under DOE grant)
    n. Data Management -- see excerpt below of tentative Cadmus evaluation: "Work with CAPs to develop a Massachusetts-wide, Web-based or software-based audit system that is common across all CAPs and PA's." Sound familiar? Comments on Cadmus Draft due Jan. 12. via Riley (or notify her that more time is needed).
    o. Other measures to review in 2011?

8. 2010 Metrics
    a. #1 (Landlords) -- zero trackable installations (OK); lessons learned
    b. #2 (New Measures) -- approved and adopted as standard measure: smart strips (prior to metric; is there a problem with installing them?), indirect water heating, window cellular shades (electric), LED down light (electric, but is it available?);
        i. rejected: window quilts (but DOE measure), outdoor re-sets (needs Common Assumptions confirmation), indoor resets
        ii. status re micro CHP installations (approved)
        iii. pending at Common Assumptions: window cellular shades (gas, oil), outdoor resets (reject), Grounded power demand control pilot
    c. #3 (MF Building Inventory) – status

9. 2011 metrics
    a. #1 (Landlords) -- remaining issue of numerical goal for program installations: develop goal for 2012? is it possible to track?
    b. #2 (New Measures, * above)
    c. #3 (MF Building Inventory) -- note that a building will often involve two utility accounts; note also that in 2012 total estimated number of buildings will need adjustment

EXCERPT OF December 2010 DRAFT BY CADMUS ET AL., "Massachusetts 2010 Residential Retrofit and Low Income Evaluation: Low Income Program"

Data Management and Content

Due to the current defragmented nature of the program data across PA's, the aggregate and analysis of the low income program more closely resembles eight individual utility evaluations than a single commonwealth-wide program. Therefore, our overarching recommendation is that the PA's collaborate to develop an electronic, standardized data management and collection process that all PA's and CAPs can use and afford. While we are recommending that certain components be identical across PA's and CAPS, we are stopping short of recommending that all PA's and CAPS use the same end-to-end data tracking and reporting system. We recognize that some PA's have made significant investments over the last several years, and are very close to having an end-to-end system that meets all evaluation and reporting requirements while at the same time achieving low administrative costs through electronic modernization. For these PA's it may be more cost-effective to modify their existing systems and processes rather than adopt a single, statewide platform. Similarly, it may be more cost-effective for PA's without such systems to a lease a system from another PA.

All of the specific conclusions and recommendations offered below regarding data management and data content revolve around unifying Low Income program data across Massachusetts.

The process of collecting low income program data is generally inefficient, often requiring significant clarification and communication with PA's via the telephone and over E-mail.

Recommendation: Standardize the data management practices across all PA's in order to improve internal reporting and QC practices, as well as to require less time to meet data requests. The importance of consistent data collection, data management, and reporting practices across the commonwealth cannot be understated. The DPU declared this as one of the primary objectives for the 2010 program year; and most of the utilities stated they are in compliance or are actively changing their systems so that they will be in compliance.

It is often difficult to determine what specific data fields are capturing.

Recommendation: A data dictionary file should exist for all program databases that includes all field definitions, value definitions, and explanations of any idiosyncrasies. This will allow evaluators or any other third-party to decode field names and data values efficiently. Once created, draft data dictionaries should be circulated among the low income working group to ensure that all PA's are collecting the same data and using the same naming conventions whenever possible.

Most audit data is never entered electronically or provided to the PA's. This results in a tremendous amount of data "leakage," as data that could be leveraged to assist with evaluation studies, potential studies, and program planning efforts is lost or not usable in a cost-effective format.

Recommendation: PA's should mandate that all critical audit data fields be entered into an electronic format and maintained/archived for future internal and external use.

Some CAPs are currently using hard-copy audit data collection forms and entering the data manually into disparate electronic tracking systems. Part of the reason for the

data leakage described above is that many CAPs still use hard copy audit forms. Since these forms must be hand entered, CAPs enter only select fields in a digital format. Further, manual data entry leads to errors (due to transcription issues) and requires additional administrative time.

Recommendation: Work with CAPs to develop a Massachusetts-wide, Web-based or software-based audit system that is common across all CAPs and PA's. This could be cost-effectively and quickly accomplished by leveraging one of the more robust systems currently in use. To equitably share the costs of upgrading an existing system (or developing a new one), the PA's could consider a collaborative billing system based on each PA's expected system use.

Recommendation: In order to populate the Massachusetts-wide, Web-based or software-based audit system, field technicians should use electronic hardware (a PDA or laptop) to collect and enter onsite data whenever possible. This approach would avoid later manual data entry, reduce program administrative costs, and improve data quality through the institution of unique keys, foreign keys, constraints, lookup tables, and other database design best practices. Part of the implementation could also include uploading program data to PA's, as well as a central Massachusetts database accessible automatically via the Internet.

The rigor of QC is low for half the PA's. More than half of the PA's have automated QC systems in place, including the use of database queries and procedures. The other half of PA's merely eyeball the data for anomalies and outliers.

Recommendation: Develop thorough and stringent database queries and procedures that allow for more robust QC of the audit and invoice data. A standardized database system developed using best practices and with standard database integrity will eliminate a lot of common data errors and allow the tracking data to be considerably more consistent.

Summary statistics from low income tracking data are exported and sometimes delivered to a third party for estimating the benefit/costs analysis.

Recommendation: An ideal database system would have procedures in place to estimate the program-level benefit/cost ratio to inform overall program performance. This procedure takes minimal time to run and could be conducted *ad hoc*. To estimate the overall program performance, all required fields would need to exist in the system and be populated with up-to-date data. Using this system, each measure with a unique savings calculation or incentive would have its own Claim ID.

The lack of a standardized measure naming convention makes it difficult to aggregate and/or compare measure savings. The measure naming conventions varies greatly across PA's, because different program stakeholders require different levels of specificity pertaining to measure data. For example, while the contractor installing the new refrigerator needs to know and record the exact make and model, the vendor may only care about the type of refrigerator (top freezer, side-by-side, etc.) and the PA may only care that a refrigerator was installed.

Recommendation: Through a collaborative process with the PA's and CAPs, develop and employ a standardized measure naming convention. The TRM could be used as a

basis to develop standard names and codes. A naming convention would allow for faster and more accurate commonwealth-wide reporting, improve evaluability, and add transparency to the measure tracking process. The Cadmus Team specifically recommends a four-part measure naming convention that includes varying levels of detail for each program stakeholder: denoting the measure's end-use, group, type, and detail. Examples of several common program measures are provided in Table 7 below.

Table. Examples of Potential Standardized Measure Naming Convention

End Use	Measure Group	Measure Type	Measure Detail
Appliances	Refrigerator	Top Freezer Refrigerator	Frigidaire LGHT1837L*
HVAC	Insulation	Attic Insulation	R-30 Unrestricted - Settled Cellulose
Lighting	CFL	Screw-in CFL (20W)	GE 75412 20-Watt CFL Spiral Reveal Light Bulb, 75-Watt Equivalent
Water Heating	Water Heater	Condensing Water Heater (EF 0.82)	AO Smith GPHE-50 Vertex

Unique identification fields (ID) are currently not being used to link different data sources and participation across programs. As a result, it is difficult to align values listed in the PA low income program datasets with other program datasets or external reference documents (such as the TRM).

Recommendation: The PA's should work collaboratively with each other and with the CAPs to develop and maintain standardized ID fields that link data across programs, customers, contractors, and billing data. In addition, the integration of a common Claim ID system would allow tracking of each installed measure from participant tracking database to the BCR input sheet and to the TRM.

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From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
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To: tobin@bostonabcd.org; wells@bostonabcd.org; maclellan@bostonabcd.org; craig@actioninc.org; ritac@actioninc.org; Elj@actioninc.org; DBuchler@nisource.com; kgray@nisource.com; msommer@berkshiregas.com; rgyurjan@berkshiregas.com; Ken.Rauseo@state.ma.us; AMickee@GLCAC.Org; rbechtold@haconcapecod.org; NDAVISON@haconcapecod.org; bruceledgerwood@comcast.net; artwillcox@yahoo.com; PWingate@communityaction.us; jhowat@nclc.org; Diana.Duffy@us.ngrid.com; Lynn.Ross@us.ngrid.com; dave.legg@us.ngrid.com; michael.rossacci@us.ngrid.com; Azulay, Gail; Lopes, Diane; pjackson@smoc.org; kimball@unitil.com; aginkt@nu.com; oswalrl@nu.com; sasde@nu.com; walshj@nu.com; danielle.rathbun@state.ma.us; jeanne.cherry@sug.com; James.Carey@sug.com; trish.walker@sug.com; jglivermore@yahoo.com; pahorowitz@earthlink.com; Mary Gianetti; Margaret M. Song; Debra Hall; Hastings, Christine
Subject: AW: Low Income Best Practices agenda -- Wednesday, May 11 at 10 AM at CMA, Westborough
(agenda attached and pasted below)

LOW INCOME BEST PRACTICES DRAFT AGENDA FOR May 11, 2011
At CMA, Westborough

1. Preliminaries: note taker, next meeting, amendments to agenda, corrections to e-list

2. List of Working Groups: John L. circulated res. WGs 2/23/10, Glenn agreed at 1/1/11 meeting to circulate others (e.g., evaluation, others, updates)

4. Contractor training and recruitment, Auditor training, DHCD Report – CRAIG AND KEN
    a) ART, PAUL – air sealing of windows: spec a loose window in order to test air sealing savings, note that window may fail if tighten; Art will test this, especially re: oil
    b) CRAIG – DOE protocol
    c) Measure list attached (from Art)

4. Borate in place of aluminum sulfate – confirm that not a problem in practice

5. DEBI/JOHN WALSH – WMECo evaluation of repairs (roofs are cost-effective)

6. BRUCE, ART – SDHW, coordinate with CEC/DOE SERC? (PA case-by-case interest)

7. DEBI – Accounting for cross-fuel savings, e.g., instant gas savings where measures installed by electrics. (See spreadsheet attached.)

8. 2011 Metrics

9. Metric 1 (Hard to Reach Landlords) – Progress reports

10. Metric 2 Threshold: “Research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new

technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE).” ART to survey California, Wisconsin, Ohio, Oregon, Washington State; also consult Keith Miller (N Grid) re R&D and ACEEE – Status report

11. Low-Income Multi-Family Program issues (per agreement)
    a) Pricing for large scale projects – competitive bidding v. other approaches (DEFER)
    b) Air sealing cap (DEFER)
    c) Pilot heating distribution system replacement to test cost-effectiveness (possible NSTAR EOP funding)
    d) Building inventory – all contracts signed?

12. Goal-setting and budget discussion (START IN JULY per agreement)

13. Hockey stick (per agreement – also see item 14.b.4.) (DEFER)

14. [START AFTER 11 to accommodate Riley] Low-Income 2010 process evaluation and projected 2011 process and impact evaluations – LEAN response to latest draft circulated separately
    a) Standard screening tool
    b) Data management standardization
        1. Measure names, definitions, “dictionary”
        2. Electronic management, linking across systems (e.g., TRM, BCR input, tracking)
        3. Data gaps?
        4. Pipelines?

15. New measures (all low-income programs) (measures for 2011 Metric 2 marked by *)
    a) * Hybrid electric water heaters, ductless air source heat pump – awaiting Steven Winter evaluation of CLC pilot in Aug-Sept
    b) Outdoor re-sets (2010 metric): Common Assumptions confirmed rejection at TRC BCR = 0.97 with conservative assumptions, approved measure in TRM with 15 year life instead of Common Assumptions 5 years? In light of the close-to-1.0 BCR and the non-standard assumption, as well as the cost-effectiveness standard only applying on the program level, and the relatively low cost of the measure, LEAN proposes including this measure.
    c) * Innovative roofing materials (when roof replaced anyway) – DEBI (see two files attached)
    d) * Grounded Power demand control pilot – send back to Common Assumptions to analyze as pilot per metric 2.
    e) * Foundation foam, e.g., 2 inch inside – ART re BCR, verification of price for fire-compliant product; limit to intentionally heated basements
    f) * LED downlights – CR 6 (less high-powered so more residential applications, screened by MassSave)
    g) MCHP furnaces – BRUCE
    h) * Ductless mini-split electric space heaters – as supplement to resistance heating and some cooling benefit but not effective below 10-20 degrees – at last meeting, CLC reported BCR of 0.87, Glenn reported pilot did not pass at current costs – anything new?

i) * Brushless fan motors for gas furnaces – ART to consult CSG and Cool Smart PA's (Glenn has list of them); should we use TRM assumptions at Common Assumptions?
j) * Aerogel – wait for test under DOE SERC
k) TLC Kit
    1. humidity sensor (health & safety, education benefits) – DEBI
    2. EFI night light covers falling off? – Debi
l) Smart strips (approved measure) –
    1. Coordinate with PA's Residential Technical Review Committee – ART status report
m) Others?

16. Other matters?

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11_23_09_Measure-List

Measure	*Post Condition*	*Type*	*Measure Group*
R-38 Cellulose	R-38/R49	Prescriptive	Attic
R-30 Cellulose	R-38/R49	Prescriptive	Attic
R-19 Cellulose	R-38/R49	Prescriptive	Attic
R-11 Cellulose	R-38/R49	Prescriptive	Attic
Insulation Dam	Safety	Prescriptive	Attic
Seal ducts	Air Leakage Reduction	Prescriptive	Attic
Insulate ducts	R-7/R-11	Prescriptive	Attic
Install attic hatch or door	R-38/R49	Prescriptive	Attic
Insulate mobile home roof-cavity	R-38/R49	Prescriptive	Attic
Eave Chutes	Code	Prescriptive	Attic
Pull Down Stair Cover	R-38/R49	Prescriptive	Attic
Insulate Attic Hatch/Door	R-20	Prescriptive	Attic
R-13 KWall FG	R-13	Prescriptive	Attic
R-19 KWall FG	R-19	Prescriptive	Attic
Tyvek	Moisture Control	Prescriptive	Attic
R-13 KWall Door FG	R-13	Prescriptive	Attic

R-13 Attic Stair Wall	R-13	Prescriptive	Attic
Insulate Attic Stairs	R-13	Prescriptive	Attic
Blown in FG R-38	R-38/R49	Prescriptive	Attic
R-49 Cellulose	R-38/R49	Prescriptive	Attic
R-49 FG	R-38/R49	Prescriptive	Attic
Two Part Foam	Air Leakage Reduction	Prescriptive	Attic
Move or Remove K&T Wiring	Safety	Prescriptive	Attic
Install Junction Box	Code	Prescriptive	Attic
Isolate Recessed Light Fixtures	Safety	Prescriptive	Attic
R-30 FG	R-38/R49	Prescriptive	Attic
R-38 FG	R-38/R49	Prescriptive	Attic
R-38 FG	R-38/R49	Prescriptive	Attic
Duct Sealing	Air Leakage Reduction	Prescriptive	Distribution
HW Pipe Insulation	R-7 or >	Prescriptive	Distribution
Steam Pipe Insulation	R-7 or >	Prescriptive	Distribution
Boiler pipe insulation	R-7 or >	Prescriptive	Distribution
Sill Plate Insulation	R-11 or >	Prescriptive	Floor
R-19 FG Insulation	R-19/R-30	Prescriptive	Floor
Closed Floor Cavity DP	R-19/R-30	Prescriptive	Floor
Insulate Basement Door	R-13 or >	Prescriptive	Floor
Loose Fill FG R19	R-19/R-30	Prescriptive	Floor
3.5 lbs/ft3 DP Cellulose	R-38/R49	Prescriptive	Floor
Replace Heating unit	ESTAR or >	Custom	Heating System
Insulate 6’ hot & Cold water lines	R-5 or >	Prescriptive	Hot Water
Low-flow showerhead	4 Gal/Min or >	Prescriptive	Hot Water
Replace DHW Tank	Demand/Indirect/DV	Prescriptive	Hot Water
Replace faucet aerators	2.5 Gal/Min or >	Prescriptive	Hot Water
Replace Thermostat	Set Back Tstat	Prescriptive	Hot Water
Blower door set-up & tests	Air Leakage Reduction	Prescriptive	Infiltration
Blower door guided air sealing	Air Leakage Reduction	Prescriptive	Infiltration
Repair faulty doors	Air Leakage Reduction	Prescriptive	Infiltration
Repair faulty windows	Air Leakage Reduction	Prescriptive	Infiltration
Spray foam Insulation	Air Leakage Reduction	Prescriptive	Infiltration
2 Part Foam Airsealing	Air Leakage Reduction	Prescriptive	Infiltration
Attic Airsealing	Air Leakage Reduction	Prescriptive	Infiltration
Basement Airsealing	Air Leakage Reduction	Prescriptive	Infiltration
Major Bypass Airsealing	Air Leakage Reduction	Prescriptive	Infiltration

Install light fixture	CFL/LED	Prescriptive	Lighting
CFL Replacement	CFL/LED	Prescriptive	Lighting
CFL Dimmable	CFL/LED	Prescriptive	Lighting
CFL 3-Way	CFL/LED	Prescriptive	Lighting
CFL Torchiere	CFL/LED	Prescriptive	Lighting
CFL Exterior	CFL/LED	Prescriptive	Lighting
C.A.N. Light Treatments	CFL/LED	Prescriptive	Lighting
Client Education	Education	Custom	Other Measure
Gable Vent	Code	Prescriptive	Ventilation
Roof Vent	Code	Prescriptive	Ventilation
Soffit Vent	Code	Prescriptive	Ventilation
Window Vent	Code	Prescriptive	Ventilation
Ridge Vent	Code	Prescriptive	Ventilation
Wall Insulation DP	R-13/R-19	Prescriptive	Wall
Wall Insulation FG R-13	R-13/R-19	Prescriptive	Wall
Wall Insulation FG R-19	R-13/R-19	Prescriptive	Wall
Window Replacement	R-4 or >	Custom	Windows
Door Replacement	R-7 or >	Custom	Doors

05.09.11 Billing Gas DHW & Heat Measures to BP

5/9/2011	**2011 Billing Domestic Hot Water & Heating Related Measures**				
Measure	**IF Gas Heat & Gas Hot Water (Standalone or Tankless Coil)**	**IF Gas Heat & Standalone Electric/ Oil/Propane Hot Water**	**IF Electric/Oil/Propane/Wood Heat with Standalone Gas Hot Water**	**IF Electric/Oil/Wood/ Propane Heat & Standalone Electric/Propane/ Oil Hot Water**	**Other**
All Faucet Aerators					
All Showerheads					
All Weatherstripping including Q-Lon					
Fixed and Auto sweeps					
Caulking					
Electric outlet gaskets					
Repair/refit door/window					
All window locks side or top					
Domestic water pipe wrap					

Attic Hatch					
Air sealing					
Insulation & related items (piggyback)					
Glass replacement					
R-5 Ductwrap or R-max on door					

2011 Asphalt Shingles E Star List

ENERGY STAR Roof Product List

List Posted on May 03, 2011

Below are currently qualified ENERGY STAR models available for sale in the U.S.

*As of December 31, 2007, all new ENERGY STAR qualified products are prohibited from being cleaned during testing.

Company Name	Brand	Model	Type	Initial Solar Reflectance	Solar Reflectance after 3 years	Initial Emissivity	Low Slope?	Steep Slope?	Roof Cleaned Prior to 3rd Year Test*	Warranty Period (Years)**
CertainTeed Corporation	CertainTeed	Landmark Solaris Crystal Gray	Shingles	0.27	0.29	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Dusky Clay	Shingles	0.26	0.28	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Max Def Burnt Sienna	Shingles	0.26	0.27	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Max Def Heather Blend	Shingles	0.25	0.27	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Max Def Resawn Shake	Shingles	0.26	0.28	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Max Def Weathered Wood	Shingles	0.25	0.27	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Santa Fe Blend	Shingles	0.40	0.43	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Santa Fe Blend AR	Shingles	0.41	0.43	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Sierra Buff	Shingles	0.43	0.46	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Sierra Buff AR	Shingles	0.41	0.44	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Solaris Stonegate Gray	Shingles	0.26	0.28	0.91	No	Yes	N	50

CertainTeed Corporation	CertainTeed	Landmark Solaris Sunset Shake	Shingles	0.26	0.28	0.95	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Landmark Star White	Shingles	0.27	0.29	0.93	No	Yes	N	30
CertainTeed Corporation	CertainTeed	Presidential Solaris Burnt Sienna	Shingles	0.25	0.27	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Presidential Solaris Max Def Weathered Wood	Shingles	0.25	0.27	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Presidential Solaris Santa Fe Blend	Shingles	0.41	0.45	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Symphony Capital Blend	Shingles	0.26	0.28	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Symphony Colonial Gray	Shingles	0.26	0.28	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	Symphony Evergreen	Shingles	0.31	0.34	0.94	No	Yes	N	50
CertainTeed Corporation	CertainTeed	XT25 AR Star White from Avery, OH	Shingles	0.27	0.29	0.89	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT25 AR Star White from Norwood, MA	Shingles	0.25	0.27	0.88	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT25 AR Star White from Oxford, NC	Shingles	0.28	0.30	0.89	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT25 Star White from Avery, OH	Shingles	0.27	0.29	0.89	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT25 Star White from Oxford, NC	Shingles	0.27	0.29	0.90	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT25 Star White from Shakopee, MN	Shingles	0.27	0.29	0.89	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT25 Star White from Shreveport, LA	Shingles	0.27	0.29	0.88	No	Yes	N	25
CertainTeed Corporation	CertainTeed	XT30 AR Star White from Avery, OH	Shingles	0.27	0.29	0.89	No	Yes	N	30
CertainTeed Corporation	CertainTeed	XT30 AR Star White from Norwood, MA	Shingles	0.25	0.27	0.89	No	Yes	N	30
CertainTeed Corporation	CertainTeed	XT30 AR Star White from Oxford, NC	Shingles	0.29	0.31	0.90	No	Yes	N	30
CertainTeed Corporation	CertainTeed	XT30 AR Star White from Shakopee, MN	Shingles	0.27	0.29	0.90	No	Yes	N	30
CertainTeed Corporation	CertainTeed	XT30 Star White from Portland, OR	Shingles	0.27	0.29	0.89	No	Yes	N	30
GAF Materials Corporation	GAF	Royal SovereignÂ® Shingles (white)	Shingles	0.27	0.27	0.91	No	Yes	N	25.0
GAF Materials	GAF	SentinelÂ® Shingles	Shingles	0.27	0.26	0.91	No	Yes	N	20.0

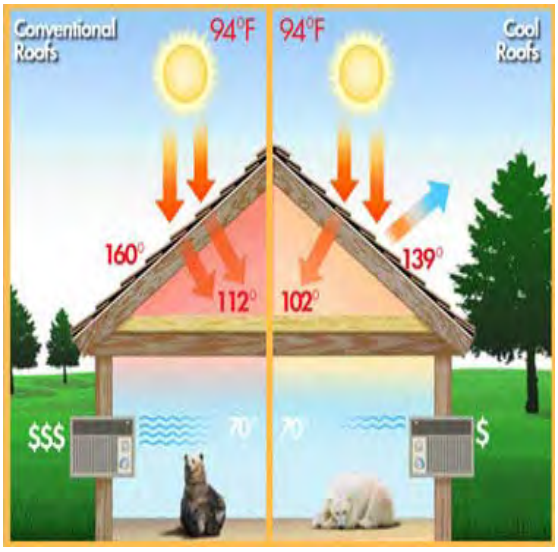
Corporation		(white)								
GAF Materials Corporation	GAF	TimberlineÂ® Cool Series - Cool Antique Slate	Shingles	0.27	0.26	0.92	No	Yes	N	50.0
GAF Materials Corporation	GAF	TimberlineÂ® Cool Series - Cool Barkwood	Shingles	0.27	0.26	0.92	No	Yes	N	50.0
GAF Materials Corporation	GAF	TimberlineÂ® Cool Series - Cool Weathered Wood	Shingles	0.26	0.25	0.92	No	Yes	N	50.0
GAF Materials Corporation	GAF	TimberlineÂ® PrestiqueÂ® 30 or TimberlineÂ® HDâ„¢ Shingles (white)	Shingles	0.26	0.29	0.85	No	Yes	N	50.0
GAF Materials Corporation	GAF	TimberlineÂ® PrestiqueÂ® 40 Shingles (white)	Shingles	0.29	0.29	0.85	No	Yes	N	50.0
GAF Materials Corporation	GAF	TimberlineÂ® PrestiqueÂ® Lifetime or TimberlineÂ® Ultra HDâ„¢ Shingles (white)	Shingles	0.29	0.29	0.85	No	Yes	N	50.0
GAF Materials Corporation	GAF	Timberline Cool Series - Cool White	Shingles	0.26	0.29	0.85	No	Yes	N	50.0
IKO Industries, Ltd	Cambridge 30 AR	Super White	Shingles	0.28	0.25	0.88	No	Yes	N	30.0
IKO Industries, Ltd	Marathon Ultra AR	Super White	Shingles	0.28	0.25	0.88	No	Yes	N	30.0
Malarkey Roofing Products	Dove White 20 YR	Dura Seal 202	Shingles	0.26	0.27	0.91	No	Yes	N	20.0
Owens Corning	CLASSIC	Shasta White	Shingles	0.26	0.25	0.90	No	Yes	N	20.0
Owens Corning	Duratiion Premium	Cool Shingles Sunrise	Shingles	0.26	0.28	0.89	No	Yes	N	0.0
Owens Corning	Duration	Shasta White	Shingles	0.26	0.28	0.90	No	Yes	N	0.0
Owens Corning	Duration Premium	Cool Shingles Frosted Oak	Shingles	0.27	0.28	0.89	No	Yes	N	0.0
Owens Corning	Duration Premium	Cool Shingles Harbor Fog	Shingles	0.27	0.30	0.89	No	Yes	N	0.0
Owens Corning	Duration Premium	Shasta White	Shingles	0.26	0.28	0.90	No	Yes	N	0.0
Owens Corning	Oakridge	Shasta White	Shingles	0.26	0.28	0.90	No	Yes	N	0.0
Owens Corning	SUPREME	Shasta White	Shingles	0.26	0.29	0.91	No	Yes	N	25.0

**Warranty does not necessarily cover solar reflectance.

Asphalt Shingle Cool Roofs

Several roofing manufacturers have created new lines of asphalt shingles known as 'Cool Series'. Cool Series shingles use specially-designed roofing granules that have greater reflectance than traditional shingles. ENERGY STAR qualified roof products reflect more of the sun's rays. This can lower roof surface temperature decreasing the amount of heat transferred into a building. Roof products qualify for the ENERGY STAR label based on their solar reflectance.

The surface of the shingle is measured by a solar reflectance index. This is the roofs ability to reject solar heat as shown by a small temperature rise. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is 0 and a standard white (reflectance 0.80, emittance 0.90) is 100. Due to the way SRI is defined, particularly hot materials can even take slightly negative values, and particularly cool materials can even exceed 100.



You'll get the most benefit if you live in hot sunny climates where you are using your air conditioning a lot. If a house is already shaded and the roof is not exposed to too much sun, then a reflective roof may not provide a significant benefit. The benefits will also be lessened if the attic space is well insulated.

Roofing manufacturers claim that cool roofs may save residents an avg. 7-15% of total cooling costs, depending on geography, structure and climate. In warmer climates, cooling-cost savings may be greater year round.

Other types of residential and commercial roofs may also qualify for the Energy Star label. They include

- built-up-roofs
- metal roofing products
- roof tiles
- spray polyurethane foam roof systems
- single-ply membranes
- roof coating products

- modified bitumen

Note: ENERGY STAR does not label radiant barrier paints. Reflective insulation, also called a radiant barrier, is a material (usually aluminum, but it can be in a paint) designed to block radiant heat transfer across open spaces. It is always installed on the inside of the attic.

ENERGY STAR qualified roof products do include roof "coatings." These roof coatings would always be applied to the outside of the roof. The coating would provide solar reflectance, so that the roof is cool to the touch – it will not absorb the heat, and thus transfer less heat into the inside.

What are the Benefits of a Cool Roof?

There are numerous benefits in having a cool roof:

- Increase ecological sustainability factor, or make your house "greener" by:
  - Reducing your utility bills associated with air conditioning
  - Increasing occupant comfort and avoid installing an air conditioner where there isn't already one
  - Decreasing the size and prolong the life of your air conditioning system
  - Lowering roof maintenance costs and extend roof life, avoiding reroofing costs and reducing solid waste
- Assist your home in meeting building codes
- Mitigate your community's Urban Heat Island Effect
- Maintain aesthetics with a roof that performs *and* looks good
- Receive utility rebates (in some locations)
- Receive LEED credits

Considerations:

Climate
In most climate zones worldwide, cool roofs can significantly reduce a building's cooling load. However, cool roofs can also increase heating costs in winter months. This increase is usually greatly outweighed by the cooling energy savings achieved during summer months because the sun is low in the sky during winter months, the weather tends to be overcast, and snow often covers the roof, usually making the heat gain through the roof negligible in all but the most northern climate zones in the US.

There are two cool roof calculators available online that can give good estimates of how much energy you will save. You can find them at:

DOE Cool Roof Calculator
http://www.ornl.gov/sci/roofs%2Bwalls/facts/CoolCalcEnergy.htm

EPA Cool Roof Calculator
http://www.roofcalc.com

From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
Sent: Monday, August 08, 2011 11:08 PM
To: tobin@bostonabcd.org; wells@bostonabcd.org; maclellan@bostonabcd.org; craig@actioninc.org; ritac@actioninc.org; Elj@actioninc.org; DBuchler@nisource.com; kgray@nisource.com; msommer@berkshiregas.com; rgyurjan@berkshiregas.com; Ken.Rauseo@state.ma.us; AMickee@GLCAC.Org; rbechtold@haconcapecod.org; NDAVISON@haconcapecod.org; bruceledgerwood@comcast.net; artwillcox@yahoo.com; PWingate@communityaction.us; jhowat@nclc.org; kimberly.crossman@us.ngrid.com; michael.rossacci@us.ngrid.com; Azulay, Gail; Stack, William; pjackson@smoc.org; kimball@unitil.com; oswalrl@nu.com; sasde@nu.com; walshj@nu.com; danielle.rathbun@state.ma.us; jeanne.cherry@sug.com; James.Carey@sug.com; trish.walker@sug.com; jglivermore@yahoo.com; pahorowitz@earthlink.com; Mary Gianetti; Margaret M. Song; Debra Hall; Hastings, Christine (Riley)
Cc: Bonnie Watson
Subject: Proposed Agenda for Low Income Best Practices meeting at CMA, this Wednesday, August 10 at 10 AM

LOW INCOME BEST PRACTICES DRAFT AGENDA FOR August 10, 2011
At CMA, Westborough
Call-in: 781-441-3101 +8717#

1. Preliminaries: note taker, next meeting, amendments to agenda, corrections to e-list

2. List of Working Groups: John L. circulated res. WGs 2/23/10, Glenn agreed at 1/1/11 meeting to circulate others (e.g., evaluation, others, updates)

3. Contractor training and recruitment, Auditor training, DHCD Report – CRAIG AND KEN

4. DEBI/JOHN WALSH – WMECo evaluation of repairs (roofs are cost-effective)

5. BRUCE, ART – SDHW, microCHP, *aerogel
   coordinate with CEC/DOE SERC in mid-2012, when data will be available from CEC/SERC project (PA case-by-case interest)

6. Expansion of air conditioner replacement measure (contractor model)

7. Code issues
   a) Sheet metal license required to install dryer or bathroom vent - Peter Wingate
   b) Other new issues?
8. Low-Income Multi-Family Program issues (per agreement)
   a) Pricing for large scale projects – competitive bidding v. other approaches (DEFER)
   b) Air sealing cap (DEFER)
   c) Pilot heating distribution system replacement to test cost-effectiveness (possible NSTAR EOP funding in old Comm. Elec. territory)
   d) Building inventory – all contracts signed?

9. Goal-setting and budget discussion (to start in JULY per agreement) – update re avoided costs (including carbon compliance, economic development) and NEBs

10. Hockey stick, pipeline reporting (per agreement)

11. Metric 1 (Hard to Reach Landlords) – Progress reports

12. [START ABOUT 11, for an hour] Low-Income 2010 process evaluation and projected 2011 process and impact evaluations -- Cadmus Group, Riley Hastings

    a) Cadmus topics -- discussion including questions and concerns
        1. Researchable questions to be addressed
        2. Data requests of the MA RR&LI Evaluation Team for 2011 impact evaluation work (this includes all household information collected by auditors such as baseline conditions, demographics, recommended measures, efficiency levels, expected savings, etc.) -- examples of the data Cadmus is looking for, Cadmus requests feedback on the best process for obtaining this data from the agencies
        3. Interviews with CAP agencies and PA staff
        4. How the data will be used
        5. Cadmus timelines

    b) Process evaluation recommendations
        1. Standard screening tool
        2. Data management standardization
        3. Measure names, definitions, "dictionary"
        4. Electronic management, linking across systems (e.g., TRM, BCR input, tracking)
        5. Data gaps?
        6. Pipeline reporting?

    c) Cadmus participation in PA achievement of Metric 2 Threshold: "Research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE)." ART to survey California, Wisconsin, Ohio, Oregon, Washington State; also consult Keith Miller (N Grid) re PA's Residential Technical Review Committee and ACEEE – ART AND CADMUS STATUS REPORTS (Art's summary to date of measures to be circulated ahead of meeting)

13. New measures (all low-income programs) (measures for 2011 Metric 2 marked by *)
    a) * Hybrid electric water heaters, ductless air source heat pump – awaiting Steven Winter evaluation of CLC/NSTAR$/NGrid pilot expected in Aug.

    b) * Innovative roofing materials (when roof replaced anyway) – DEBI re insulating shingles

c) * Grounded Power demand control pilot – sent back to Common Assumptions to analyze as 2012 or 2013 pilot per metric 2, awaiting confirmation of costs from Grounded Power/Tendril. (DEFER)

d) * LED downlights
    1. CR 6 (less high-powered so more residential applications, screened by MassSave) -- referred to Common Assumptions at May meeting; Common Assumptions thinks the analysis is the same as for the lamp they screened last year (see attached from last year)
    2. Any other lamps we should be looking at?

e) * Brushless fan motors for gas furnaces – Common Assumptions approved based on TRM assumptions (see attached)

f) * Aerogel – wait for test under DOE SERC, perhaps by fall

g) TLC Kit
    1. humidity sensor (health & safety, education benefits) – DEBI will have a sample of a less costly thermometer/humidiguide unit and education piece to go with it
    2. Other?

h) Rennai wall heaters -- Common Assumptions reviewed with distribution and found it not cost-effective. ART will confirm that there are applications with no distribution and thus at much less cost, which will probably be cost-effective.

i) Others?

j) [1:45?] Smart strips (approved measure) – Presentation by Allan Telio of Belkin (DEBI)

14. Refrigerator thresholds (DEBI)

15. Other matters?

RESOLVED AT MAY MEETING:

Air sealing of windows: continue current case-by-case approach.

Borate in place of aluminum sulfate: confirmed that this is not an issue.

Accounting for cross-fuel savings, e.g., gas savings where DHW measures installed by electrics: continue current practice at NU where gas PA's (CMA, Berkshire) reimburse electrics and claim savings if also gas heat. Unitil will not do this. NSTAR, New England, National Grid either absent or offered no opinion.

Outdoor resets: Accepted as a measure since Common Assumptions TRC BCR = 0.97 with conservative assumptions and is approved measure in TRM with 15 year life instead

of Common Assumptions 5 years. Noted also that cost-effectiveness requirement is only at the program level.

* Foundation foam, e.g., 2 inch inside: rejected on cost grounds.

* Ductless mini-split electric space heaters – as supplement to resistance heating and some cooling benefit but not effective below 10-20 degrees – at prior meeting, CLC reported BCR of 0.87, Glenn reported pilot did not pass at current costs. Rejected on cost grounds.

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Attachments:

- LED down Light Screening Report June 2010
- Brushless Fan Motor Screening Report Aug 2011

From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
Sent: Saturday, September 24, 2011 5:12 PM
To: tobin@bostonabcd.org; wells@bostonabcd.org; maclellan@bostonabcd.org; craig@actioninc.org; ritac@actioninc.org; Elj@actioninc.org; DBuchler@nisource.com; kgray@nisource.com; msommer@berkshiregas.com; rgyurjan@berkshiregas.com; Ken.Rauseo@state.ma.us; AMickee@GLCAC.Org; rbechtold@haconcapecod.org; NDAVISON@haconcapecod.org; bruceledgerwood@comcast.net; artwillcox@yahoo.com; PWingate@communityaction.us; jhowat@nclc.org; kimberly.crossman@us.ngrid.com; michael.rossacci@us.ngrid.com; Azulay, Gail; Stack, William; pjackson@smoc.org; kimball@unitil.com; oswalrl@nu.com; sasde@nu.com; walshj@nu.com; danielle.rathbun@state.ma.us; jeanne.cherry@sug.com; James.Carey@sug.com; trish.walker@sug.com; jglivermore@yahoo.com; pahorowitz@earthlink.com; Mary Gianetti; Margaret M. Song; Debra Hall; Hastings, Christine; BenStephenson@unitil.com
Cc: Bonnie Watson; Aquila Velonis; Bryan Ward; Jamie Drakos
Subject: BEST PRACTICES - proposed agenda for Monday, Sept. 26, notes of last two meetings; 2011-2012 metrics

LOW INCOME BEST PRACTICES DRAFT AGENDA
For Monday, September 26, 2011
Including notes from May and August, Metrics
At CMA, Westborough

1. Preliminaries: note taker, next meeting (after Nov. 7 national survey report), amendments to agenda, corrections to e-list, corrections to notes

2. List of Working Groups: John L. circulated res. WGs 2/23/10, Glenn agreed at 1/1/11 meeting to circulate others (e.g., evaluation, others, updates), John L agreed 8/10/11 to circulate others (including evaluation, TRM, Codes and Standards)

3. Contractor training and recruitment, Auditor training, DHCD Report, 2012 needs? – CRAIG AND KEN

    a. Ken:
        i. ARRA WAP (ends 3/31/12)
        ii. DOE WAP FY 2012 (begins 4/1/12)
        iii. DOE mandated Health & Safety Measures going forward
        iv. HEARTWAP FY 2012 (begins 10/1/11)
        v. WAP Contractor & Energy Auditor Training completed and going forward
    b. Craig – new measures

4. BRUCE, ART – SDHW, microCHP, *aerogel
    a. coordinate with CEC/DOE SERC in early or mid-2012, when data will be available from CEC/SERC project (PA case-by-case interest)
    b. update August report [SDHW and MCHP underway; SDHW costs have been driven down by project; some data later this fall; aerogel later, costs to include finish work]

5. Program issues

a. Air Conditioner replacements
    i. PAUL JACKSON will check whether prices include installation
    ii. MIKE ROSSACCI will report InDemand protocol for replacement threshold
b. Bi-monthly billing to accommodate loss of ARRA advance (AL MICKEE)
c. Address caps for Wx, heating systems post-ARRA (DEFER)
d. Procurement in November (?) for April 1 – changes?

6. Any Code issues?

7. Low-Income Multi-Family Program issues (per agreement)
    a. Pricing for large scale projects – competitive bidding v. other approaches (DEFER)
    b. Air sealing cap (DEFER)
    c. Pilot heating distribution system replacement to test cost-effectiveness (possible NSTAR EOP funding in old Comm. Elec. territory) (Defer to Metrics discussion)
    d. Building inventory – we are told not all contracts signed

8. Goal-setting and budget discussion (to start in JULY per agreement) -- update re avoided costs (including carbon compliance, economic development) and NEBs

9. Metric progress reports
    a. 1 (Hard to Reach Landlords)
    b. 2 (New Measures) – in-field
    c. 3 (MF Building inventory) – contractor reports on schedule, but contracts?
    d. note need for reports

10. Cadmus participation in PA achievement of 2011 Metric 2 Threshold
    a. Proposed to carry over analysis of results to BP and Common Assumptions 2012. Metric us silent about timing: “Research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE).”
    b. ART AND CADMUS STATUS REPORT:

        1. Cadmus will complete its survey of Massachusetts costs, savings, and measure lives with respect to the measures listed below and forward the resulting spreadsheet (based on the Sept. 8 model) and back-up documentation to Art and me **on or before Tuesday, November 1**, 2011.
        2. We will all convene on the telephone to discuss the survey at **2pm ET on Monday, Nov. 7**, 2011. If it is agreed that any changes are needed, Cadmus will complete them right away (in time for distribution ahead of the next Best Practices meeting).
        3. Best Practices will convene **soon after November 7** to review the materials and (a) make recommendations to Common Assumptions for measures to be adopted, and (b) decide on other research to be done to follow up.
        4. Common Assumptions will report in 2012. Approved measures will be adopted in 2012. (Note: a few additional measures may also be investigated by Best Practices during 2012.)

5. This schedule is subject to approval of Best Practices at the Sept. 26 meeting, including agreement that it will result in meeting 2011 Metric 2 Threshold ["In coordination with LEAN, develop and implement a research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE)."]
6. The measures are:
    a. Heat Pump Water Heaters
    b. Gas Hearths (in place of wood stoves) (probably propane; not clear fuel-switching or load-building is appropriate for us)
    c. MF Make-Up Units (MAU) (preliminary exploration, may not result in recommendation at this time)
    d. MF High-Efficiency Clothes Washer
    e. MF Common Area Lighting Controls - including bi-level hall lights, vacancy sensors
    f. MF Duct Repair, including sealing foam (aeroseal?)
    g. MF Combined Heat & Hot Water
    h. Dehumidifier replacement
    i. LEDs, with focus on likely future developments and prices

11. New measures (all low-income programs) (measures for 2011 Metric 2 marked by *)

    a. * Hybrid electric water heaters, ductless air source heat pump – awaiting Steven Winter evaluation of CLC/NSTAR$/NGrid pilot expected in Aug. – MARGARET SONG to report

    b. * Innovative roofing materials (when roof replaced anyway) – DEBI re insulating shingles, with Art

    c. * Grounded Power demand control pilot – sent back to Common Assumptions to analyze as 2012 or 2013 pilot per metric 2, awaiting confirmation of costs from Grounded Power/Tendril. (DEFER: Tendril is not responding.)

    d. * LEDs
        i. KIM CROSSMAN re whether Phillips 12.5w 60w 25,000 hour replacement at $40 is cost-effective against CFL
        ii. Note: Further research part of national survey, see 10(6i) above – Any other lamps we should be looking at?

    e. * Aerogel – wait for test under DOE SERC, perhaps by fall
        i. Other super-insulation products (aeroseal?)? – see national survey, 10 (6f) above.

    f. TLC Kit
        i. Humidity gauge (health & safety, education benefits) – DEBI showed $9 Taylor batteryless gauge, in which there was interest. Debi will research (a) value of customer information about

humidity, and (b) a leave-behind (CRAIG will also locate moisture booklet)

ii. Others?

g. Rennai wall heaters -- Common Assumptions reviewed with distribution and found it not cost-effective. ART will confirm that there are applications with no distribution and thus at much less cost, which will probably be cost-effective, gas steam to gas (savings custom), Lunenberg HA installation, CLC experience.

h. [1 PM] Smart strips (approved measure) – Presentation by Allan Telio of Belkin (DEBI)

i. Others?

12. New measure implementation reports – outdoor resets, a/c replacements, Brushless fan motors for gas furnaces, LEDs, Smart strips

13. Refrigerator thresholds, repairs and replacements (DEBI, KIM, ART)
    i. kWh/yr usage thresholds vary (WM 1059, NS 928, NG 836 if before 1989-960, CLC (same as NG?), FGE (same as NG?)
    ii. all use 19-year life
    iii. repair policies vary (WM w/in 3 yrs, NS case-by-case w/in 2 yrs, NG 5 yrs if in same location)
    iv. replacement policies (NS every 10 years)

14. 2012 Metrics – see LEAN proposal below (Thanks to Kara for review)

15. Other matters?

RESOLVED AT MAY MEETING:

1. Air sealing of windows: continue current case-by-case approach.

2. Borate in place of aluminum sulfate: confirmed that this is not an issue.

3. Accounting for cross-fuel savings, e.g., gas savings where DHW measures installed by electrics: continue current practice at NU where gas PA's (CMA, Berkshire) reimburse electrics and claim savings if also gas heat. Unitil will not do this. NSTAR, New England, National Grid either absent or offered no opinion.

4. Outdoor resets: Accepted as a measure since Common Assumptions TRC BCR = 0.97 with conservative assumptions and is approved measure in TRM with 15 year life instead of Common Assumptions 5 years. Noted also that cost-effectiveness requirement is only at the program level.

5. * Foundation foam, e.g., 2 inch inside: rejected on cost grounds.

6. * Ductless mini-split electric space heaters – as supplement to resistance heating and some cooling benefit but not effective below 10-20 degrees – at prior meeting, CLC reported BCR of 0.87, Glenn reported pilot did not pass at current costs. Rejected on cost grounds.

RESOLVED AT AUGUST MEETING:

1. Confirming our approval of repairs, WMECo found a BCR of 1.62.

2. Expansion of air conditioner replacement measure (contractor model)
   Previous agreement: client must be home during day so timer not useful
   Savings are principally demand and NEBs
   Agreed: replace low-efficiency A/Cs that are used during the day, using SEER to decide
   Agreed: no annual removal by agency, which however will provide education (including seal and cover as fallback to removal)
   Agreed: Savings per TRM, or computed actual

3. Where sheet metal license required to install dryer or bathroom vent, use PVC instead (insulated if in attic).

4. Hockey stick, pipeline reporting (per agreement)
   Agreed: agencies will provide queue information now provided to DHCD; this situation will ease post-ARRA when the ratio of stand-alones will substantially increase [note also that the 2011 hockey stick is greatly attenuated: on average, more than 40% of the 2011 budgets were expended at mid-year]

5. Discussion of impact evaluation with Cadmus
   a. Cadmus will get back re: screening tool
   b. Wait for Cadmus proposal re: measure naming (what's wrong with DOE list?, PA's: does not seem like an operational problem except for evaluator; seems to be a TRM issue)

6. Approval of LED CR-6 confirmed.

7. Phillips 12.5w 60w 25,000 hour replacement at $40 probably cost-effective but costly so too soon to adopt; note that it is hot, dimmable, indoor use only

8. * Brushless fan motors for gas furnaces – Common Assumptions approved based on TRM assumptions

PROPOSED 2012 LOW INCOME METRICS

1. **Best Practices Program Strategies Research & Technical Review of Potential New Measures**

Threshold ~~In coordination with LEAN, develop and implement a research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE).~~

In coordination with LEAN, implement Best Practices to achieve deeper energy savings by screening new practices and measures to further increase the comprehensiveness of what is already a comprehensive whole-building approach. The Best Practices Working Group, with each PA participating, shall perform due-diligence reviews of proposed new products/technologies and practices in support of the Utility energy efficiency programs. These due-diligence reviews will be focused on determining if a technology/product not presently being utilized in the Utility weatherization programs is suitable and applicable for incorporation into the Utility programs. PA's will contribute their expertise, including from the disciplines of engineering, utility energy efficiency program planning, evaluation, power, demand resources, construction, weatherization, weatherization auditing and assessment, and training, and will seek outside expertise as appropriate. Best Practices meets regularly for this purpose, including selecting new measures for review. PA's will provide written updates on meetings, technical analyses performed, and additional Best Practices implemented. Each PA will accept an assignment with respect to written products and will submit documentation showing performance of these tasks.

Design Study possible new program measures and practices not now included in the utility program. This will specifically include, but not be limited to: {Aerogel, heat pump water heaters, LED CR6, foundation foam, roof insulation materials, ductless mini-splits, behavior-based pilot measures (if feasible and available), and brushless fan motors.} Cost-effectiveness analysis will be conducted by the PA Common Assumptions group, or the equivalent, which shall include LEAN for this purpose, within eight weeks of referral by Best Practices, with first reports of analysis no later than June 15, 2012. All feasible non-pilot cost-effective measures to be included in standard program offering within 3 months, subject to PA specific budget impacts. Each PA will submit documentation showing its performance of these tasks.

This is 2011 list. Our list for 2012: super insulation (aside from aerogel) such as U-vacua, identify application parameters for SDHW, identify application parameters for MCHP, pilot comprehensive work in MF buildings with very high WEGO scores to include steam distribution system replacement, behavior-based pilot measures (if feasible and available) [not available in 2011].
Also review results of Art-Cadmus national survey of:

a. Heat Pump Water Heaters
b. Gas Hearths (in place of wood stoves) (probably propane; not clear fuel-switching or load-building is appropriate for us)
c. MF Make-Up Units (MAU) (preliminary exploration, may not result in recommendation at this time)
d. MF High-Efficiency Clothes Washer
e. MF Common Area Lighting Controls - including bi-level hall lights, vacancy sensors
f. MF Duct Repair, including sealing foam (aeroseal?)
g. MF Combined Heat & Hot Water
h. Dehumidifier replacement
i. LEDs, with focus on likely future developments and prices

Exemplary By February 28th, 2013, a report of all measures that were reviewed in 2012 by the Best Practices Working Group and Sub-Committee will be developed to support Utility program adoption or non-inclusion. Each new measure that passes the Common Assumptions screening will be implemented no later than three months after the relevant Common Assumptions report. In a memo to EEAC consultants by April 1, 2013, each PA will document results and findings, including savings and feasibility. Each PA to submit documentation showing its performance relative to targets.

Clear & Distinct Role: Each utility must produce a Best Practices document, participate in the Common Assumptions group with LEAN, and implement new measures.
Verification Plan: Best Practices document, Common Assumptions analyses, field results and findings.
Baseline Information: Baseline for each of these measures is that they are now not part of the program.

2. Multi-family Building Inventory

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. 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 and scheduled to conclude at the end of 2013, 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 develop of an energy efficiency standard (e.g., BTUs of energy per square foot of heated space) for low-income multi-family buildings.

Design Each utility PA will implement the inventory in its service territory, reaching the designated milestone number of account reports (defined under “Baseline Information” below) as indicated below. Each utility will support the inventory on an allocated basis, with a statewide total of 536 accounts per month (not including Cape Light Compact). The milestones are:

Utility	% Allocation	# of Account Reports
NSTAR Electric	24%	129
NGRID Electric	20%	107
WMECO	4%	21
Unitil Electric	1%	5
NSTAR Gas	14%	75
NGRID Gas	22%	118
Columbia Gas	10%	54

Berkshire Gas	2%	11
New England Gas	2%	11
Unitil Gas	1%	5

Exemplary By Jan 31st, 2013, in coordination with LEAN, each PA will submit a status report showing its implementation of the Inventory. 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.

Clear & Distinct Role: Each utility must continue to participate in development of the inventory, support its implementation, and report thereon.
Verification Plan: An allocated share of low-income multi-family buildings must be entered in the database.
Baseline Information: The current low-income multi-family building universe consists of approximately 20,300 common area/master metered accounts and/or collections of tenant accounts in approximately 13,500 buildings. Where tenant accounts exist and are available with respect to a fuel, the report (Account Report in the table above) will include the entire building, i.e., common areas/master metered (if any) and all tenants in one combined report. Otherwise, the report will include only common areas (if any). The estimate of 20,300 accounts for such situations as municipal utilities (not included) and the lack of common area or gas accounts.

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Sent: Tue 11/8/2011 12:39 PM
To: tobin@bostonabcd.org; wells@bostonabcd.org; maclellan@bostonabcd.org; craig@actioninc.org; ritac@actioninc.org; Elj@actioninc.org; DBuchler@nisource.com; kgray@nisource.com; msommer@berkshiregas.com; rgyurjan@berkshiregas.com; Ken.Rauseo@state.ma.us; AMickee@GLCAC.Org; rbechtold@haconcapecod.org; NDAVISON@haconcapecod.org; bruceledgerwood@comcast.net; artwillcox@yahoo.com; PWingate@communityaction.us; jhowat@nclc.org; kimberly.crossman@us.ngrid.com; michael.rossacci@us.ngrid.com; Azulay, Gail; Stack, William; pjackson@smoc.org; kimball@unitil.com; oswalrl@nu.com; sasde@nu.com; walshj@nu.com; danielle.rathbun@state.ma.us; jeanne.cherry@sug.com; James.Carey@sug.com; trish.walker@sug.com; jglivermore@yahoo.com; pahorowitz@earthlink.com; Mary Gianetti; Margaret M. Song; Debra Hall; Hastings, Christine (Riley); Ben Stephenson
Cc: Bonnie Watson; Aquila Velonis; Bryan Ward; Jamie Drakos
Subject: BEST PRACTICES - proposed agenda for Thursday, Nov. 10; notes of last meeting; 2011-2012 metrics

The next meeting of the Low-Income Best Practices Task Force is this Thursday, November 10, at 10am at the UMass-Dartmouth Advancced Technology & Manufacturing Centre (ATMC) Conference Centre, 151 Maritime St., Fall River 02723 -- directions are attached.

Call-in number: 888-481-3032 + 6499 2728.

Many thanks to Jeanne Cherry of New England Gas for these arrangements.

Below, and attached, is the proposed agenda (next year's metrics are attached):

LOW INCOME BEST PRACTICES DRAFT AGENDA
For Thursday, November 10, 2011
Including notes from September
At UMass ATMC Conference Centre, Fall River

Call-in: 888-481-3032 + 6499 2728

Reports to be made highlighted

1. Preliminaries: note taker, next meeting, amendments to agenda, corrections to e-list, corrections to notes.

2. List of Working Groups: John L. circulated res. WGs 2/23/10, Glenn agreed at 1/1/11 meeting to circulate others (e.g., evaluation, others, updates), John L recently circulated others (including evaluation, TRM, Codes and Standards)

3. Contractor training and recruitment, Auditor training, DHCD Report, 2012 needs? – CRAIG AND KEN
    i. ARRA WAP (ends 3/31/12)
    ii. DOE WAP FY 2012 (begins 4/1/12)
    iii. DOE mandated Health & Safety Measures going forward
    iv. HEARTWAP FY 2012 (begins 10/1/11)
    v. WAP Contractor & Energy Auditor Training completed and going forward

4. BRUCE, ART – SDHW, microCHP, *aerogel
    a. coordinate with CEC/DOE SERC in early or mid-2012, when data will be available from CEC/SERC project (PA case-by-case interest)
    b. update [SDHW and MCHP underway; SDHW costs have been driven down by project; some data later this fall; aerogel later, costs to include finish work; CEC contract may be extended and expanded]

5. Program issues
    a. Air Conditioner replacements (prices include installation)
        i. MIKE ROSSACCI will report InDemand protocol for replacement threshold, provide screen shot (hours, peak hours, SEER or age, BTUs)
    b. Address caps for Wx, heating systems post-ARRA (DEFER)

   Procurement in November (?) for April 1 – changes?; contractors need to understand that low-income certification is not equivalent to MassSAVE

6. Any Code issues?
    a. Update re requirement for architect for greater than 35000 cu ft? Need a panel of no-cost architects/engineers?

7. Low-Income Multi-Family Program issues (per agreement)
    a. Pricing for large scale projects – competitive bidding v. other approaches (DEFER)
    b. Air sealing cap (DEFER)
    c. Pilot heating distribution system replacement to test cost-effectiveness (possible NSTAR EOP funding in old Comm. Elec. territory) (Now included in 2012 Metrics)
    d. Building inventory – note that billing is to come

8. Goal-setting and budget discussion (to start in JULY per agreement) -- update re avoided costs (including carbon compliance, economic development) and NEBs, possibly at issue in MTM cases.

9. 2011 Metric progress reports
    a. 1 (Hard to Reach Landlords)
    b. 2 (New Measures) – in-field
    c. 3 (MF Building inventory)
    d. note need for reports

10. Cadmus participation in PA achievement of 2011 Metric 2 Threshold
    a. "Research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE)."
    b. ART AND CADMUS STATUS REPORT – see attached spreadsheet
        1. Cadmus has completed most of its survey of Massachusetts costs, savings, and measure lives with respect to the measures listed below. Additional data will be provided by Nov. 21 for MF clothes washers (costs), SF and

MF combined heat and hot water (costs, savings), MF make-up air units (matrix to support analysis).

2. Conclusion for LEDs is to keep watching as prices decline. DEBI will follow up with EFI (DEFER)
3. ART will present preliminary cost-effectiveness analysis for:
    a) Duct repairs (heating but not cooling)
    b) MF Energy Star clothes washers where electricity or propane but not gas, including identifying usage thresholds (perhaps for SF also)
    c) MF (not SF) exterior photocells
    d) MF and SF combined heat and hot water
    e) Replacement wood stoves
    f) Hours of used thresholds for replacement dehumidifiers (checking with Cape Light)
    g) Apparently not cost-effective are heat pump water heaters, fireplace inserts, and MF bi-level lighting controls.
4. Best Practices to (a) make recommendations to Common Assumptions for measures to be adopted, and (b) decide on other research to be done to follow up.
5. Discuss non-low-income finding that heat pump water heaters <u>are</u> cost-effective. KIM?
6. Common Assumptions will report in 2012. Approved measures will be adopted in 2012. (Note: additional measures will also be investigated by Best Practices during 2012.)

11. New measures (all low-income programs) (measures for 2011 Metric 2 marked by *)

    a. * Hybrid electric water heaters, ductless air source heat pump –Steven Winter evaluation of CLC/NSTAR$/NGrid pilot – see 10.b.5 above.

    b. * Grounded Power demand control pilot – sent back to Common Assumptions to analyze as 2012 or 2013 pilot per metric 2, awaiting confirmation of costs from Grounded Power/Tendril. (DEFER: expect to hear from Tendril in January.)

    c. * LEDs
        i. KIM CROSSMAN re whether Phillips 12.5w 60w 25,000 hour replacement at $40 is cost-effective against CFL
        ii. See national survey, see 10.b.1-2 above.
        iii. Any other lamps we should be looking at?

    d. * Aerogel – wait for test under DOE SERC, perhaps by fall
        i. Other super-insulation products (aeroseal?Vacuoa?)? – see national survey, 10.b.3.a above re aeroseal.

    e. Rennai wall heaters -- Common Assumptions reviewed with distribution and found it not cost-effective. ART will confirm that there are applications with no distribution and thus at much less cost, which will probably be cost-effective, gas steam to gas (savings custom), e.g., Lunenberg HA installation, CLC experience (OK with tight air sealing). Need full winter's data. Avoid fuel-switching.

    f. Doors – already approved for non-LI

ART: cost-effectiveness based on data from Kim

g. Windows – if cost-effective per NEAT

h. Smart strip – Alan Telio of Belkin offered to provide Quick Guide with 800# -- Status? DEBI (Defer)

i. Others?

12. New measure implementation reports – outdoor resets, a/c replacements, Brushless fan motors for gas furnaces, LEDs (1 job at WM), Smart strips (NGrid, WM, FGE moving forward)

13. Refrigerator thresholds, repairs and replacements (DEBI, KIM, ART) Defer?
    a) kWh/yr usage thresholds vary (WM 1059, NS 928, NG 836 if before 1989-960, CLC (same as NG?), FGE (same as NG?)
    b) all use 19-year life
    c) repair policies vary (WM w/in 3 yrs, NS case-by-case w/in 2 yrs, NG 5 yrs if in same location)
    d) replacement policies (NS every 10 years)

14. 2012 Metrics – attached

15. Coordinating background checks – agreement in principle but issues:

    a) Background check requirements differ
    b) Cost-sharing
    c) Share database
    d) Exceptions are individual

16. Statewide marketing?
    a) Customer information/education (instead)? E.g., moisture booklets
    b) Share creative, but not publishing
    c) Landlords?

17. Other matters?

RESOLVED AT MAY MEETING:

1. Air sealing of windows: continue current case-by-case approach.

2. Borate in place of aluminum sulfate: confirmed that this is not an issue.

3. Accounting for cross-fuel savings, e.g., gas savings where DHW measures installed by electrics: continue current practice at NU where gas PA's (CMA, Berkshire) reimburse electrics and claim savings if also gas heat. Unitil will not do this. NSTAR, New England, National Grid either absent or offered no opinion.

4. Outdoor resets: Accepted as a measure since Common Assumptions TRC BCR = 0.97 with conservative assumptions and is approved measure in TRM with 15 year life instead

of Common Assumptions 5 years. Noted also that cost-effectiveness requirement is only at the program level.

5. * Foundation foam, e.g., 2 inch inside: rejected on cost grounds.

6. * Ductless mini-split electric space heaters – as supplement to resistance heating and some cooling benefit but not effective below 10-20 degrees – at prior meeting, CLC reported BCR of 0.87, Glenn reported pilot did not pass at current costs. Rejected on cost grounds.

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1. Confirming our approval of repairs, WMECo found a BCR of 1.62.

2. Expansion of air conditioner replacement measure (contractor model)
   Previous agreement: client must be home during day so timer not useful
   Savings are principally demand and NEBs
   Agreed: replace low-efficiency A/Cs that are used during the day, using SEER to decide
   Agreed: no annual removal by agency, which however will provide education (including seal and cover as fallback to removal)
   Agreed: Savings per TRM, or computed actual

3. Where sheet metal license required to install dryer or bathroom vent, use PVC instead (insulated if in attic).

4. Hockey stick, pipeline reporting (per agreement)
   Agreed: agencies will provide queue information now provided to DHCD; this situation will ease post-ARRA when the ratio of stand-alones will substantially increase [note also that the 2011 hockey stick is greatly attenuated: on average, more than 40% of the 2011 budgets were expended at mid-year]

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   a) Cadmus will get back re: screening tool
   b) Wait for Cadmus proposal re: measure naming (what's wrong with DOE list?, PA's: does not seem like an operational problem except for evaluator; seems to be a TRM issue)

6. Approval of LED CR-6 confirmed.

7. Phillips 12.5w 60w 25,000 hour replacement at $40 probably cost-effective but costly so too soon to adopt; note that it is hot, dimmable, indoor use only

8. * Brushless fan motors for gas furnaces – Common Assumptions approved based on TRM assumptions

RESOLVED AT SEPTEMBER MEETING:

1. Bathroom exhaust fans (health and safety requirement) will be paid out of minor or major repair budgets for stand-alone jobs (i.e., where there are no DOE funds).

2. Bi-monthly billing approved (to accommodate loss of ARRA advance) except National Grid, WMECo (billing any time); Berkshire billing via CET.

3. If there is a problem with an invoice, PA's will process and pay that portion of the invoice for which there is no problem rather than hold up the entire invoice.

4. * No cost-effective innovative roofing products at this time.

5. No changes in TLC Kit at this time.

From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
Sent: Monday, November 28, 2011 4:51 PM
To: tobin@bostonabcd.org; wells@bostonabcd.org; maclellan@bostonabcd.org; craig@actioninc.org; ritac@actioninc.org; Elj@actioninc.org; DBuchler@nisource.com; kgray@nisource.com; msommer@berkshiregas.com; rgyurjan@berkshiregas.com; Ken.Rauseo@state.ma.us; AMickee@GLCAC.Org; rbechtold@haconcapecod.org; NDAVISON@haconcapecod.org; bruceledgerwood@comcast.net; artwillcox@yahoo.com; PWingate@communityaction.us; jhowat@nclc.org; kimberly.crossman@us.ngrid.com; michael.rossacci@us.ngrid.com; Azulay, Gail; Stack, William; pjackson@smoc.org; kimball@unitil.com; oswalrl@nu.com; sasde@nu.com; walshj@nu.com; danielle.rathbun@state.ma.us; jeanne.cherry@sug.com; James.Carey@sug.com; trish.walker@sug.com; jglivermore@yahoo.com; pahorowitz@earthlink.com; Mary Gianetti; Margaret M. Song; Debra Hall; Hastings, Christine (Riley); Ben Stephenson; Lynda.Row@us.ngrid.com; Harrington, Cheryl; Karen Hulette
Subject: AW: BEST PRACTICES - proposed agenda for Monday, January 23, 2012; notes of Nov. 10 meeting; 2011-2012 metrics

The next meeting of the Low Income Best Practices task force is 10 am on Monday, January 23, 2012 at CMA. Call-in number to follow.

Below and attached is the proposed agenda, along with notes of our November meeting.

Assignments for the meeting are highlighted -- please check for your assignments!

LOW INCOME BEST PRACTICES DRAFT AGENDA
For Monday, January 23, 2012
Including notes from November
At CMA, Westborough
Call-in: [to come]

Reports to be made highlighted

1. Preliminaries: note taker, next meeting, amendments to agenda, corrections to e-list, corrections to notes.

2. Contractor training and recruitment, Auditor training, DHCD Report, 2012 needs? – CRAIG AND DHCD

   i. ARRA WAP (ends 3/31/12)
   ii. DOE WAP FY 2012 (begins 4/1/12)
   iii. DOE mandated Health & Safety Measures going forward
   iv. HEARTWAP FY 2012 (began 10/1/11)
   v. WAP Contractor & Energy Auditor Training completed and going forward

5. BRUCE, ART – Update re: SDHW, microCHP, *aerogel
   a. coordinate with CEC/DOE SERC in early or mid-2012, when data will be available from CEC/SERC project (PA case-by-case interest)
   b. update [SDHW and MCHP underway; SDHW costs have been driven down by project; some data later this fall; aerogel later, costs to include finish work; CEC contract may be extended and expanded]
   c. November report:

   SDHW: 6 complete
   5 in construction, will be completed before Thanksgiving
   4 more to begin construction before Thanksgiving, complete by Christmas
   2 more bid out, contractor selection pending; will begin installation in December
   3 in pipeline to be completed in January and February
   20 systems total, combination of CEC and SERC funding; all currently available funding will be spent out by February.

   LEAN currently in discussion with CEC for possible 12 month contract for additional 20+ systems in calendar 2012.

   MCHP: 3 complete
   4 scheduled for installation before Thanksgiving
   2 scheduled for installation soon after Thanksgiving
   4 being bid out this week; scheduled for installation by Christmas
   7 additional sites have been initially assessed; will be RFP'd in December
   6 other sites have been proposed by owners.

   Available funding for approximately 25 systems.

   Aerogel: 2 scoped and contracted and scheduled; one to be completed by New Year's, the second shortly after New Year.

   These 2 projects will spend out the available funding.

6. Program issues
   a. Air Conditioner replacements (prices include installation) – SEE ATTACHMENT
      i. MIKE ROSSACCI reported InDemand protocol for replacement threshold, and provided screen shot (hours, peak hours, SEER or age, BTUs) – note that SMOC carries only two models -- ART has provided a

calculator: "The attached is an initial draft of a calculator with a range of editable parameters noted on the coversheet. The current settings are consistent with the NGRID evaluation and TRM data. Please note the differences. Also, this calculator would inform the program protocols in both single family and multifamily settings. I suggest that MF window AC's be replaced based on deemed savings based on accepted SEER, (pre & post) and hours of operation."

   b. Address caps for Wx, heating systems post-ARRA (DEFER)
   c. Procurement in late November (?) for April 1 – changes?; contractors need to understand that low-income certification is not equivalent to MassSAVE – PA's expressed interest in the process from the point where prices are identified; CLC wants to review the RFP specs; there weas a suggestion for a precautionary prohibition against drop-shipping

7. Any Code issues?
   a. Update re requirement for architect for greater than 35000 cu ft? Need a panel of no-cost architects/engineers?

8. Low-Income Multi-Family Program issues (per agreement)
   a. Pricing for large scale projects – competitive bidding v. other approaches (DEFER)
   b. Air sealing cap (DEFER)
      Pilot heating distribution system replacement to test cost-effectiveness
   c. (possible NSTAR EOP funding in old Comm. Elec. territory) (Now included in 2012 Metrics)
   d. Building inventory

9. Goal-setting and budget discussion (to start in JULY per agreement) -- update re avoided costs (including carbon compliance, economic development) and NEBs, possibly at issue in MTM cases.

11. 2011 Metric progress reports
   a. 1 (Hard to Reach Landlords) – report by Debi; note that Code violations have prevented many installations (e.g., extra cost to Landlords due to requirement for chimney liner) and that tracking has been an issue
   b. 2 (New Measures) – in-field – report by Cheryl and Riley
      i. Aerogel – consumption data available next year
      ii. HPWH – OK
      iii. LED – approved prior year
      iv. Foundation foam – rejected
      v. Roof insulation – rejected
      vi. Mini-splits – rejected
      vii. Demand control – deferred to next year at vendor's request
      viii. Brushless fan motors – OK
      ix. National survey – done, measures to be reviewed next year
   c. 3 (MF Building inventory) – report by Kara

11. Cadmus participation in PA achievement of 2011 Metric 2 Threshold
   a. "Research survey to assess a cross section of low-income programs being offered around the country. The survey will be used to identify potential new

technologies, measures, and program strategies that may be considered for future program offerings. The survey should also include a review of relevant studies (e.g. CEE, ACEEE)."

b. ART AND CADMUS STATUS REPORT – see attached updated spreadsheet and review of make-up units – Cadmus reports:
"We completed several tasks in addition to the MAU [Make-Up Air Unit] update:
   - Updated clothes washer costs for LIMF and clarified cost source for LISF
   - Broke the combined heat and hot water measure into three categories (individual LIMF unit; LIMF whole building; LISF)
   - Added clarity to the savings source for bi-level controls

c. * We referred to Common Assumptions in November:
   1. Duct repairs
   2. MF clothes washers
   3. Occupancy sensors
   4. MF exterior photocells
   5. Combined heat and hot water (MF and SF)
   6. Bi-level lighting controls

d. Hours of use thresholds for replacement dehumidifiers – Cape Light

e. Heat Pump Water Heaters – OK per TRM – Cape Light to circulate protocol for discussion; warranty issues?

f. Conclusion for LEDs is to keep watching as prices decline. DEBI will follow up with EFI

g. Replacement wood stoves? – what is HEARTWAP experience?

12. New measures (all low-income programs) (measures for 2012 Metric 2 marked by *)
   a. * Grounded Power demand control pilot – sent back to Common Assumptions to analyze as 2012 or 2013 pilot per metric 2, awaiting confirmation of costs from Grounded Power/Tendril. (DEFER: expect to hear from Tendril in January.)
   b. * LEDs
      i. KIM CROSSMAN re whether Phillips 12.5w 60w 25,000 hour replacement at $40 is cost-effective against CFL
      ii. Any other lamps we should be looking at? Debi
   c. Aerogel – wait for test under DOE SERC
      i. Other super-insulation products (aeroseal?Vacuoa?)? – see national survey, 10.b.3.a above re aeroseal.
   d. Rinnai wall heaters -- Common Assumptions reviewed with distribution and found it not cost-effective. ART will confirm that there are applications with no distribution (or just fans) and thus at much less cost, which will probably be cost-effective, gas steam to gas (savings custom), e.g., Lunenberg HA installation, CLC experience (OK with tight air sealing and room-to-room venting). Need full winter's data.
      Avoid fuel-switching.
   e. Doors – already approved for non-LI
      ART: checking cost-effectiveness based on data from Kim
   f. Windows – if cost-effective per NEAT
   g. Smart strip – Allan Telio of Belkin offered to provide Quick Guide with 800# -- Status? DEBI
   h. Others?

13. New measure implementation reports – outdoor resets, a/c replacements, Brushless fan motors for gas furnaces, LEDs (1 job at WM), Smart strips (NGrid, WM, FGE moving forward)

14. Refrigerator thresholds, repairs and replacements (DEBI, KIM, ART) Defer?
    a) kWh/yr usage thresholds vary (WM 1059, NS 928, NG 836 if before 1989-960, CLC (same as NG?), FGE (same as NG?) – AGREED that thresholds should be uniform at the most generous level, ALL to send thresholds to DEBI, who will report
    b) all use 19-year life
    c) repair policies vary (WM w/in 3 yrs, NS case-by-case w/in 2 yrs, NG 5 yrs if in same location)
    d) replacement policies (NS every 10 years)
    e) Margaret: "**The refrigerator link mentioned on Thursday is as follows: http://www.kouba-cavallo.com/refmods.htm." [**Refrigerator and Freezer Energy Rating Database]
15. CFL lives – MARGARET
16. 2012 Metrics –

    #1. Best Practices Measures – MAKE ASSIGNMENTS
    Super insulation such as aerogel, U-vacua,
    Identify application parameters for SDHW,
    Identify application parameters for MCHP,
    Pilot comprehensive work in MF buildings with very high WEGO scores to include steam distribution system replacement,
    Behavior-based pilot measures (if feasible and available)
    Measures from National Survey [already referred to Common Assumptions]
    1. Duct repairs
    2. MF clothes washers
    3. Occupancy sensors
    4. MF exterior photocells
    5. Combined heat and hot water (MF and SF)
    6. Bi-level lighting controls

    #2. MF Building Inventory (year 3 of 4)

17. Coordinating background checks – agreement in principle but issues:
    a) Background check requirements differ
    b) Cost-sharing
    c) Share database
    d) Exceptions are individual
18. Major repairs (roofs, structures, knob & tube) CRAIG
    a) No roofs without insulation savings
    b) No roof where insulation already installed
19. Other matters?

RESOLVED AT MAY MEETING:

1. Air sealing of windows: continue current case-by-case approach.
2. Borate in place of aluminum sulfate: confirmed that this is not an issue.
3. Accounting for cross-fuel savings, e.g., gas savings where DHW measures installed by electrics: continue current practice at NU where gas PA's (CMA, Berkshire) reimburse

electrics and claim savings if also gas heat. Unitil will not do this. NSTAR, New England, National Grid either absent or offered no opinion.

4. Outdoor resets: Accepted as a measure since Common Assumptions TRC BCR = 0.97 with conservative assumptions and is approved measure in TRM with 15 year life instead of Common Assumptions 5 years. Noted also that cost-effectiveness requirement is only at the program level.
5. * Foundation foam, e.g., 2 inch inside: rejected on cost grounds.
6. * Ductless mini-split electric space heaters – as supplement to resistance heating and some cooling benefit but not effective below 10-20 degrees – at prior meeting, CLC reported BCR of 0.87, Glenn reported pilot did not pass at current costs. Rejected on cost grounds.

RESOLVED AT AUGUST MEETING:

1. Confirming our approval of repairs, WMECo found a BCR of 1.62.
2. Expansion of air conditioner replacement measure (contractor model)
   Previous agreement: client must be home during day so timer not useful Savings are principally demand and NEBs
   Agreed: replace low-efficiency A/Cs that are used during the day, using SEER to decide
   Agreed: no annual removal by agency, which however will provide education (including seal and cover as fallback to removal)
   Agreed: Savings per TRM, or computed actual
3. Where sheet metal license required to install dryer or bathroom vent, use PVC instead (insulated if in attic).
4. Hockey stick, pipeline reporting (per agreement)
   Agreed: agencies will provide queue information now provided to DHCD; this situation will ease post-ARRA when the ratio of stand-alones will substantially increase [note also that the 2011 hockey stick is greatly attenuated: on average, more than 40% of the 2011 budgets were expended at mid-year]
5. Discussion of impact evaluation with Cadmus
   a) Cadmus will get back re: screening tool
   b) Wait for Cadmus proposal re: measure naming (what's wrong with DOE list?, PA's: does not seem like an operational problem except for evaluator; seems to be a TRM issue)
6. Approval of LED CR-6 confirmed.
7. Phillips 12.5w 60w 25,000 hour replacement at $40 probably cost-effective but costly so too soon to adopt; note that it is hot, dimmable, indoor use only
8. * Brushless fan motors for gas furnaces – Common Assumptions approved based on TRM assumptions

RESOLVED AT SEPTEMBER MEETING:

1. Bathroom exhaust fans (health and safety requirement) will be paid out of minor or major repair budgets for stand-alone jobs (i.e., where there are no DOE funds).
2. Bi-monthly billing approved (to accommodate loss of ARRA advance) except National Grid, WMECo (billing any time); Berkshire billing via CET.
3. If there is a problem with an invoice, PA's will process and pay that portion of the invoice for which there is no problem rather than hold up the entire invoice.
4. * No cost-effective innovative roofing products at this time.
5. No changes in TLC Kit at this time.

RESOLVED AT NOVEMBER MEETING

1. Heat Pump Water Heaters approved per TRM for RCS Program.
2. Fireplace inserts rejected as providing insufficient savings.
   Roof repairs: No roofs without insulation savings, No roof where insulation already installed

Attachment C

From: **Hastings, Christine \(Riley\)** 06/09/2011 09:09 AM

To: kgray, rgyurjan, michael.rossacci, "Lopes, Diane", kimball, Deborah E. Sas, jeanne.cherry, "Azulay, Gail", eftaylor, Gene R. Fry, glover, james.carey, "Crossman, Kimberly", mcohen, msommer, pmoffitt, "Walker, Trish", msong

Re: Measures to be screened

The design portion of the low-income measures metric (Metric #2) states:

> ***Design*** *Study possible new program measures and practices not now included in the utility program. This will specifically include, but not be limited to: Aerogel, heat pump water heaters, LED CR6, foundation foam, roof insulation materials, ductless mini-splits, behavior-based pilot measures (if feasible available), and brushless fan motors. Cost-effectiveness analysis will be conducted by the PA Common Assumptions group, or the equivalent, which shall include LEAN for this purpose, within eight weeks of referral by Best Practices, with first reports of analysis no later than June 15, 2011. All feasible non-pilot cost-effective measures to be included in standard program offering within 3 months, subject to PA specific budget impacts. Each PA will submit documentation showing its performance of these tasks.*

Per the email below from Jerry Oppenheim, there has been no official referral of measures by Best Practices. Therefore, in accordance with this metric, there are no measures to include in a first report analysis.

If you have any questions please let me know.

Thanks,
Riley

~~~~~~~~~~~~~~~~~~~~~~~~~

Riley Hastings
Senior Research Analyst, Evaluation
NSTAR Energy Efficiency
781-441-3534
~~~~~~~~~~~~~~~~~~~~~~~~~

From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
Sent: Friday, June 03, 2011 1:01 PM
To: Hastings, Christine (Riley); Art Willcox
Cc: Lopes, Diane; Crossman, Kimberly
Subject: AW: Measures to be screened

Riley,

I am comfortable saying there has been no official referral of measures, so I don't see June 15 as a deadline, although we did discuss a number of items at the last BP meeting:

1) Analyze Grounded Power/Tendril as a pilot (for 2013). I will verify the cost estimates with them.
2) Brushless fan motors for gas furnacecs, Art to confirm use of TRM assumptions. (So please check with Art.)
3) Art will also compute and refer to you:
    a. CR 6 LED downlights, and
    b. Renai wall heaters, based on Methuen and Quincy Housing Authority data (which Art will get from Debra Hall of DHCD).

I will get the "official" notes out soon.

Many thanks, Riley.

Cheers,
Jerry

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Von: "Hastings, Christine (Riley)" <Christine.Hastings@nstar.com>
An: jerroldopp@democracyandregulation.com; Art Willcox <artwillcox@yahoo.com>
CC: "Lopes, Diane" <Diane.Lopes@nstar.com>; "Crossman, Kimberly" <Kimberly.Crossman@us.ngrid.com>
Gesendet: Donnerstag, den 2. Juni 2011, 11:04:52 Uhr
Betreff: Measures to be screened

Hi Jerry, Art,

I know that we discussed this briefly at the last BP meeting but wanted to check-in on Metric 2. It currently states that "Cost-effectiveness analysis will be conducted by the PA Common Assumptions group, or the equivalent, which shall include LEAN for this purpose, within eight weeks of referral by BP, with first reports of analysis no later than June 15, 2011". Are there measures that have been referred that we should be writing up for the June 15th deadline?

Thanks,
Riley

~~~~~~~~~~~~~~~~~~~~~~~~~

Riley Hastings
Senior Research Analyst, Evaluation
NSTAR Energy Efficiency
781-441-3534
~~~~~~~~~~~~~~~~~~~~~~~~~

Attachment D

aspen aerogels

SAFETY DATA SHEET

Spaceloft®
Revision Date: 05/27/09

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product Name:	Spaceloft®
Synonyms:	Silica aerogel materials
Use of the Substance/Preparation:	High performance insulation material
Manufacturer: **Address:**	Aspen Aerogels, Inc. 30 Forbes Road Northborough, MA 01532
Telephone: **Email:**	**(508) 691-1111** **EHS@aerogel.com**
Emergency Telephone Number:	800-535-5053 US (INFOTRAC) 352-323-3500 INTERNATIONAL

2. HAZARDS IDENTIFICATION

Classification:	Product is not classified as a dangerous material or preparation as defined in EC Directives 67/548/EEC or 1999/45/EC.
Emergency Overview:	Inhalation of excessive amounts of dust from the product may cause mechanical irritation to the respiratory tract. Dermal contact may cause mechanical irritation.

POTENTIAL HEALTH EFFECTS

Inhalation:	Inhalation of airborne dusts may cause mechanical irritation of the upper respiratory tract.
Eye Contact:	Exposure to dust from this product can produce a drying sensation and mechanical irritation of the eyes.
Skin Contact:	Skin contact with dust from this product can produce a drying sensation and mechanical irritation of the skin and mucous membranes.
Ingestion:	This material is not intended to be ingested (eaten). If ingested in large quantity, the material may produce mechanical irritation and blockage
Acute Health Hazards:	Dust from this product is a physical irritant, and may cause temporary irritation or scratchiness of the throat and / or itching and redness of the eyes and skin.
Chronic Health Hazards:	Per the fiberglass manufacturer, the fiberglass is considered textile grade and is not classified as a human carcinogenic by IARC (Group 3), ACGIH (Group A4), NTP, or OSHA.
Medical Conditions Aggravated by Exposure:	Excessive inhalation of dust may aggravate pre-existing chronic lung conditions including, but not limited to, bronchitis, emphysema, and asthma. Dermal contact may aggravate existing dermatitis.

CARCINOGENICITY

Component	ACGIH	NTP	IARC
Continuous Filament Glass Fibers	A4	Not Listed	3
Amorphous Silica	NA	Not Listed	None
Magnesium Hydroxide	NA	Not Listed	None

aspen aerogels

SAFETY DATA SHEET
Spaceloft®
Revision Date: 05/27/09

SECTION 2 NOTES: This product is composed of synthetic amorphous silica dioxide. Amorphous silica should not to be confused with crystalline silica. Epidemiological studies indicate low potential for adverse health effects from exposure to synthetic amorphous silica.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent	EINECS Number	EU Classification
Methylsilylated Silica	68909-20-6	40-50	272-697-1	None
Polyethylene terephthalate (PET or polyester)	25038-59-9	10-20	Not Assigned	None
Fibrous glass (textile grade)	NA	10-20	Not Assigned	None
Magnesium Hydroxide	1309-42-8	0-5	215-170-3	None

4. FIRST AID MEASURES

Eye Contact: Immediately wash with large amounts of water for at least 15 minutes, occasionally lifting lids. If irritation occurs and persists, get medical treatment.

Skin Contact: Wash skin thoroughly with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Obtain medical attention if symptoms occur.

Ingestion: Material will pass through the body normally.

Inhalation: Remove to fresh air. Drink water to clear throat and blow nose to remove dust. Obtain medical attention if ill effects persist.

5. FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY PROPERTIES

Auto ignition Temperature	Not Applicable
Flash Point	Not Applicable
Flammability Limits: (Lower Explosive Limit)	Not Applicable
Flammability Limits: (Upper Explosive Limit)	Not Applicable

5.2 EXTINGUISHING MEDIA:

Use media suitable for surrounding fire and that are appropriate to the surrounding environment; normal fog nozzle water application and/or exclusion of air is typically suitable for extinguishing this product in blanket form.

5.3 PROTECTION FOR FIRE FIGHTERS

Special Fire Fighting Procedures: Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases produced by a fire.

Unusual Fire and Explosion Hazards: Product is a super-insulation material. Rolls of material can retain heat within internal layers causing re-ignition in the presence of oxygen if heat is not removed.

Hazardous Decomposition Products: Primary combustion products are carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Minimize dust generation. Ensure adequate ventilation. Use personal protective equipment as necessary.

Environmental Precautions: Material is not soluble. Do not flush into surface water or sanitary sewer system.

Methods for Cleaning Up: Contain and collect released material for proper disposal. Dry vacuuming is the preferred method of cleaning up.

7. HANDLING AND STORAGE

Handling Aerogel blankets will generate dust when handled. Workplace exposure to all dusts should be controlled with standard industrial hygiene practices. Dry vacuuming is the preferred method for cleaning up dust. Because aerogel dust is hydrophobic, water is not effective as a dust control agent.

Storage Aerogel blankets should be kept in their packaging until they are ready to be used. Unpack the material in the work area. This will help to minimize the area where dust exposure may occur. Trimmed material and scrap should be promptly packed in disposal bags.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Limit Values

There are no exposure limits identified for the main product component, classified as synthetic amorphous silica.

CAS Number	Component Name	Exposure Limits	
7631-86-9	Silica, Amorphous	Germany TRGS 900	4 mg/m^3 (inhalable fraction)
		UK WEL	6 mg/m^3 (total inhalable fraction) 2.4 mg/m^3 (respirable fraction)
		US OSHA PEL (TWA)[a]	15 mg/m^3 (total dust) 5 mg/m^3 (respirable fraction)
		US ACGIH[b]	10 mg/m^3 (inhalable) 3 mg/m^3 (respirable)
NA	Continuous filament glass fibers	US ACGIH	1.0 fibers/cc[c] 5 mg/m^3 (inhalable)
		US OSHA	10 mg/m^3 (total dust) 5 mg/m^3 (respirable fraction)
1309-42-8	Magnesium Hydroxide	US OSHA PEL (TWA)[a]	15 mg/m^3 (total dust) 5 mg/m^3 (respirable fraction)
		US ACGIH[b]	10 mg/m^3 (inhalable) 3 mg/m^3 (respirable)

[a] The US OSHA standard for amorphous silica is: (80 mg/m^3)/(%SiO2). The NIOSH Sampling Method 7501 for Amorphous Silica calculates the %SiO2 based on the percentage of crystalline silica in the sample. Because the percentage of crystalline silica in aerogel is 0%, the particulate limit applies.

[b] US ACGIH based on Particles Not Otherwise Specified (PNOS)

[c] Respirable fibers: length >5 µm; aspect ratio ≥3:1, as determined by the membrane filter method at 400–450X magnification (4-mm objective), using phase-contrast illumination. US NIOSlengthµm, width <3 µm diameter and length:width ratios ≥3.

8.2 Exposure Control

Ventilation: Local exhaust in accordance with general industrial hygiene practices is recommended to control dust.

Respiratory Protection:	A properly fitted, NIOSH or CE approved respirator should be worn when ventilation is unavailable or inadequate to maintain airborne concentrations below applicable occupational exposure limits. A respiratory protection program that meets applicable local regulations should be implemented whenever workplace conditions warrant use of a respirator.
Hand Protection	Silica aerogels are hydrophobic (repel water) and may cause drying and irritation of the skin, eyes, and mucous membranes. For this reason, nitrile, latex, or other impermeable gloves should be worn when handling aerogel blankets.
Eye Protection:	Safety glasses, or chemical goggles as needed to provide greater protection from dust.
Skin Protection:	Long-sleeved, long-legged work clothes are also advised. Disposable coveralls should be considered to minimize skin exposure and track out of aerogel dusts into adjacent areas.
Work Hygienic Practices	Keep materials packaged until just prior to use. Die cut in preference to rotary or other cutting methods. Dry vacuum with proper filtration preferred to sweeping. Wash thoroughly after using the product. Wash clothing if dusty conditions present. Wash hands before eating or drinking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White fabric blanket; material is hydrophobic (repels water)
Odor:	No characteristic odor. Under certain conditions, product may have faint ammonia-like odor.
pH:	Not applicable.
Boling Point/Range:	Not applicable.
Flash Point:	Not applicable.
Flammability (solid, gas):	Not applicable.
Explosive Properties:	Not applicable.
Oxidizing Properties:	Not applicable.
Vapor Pressure:	Not applicable.
Solubility:	Insoluble.
Viscosity:	Not applicable.
Evaporation Rate:	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	Prolonged exposure to temperatures above the recommended use temperatures.
Materials to Avoid:	None known
Hazardous Decomposition Products	Under recommended usage conditions, hazardous decomposition products are not expected.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY
Dust may cause mechanical irritation and dryness to eyes and skin.

Synthetic Amorphous Silica

Oral LD50:	>5,000 mg/kg
Inhalation LC50:	>2,000 mg/m^3
Dermal LD50:	>3,000 mg/kg

Eye Irritation: Synthetic amorphous silica and silicates are not irritating to skin and eyes under experimental conditions, but may produce dryness following prolonged and repeated exposure.

Skin Irritation: Synthetic amorphous silica and silicates are not irritating to skin and eyes under experimental conditions, but may produce dryness following prolonged and repeated exposure.

CARCINOGENICITY
The International Agency for Research on Cancer (IARC) considers synthetic amorphous silica to be not classifiable as to its carcinogenicity to humans (Group 3). According to the manufacturer, the fiberglass in this product is considered textile grade fibrous glass and it is not classified as a carcinogen by ACGIH, IARC, NTP or OSHA.

NOTE TO SECTION 11: Toxicological information is based on literature review for synthetic amorphous silica.

12. ECOLOGICAL INFORMATION

Synthetic Amorphous Silica

Aquatic Toxicity	Fish: LC50 > 10,000 mg/L (Brachydanio rerio: 96 hour), Method OECD 203 Daphnia magna: EC50 > 10,000 mg/l (24 hours), Method OECD 202
Mobility	None expected due to insoluble nature of product.
Persistence and Biodegradability	Not applicable for inorganic material.
Bioaccumulative Potential	None expected due to insoluble nature of product.
Other Adverse Effects	None expected.

13. DISPOSAL CONSIDERATIONS

Dispose in an approved landfill in accordance with federal, state / provincial, and local regulation. Cover promptly to avoid dust generation. This product is not regulated as a hazardous waste under US RCRA regulations.

14. TRANSPORT INFORMATION

Shipping Name:	Not regulated for transport
Hazard Class	None
UN Number	None
Packing Group	None
Required Label(s)	None
Marine Pollutant	No
Additional Information	None

15. REGULATORY INFORMATION

EC REGULATORY INFORMATION
Product is not classified as a dangerous material or preparation as defined in EC Directives 67/548/EEC or 1999/45/EC. Aerogel insulation blankets are considered an article, not a substance or preparation, under the REACH directive.

CANADIAN REGULATIONS
All chemical substances in this product are included on or exempted from the Canadian Domestic Substance List (DSL). Amorphous silica (CAS No. 7631-86-9) is listed on the WHMIS Ingredient Disclosure List at a concentration threshold of 1 %.

U.S. FEDERAL REGULATIONS
CERCLA (Comprehensive Response Compensation and Liability Act): Product is not classified as hazardous or reportable under this requirement.

SARA TITLE III (Superfund Amendments and Reauthorization Act): Product is not classified as hazardous or reportable under this requirement.

311/312 HAZARD CATEGORIES: Materials in this product are classified as hazardous or reportable under this requirement.

313 REPORTABLE INGREDIENTS: Materials in this product are not classified as hazardous or reportable under this requirement.

STATE REGULATIONS: Materials in this product appear on the following state hazardous substance lists: CA, IN, KY, MA, MN, NC, NJ, OR, PA. Check individual state requirements

TSCA: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

16. OTHER INFORMATION

NFPA HAZARD CLASSIFICATION		HMIS HAZARD CLASSIFICATION	
Health	**1**	**Health**	**1**
Flammability	**1**	**Flammability**	**1**
Reactivity	**0**	**Reactivity**	**0**
Other	**N/A**	**Protection**	**Please refer to Section 8.**

Section 11 Synthetic Amorphous Silica Toxicity Information Reference: United Nations Environmental Programme (UNEP), Organization for Economic Co-operation and Development (OECD) Screening Information Data Set (SIDS) Initial Assessment Report, Synthetic Amorphous Silica, July 23, 2004.

Revision Summary: Revisions to Sections 2, 3, 5, 6, 7, 11, and 15.

DISCLAIMER: The information herein is presented in good faith and believed to be accurate as of the effective data given. However, no warranty, expressed or implied, is given. It is the user's responsibility to ensure that its activities comply with Federal, State or Provincial, and local laws.

Attic Superinsulation Cost Effectiveness			
Existing R Value	**Measure Cost**		**BCR**
0	$	6.00	1.24
1	$	6.00	0.84
2	$	6.00	0.63
5	$	6.00	0.35
11	$	6.00	0.17
19	$	6.00	0.09
0	$	5.00	1.43
1	$	5.00	1.01
2	$	5.00	0.75
5	$	5.00	0.42
11	$	5.00	0.21
19	$	5.00	0.11
0	$	4.00	1.86
1	$	4.00	1.26
2	$	4.00	0.94
5	$	4.00	0.52
11	$	4.00	0.26
19	$	4.00	0.14

Parameters
HS = 70% EFF
Roof sf = 1216
DD= 5800 East. MA
Discount Rate = 2.5%
Wholesale Gas = $.90/Therm
LI Adder = 1.50

Design justification for 5 years of savings for the proposed Grounded Power Pilot Program

The attached documents identify the proposed Grounded Power pilot educational program with costs comprised of one time upfront costs and ongoing annual budget line items with a program implementation period of 5 years.

A fundamental precondition and test criteria of the program is that it will be run over a specified time period herein identified as 5 years in duration, and therefore it is proffered that the pilot should not be presumptively failed due to a weakly substantiated grouping of the program based on a generalized historic educational program design and evaluation methodology at limits the program's impact to 1-2 years.

To correctly predetermine the pilot's likely cost-effectiveness, the initial start up costs should be amortized over the life of the program, however long it is specified by design protocols. In this case, the program life is 5 years.

It is inappropriate to default the lifetime of the program in a manner that is not based on the proposed initiative, but on an historic number that will be inconsistent with the parameters/protocols of the proposed pilot.

See below for an example of the start up cost amortization's impact on allowable program lifetime costs, savings and cost-effectiveness determination.

Grounded Power Program Cost-Effectiveness Analysis

Grounded Power – Challenge Program:

Gas & Electric:
80 KWh saved per year/per client
750 clients
22 Therms saved per year
Cost = $94,000.00
Discount Rate of $ = 2.5%
Fuel Escalation Rate = 0.0%
LI Adder = 1.5
Wholesale KWh Value = $.10
Wholesale Gas Therm Value = $.90
Lifetime = 5 years
Annual Savings = $27.80
Lifetime Savings = $139.00
Total Program Lifetime Savings = $100,080.00
CE w NEBS= **1.58**

Attachment E

August, 2011
Review of CR 6 LED Down Light Fixtures
Kimberly Crossman, National Grid

Introduction:

The CR6 is an LED down light for use in residential and light commercial applications. It easily installs into most standard six inch recessed IC or non-IC housings.[9]

- Delivered Light Output = 575 lumens
- Input Power = 10.5 Watts
- CRI = 90
- CCT = 2700K
- Dimmable to 5%

Approval for Use:
The CR6 LED screw-in down light fixture is approved for use when replacing an incandescent lamp as the benefits are greater than the costs. It is not approved for replacing a CFL.

Unit Costs:
The cost for the CR6 LED down light fixture is $65[10] plus $5 labor.

Conclusions and Recommendations:
This measure is cost effective when replacing an incandescent lamp.

- Replacing a 65w incandescent recessed down light with a 10.5 LED down light (54.5w diff). To calculate savings the following formula was used:
  - The fixture is assumed to operate 4 hours per day; 365 days per year.
  - 54.5w/1000 *1,460 hours of use = 79 kWh savings.
  - A lifetime of 25 years was assumed
- Using the formula and assumptions above an LED down light would save 79 kWh and .05 kW.
- A one time O&M benefit of $3.00 was used.

[9] http://www.creelighting.com/Libraries/Detailed_Product_Information/CR6.sflb.ashx
[10] EFI

August, 2011

Review of Brushless Fan Motors
Kimberly Crossman, National Grid

Description:
Installation of a high efficiency steady state brushless furnace fan motor.

Approval for Use:
The brushless furnace fan motor is approved for use as the benefits are greater than the costs using the following assumptions from the MA TRM 2011 Plan Version:

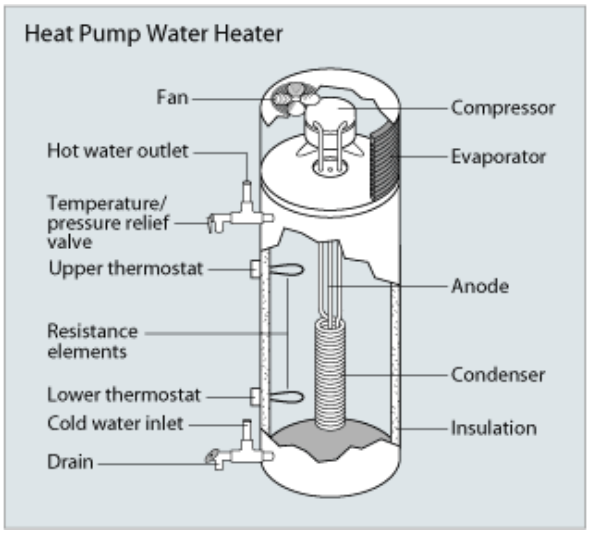
- Electric savings are 600 kWh per year
- Increase in gas usage (negative savings) of 1.575 MMBTUs per year.
- Measure lifetime is 18 years
- Benefits are assigned dollar value based on current avoided costs (2011)

Unit Costs:
The cost for the brushless furnace fan motor is $450.

Conclusions and Recommendations:
This measure is cost effective.

January, 2012
Review of Heat Pump Water Heaters (HPWH)
Kimberly Crossman, National Grid

Description:
Heat pump water heaters (HPWH) use electricity to move heat from one place to another instead of generating heat directly. Therefore, they can be two to three times more energy efficient than conventional electric resistance water heaters. A low-pressure liquid refrigerant is vaporized in the heat pump's evaporator and passed into the compressor. As the pressure of the refrigerant increases, so does its temperature. The heated refrigerant runs through a condenser coil within the storage tank, transferring heat to the water stored there. As the refrigerant delivers its heat to the water, it cools and condenses, and then passes through an expansion valve where the pressure is reduced and the cycle starts over.



Approval for Use:

The HPWH is approved for use when replacing an electric water heater as the benefits are greater than the costs using the following assumptions from the MA TRM 2012 Plan Version:

- Electric savings are 2,712 kWh per year for the 80 gallon size and 1,817 for the 50 gallon size[11]
- Demand savings are 3.32 kW[12]
- Measure lifetime is 10 years[13]
- Benefits are assigned dollar value based on current avoided costs (2012)

The HPWH is NOT approved for use when replacing an oil water heater as the benefits are not greater than the costs using the following assumptions from the MA TRM 2012 Plan Version:

- Electric penalty of -1,795 kWh per year for 80 gallon size and -1,552 for the 50 gallon size[14]
- Oil savings of 26.38 MMBTUs per year for the 80 gallon size and 18.22 for the 50 gallon size.[15]
- Measure lifetime is 10 years[16]
- Benefits are assigned dollar value based on current avoided costs (2012)

[11] Energy savings based on metered data from 14 in home installations over a 9 month period (November 2010-July 2011). Savings are discounted 5% to account for approximately 10% of units installed in conditioned spaces.
[12] Demand savings are based on engineering estimates. Savings based on 50 gallon tank, which will be conservative for the >50 gallon scenario.
[13] Based on warranty of equipment
[14] Electric penalty based on metered data from 14 in home installations over a 9 month period (November 2010-July 2011). Penalty represents total annual operating energy use for a HPWH.
[15] Oil savings based on metered data from 14 in home installations over a 9 month period (November 2010-July 2011).
[16] Based on warranty of equipment

Unit Costs:

The cost for the 80 gallon electric replacement HPWH is $3,516.80 and $2,316.80 for the 50 gallon size. The cost for the oil replacement HPWH is $3,716.80 for 80 gallons and $2,516.80 for the 50 gallon size.

Conclusions and Recommendations:

This measure is cost effective and approved for use when replacing an electric water heater. This measure is NOT cost effective and NOT approved for use when replacing an oil water heater.

Attachment F

From: Jerrold Oppenheim [mailto:jerroldopp@democracyandregulation.com]
Sent: Thursday, February 23, 2012 10:08 PM
To: Harrington, Cheryl
Cc: Stack, William; John Wells; Elliott Jacobson; Rita Carvalho
Subject: Re: Metrics 1 & 2

Here is the opinion re: Metric 2 which we discussed earlier.

Metric 2
2011 Metric 2 requires field testing and implementation of measures. The question has come up whether gas utilities have earned "exemplary" this year since there have been no gas measures approved as cost effective, and thus approved for testing or implementation in the field. My interpretation of 2011 Metric 2 is that the gas utilities have done all they need to do in order to earn "exemplary" since they approved in good faith a number of measures for cost-effectiveness analysis, then tested and implemented all measures approved by Common Assumptions, which happened to be none.

JO

Low Income #3
Multi-Family Building Inventory

2011 Low-Income Metric Three

Berkshire Gas Company, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR Electric & Gas, Unitil Service Corporation, and Western Massachusetts Electric Company are submitting this report to update the Low Income Energy Affordability Network (LEAN) on the status of the 2011 Low Income metric number three.

3. Multi-family Building Inventory

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. 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 develop of an energy efficiency standard (e.g., BTUs of energy per square foot of heated space) for low-income multi-family buildings.

Design Each utility PA will implement the inventory in its service territory, reaching the designated milestone number of account reports (defined under ñBaseline Informationò below) as indicated below. Each utility will support the inventory on an allocated basis, with a statewide total of 536 accounts per month (not including Cape Light Compact).

The milestones are:

Utility	% Allocation	# of Account Reports
NSTAR Electric	24%	129
NGRID Electric	20%	107
WMECO	4%	21
Unitil Electric	1%	5
NSTAR Gas	14%	75
NGRID Gas	22%	118
Columbia Gas	10%	54
Berkshire Gas	2%	11
New England Gas	2%	11
Unitil Gas	1%	5

Exemplary By Jan 31st, 2012, in coordination with LEAN, each PA will submit a status report showing its implementation of the Inventory. 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.

Clear & Distinct Role: Each utility must continue to participate in development of the inventory, support its implementation, and report thereon.

Verification Plan: An allocated share of low-income multi-family buildings must be entered in the database.

Baseline Information: The current low-income multi-family building universe consists of approximately 20,300 common area/master metered accounts and/or collections of tenant accounts in approximately 13,500 buildings. Where tenant accounts exist and are available with respect to a fuel, the report (Account Report in the table above) will include the entire building, i.e., common areas/master metered (if any) and all tenants in one combined report. Otherwise, the report will include only common areas (if any). The estimate of 20,300 accounts for such situations as municipal utilities (not included) and the lack of common area or gas accounts.

We believe that by completion and documentation of these tasks within this status report dated January 31, 2012, each utility has reached the level of metric listed below.

Berkshire Gas Company -Threshold
Columbia Gas of Massachusetts -Exemplary
National Grid Electric-Exemplary
National Grid Gas - Exemplary
New England Gas Company-Threshold
NSTAR Electric-Exemplary
NSTAR Gas ï Exemplary
Unitil Service Corporation (Electric) - Exemplary
Unitil Service Corporation (Gas) - Exemplary
Western Massachusetts Electric Co.-Exemplary

Respectfully submitted by:

Robert Gyurjan
Lead Analyst ï Energy Services
Berkshire Gas Company

Kara A. Gray
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Columbia Gas of Massachusetts

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Ben Stephenson
Residential Program
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Deborah E. Sas
Senior Program Administrator
Western Massachusetts Electric
Company

Metric 3: Multi-Family Building Inventory

In coordination with LEAN, the utilities or Program Administrators (PAs) developed and supported a low-income non-profit multi-family building inventory in order to facilitate benchmarking for project identification of energy retrofit potential and screening of potential projects.

Metric Achievements

THRESHOLD

- PAs contracted, through the LEAN network, with New Ecology to develop this building inventory metric in order to benchmark the low income multi family buildings targeted by this program
- PAs continued to use the WegoWise application and obtain monthly inventory reports with energy usage data in order to track progress on the metric and ensure necessary inventory and information was being acquired
- PAs worked with New Ecology to supply necessary energy usage data for multi-family inventory
- PAs plan to use the inventory data to assist in the development of the next three year plan

DESIGN

In coordination with LEAN, each PA implemented the Inventory within its service territory; however, some PAs did not meet the monthly average target necessary to achieve design level**.**

Program Administrator	% Allocation	Required Monthly Accounts	Monthly Average Accounts	Total
Berkshire Gas	**2%**	**11**	**5**	**60**
Columbia Gas	**10%**	**54**	**54**	**648**
NGrid Electric	**20%**	**107**	**107**	**1,284**
NGrid Gas	**22%**	**118**	**118**	**1416**
New England Gas	**2%**	**11**	**8**	**96**
NSTAR Electric	**24%**	**129**	**129**	**1,548**
NSTAR Gas	**14%**	**75**	**75**	**900**
Unitil Electric	**1%**	**5**	**5**	**60**
Unitil Gas	**1%**	**5**	**5**	**60**
WMECO	**4%**	**21**	**21**	**252**
Total	**100%**	**536**	**527**	**6,324**

EXEMPLARY

The full, comprehensive status report for the Multi-Family Building Inventory can be found in Attachment A including a comparison section between the 2010 and 2011 inventory reports. Attachment B provides the supporting documentation for the 2011 benchmarked accounts for each utility. Below are some of the high level findings.

Summary and Findings

In summary, 6,324 accounts were inventoried and ranked as part of the 2011 efforts. Based on the mean (or average) usage per square foot, inventoried accounts fell into one of the four quartiles as defined by WegoWise.

- ñEnergy Efficientò ï defined as buildings in the top quartile of performance;
- ñBetter Than Averageò ï represents the second quartile of performance;
- ñWorse Than Averageò ï details the third quartile of performance; and
- ñPoorò ï represents the fourth quartile.

The calculated benchmarks can be used to approximately assess a buildingôs performance relative to other affordable housing buildings in Massachusetts based on where its energy use falls within this classification scheme. Buildings/Accounts that fall into the ñWorse than Averageò and ñPoorò categories likely have particularly attractive payback energy efficiency opportunities. The following means were calculated by WegoWise based on the results of the 2011 benchmarking effort relative to usage per square foot:

Acct Type	Mean	Quartile	EE Classification
Gas Accounts	0.88 therms/sq ft	3	Worse than avg.
Electric Common Areas	3.77 kWh/sq ft	3	Worse than avg.
Electric Whole Building	6.54 kWh/sq ft	3	Worse than avg.
Electrically Heated Building	15.29 kWh/sq ft	3	Worse than avg.

- For gas accounts, energy efficient is defined as accounts in the top quartile of performance or less than 0.65 therms per sq ft. Based on the 2011 inventory of 3,180 gas accounts, the mean is 0.88 therms/sq ft. This demonstrates that most of the inventoried gas accounts fall below the 2011 average.

- For electric common area accounts, energy efficient is defined as accounts in the top quartile of performance or less than 1.35 kWh per sq ft. Based on the 2011 inventory of electric common area accounts, the mean is 3.77 kWh/sq ft. This demonstrates that most of the inventoried accounts for electric common areas also fall below the 2011 average.

- For electric whole building accounts, energy efficient is defined as accounts in the top quartile of performance or less than 4.91 kWh per sq ft. Based on the 2011 inventory of

electric whole building accounts, the mean is 6.54 kWh/sq ft. This demonstrates that the median performance of electric whole building accounts is worse than the 2011 average.

- For electrically heated accounts, energy efficient is defined as accounts in the top quartile of performance or less than 12.46 kWh per sq ft. Based on the 2011 inventory of electrically heated building accounts, the mean is 15.29 kWh/sq ft. This demonstrates that the median performance of inventoried electrically heated accounts is also worse than the 2011 average.

In short, the mean for all account types fall in the worse than average category which reinforces the need and opportunity for energy efficiency.

PAs in conjunction with LEAN and Low Income Multi-family vendors will review the details of the inventory and target customers that appear in the third and fourth quartiles (ñworse than averageò and ñpoorò respectively) first. These buildings show the greatest opportunity for energy savings. Based on the applicable data, approximately 50% of gas accounts, 60% of whole building electric accounts and 51% of common area electric accounts fall in the bottom two quartiles further exemplifying a strong pool of candidates ripe for cost-effective energy efficiency.

The 2011 inventory shows that there is good, strong market potential for the Low Income Multi-family sector to explore in 2012 as well as within the next three year plan. The inventory provides each PA with detailed information as to which classification of customers may be more advantageous to target relative to their savings potential and needs within their respective territories. For example, public housing tends to be more inefficient than other affordable housing properties based on findings laid out in the WegoWise report (Attachment A).

Further, the report provides potential savings that can be achieved by each PA by addressing buildings that are in the ñPoorò quartile and bringing them to the median level of efficiency. If PAs were able to bring the 1,464 poorly performing buildings noted in the report to the median level there is potential to save approximately 2 million therms and 53 million kWh. Our desire, of course, would be to get these buildings beyond the median level of efficiency and into the top quartiles of performance which would only enhance the energy savings realized by the customers.

CLEAR AND DISTINCT ROLE

Berkshire Gas

- Provided gas usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation

Columbia Gas

- Provided gas usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data
- Reviewed inventory reports to ensure that our targets of the metric were being met
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation
- Took the PA lead role to compile metric documentation including comments, direction, and edits from other PAôs

New England Gas

- Provided gas usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation

NSTAR

- Provided electric and gas usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data
- Reviewed inventory reports to ensure that our targets of the metric were being met
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation
- Compiled the backup data of the complete list of benchmarked accounts found in Attachment B

National Grid

- Provided electric and gas usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data
- Reviewed inventory reports to ensure that our targets of the metric were being met
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation

Unitil

- Provided electric and gas usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data

- Reviewed inventory reports to ensure that our targets of the metric were being met
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation

WMECO

- Provided electric usage to WegoWise as needed for each building within our territory that is maintained for this metric.
- Reviewed inventory reports to ensure accuracy of the data
- Reviewed inventory reports to ensure that our targets of the metric were being met
- Participated in meetings, conference calls, and email communications with WegoWise and PAôs throughout 2011
- Reviewed and provided input into metric documentation

Attachment A

Massachusetts Affordable Housing Energy Benchmarking

2011 Final Report

Prepared by WegoWise, Inc. for the Low Income Energy Affordability Network (LEAN)

1/26/2012

wēgowise

This report was prepared by WegoWise, Inc. It is based on analysis of the second phase of data collection for the LEAN multi-family benchmarking program from January 2011 to December 2011. The data, analysis and recommendations are subject to change as the implementation of this program progresses. This report should therefore be understood to be an analysis of a partial sample of the larger scope of the project.

Please contact WegoWise with any questions or comments:

617-367-WEGO (9346)

info@wegowise.com

PROJECT DESCRIPTION

The goal of this project is to create a comprehensive inventory of low-income multi-family buildings in the state of Massachusetts with the ultimate objective of establishing energy benchmarks based on aggregated usage data of these buildings over three years. This project supports the development of an energy efficiency standard and in turn an understanding of the extent of achievable energy savings in low-income multi-family buildings.

One full year of usage data was gathered for each building as well as key building characteristics including whole building square footage and common area square footage. An individual metric for each building was calculated using these numbers and added to the database. This document serves as a status report summarizing the data gathered from January 2011 to December 2011 and outlines general recommendations based on the analysis of this data.

SUMMARY OF RELEVANT FINDINGS

Based on a quartile analysis of the data gathered from January 2011 through December 2011, the following energy benchmarks were calculated.

Gas Usage *(therms/conditioned ft²)*	**Energy Efficiency Classification**
< .65	Energy Efficient
.65 - .86	Better Than Average
.87 - 1.09	Worse Than Average
> 1.09	Poor

Whole Building Electricity Usage *(kWh/bldg ft²)*	**Energy Efficiency Classification**
< 4.91	Energy Efficient
4.91 - 6.42	Better Than Average
6.43 - 7.85	Worse Than Average
> 7.85	Poor
Common Area Electricity Usage *(kWh/Common Area ft²)*	**Energy Efficiency Classification**
< 1.35	Energy Efficient
1.35 – 2.94	Better Than Average
2.95 – 5.03	Worse Than Average
> 5.03	Poor
Electrically Heated *(kWh/bldg ft²)*	**Energy Efficiency Classification**
< 12.46	Energy Efficient
12.46 – 15.11	Better Than Average
15.12 - 17.66	Worse Than Average
>17.66	Poor

"Energy Efficient" is defined as buildings in the top quartile of performance; "Better Than Average" represents the second quartile, "Worse Than Average" the third, and "Poor" the fourth. These 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 in this classification scheme. Buildings that fall into the "Worse Than Average" and "Poor" categories likely have particularly high payback energy conservation opportunities.

The gas usage benchmark includes buildings that utilize gas for both space heating and domestic hot water. Buildings that used gas for only domestic hot water production were excluded from this benchmark to provide a more meaningful and uniform comparison.

The electric benchmark captures a range of types of electricity usage. The electric usage collected for a building for the purpose of this inventory may include interior lighting (unit lighting, corridor lighting), exterior lighting, general building plug loads, electrically-run equipment and central air conditioning electricity usage. Buildings that utilize electricity for heating were excluded from the whole building electricity usage and common area electricity usage benchmarks to provide a more meaningful comparison between non-electrically heated buildings. A separate electric benchmark was developed for electrically heated buildings to provide a comparison across those buildings that have substantially higher electricity usage due to their heating demand.

POTENTIAL ENERGY REDUCTION OPPORTUNTIES

The buildings that fall into the 'poor' energy efficiency classification present the most substantial opportunity for improvements in energy use. If efforts were put into bringing these very poorly performing buildings to the median level of efficiency, the energy savings would be significant. Detailed below are our estimates of the potential energy savings for these buildings in the 2011 dataset. These estimates were determined for each building by calculating the difference between current whole building usage and the potential usage if that building were upgraded to perform at the median per square foot benchmark.

Energy savings from electrically heated buildings:

Utility Company	Energy Savings in kWh	# of Buildings
National Grid	16,956,159	185
Nstar	4,104,796	45
Unitil	91,484	1
WMECO	214,926	16

Energy savings from buildings with whole building electric usage:

Utility Company	Energy Savings in kWh	# of Buildings
National Grid	24,898,499	208
Nstar	5,881,222	157
Unitil	485,454	21
WMECO	444,009	8

Energy savings from buildings that utilize gas for heat and domestic hot water production:

Utility Company	Energy Savings in Therms	# of Buildings
Berkshire Gas	14378	12
Columbia	198,555	111
NE Gas	47,661	36
National Grid	1,099,587	395
NStar	650,670	246
Unitil	47,765	23

COMPARISON BETWEEN 2010 AND 2011 FINDINGS

Below we compare the medians from our 2010 dataset (which consisted of 864 data points) to our 2011 dataset (6,324 data points).

2010 Gas Usage Median *(therms/conditioned ft^2)*	**2011 Gas Usage Median** *(therms/conditioned ft^2)*
.75	.86

The median gas usage observed in the 2011 dataset is higher than that of the 2010 dataset. One of the reasons we believe this to be the case is that we eliminated buildings that use gas only for domestic hot water production (and not space heating) in the 2011 dataset; this type of building was not eliminated in the 2010 dataset, potentially artificially lowering the median gas usage in the 2010 report. We also did not trim any outliers in the 2010 data as we did in the 2011 data, which would also cause a discrepancy between the two medians because of the inclusion of extreme data points in the 2010 set. Additionally, the 2011 dataset includes a larger proportion of public housing authority properties as compared to the 2010 dataset. We have observed in the WegoWise database that, in general, public housing tends to be more inefficient than other affordable housing properties. Therefore the 2011 median may also reflect this higher level of inefficiency in the public housing building stock.

2010 Whole Building Electricity Usage Median *(kWh/bldg ft2)*	**2011 Whole Building Electricity Usage Median** *(kWh/bldg ft2)*
8.77	6.42
2010 Common Area Electricity Usage Median *(kWh/Common Area ft2)*	**2011 Common Area Electricity Usage Median** *(kWh/Common Area ft2)*
3.83	6.42
2010 Electrically Heated Usage Median *(kWh/Common Area ft2)*	**2011 Electrically Heated Usage Median** *(kWh/Common Area ft2)*
N/A	15.11

With regard to the electric benchmarks, given that we had a substantial enough set of buildings that utilized electric heat, we were able to generate a separate benchmark for this type of building. The 2010 dataset did not contain a sufficient number of electrically heated buildings to generate a robust benchmark. Therefore, the whole building electric benchmark in 2010 includes the larger usage numbers obtained from electrically heated buildings, whereas the 2011 benchmark for whole building electric usage does not contain this type of building. Similarly, in the 2011 dataset we removed the common area electric benchmarks that were from electrically heated buildings as well. However, given the small number of these buildings, we were not able to generate a separate, meaningful benchmark for them. Therefore, the 2010 median for common area electric proves to be substantially higher than the 2011 median.

In general, the robustness of the analysis done on the 2011 dataset as well as its size leads us to believe that the median usage benchmarks calculated from this dataset are a better approximation of usage in the state's low-income building stock than the numbers obtained from the 2010 dataset. We plan to include the 2010, 2011 and 2012 datasets in the 2012 final end-of-year report for this inventory and use similar parameters to clean and analyze the data as we did in this 2011 report. Additionally, the growing dataset could allow us to generate benchmarks for types of buildings that we have not had sufficient data for (i.e. buildings with common area electric heat, or central air conditioning systems).

CHALLENGES AND PROGRAM RECOMMENDATIONS

CHALLENGES

- Housing organizations often lacked the staff time or technical capability to collect the required information for the inventory. This information included building characteristics such as square footage, utility account numbers, or usage data. The specific information required to set up online utility accounts in order for WegoWise to obtain usage data was often not readily available and proved to be particularly difficult for housing organizations to deliver.

- Developments where tenants pay their own utilities, as opposed to owner paid, proved to be an especially challenging case for data collection. It was necessary to get in touch with tenants through the property manager to obtain signed releases that would allow us to collect their usage data directly from the utility company or to be given photocopies of tenants' utility bills. In many cases this was not feasible as we did not receive sufficient responses from enough tenants. Given that these properties are included in the scope of the project, there is a need to establish a more effective method to obtain usage data directly from utility companies for tenant paid utilities.

RECOMMENDATIONS

- We received excellent support from the Department of Housing and Community Development, and found that their ability to directly interface with Housing Authorities greatly reinforced our efforts to benchmark the state-run portfolio of public housing.

- More streamlined access to participants' utility data directly from the utility company will be critical for the continued success of this project and to meet our goals with regard to the scope of the size of the inventory.

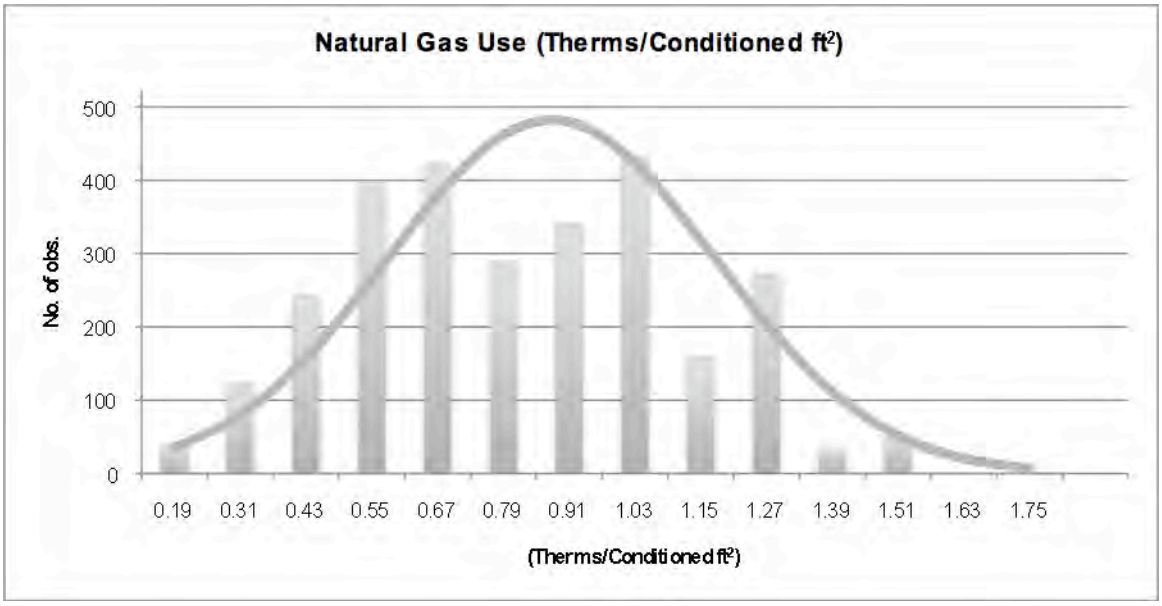
- We hope to build a partnership with the U.S. Department of Housing and Urban Development (HUD), similar to the arrangement we currently have with DHCD, that will

allow us to more efficiently and effectively benchmark the federally run public housing properties in the state.

ANALYSIS BY UTILITY TYPE

GAS USAGE DATA AND ANALYSIS

Aggregated Gas Benchmark 2011 Statistics *(Therms/Conditioned ft²)*	
Mean	0.88
Median	0.86
Standard Deviation	0.30
Minimum	0.25
Maximum	1.61
Reported Benchmarks*	3180

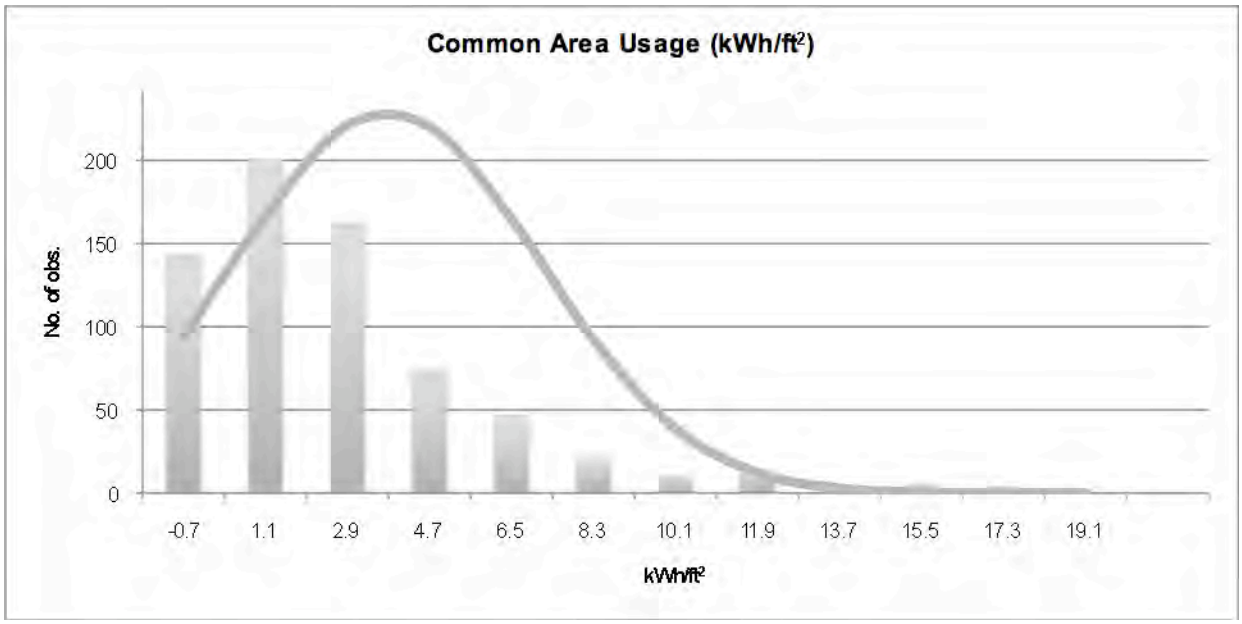


ELECTRICITY USAGE DATA AND ANALYSIS

The total reported electric usage benchmarks for the year (aggregated over all buildings, including whole building usage, common area usage and electrically heated buildings) is 3,144. The inventory does not include individual quotas for each type of electric usage.

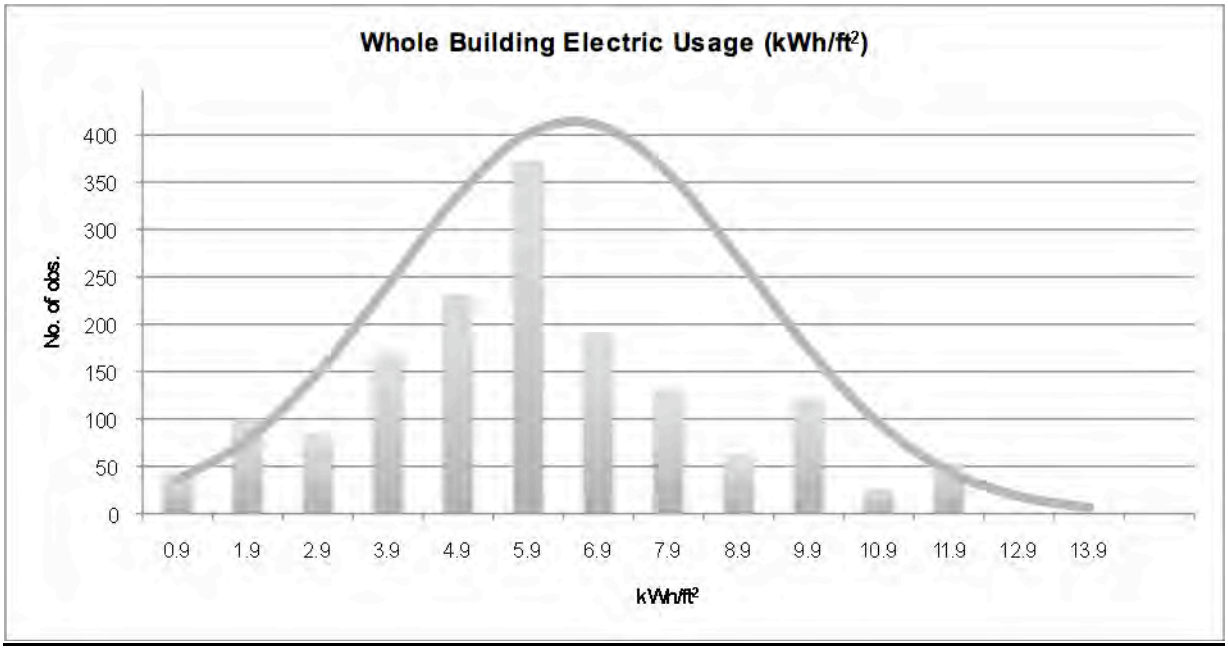
Common Area Usage

Aggregated Electric Common Area Benchmark 2011 Statistics *(kWh/ft²)*	
Mean	3.77
Median	2.94
Standard Deviation	3.35
Minimum	0.22
Maximum	17.54



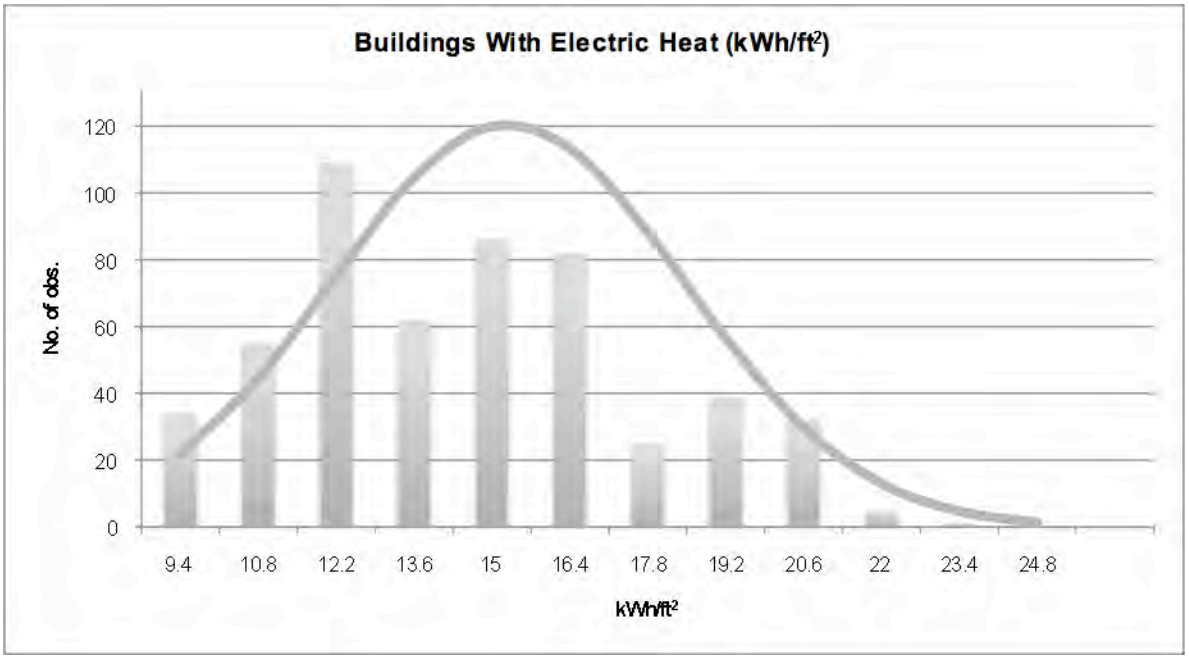
Whole Building Usage

Aggregated Electric Whole Building Benchmark 2010 Statistics *(kWh/ft²)*	
Mean	6.54
Median	6.42
Standard Deviation	2.54
Minimum	1.45
Maximum	10.98



Electrically Heated Building Usage

Aggregated Electrically Heated Building Benchmark 2011 Statistics *(kwh/ft²)*	
Mean	15.29
Median	15.11
Standard Deviation	3.18
Minimum	10.13
Maximum	23.54



ANALYSIS BY UTILITY COMPANY

NATIONAL GRID GAS

NGRID Gas Benchmark 2011 Statistics	
Mean	0.90
Median	0.81
Standard Deviation	0.59
Minimum	0.01
Maximum	8.08
Reported Benchmarks*	1416

NSTAR GAS

NSTAR Gas Benchmark 2011 Statistics	
Mean	0.93
Median	0.92
Standard Deviation	0.38
Minimum	0.03
Maximum	2.29
Reported Benchmarks*	900

COLUMBIA GAS

Columbia Gas Benchmark 2011 Statistics	
Mean	0.86
Median	0.87
Standard Deviation	0.48
Minimum	0.01
Maximum	5.69
Reported Benchmarks*	648

BERKSHIRE GAS

Berkshire Gas Benchmark 2011 Statistics	
Mean	0.85
Median	0.78
Standard Deviation	0.35
Minimum	0.43
Maximum	1.93
Reported Benchmarks*	60

NEW ENGLAND GAS

New England Gas Benchmark 2011 Statistics	
Mean	1.01
Median	1.08
Standard Deviation	0.28
Minimum	0.35
Maximum	1.65
Reported Benchmarks*	96

UNITIL GAS

Unitil Gas Benchmark 2011 Statistics	
Mean	1.13
Median	0.64
Standard Deviation	0.81
Minimum	0.18
Maximum	4.27
Reported Benchmarks*	60

NATIONAL GRID ELECTRIC

The total reported benchmarks for National Grid electric usage benchmarks is 1,284.

Common Area Usage

NGRID Electric Common Area Benchmark 2011 Statistics	
Mean	2.82
Median	1.23
Standard Deviation	4.2
Minimum	0.2
Maximum	33.1

Whole Building Usage

NGRID Electric Whole Building Benchmark 2011 Statistics	
Mean	7.13
Median	6.59
Standard Deviation	6.11
Minimum	.74
Maximum	131.68

Electric Heat

NGRID Electrically Heated Buildings Benchmark 2011 Statistics	
Mean	20.88
Median	19.37
Standard Deviation	9.57
Minimum	.35
Maximum	96.13

NSTAR ELECTRIC

The total reported benchmarks for Nstar electric usage benchmarks is 1,548.

Common Area Usage

NSTAR Electric Common Area Benchmark 2011 Statistics	
Mean	5.35
Median	2.90
Standard Deviation	7.23
Minimum	0.01
Maximum	44.20

Whole Building Usage

NSTAR Electric Whole Building Benchmark 2011 Statistics	
Mean	6.00
Median	6.24
Standard Deviation	3.06
Minimum	0.02
Maximum	22.41

Electrically Heated

NSTAR Electric Whole Building Benchmark 2011 Statistics	
Mean	16.49
Median	16.42
Standard Deviation	5.71
Minimum	8.44
Maximum	48.91

WMECO

The total reported benchmarks for WMECO electric usage benchmarks is 252.

Common Area Usage

WMECO Common Area Electric Benchmark 2011 Statistics	
Mean	4.16
Median	4.13
Standard Deviation	2.33
Minimum	0.05
Maximum	13.63

Whole Building Usage

WMECO Electric Whole Building Benchmark 2011 Statistics	
Mean	5.17
Median	5.22
Standard Deviation	2.79
Minimum	.03
Maximum	14.53

Electrically Heated

WMECO Electric Heated Building Benchmark 2011 Statistics	
Mean	16.24
Median	15.11
Standard Deviation	2.61
Minimum	11.97
Maximum	23.68

UNITIL

The total reported benchmarks for Unitil electric usage benchmarks is 60.

Common Area Usage

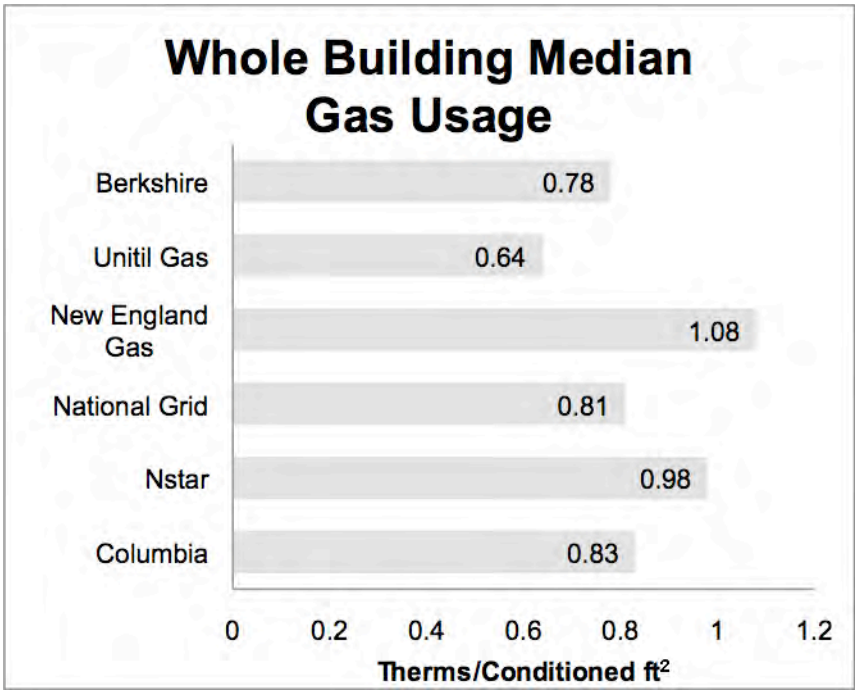
Unitil Common Area Electric Benchmark 2011 Statistics	
Mean	N/A
Median	N/A
Standard Deviation	N/A
Minimum	N/A
Maximum	N/A

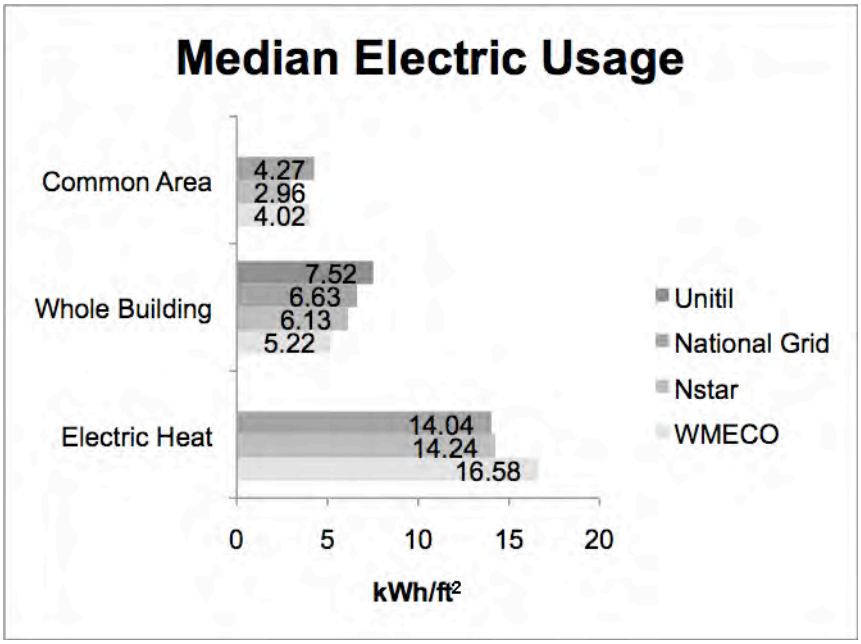
Whole Building Usage

Unitil Electric Whole Building Benchmark 2011 Statistics	
Mean	8.05
Median	7.52
Standard Deviation	3.97
Minimum	4.51
Maximum	34

Electrically Heated

Unitil Electric Heated Building Benchmark 2011 Statistics	
Mean	N/A
Median	N/A
Standard Deviation	N/A
Minimum	N/A
Maximum	N/A





** Based on research into statistical best practices, we elected to trim 5% of the data points on either end of the dataset to eliminate outliers and provide a meaningful statistical analysis. Additionally when calculating the gas benchmarks we eliminated a small number of buildings that did not utilize gas for both space heating and domestic hot water production to ensure a uniform comparison.*

Attachment B

Metric 3 2011 - Multi Family Building Inventory

Attachment B

Program Administrator	% Allocation	Required Monthly Accounts	Monthly Average Accounts	2011 Year Total
Berkshire Gas	2%	11	5	60
Columbia Gas	10%	54	54	648
NGrid Electric	20%	107	107	1,284
NGrid Gas	22%	118	118	1,416
New England Gas	2%	11	8	96
NSTAR Electric	24%	129	129	1,548
NSTAR Gas	14%	75	75	900
Unitil Electric	1%	5	5	60
Unitil Gas	1%	5	5	60
WMECO	4%	21	21	252
Total	**100%**	**536**	**527**	**6,324**

Category	Gas Usage		Whole Building Electricity Usage		Common Area Electricity Usage	
	Therms/ Sq Ft	# of Accts	kWh/ Sq Ft	# of Accts	kWh/ Sq Ft	# of Accts
Energy Efficient	< 0.65	886	< 4.91	493	< 1.35	212
Better than Average	0.65 - 0.86	717	4.91 - 6.42	454	1.35 - 2.94	172
Worse than Average	0.87 - 1.09	751	6.43 - 7.85	352	2.95 - 5.03	175
Poor	> 1.09	826	> 7.85	1,070	> 5.03	216
(A usage value could not be calculated because the building is master metered or because only common area meter information was available)	N/A	0	N/A	775	N/A	2,369
Total		**3,180**		**3,144**		**3,144**
	Total w/out N/A	3,180	Total w/out N/A	2,369	Total w/out N/A	775
	Bottom 2 Quartiles	1,577	Bottom 2 Quartiles	1,422	Bottom 2 Quartiles	391
% of Accts in bottom 2 categories		**49.6%**		**60.0%**		**50.5%**

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1	1	2434	17-23 A St	17-23 A St	Whitinsville	4	National Grid	3250	2844	844	4.71	N/A
2	2	2507	190 Milk St	190 Milk St	westboro	1	National Grid	3000	1800	N/A	15.13	N/A
3	3	2630	5 Rhodes St	5 Rhodes St.	Millbury	18	National Grid	8510	5822	5270	2.76	N/A
4	4	2617	57 Mechanic St	57 Mechanic St	Marlborough	9	National Grid	4331	3158	3035	12.41	N/A
5	5	1812	Academy Hills Apartments	4 Westminster Street	Nantucket	27	National Grid	25110	25110	270	N/A	1.83
6	6	2800	Ashland St.	18-20 Ashland St	North Andover	2	National Grid	2400	2400	600	N/A	6.87
7	7		Augustine Silva House	44 Pleasant Street	Stoughton	19	National Grid	8646	8646	N/A	7.51	N/A
8	8	2793	Bingham Way	Bingham Community Building	North Andover	1	National Grid	1300	1300	0	5.68	N/A
9	9	2789	Bingham Way	Building A	North Andover	12	National Grid	6112	6112	112	0.84	N/A
10	10	2790	Bingham Way	Building B	North Andover	12	National Grid	6112	6112	112	5.34	N/A
11	11	2791	Bingham Way	Building C	North Andover	12	National Grid	6112	6112	112	4.34	N/A
12	12	2792	Bingham Way	Building D	North Andover	6	National Grid	4920	4920	1920	2.31	N/A
13	13	1152	Brooks House	50 Arthur Street	Worcester	4	National Grid	3500	3500	1250	15.86	N/A
14	14	2269	Calumet Court	Calumet Court A	Uxbridge	4	National Grid	1800	1800	0	N/A	6.67
15	15	2271	Calumet Court	Calumet Court C	Uxbridge	4	National Grid	1800	1800	0	N/A	6.67
16	16	2274	Calumet Court	Calumet Court F	Uxbridge	4	National Grid	1800	1800	0	N/A	6.67
17	17	2275	Calumet Court	Calumet Court G	Uxbridge	4	National Grid	1800	1800	0	N/A	6.67
18	18	2276	Calumet Court	Calumet Court H	Uxbridge	4	National Grid	1800	1800	0	N/A	6.67
19	19	2270	Calumet Court	Calumet Court B	Uxbridge	4	National Grid	2050	1600	450	N/A	8.55
20	20	2273	Calumet Court	Calumet Court E	Uxbridge	4	National Grid	2050	1600	450	N/A	8.55
21	21	2272	Calumet Court	Calumet Court D	Uxbridge	6	National Grid	2740	2290	490	N/A	7.98
22	22	2277	Centennial Court	Centennial Court J	Uxbridge	8	National Grid	2400	2400	0	12.40	N/A
23	23	2278	Centennial Court	Centennial Court K	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
24	24	2279	Centennial Court	Centennial Court L	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
25	25	2280	Centennial Court	Centennial Court M	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
26	26	2281	Centennial Court	Centennial Court N	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
27	27	2282	Centennial Court	Centennial Court O	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
28	28	2283	Centennial Court	Centennial Court P	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
29	29	2284	Centennial Court	Centennial Court Q	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
30	30	2285	Centennial Court	Centennial Court R	Uxbridge	8	National Grid	4676	4676	676	12.40	N/A
31	31	2890	Depot Street	Depot Street - 2	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
32	32	2892	Depot Street	Depot Street - 4	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
33	33	2893	Depot Street	Depot Street - 5	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
34	34	2894	Depot Street	Depot Street - 6	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
35	35	1176	Dismas Family Farm	687 Lincoln Road	Oakham	6	National Grid	3800	2234	734	7.06	N/A
36	36	1153	Dismas House	30 Richards Street	Worcester	8	National Grid	2500	2500	900	9.50	N/A
37	37	1179	Emergency Shelter	312 Lafayette Street	Salem	2	National Grid	5446	3698	2723	4.92	N/A
38	38	2796	Fould's Terrace	12-14 Fould's Terrace	North Andover	8	National Grid	4300	4300	300	23.54	N/A
39	39	2797	Fould's Terrace	23- 25 Fould's Terrace	North Andover	12	National Grid	6450	6450	450	10.40	N/A
40	40	2798	Fould's Terrace	31-33-35 Fould's Terrace	North Andover	12	National Grid	6450	6450	450	9.00	N/A
41	41	2794	Fould's Terrace	8-10 Fould's Terrace	North Andover	8	National Grid	4300	4300	300	20.34	N/A
42	42	2799	Fould's Terrace	Fould's Community Bldg	North Andover	1	National Grid	1400	1400	0	23.23	N/A
43	43	2785	Fountain Drive	1-11 Fountain Drive	North Andover	6	National Grid	4250	4250	1250	3.15	N/A
44	44	2784	Fountain Drive	11A-23 Fountain Drive	North Andover	6	National Grid	4250	4250	1250	4.65	N/A
45	45	2786	Fountain Drive	2-8 Fountain Drive	North Andover	4	National Grid	2160	2160	160	3.32	N/A
46	46	2783	Fountain Drive	25-35 Fountain Drive	North Andover	6	National Grid	4250	4250	1250	2.43	N/A
47	47	2787	Fountain Drive	28-38 Fountain Drive	North Andover	6	National Grid	4250	4250	1250	3.96	N/A
48	48	2782	Fountain Drive	37-47 Fountain Drive	North Andover	6	National Grid	4250	4250	1250	3.17	N/A
49	49	2781	Fountain Drive	49-59 Fountain Drive	North Andover	6	National Grid	4250	4250	1250	2.46	N/A
50	50	2788	Fountain Drive	Community Building	North Andover	1	National Grid	1269	1269	0	6.47	N/A
51	51	3476	George Welch	14-17	Randolph	4	National Grid	2410	2410	410	4.73	N/A
52	52	3477	George Welch	18-21	Randolph	4	National Grid	2410	2410	410	4.73	N/A
53	53	3479	George Welch	22-25	Randolph	4	National Grid	2410	2410	410	4.73	N/A
54	54	3480	George Welch	26-29	Randolph	4	National Grid	2410	2410	410	4.73	N/A
55	55	3481	George Welch	30-33	Randolph	4	National Grid	2410	2410	410	4.73	N/A
56	56	3482	George Welch	34-37	Randolph	4	National Grid	2410	2410	410	4.73	N/A
57	57	3483	George Welch	38-41	Randolph	4	National Grid	2410	2410	410	4.73	N/A
58	58	3484	George Welch	42-45	Randolph	4	National Grid	2410	2410	410	4.73	N/A
59	59	3485	George Welch	46-49	Randolph	4	National Grid	2410	2410	410	4.73	N/A
60	60	3486	George Welch	50-53	Randolph	4	National Grid	2410	2410	410	4.73	N/A
61	61	3487	George Welch	54-57	Randolph	4	National Grid	2410	2410	410	4.73	N/A
62	62	3488	George Welch	58-61	Randolph	4	National Grid	2410	2410	410	4.73	N/A
63	63	3489	George Welch	62-65	Randolph	4	National Grid	2410	2410	410	4.73	N/A
64	64	3490	George Welch	66-69	Randolph	4	National Grid	1205	1205	410	4.73	N/A
65	65	3491	George Welch	70-73	Randolph	4	National Grid	2410	2410	410	4.73	N/A
66	66	3492	George Welch	74-77	Randolph	4	National Grid	2410	2410	410	4.73	N/A
67	67	966	Harborlight House	1 Monument Sq.	Beverly	35	National Grid	21348	18078	13648	9.07	N/A
68	68	1421	Hemlock Drive 1	1-4 Hemlock Drive	Bridgewater	4	National Grid	1870	1870	N/A	21.58	N/A
69	69	3010	Hemlock Drive 1	5-10 Hemlock Drive	Bridgewater	6	National Grid	2816	2816	N/A	21.58	N/A
70	70	3011	Hemlock Drive 1	11-14 Hemlock Drive	Bridgewater	4	National Grid	1870	1870	N/A	21.58	N/A
71	71	3012	Hemlock Drive 1	15-20 Hemlock Drive	Bridgewater	6	National Grid	2816	2816	N/A	21.58	N/A
72	72	3013	Hemlock Drive 1	21-24 Hemlock Drive	Bridgewater	4	National Grid	1870	1870	N/A	21.58	N/A
73	73	3014	Hemlock Drive 1	25-30 Hemlock Drive	Bridgewater	6	National Grid	2816	2816	N/A	21.58	N/A
74	74	3015	Hemlock Drive 1	31-34 Hemlock Drive	Bridgewater	4	National Grid	1870	1870	N/A	21.58	N/A
75	75	3016	Hemlock Drive 1	35-40 Hemlock Drive	Bridgewater	6	National Grid	2816	2816	N/A	21.58	N/A
76	76	3108	Hemlock Drive 2	42-45 Hemlock Drive	Bridgewater	16	National Grid	8800	8800	N/A	16.75	N/A
77	77	3109	Hemlock Drive 2	46-28 Hemlock Drive	Bridgewater	12	National Grid	6600	6600	N/A	16.75	N/A
78	78	3110	Hemlock Drive 2	49-51 Hemlock Drive	Bridgewater	12	National Grid	6600	6600	N/A	16.75	N/A
79	79	3111	Hemlock Drive 2	52-55 Hemlock Drive	Bridgewater	16	National Grid	8800	8800	N/A	16.75	N/A
80	80		La Civita Court	La Civita Court - 1	Stoughton	8	National Grid	4240	4240	N/A	31.28	N/A
81	81		La Civita Court	La Civita Court - 2	Stoughton	8	National Grid	4240	4240	N/A	31.28	N/A
82	82		La Civita Court	La Civita Court - 3	Stoughton	8	National Grid	4240	4240	N/A	31.28	N/A
83	83		La Civita Court	La Civita Court - 4	Stoughton	6	National Grid	4725	4725	N/A	31.28	N/A
84	84		La Civita Court	La Civita Court - 5	Stoughton	6	National Grid	4725	4725	N/A	31.28	N/A
85	85		La Civita Court	La Civita Court - 6	Stoughton	6	National Grid	4725	4725	N/A	31.28	N/A
86	86		La Civita Court	La Civita Court - 7	Stoughton	6	National Grid	4725	4725	N/A	31.28	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
87	87	1517	Maris Center	197 Elm Street	Salisbury	19	National Grid	3948	3948	3212	23.70	N/A
88	88	3452	McCauley Murray Lewis	Building 1	Randolph	124	National Grid	80132	80132	N/A	15.46	N/A
89	89	2628	Monsignor Neagle Apartments	350 Charles St.	Malden	76	National Grid	75776	66304	35192	6.52	N/A
90	90		O'Connor Heights	Second St.	North Andover	18	National Grid	18950	18950	0	3.26	N/A
91	91		O'Connor Heights	Second St.	North Andover	4	National Grid	3790	3790	0	3.26	N/A
92	92		O'Connor Heights	Second St.	North Andover	4	National Grid	3790	3790	0	3.26	N/A
93	93		O'Connor Heights	Second St.	North Andover	4	National Grid	3790	3790	0	3.26	N/A
94	94	2801	O'Connor Heights	1-22 O'Connor	North Andover	30	National Grid	40320	40320	20320	2.45	N/A
95	95	2552	Progress House	39 High Street	Amesbury	26	National Grid	11301	9525	2588	6.31	N/A
96	96	1918	Prospect House	420 Reservior Ave	Revere	109	National Grid	70000	60000	20114	13.11	N/A
97	97	6142	Rainbow terrace	Hawley Street - 3	Brockton	8	National Grid	4324	4324	N/A	6.92	N/A
98	98	6143	Rainbow terrace	Rochelle Street - 4	Brockton	8	National Grid	4324	4324	N/A	6.92	N/A
99	99	6144	Rainbow terrace	Hawley Street - 5	Brockton	8	National Grid	4324	4324	N/A	6.92	N/A
100	100		Rose Forte	4 Capen Street	Stoughton	68	National Grid	60800	60800	N/A	13.91	N/A
101	101	965	Turtle Woods	399 Essex St.	Beverly	67	National Grid	45560	44288	10730	11.07	N/A
102	102	3442	Walter Lyon	20-27 Elderly Dr	Randolph	8	National Grid	5824	5824	1824	4.64	N/A
103	103	3443	Walter Lyon	30-37 Elderly Dr	Randolph	8	National Grid	5824	5824	1824	4.64	N/A
104	104	3444	Walter Lyon	40-47 Elderly Dr	Randolph	8	National Grid	5824	5824	1824	4.64	N/A
105	105	3445	Walter Lyon	50-57 Elderly Dr	Randolph	8	National Grid	5824	5824	1824	4.64	N/A
106	106	3446	Walter Lyon	60-67 Elderly Dr	Randolph	8	National Grid	5824	5824	1824	4.64	N/A
107	107	3441	Walter Lyon	10-17 Elderly Drive	Randolph	8	National Grid	5824	5824	1824	4.64	N/A
108	108		Leavitt Terrace	100 Lincoln Blvd - A	Abington	8	National Grid	4176	4176	N/A	19.83	N/A
109	109		Leavitt Terrace	100 Lincoln Blvd - B	Abington	8	National Grid	4176	4176	N/A	19.83	N/A
110	110		Leavitt Terrace	100 Lincoln Blvd - C	Abington	8	National Grid	4176	4176	N/A	19.83	N/A
111	111		Leavitt Terrace	100 Lincoln Blvd - D	Abington	8	National Grid	4176	4176	N/A	19.83	N/A
112	112		Leavitt Terrace	100 Lincoln Blvd - E	Abington	8	National Grid	4176	4176	N/A	19.83	N/A
113	113		Leavitt Terrace	100 Lincoln Blvd - Community Building	Abington	1	National Grid	1500	1500	N/A	19.83	N/A
114	114		Vinson Blanchard Gardens	71 Shaw Avenue - F	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
115	115		Vinson Blanchard Gardens	71 Shaw Avenue - G	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
116	116		Vinson Blanchard Gardens	71 Shaw Avenue - H	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
117	117		Vinson Blanchard Gardens	71 Shaw Avenue - J	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
118	118		Vinson Blanchard Gardens	71 Shaw Avenue - K	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
119	119		Vinson Blanchard Gardens	71 Shaw Avenue - L	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
120	120		Vinson Blanchard Gardens	71 Shaw Avenue - M	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
121	121		Vinson Blanchard Gardens	71 Shaw Avenue - N	Abington	8	National Grid	7720	7720	N/A	6.38	N/A
122	122		Vinson Blanchard Gardens	71 Shaw Avenue - P	Abington	5	National Grid	7720	7720	N/A	6.38	N/A
123	123	4344	Columbia Valley	4 Columbia Street - 1	Adams	16	National Grid	9680	9680	N/A	18.48	N/A
124	124	4343	Columbia Valley	4 Columbia Street - 2	Adams	24	National Grid	14186	14186	N/A	18.48	N/A
125	125	4339	Columbia Valley	4 Columbia Street - 3	Adams	24	National Grid	14186	14186	N/A	18.48	N/A
126	126	2521	Neptune Towers Apartments	130 Neptune Blvd.	Lynn	334	National Grid	100000	100000	25000	9.18	N/A
127	127	2522	Neptune Towers Apartments	160 Neptune Blvd.	Lynn	334	National Grid	100000	100000	25000	9.87	N/A
128	128	720	Saugus Commons	19 Newhall Ave	Saugus	26	National Grid	20359	20359	4345	N/A	6.10
129	129	722	Saugus Commons	21 Newhall Ave	Saugus	24	National Grid	18304	18304	4141	N/A	5.02
130	130	727	Saugus Commons	48 Newhall Ave	Saugus	6	National Grid	7556	7556	752	N/A	12.55
131	131	730	Saugus Commons	66 Newhall Ave	Saugus	6	National Grid	10075	10075	1003	N/A	6.17
132	132	2886	Wrentham Manor	Wrentham Road - 4	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
133	133	2887	Wrentham Manor	Wrentham Road - 5	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
134	134	2888	Wrentham Manor	Wrentham Road - 6	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
135	135	2889	Wrentham Manor	Wrentham Road - 7	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
136	136	2867	Depot Street	Depot Street - 1	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
137	137	2846	Maple Gardens	1 Maple Gardens	Fall River	4	National Grid	1170	1170	N/A	6.37	N/A
138	138	3236	Pleasant Street Apartments	Community Building	Marlborough	1	National Grid	1410	1410	N/A	5.91	N/A
139	139	2852	Corky Row 2	566 - 568 Third Street	Fall River	2	National Grid	2416	2416	N/A	5.87	N/A
140	140	2933	Golden Circle	Golden Circle Community Building	Brockton	1	National Grid	1520	1520	N/A	9.37	N/A
141	141	3182	Maple Gardens	31 Maple Gardens	Fall River	4	National Grid	2504	2504	N/A	6.37	N/A
142	142	3183	Maple Gardens	32 Maple Gardens	Fall River	4	National Grid	2504	2504	N/A	6.37	N/A
143	143	2849	Corky Row 2	463-465 Fourth Street	Fall River	2	National Grid	2416	2416	N/A	7.49	N/A
144	144	3178	Maple Gardens	15 Maple Gardens	Fall River	3	National Grid	2906	2906	N/A	6.37	N/A
145	145	3179	Maple Gardens	17 Maple Gardens	Fall River	3	National Grid	2906	2906	N/A	6.37	N/A
146	146	3180	Maple Gardens	16 Maple Gardens	Fall River	3	National Grid	2906	2906	N/A	6.37	N/A
147	147	3181	Maple Gardens	18 Maple Gardens	Fall River	3	National Grid	2906	2906	N/A	6.37	N/A
148	148	2868	Depot Street	Depot Street Community Building	Bellingham	1	National Grid	1512	1512	N/A	13.07	N/A
149	149	3154	Maple Gardens	14 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
150	150	3155	Maple Gardens	2 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
151	151	3156	Maple Gardens	20 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
152	152	3157	Maple Gardens	21 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
153	153	3158	Maple Gardens	23 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
154	154	3159	Maple Gardens	24 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
155	155	3160	Maple Gardens	26 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
156	156	3161	Maple Gardens	27 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
157	157	3162	Maple Gardens	29 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
158	158	3163	Maple Gardens	30 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
159	159	3164	Maple Gardens	33 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
160	160	3165	Maple Gardens	34 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
161	161	3166	Maple Gardens	8 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
162	162	3167	Maple Gardens	6 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
163	163	3168	Maple Gardens	5 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
164	164	3169	Maple Gardens	49 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
165	165	3170	Maple Gardens	46 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
166	166	3171	Maple Gardens	48 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
167	167	3172	Maple Gardens	38 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
168	168	3173	Maple Gardens	4 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
169	169	3174	Maple Gardens	35 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
170	170	3175	Maple Gardens	36 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
171	171	3176	Maple Gardens	37 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A
172	172	3177	Maple Gardens	45 Maple Gardens	Fall River	4	National Grid	3150	3150	350	6.37	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
173	173	2853	Corky Row 2	241-247 Fifth Street	Fall River	2	National Grid	2416	2416	N/A	9.77	N/A
174	174	2851	Corky Row 2	68 - 70 Branch Street	Fall River	2	National Grid	2145	2145	N/A	11.05	N/A
175	175	3058	Maple Gardens	10 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
176	176	3059	Maple Gardens	11 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
177	177	3060	Maple Gardens	12 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
178	178	3061	Maple Gardens	13 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
179	179	3062	Maple Gardens	19 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
180	180	3063	Maple Gardens	22 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
181	181	3064	Maple Gardens	25 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
182	182	3065	Maple Gardens	28 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
183	183	3066	Maple Gardens	3 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
184	184	3067	Maple Gardens	39 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
185	185	3068	Maple Gardens	40 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
186	186	3069	Maple Gardens	41 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
187	187	3147	Maple Gardens	42 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
188	188	3148	Maple Gardens	43 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
189	189	3149	Maple Gardens	44 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
190	190	3150	Maple Gardens	47 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
191	191	3151	Maple Gardens	50 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
192	192	3152	Maple Gardens	7 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
193	193	3153	Maple Gardens	9 Maple Gardens	Fall River	4	National Grid	3726	3726	N/A	6.37	N/A
194	194	2854	Corky Row 2	242-244 Fifth Street	Fall River	2	National Grid	2416	2416	N/A	9.95	N/A
195	195	2847	Corky Row 2	316-318 Fourth Street	Fall River	2	National Grid	2416	2416	N/A	10.33	N/A
196	196	2842	Mechanic St	8 Mechanic St.	Quincy	12	National Grid	3800	2850	2000	8.83	N/A
197	197	2855	Corky Row 2	228 - 230 Fifth Street	Fall River	2	National Grid	2416	2416	N/A	10.60	N/A
198	198	3246	Bolton Hill Apartments	397 Bolton St. Community Building	Marlborough	1	National Grid	1620	1620	N/A	15.82	N/A
199	199	3233	Pleasant Street Apartments	Building 2	Marlborough	8	National Grid	4532	4532	532	5.91	N/A
200	200	3234	Pleasant Street Apartments	Building 3	Marlborough	8	National Grid	4532	4532	532	5.91	N/A
201	201	2870	Wrentham Manor	Wrentham Road Community Building	Bellingham	1	National Grid	1908	1908	N/A	14.04	N/A
202	202	2901	Spear St	50-52 Spear St	Quincy	12	National Grid	2526	1263	1326	23.25	N/A
203	203	2903	Spear St	54-56 Spear St	Quincy	10	National Grid	3124	1562	2124	22.26	N/A
204	204	2848	Corky Row 2	322-324 Fourth Street	Fall River	2	National Grid	2416	2416	N/A	14.53	N/A
205	205	3244	Bolton Hill Apartments	397 Bolton St. #4	Marlborough	4	National Grid	2250	2250	250	15.82	N/A
206	206	2993	Vine St	24 Vine St	Melrose	14	National Grid	3400	1700	1720	23.02	N/A
207	207	3235	Pleasant Street Apartments	Building 4	Marlborough	12	National Grid	6820	6820	820	5.91	N/A
208	208	3231	Pleasant Street Apartments	Building 1	Marlborough	14	National Grid	8140	8140	1140	5.91	N/A
209	209	3001	Colonial Park	Colonial Park Community Room	Brimfield	1	National Grid	2200	2200	N/A	32.41	N/A
210	210	2878	Norwood St	76 Norwood St	Everett	29	National Grid	6000	4750	1650	15.07	N/A
211	211	2869	Wrentham Manor	Wrentham Road - 1	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
212	212	2884	Wrentham Manor	Wrentham Road - 2	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
213	213	2885	Wrentham Manor	Wrentham Road - 3	Bellingham	8	National Grid	5264	5264	1264	14.04	N/A
214	214	2891	Depot Street	Depot Street - 3	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
215	215	2858	(SS) 256 State Street	256 State Street	Northampton	6	National Grid	4959	4959	N/A	1.34	N/A
216	216	3022	10 Heritage Circle	10 Heritage Circle	Bridgewater	50	National Grid	36666	36666	11666	6.09	N/A
217	217	2880	Ashland St	4-6 Ashland St	Medford	16	National Grid	4000	3000	1600	10.84	N/A
218	218	4041	Bates Terrace	5 Bates Terrace	Salem	8	National Grid	4998	4998	998	0.35	N/A
219	219	4040	Bates Terrace	4 Bates Terrace	Salem	8	National Grid	4998	4998	998	0.35	N/A
220	220	2872	BLL - 115-117 Center Street	115 Center Street	Bellingham	1	National Grid	720	720	N/A	13.52	N/A
221	221	2895	BLL - Depot Street	Depot Street - 7	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
222	222	2896	BLL - Depot Street	Depot Street - 8	Bellingham	8	National Grid	5724	5724	1724	13.07	N/A
223	223	3240	Bolton Hill Apartments	397 Bolton St. #1	Marlborough	24	National Grid	16200	16200	4200	15.82	N/A
224	224	3242	Bolton Hill Apartments	397 Bolton St. #2	Marlborough	8	National Grid	7360	7360	3360	15.82	N/A
225	225	3243	Bolton Hill Apartments	397 Bolton St. #3	Marlborough	24	National Grid	16200	16200	4200	15.82	N/A
226	226	3307	Bridle Path Apartments	152 Bittersweet Lane	Randolph	35	National Grid	27500	27500	5500	N/A	9.75
227	227	3308	Bridle Path Apartments	164 Bittersweet Lane	Randolph	34	National Grid	27500	27500	5500	N/A	14.20
228	228	3309	Bridle Path Apartments	25 Bridle Path Circle	Randolph	35	National Grid	27500	27500	5500	N/A	9.55
229	229	2734	Colonial Park	Colonial Park - 1	Brimfield	20	National Grid	12866	12866	3266	15.37	N/A
230	230	3000	Colonial Park	Colonial Park - 2	Brimfield	16	National Grid	12866	12866	5186	11.62	N/A
231	231	2999	Colonial Park	Colonial Park - 3	Brimfield	20	National Grid	12866	12866	3266	14.51	N/A
232	232	2828	Fenno House	540 Hancock Street	Quincy	151	National Grid	82980	74100	16888	4.28	N/A
233	233	3787	FRN - Central Park - 1	CPT1: Community Hall	Franklin	1	National Grid	868	868	N/A	5.95	N/A
234	234	2676	FRN - Central Park - 1	CPT1: East Park Street - 1	Franklin	8	National Grid	5000	5000	1000	5.95	N/A
235	235	3783	FRN - Central Park - 1	CPT1: East Park Street - 4	Franklin	4	National Grid	1920	1920	N/A	5.95	N/A
236	236	3784	FRN - Central Park - 1	CPT1: East Park Street - 5	Franklin	4	National Grid	1920	1920	N/A	5.95	N/A
237	237	3785	FRN - Central Park - 1	CPT1: East Park Street - 6	Franklin	4	National Grid	1920	1920	N/A	5.95	N/A
238	238	3786	FRN - Central Park - 1	CPT1: East Park Street - 7	Franklin	8	National Grid	5000	5000	1000	5.95	N/A
239	239	3781	FRN - Central Park - 1	CPT1: West Park Street - 2	Franklin	4	National Grid	1920	1920	N/A	5.95	N/A
240	240	3782	FRN - Central Park - 1	CPT1: West Park Street - 3	Franklin	8	National Grid	5000	5000	1000	5.95	N/A
241	241	3844	FRN - Central Park - 2	Central Park Terrace - 6	Franklin	4	National Grid	1924	1924	124	20.27	N/A
242	242	3845	FRN - Central Park - 2	Central Park Terrace - 7	Franklin	4	National Grid	1924	1924	124	20.27	N/A
243	243	3846	FRN - Central Park - 2	Central Park Terrace - 8	Franklin	4	National Grid	1924	1924	124	20.27	N/A
244	244	2677	FRN - Central Park - 2	East Park Street - 1	Franklin	4	National Grid	1924	1924	124	20.27	N/A
245	245	3840	FRN - Central Park - 2	East Park Street - 2	Franklin	4	National Grid	1924	1924	124	20.27	N/A
246	246	3841	FRN - Central Park - 2	East Park Street - 3	Franklin	4	National Grid	1924	1924	124	20.27	N/A
247	247	2678	FRN - Central Park - 3	Central Park Terrace - 1	Franklin	8	National Grid	3276	3276	156	37.76	N/A
248	248	3849	FRN - Central Park - 3	Central Park Terrace - 2	Franklin	8	National Grid	3276	3276	156	37.76	N/A
249	249	3850	FRN - Central Park - 3	Central Park Terrace - 3	Franklin	8	National Grid	3276	3276	156	23.65	N/A
250	250	3851	FRN - Central Park - 3	Central Park Terrace - 4	Franklin	8	National Grid	3276	3276	156	23.65	N/A
251	251	3852	FRN - Central Park - 3	Central Park Terrace - 5	Franklin	8	National Grid	3276	3276	156	22.13	N/A
252	252	3854	FRN - Central Park - 3	CPT3: Central Park Terrace - 6	Franklin	8	National Grid	3276	3276	156	22.13	N/A
253	253	3853	FRN - Central Park - 3	CPT3: Central Park Terrace - 7	Franklin	8	National Grid	3276	3276	156	10.57	N/A
254	254	3451	FRV - Barresi Heights	1863 Pleasant Street	Fall River	149	National Grid	93740	93740	19240	6.86	N/A
255	255	2857	FRV - Bishop Joseph Eid	33 Quequechan Street	Fall River	54	National Grid	49464	49464	22464	4.60	N/A
256	256	3455	FRV - Corky Row Rehab	252 Wade Street	Fall River	3	National Grid	4200	4200	N/A	1.45	N/A
257	257	3455	FRV - Corky Row Rehab	252 Wade Street	Fall River	3	National Grid	4200	4200	N/A	1.30	N/A
258	258	3271	FRV - Pleasant View	1 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
259	259	3259	FRV - Pleasant View	10 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
260	260	3260	FRV - Pleasant View	11 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
261	261	3272	FRV - Pleasant View	12 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
262	262	3273	FRV - Pleasant View	13 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
263	263	3274	FRV - Pleasant View	14 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
264	264	3282	FRV - Pleasant View	15 Pleasant View	Fall River	4	National Grid	3952	3952	200	7.03	N/A
265	265	3283	FRV - Pleasant View	16 Pleasant View	Fall River	4	National Grid	3952	3952	200	7.03	N/A
266	266	3261	FRV - Pleasant View	17 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
267	267	3286	FRV - Pleasant View	18 Pleasant View	Fall River	4	National Grid	2504	2504	N/A	7.03	N/A
268	268	3262	FRV - Pleasant View	19 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
269	269	3275	FRV - Pleasant View	2 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
270	270	3287	FRV - Pleasant View	20 Pleasant View	Fall River	3	National Grid	2906	2906	N/A	7.03	N/A
271	271	3263	FRV - Pleasant View	21 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
272	272	3264	FRV - Pleasant View	22 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
273	273	3265	FRV - Pleasant View	23 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
274	274	3276	FRV - Pleasant View	24 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
275	275	3277	FRV - Pleasant View	25 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
276	276	3278	FRV - Pleasant View	26 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
277	277	3279	FRV - Pleasant View	27 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
278	278	3284	FRV - Pleasant View	28 Pleasant View	Fall River	4	National Grid	3952	3952	200	7.03	N/A
279	279	3285	FRV - Pleasant View	29 Pleasant View	Fall River	4	National Grid	3952	3952	200	7.03	N/A
280	280	3292	FRV - Pleasant View	3 Pleasant View	Fall River	4	National Grid	3652	3652	N/A	7.03	N/A
281	281	3280	FRV - Pleasant View	30 Pleasant View	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
282	282	3266	FRV - Pleasant View	31 Pleasant Street	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
283	283	3288	FRV - Pleasant View	32 Pleasant View	Fall River	3	National Grid	2906	2906	N/A	7.03	N/A
284	284	3289	FRV - Pleasant View	33 Pleasant Street	Fall River	3	National Grid	2906	2906	N/A	7.03	N/A
285	285	3290	FRV - Pleasant View	34 Pleasant Street	Fall River	3	National Grid	2906	2906	N/A	7.03	N/A
286	286	3291	FRV - Pleasant View	35 Pleasant View	Fall River	3	National Grid	2906	2906	N/A	7.03	N/A
287	287	3281	FRV - Pleasant View	4 Pleasant Drive	Fall River	4	National Grid	3752	3752	N/A	7.03	N/A
288	288	3267	FRV - Pleasant View	5 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
289	289	3268	FRV - Pleasant View	6 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
290	290	3269	FRV - Pleasant View	7 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
291	291	3270	FRV - Pleasant View	8 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
292	292	3293	FRV - Pleasant View	9 Pleasant View	Fall River	4	National Grid	3150	3150	N/A	7.03	N/A
293	293	2927	Golden Circle	Golden Circle - 1	Brockton	3	National Grid	3002	2001	1001	N/A	0.18
294	294	2929	Golden Circle	Golden Circle - 3	Brockton	3	National Grid	3002	2001	1001	N/A	1.22
295	295	2932	Golden Circle	Golden Circle - 4	Brockton	3	National Grid	3002	2001	1001	N/A	0.02
296	296	2930	Golden Circle	Golden Circle - 5	Brockton	4	National Grid	4059	2706	1353	N/A	0.12
297	297	2931	Golden Circle	Golden Circle - 6	Brockton	3	National Grid	3002	2001	1001	N/A	0.02
298	298	3765	Hale St.	210 Hale St	Lowell	4	National Grid	1400	1400	950	96.13	N/A
299	299	3632	Kilcommons	1 KILCOMMONS DRIVE	Pembroke	12	National Grid	7996	7996	1996	6.14	N/A
300	300	3633	Kilcommons	2 KILCOMMONS DRIVE	Pembroke	12	National Grid	7996	7996	1996	6.14	N/A
301	301	3634	Kilcommons	3 KILCOMMONS DRIVE	Pembroke	12	National Grid	7996	7996	1996	6.14	N/A
302	302	2898	Lafayette St	117 Lafayette St	Salem	62	National Grid	24000	16000	14700	10.80	N/A
303	303	3912	LAW - Stadium Courts	15-29 WEST LAUREL - 6	Lawrence	8	National Grid	7800	7800	2420	8.82	N/A
304	304	3878	LAW - Stadium Courts	186 - 200 PHILLIPS ST - 1	Lawrence	8	National Grid	7800	7800	2420	8.82	N/A
305	305	3903	LAW - Stadium Courts	214 THRU 228 PHILLIPS ST - 3	Lawrence	8	National Grid	7800	7800	2420	8.82	N/A
306	306	3911	LAW - Stadium Courts	31 - 45 WEST LAUREL ST - 5	Lawrence	8	National Grid	7800	7800	2420	8.82	N/A
307	307	3910	LAW - Stadium Courts	47 THRU 61 WEST LAUREL - 4	Lawrence	8	National Grid	7800	7800	2420	8.82	N/A
308	308	3247	Liberty Hill Apartments	210 Main St.	Marlborough	125	National Grid	104000	104000	29000	12.64	N/A
309	309	4027	Mayflower	1 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	4422	12.88	N/A
310	310	4028	Mayflower	2 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	4422	12.88	N/A
311	311	4029	Mayflower	3 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	4422	12.88	N/A
312	312	2864	NHM - Salvo House	81 Conz Street	Northampton	192	National Grid	126000	126000	43200	15.39	N/A
313	313	2861	NHM - Tobin Manor	56 Maple Street	Northampton	49	National Grid	45000	45000	18590	1.73	N/A
314	314	3452	RAN - McCauley	1 DECELLE DRIVE	Randolph	124	National Grid	80132	80132	18132	15.47	N/A
315	315	881	Salem Fairweather	40R Highland Avenue	Salem	127	National Grid	76033	74833	24251	3.44	N/A
316	316	3866	Salem Heights	12 Pope Street	Salem	283	National Grid	120420	120420	2700	11.11	N/A
317	317	2621	WST - Mayberry Court	20D Mayberry Drice	Westborough	8	National Grid	4608	4608	N/A	15.50	N/A
318	318	2622	WST - Mayberry Court	20E Mayberry Drive	Westborough	8	National Grid	4608	4608	N/A	15.50	N/A
319	319	2618	WST - Mayberry Court	20A Mayberry Drive	Westborough	8	National Grid	4800	4800	N/A	15.50	N/A
320	320	2619	WST - Mayberry Court	20B Mayberry Drive	Westborough	8	National Grid	4800	4800	N/A	15.50	N/A
321	321	2620	WST - Mayberry Court	20C Mayberry Drive	Westborough	8	National Grid	4800	4800	N/A	15.50	N/A
322	322	3927	129-151 Lakeview	129-151 Lakeview 1	Lowell	4	National Grid	1420	1420	N/A	5.83	N/A
323	323	3928	129-151 Lakeview	129-151 Lakeview 2	Lowell	4	National Grid	1420	1420	N/A	5.83	N/A
324	324	3929	129-151 Lakeview	129-151 Lakeview 3	Lowell	4	National Grid	1420	1420	N/A	5.83	N/A
325	325	3635	Kilcommons	4 KILCOMMONS DRIVE	Pembroke	12	National Grid	7996	7996	1996	6.14	N/A
326	326	3636	Kilcommons	5 KILCOMMONS DRIVE	Pembroke	12	National Grid	7996	7996	1996	6.14	N/A
327	327	3637	Kilcommons	6 KILCOMMONS DRIVE - Community	Pembroke	1	National Grid	2767	2767	N/A	6.14	N/A
328	328	3900	Stadium Courts	10 - 20 WEST DALTON - 27	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
329	329	3883	Stadium Courts	11 - 25 NORTH PARISH ROAD - 13	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
330	330	3880	Stadium Courts	16 - 26 EAST LAUREL - 10	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
331	331	3916	Stadium Courts	179 Osgood - Administration Building	Lawrence	1	National Grid	6720	6720	N/A	8.82	N/A
332	332	3914	Stadium Courts	18-28 EXETER ST - 8	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
333	333	3909	Stadium Courts	183 - 193 CRAWFORD ST - 35	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
334	334	3886	Stadium Courts	185 - 195 OSGOOD ST - 16	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
335	335	3887	Stadium Courts	186 - 200 OSGOOD ST - 17	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
336	336	3908	Stadium Courts	195 - 205 CRAWFORD ST - 34	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
337	337	3885	Stadium Courts	197 - 211 OSGOOD ST - 15	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
338	338	3899	Stadium Courts	2 - 16 EXETER ST - 26	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
339	339	3891	Stadium Courts	202 - 212 PHILLIPS STREET - 2	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
340	340	3888	Stadium Courts	202 - 216 OSGOOD ST - 18	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
341	341	3907	Stadium Courts	207 - 221 CRAWFORD ST - 33	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
342	342	3902	Stadium Courts	21 - 35 EAST DALTON ST - 29	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
343	343	3884	Stadium Courts	213 - 227 OSGOOD ST - 14	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
344	344	3889	Stadium Courts	218 - 232 OSGOOD ST - 19	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
345	345	3897	Stadium Courts	22 - 36 WEST DALTON ST - 24	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
346	346	3892	Stadium Courts	27 - 41 NORTH PARISH RD - 20	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
347	347	3879	Stadium Courts	28 - 42 EAST LAUREL - 11	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
348	348	3913	Stadium Courts	3 - 13 WEST LAUREL ST - 7	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
349	349	3904	Stadium Courts	37 - 51 EAST DALTON ST - 30	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
350	350	3896	Stadium Courts	38 - 52 WEST DALTON ST - 23	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
351	351	3915	Stadium Courts	4 - 14 EAST LAUREL - 9	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
352	352	3894	Stadium Courts	43 - 49 NORTH PARISH ROAD - 21	Lawrence	4	National Grid	3624	3624	1124	8.82	N/A
353	353	3882	Stadium Courts	44 - 58 EAST LAUREL - 12	Lawrence	8	National Grid	6664	6664	2064	8.82	N/A
354	354	3898	Stadium Courts	5 - 19 WEST DALTON - 25	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
355	355	3906	Stadium Courts	51 - 65 NORTH PARISH ROAD - 32	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
356	356	3905	Stadium Courts	53 - 67 EAST DALTON ST - 31	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
357	357	3895	Stadium Courts	54 - 68 WEST DALTON - 22	Lawrence	8	National Grid	7204	7204	2234	8.82	N/A
358	358	3901	Stadium Courts	9 - 19 EAST DALTON ST - 28	Lawrence	6	National Grid	5304	5304	1644	8.82	N/A
359	359	3971	Bertram Terrace	11-20 Bertram Terrace	Pembroke	10	National Grid	7912	7912	1912	2.44	N/A
360	360	4030	Mayflower	4 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	222	12.88	N/A
361	361	4031	Mayflower	5 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	222	12.90	N/A
362	362	4032	Mayflower	6 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	222	12.90	N/A
363	363	4033	Mayflower	7 MAYFLOWER COURT	Pembroke	8	National Grid	5022	5022	222	12.90	N/A
364	364	4034	Mayflower	MAYFLOWER COURT - Community	Pembroke	1	National Grid	1580	1580	N/A	12.90	N/A
365	365	2865	Bridge Street	96 Bridge Street	Northampton	7	National Grid	6136	6136	1564	3.44	N/A
366	366	2862	Cahill Apartments	Fruit Street - Apartment A	Northampton	8	National Grid	4550	4550	550	5.69	N/A
367	367	2912	Cahill Apartments	Fruit Street - Apartment B	Northampton	8	National Grid	4550	4550	550	5.69	N/A
368	368	2913	Cahill Apartments	Fruit Street - Apartment C	Northampton	8	National Grid	4550	4550	550	5.69	N/A
369	369	3499	Cahill Apartments	Fruit Street - Apartment D	Northampton	8	National Grid	4550	4550	550	5.69	N/A
370	370	3500	Cahill Apartments	Fruit Street - Apartment E	Northampton	8	National Grid	4550	4550	550	5.69	N/A
371	371	3501	Cahill Apartments	Fruit Street - Apartment F	Northampton	8	National Grid	4550	4550	550	5.69	N/A
372	372	3502	Cahill Apartments	Fruit Street - Apartment G	Northampton	8	National Grid	4550	4550	550	5.69	N/A
373	373	3503	Cahill Apartments	Fruit Street - Apartment H	Northampton	8	National Grid	4550	4550	550	5.69	N/A
374	374	3504	Cahill Apartments	Fruit Street Community Building	Northampton	1	National Grid	1500	1500	N/A	5.69	N/A
375	375	3531	Forsander Apartments	Forsander Community	Northampton	1	National Grid	2400	2400	N/A	5.00	N/A
376	376	3523	Forsander Apartments	High St - K	Northampton	8	National Grid	4550	4550	550	4.93	N/A
377	377	3525	Forsander Apartments	High St - M	Northampton	8	National Grid	4500	4500	550	4.93	N/A
378	378	3526	Forsander Apartments	High St - N	Northampton	8	National Grid	4500	4500	550	4.93	N/A
379	379	3527	Forsander Apartments	High St - O	Northampton	8	National Grid	4500	4500	550	4.93	N/A
380	380	3528	Forsander Apartments	High St - P	Northampton	8	National Grid	4500	4500	550	4.93	N/A
381	381	3529	Forsander Apartments	High St - Q	Northampton	8	National Grid	4500	4500	550	4.93	N/A
382	382	3530	Forsander Apartments	High St - R	Northampton	8	National Grid	4550	4550	550	4.93	N/A
383	383	2863	Forsander Apartments	High Street - J	Northampton	8	National Grid	4500	4500	550	4.93	N/A
384	384	3524	Forsander Apartments	High Street - L	Northampton	8	National Grid	4500	4500	550	4.93	N/A
385	385	3476	Welch	14-17 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
386	386	3477	Welch	18-21 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
387	387	3479	Welch	22-25 SUNSHINE AVENUE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
388	388	3480	Welch	26-29 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
389	389	3481	Welch	30-33 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
390	390	3482	Welch	34-37 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
391	391	3483	Welch	38-41 SUNSHINE AVENUE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
392	392	3484	Welch	42-45 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
393	393	3485	Welch	46-49 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
394	394	3486	Welch	50-53 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
395	395	3487	Welch	54-57 SUNSHINE AVENUE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
396	396	3488	Welch	58-61 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
397	397	3489	Welch	62-65 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
398	398	3490	Welch	66-69 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
399	399	3491	Welch	70-73 SUNSHINE AVENUE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
400	400	3492	Welch	74-77 SUNSHINE AVE	Randolph	4	National Grid	2410	2410	410	4.15	N/A
401	401	3493	Welch	SUNSHINE AVENUE - COMMUNITY BLDG	Randolph	1	National Grid	1052	1052	N/A	4.15	N/A
402	402	2625	Cedar Estates	2 Rogers Road	Westborough	36	National Grid	22700	22700	4700	2.14	N/A
403	403	2623	Mayberry Court	20 Mayberry Drive Comm Room	Westborough	1	National Grid	1746	1746	N/A	15.50	N/A
404	404	3842	Central Park - 2	East Park Street - 4	Franklin	4	National Grid	1924	1924	124	19.20	N/A
405	405	3843	Central Park - 3	East Park Street - 5	Franklin	4	National Grid	1924	1924	124	19.20	N/A
406	406	3848	Central Park - 4	Office	Franklin	1	National Grid	1092	1092	N/A	19.20	N/A
407	407	3839	Central Park - 5	Wachusett Street - 10	Franklin	4	National Grid	1924	1924	124	19.20	N/A
408	408	3847	Central Park - 6	Wachusett Street - 9	Franklin	4	National Grid	1924	1924	124	19.20	N/A
409	409	4042	Pioneer Terrace	1 & 2 Pioneer	Salem	16	National Grid	10042	10042	2042	12.23	N/A
410	410	4043	Pioneer Terrace	10 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
411	411	4044	Pioneer Terrace	11 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
412	412	4045	Pioneer Terrace	12 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
413	413	4046	Pioneer Terrace	13 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
414	414	4047	Pioneer Terrace	3 & 4 Pioneer	Salem	16	National Grid	10042	10042	2042	12.23	N/A
415	415	4048	Pioneer Terrace	5 & 6 Pioneer	Salem	16	National Grid	10042	10042	2042	12.23	N/A
416	416	4049	Pioneer Terrace	7 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
417	417	4051	Pioneer Terrace	8 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
418	418	4054	Pioneer Terrace	9 Pioneer	Salem	8	National Grid	5540	5540	1540	12.23	N/A
419	419	4055	Pioneer Terrace	Pioneer Community Room	Salem	1	National Grid	2100	2100	N/A	12.23	N/A
420	420	4057	Norton Terrace	1 Norton Terrace	Salem	8	National Grid	4998	4998	998	16.09	N/A
421	421	4058	Norton Terrace	2 Norton Terrace	Salem	8	National Grid	4998	4998	998	16.09	N/A
422	422	4059	Norton Terrace	3 Norton Terrace	Salem	4	National Grid	2598	2598	N/A	16.09	N/A
423	423	3970	Morency Manor	45 St. Peter Street	Salem	54	National Grid	24750	24750	0	10.92	N/A
424	424	4036	Colonial Terrace	Bldgs 5, 6 & 7	Salem	12	National Grid	7256	7256	1256	14.58	N/A
425	425	4035	Colonial Terrace	Bldgs 1, 2, 3 & 4	Salem	16	National Grid	9658	9658	1658	14.58	N/A
426	426	4037	Colonial Terrace	Bldgs 8, 9 & 10	Salem	12	National Grid	7256	7256	1256	14.58	N/A
427	427	4038	Colonial Terrace	Building 10	Salem	1	National Grid	1240	1240	N/A	9.74	N/A
428	428	1341	Ruane Building	3 Broad Street	Salem	14	National Grid	7374	7374	N/A	7.56	N/A
429	429	4346	ADA - Colombia Valley	4 COLUMBIA STREET - Community	Adams	1	National Grid	1898	1898	0	19.58	N/A
430	430	3989	Adams Court	1 - 3 Adams Court	Revere	8	National Grid	8856	8856	856	10.03	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
431	431	3991	Adams Court	2 - 4 Adams Court	Revere	8	National Grid	8856	8856	856	10.03	N/A
432	432	3992	Adams Court	5 - 7 Adams Court	Revere	8	National Grid	8856	8856	856	10.03	N/A
433	433	3993	Adams Court	6 - 14 Adams Court	Revere	20	National Grid	21500	21500	11500	10.03	N/A
434	434	3994	Adams Court	9 - 15 Adams Court	Revere	16	National Grid	18000	18000	10000	10.03	N/A
435	435	3995	Adams Court	Community Room	Revere	1	National Grid	1664	1664	0	10.03	N/A
436	436	4355	Ashland Park	150 Ashland Street	North Adams	126	National Grid	81509	81509	27677	9.02	N/A
437	437	4278	Chesnut Gardens	301 Essex Street	Lynn	65	National Grid	67558	67558	23176	2.33	N/A
438	438	4335	Everett Villa Co-op	66 Main Street	Everett	78	National Grid	64550	64550	22430	8.71	N/A
439	439	4337	Friendly Garden Co-op	235 Revere Street	Revere	107	National Grid	83618	83618	21000	6.63	N/A
440	440	3855	FRN - Central Park - 3	Community Hall	Franklin	1	National Grid	3776	3776	0	10.65	N/A
441	441	3982	Garfield and Eliot	106 - 122 Eliot Road	Revere	18	National Grid	13280	13280	4280	5.67	N/A
442	442	3984	Garfield and Eliot	126 - 134 Eliot Road	Revere	12	National Grid	6660	6660	660	5.67	N/A
443	443	3983	Garfield and Eliot	186 - 194 Garfield Avenue	Revere	16	National Grid	8706	8706	706	5.67	N/A
444	444	3998	Hyman Towers	50 Walnut Avenue	Revere	106	National Grid	94600	94600	41600	17.80	N/A
445	445	3996	Liston Towers	45 Dolphin Avenue	Revere	103	National Grid	77315	77315	25815	15.04	N/A
446	446	4039	LOW - 572-610 Lakeview	572-586 Lakeview - 1	Lowell	4	National Grid	1419	1419	19	24.64	N/A
447	447	4050	LOW - 572-610 Lakeview	572-586 Lakeview - 2	Lowell	4	National Grid	1419	1419	19	24.64	N/A
448	448	4052	LOW - 572-610 Lakeview	588-594 Lakeview - 3	Lowell	4	National Grid	1419	1419	19	24.64	N/A
449	449	4053	LOW - 572-610 Lakeview	596-610 Lakeview - 4	Lowell	4	National Grid	1419	1419	19	24.64	N/A
450	450	4056	LOW - 572-610 Lakeview	596-610 Lakeview - 5	Lowell	4	National Grid	1419	1419	19	24.64	N/A
451	451	/362	New North Canal	281-287 Moody St	Lowell	4	National Grid	2816	2816	0	7.46	N/A
452	452	/372	New North Canal	289-291 Moody St	Lowell	8	National Grid	11264	11264	0	7.46	N/A
453	453	/382	New North Canal	301-307 Moody St	Lowell	4	National Grid	2816	2816	0	7.46	N/A
454	454	/373	New North Canal	309-313 Moody St	Lowell	15	National Grid	10978	10978	0	7.46	N/A
455	455	/383	New North Canal	323-329 Moody St	Lowell	4	National Grid	2816	2816	0	7.46	N/A
456	456	/361	New North Canal	33 Race St.	Lowell	6	National Grid	3498	3498	0	7.46	N/A
457	457	4468	QUI - David J. Crowley	11 SNUG HARBOR CT	Quincy	4	National Grid	1249	1249	0	8.06	N/A
458	458	4469	QUI - David J. Crowley	2 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	15.63	N/A
459	459	4470	QUI - David J. Crowley	29 SHED ST	Quincy	4	National Grid	1658	1658	0	8.06	N/A
460	460	4472	QUI - David J. Crowley	384 PALMER ST	Quincy	2	National Grid	1120	1120	0	9.35	N/A
461	461	4473	QUI - David J. Crowley	4 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	12.87	N/A
462	462	4474	QUI - David J. Crowley	5 SHED ST	Quincy	4	National Grid	1658	1658	0	12.87	N/A
463	463	4475	QUI - David J. Crowley	5 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	12.87	N/A
464	464	4476	QUI - David J. Crowley	6 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	9.35	N/A
465	465	4477	QUI - David J. Crowley	7 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	9.35	N/A
466	466	4478	QUI - David J. Crowley	8 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	8.06	N/A
467	467	4479	QUI - David J. Crowley	9 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	8.06	N/A
468	468	4491	QUI - Louie George	31 MARTENSEN STREET - 9	Quincy	4	National Grid	1276	1276	0	6.63	N/A
469	469	4482	QUI - Louie George	35 MARTENSEN STREET - 10	Quincy	4	National Grid	1702	1702	0	6.63	N/A
470	470	4483	QUI - Louie George	39 MARTENSEN STREET - 11	Quincy	4	National Grid	1702	1702	0	6.63	N/A
471	471	4490	QUI - Louie George	45-47 MARTENSEN STREET - 8	Quincy	8	National Grid	4152	4152	152	6.63	N/A
472	472	4481	QUI - Louie George	53-51 MARTENSEN STREET - 1	Quincy	8	National Grid	4152	4152	152	6.63	N/A
473	473	4484	QUI - Louie George	57-59 MERTENSEN STREET - 2	Quincy	8	National Grid	4152	4152	152	6.63	N/A
474	474	4485	QUI - Louie George	63-61 MARTENSEN STREET - 3	Quincy	8	National Grid	4152	4152	152	6.63	N/A
475	475	4486	QUI - Louie George	67-65 MARTENSEN STREET - 4	Quincy	8	National Grid	4152	4152	152	6.63	N/A
476	476	4487	QUI - Louie George	69-71 MARTENSEN STREET - 5	Quincy	8	National Grid	4152	4152	152	6.63	N/A
477	477	4488	QUI - Louie George	73-75 MARTENSEN STREET - 6	Quincy	8	National Grid	4152	4152	152	6.63	N/A
478	478	4489	QUI - Louie George	77-79 MARTENSEN STREET - 7	Quincy	8	National Grid	4152	4152	152	6.63	N/A
479	479	3447	RAN - Walter Lyon	ELDERLY DRIVE - Community	Randolph	1	National Grid	5824	5824	1824	3.53	N/A
480	480	4145	SLM - 117 Congress Street	117 Congress St.	Salem	8	National Grid	16000	16000	8000	N/A	1.25
481	481	4146	SLM - 26 Prince Street/ 33 Park Str	26 Prince St./33 Park St.	Salem	6	National Grid	9000	9000	3000	N/A	2.35
482	482	3973	SLM - Charter Street	27 Charter Street	Salem	110	National Grid	109392	109392	54392	12.88	N/A
483	483	3974	SLM - Dalton Residence	205 Bridge Street	Salem	35	National Grid	23385	23385	2385	6.24	N/A
484	484	3969	SLM - Leefort Terrace	14 - 28 Even	Salem	8	National Grid	4250	4250	250	5.28	N/A
485	485	3979	SLM - Leefort Terrace	19 - 33 Odd	Salem	8	National Grid	4250	4250	250	4.84	N/A
486	486	3968	SLM - Leefort Terrace	2 - 12 Even	Salem	6	National Grid	2950	2950	0	5.06	N/A
487	487	3980	SLM - Leefort Terrace	3 - 17 Odd	Salem	8	National Grid	4250	4250	250	4.54	N/A
488	488	3976	SLM - Leefort Terrace	30 - 44 Even	Salem	8	National Grid	4250	4250	250	6.53	N/A
489	489	3978	SLM - Leefort Terrace	35 - 41 Odd	Salem	8	National Grid	4250	4250	250	2.62	N/A
490	490	3977	SLM - Leefort Terrace	46 - 60 Even	Salem	8	National Grid	4250	4250	250	4.05	N/A
491	491	4060	SLM - Phillips House	84 Essex Street	Salem	2	National Grid	2400	2400	1200	6.13	N/A
492	492	4155	SLM - Phillips House	86 Essex Street	Salem	13	National Grid	16000	16000	400	0.95	N/A
493	493	4375	Spring Park	45 Spring Street	North Adams	53	National Grid	42417	42417	11298	19.85	N/A
494	494	4135	SWN - Martin Court	100 GARDNER NECK ROAD - A	Swansea	8	National Grid	5760	5760	960	10.78	N/A
495	495	4143	SWN - Martin Court	100 GARDNER NECK ROAD - Admin Bldg	Swansea	1	National Grid	1800	1800	0	10.78	N/A
496	496	4136	SWN - Martin Court	100 GARDNER NECK ROAD - B	Swansea	8	National Grid	5760	5760	960	10.78	N/A
497	497	4137	SWN - Martin Court	100 GARDNER NECK ROAD - C	Swansea	8	National Grid	5760	5760	960	10.78	N/A
498	498	4138	SWN - Martin Court	100 GARDNER NECK ROAD - D	Swansea	8	National Grid	5760	5760	960	10.78	N/A
499	499	4139	SWN - Martin Court	100 GARDNER NECK ROAD - E	Swansea	8	National Grid	5760	5760	960	10.78	N/A
500	500	4140	SWN - Martin Court	100 GARDNER NECK ROAD - F	Swansea	8	National Grid	5760	5760	960	10.78	N/A
501	501	4141	SWN - Martin Court	100 GARDNER NECK ROAD - G	Swansea	8	National Grid	5760	5760	960	10.78	N/A
502	502	4142	SWN - Martin Court	100 GARDNER NECK ROAD - H	Swansea	8	National Grid	5760	5760	960	10.78	N/A
503	503	3736	Tecumseh Mill Apartments	164 Hartwell St.	Fall River	125	National Grid	111722	111722	0	1.78	N/A
504	504	4216	TEW - Carnation Drive	Carnation Drive - 1	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
505	505	4225	TEW - Carnation Drive	Carnation Drive - 10	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
506	506	4226	TEW - Carnation Drive	Carnation Drive - 11	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
507	507	4227	TEW - Carnation Drive	Carnation Drive - 12	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
508	508	4228	TEW - Carnation Drive	Carnation Drive - 13	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
509	509	4229	TEW - Carnation Drive	Carnation Drive - 14	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
510	510	4230	TEW - Carnation Drive	Carnation Drive - 15	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
511	511	4231	TEW - Carnation Drive	Carnation Drive - 16	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
512	512	4232	TEW - Carnation Drive	Carnation Drive - 17	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
513	513	4233	TEW - Carnation Drive	Carnation Drive - 18	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
514	514	4240	TEW - Carnation Drive	Carnation Drive - 19	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
515	515	4217	TEW - Carnation Drive	Carnation Drive - 2	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
516	516	4241	TEW - Carnation Drive	Carnation Drive - 20	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
517	517	4218	TEW - Carnation Drive	Carnation Drive - 3	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
518	518	4219	TEW - Carnation Drive	Carnation Drive - 4	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
519	519	4220	TEW - Carnation Drive	Carnation Drive - 5	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
520	520	4221	TEW - Carnation Drive	Carnation Drive - 6	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
521	521	4222	TEW - Carnation Drive	Carnation Drive - 7	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
522	522	4223	TEW - Carnation Drive	Carnation Drive - 8	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
523	523	4224	TEW - Carnation Drive	Carnation Drive - 9	Tewksbury	4	National Grid	1896	1896	296	5.81	N/A
524	524	4242	TEW - Carnation Drive	Carnation Drive - Community	Tewksbury	1	National Grid	1222	1222	0	5.81	N/A
525	525	4247	TEW - Saunders Circle	Saunders Circle - 1	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
526	526	4256	TEW - Saunders Circle	Saunders Circle - 10	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
527	527	4257	TEW - Saunders Circle	Saunders Circle - 11	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
528	528	4248	TEW - Saunders Circle	Saunders Circle - 2	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
529	529	4249	TEW - Saunders Circle	Saunders Circle - 3	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
530	530	4250	TEW - Saunders Circle	Saunders Circle - 4	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
531	531	4251	TEW - Saunders Circle	Saunders Circle - 5	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
532	532	4252	TEW - Saunders Circle	Saunders Circle - 6	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
533	533	4254	TEW - Saunders Circle	Saunders Circle - 8	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
534	534	4255	TEW - Saunders Circle	Saunders Circle - 9	Tewksbury	6	National Grid	5772	5772	972	10.94	N/A
535	535	4253	TEW - Saunders Circle	Saunders Circle - Community - 7	Tewksbury	1	National Grid	3141	3141	0	10.94	N/A
536	536	4672	BEV - Cedar St. Apartments	CEDAR ST - A	Beverly	14	National Grid	6278	6278	678	5.19	N/A
537	537	4673	BEV - Cedar St. Apartments	CEDAR ST - B	Beverly	12	National Grid	5447	5447	647	5.19	N/A
538	538	4674	BEV - Cedar St. Apartments	CEDAR ST - C	Beverly	12	National Grid	5447	5447	647	5.19	N/A
539	539	4675	BEV - Cedar St. Apartments	CEDAR ST - D	Beverly	12	National Grid	5513	5513	713	5.19	N/A
540	540	4699	BEV - Essex Apartments	ESSEX ST - A	Beverly	8	National Grid	3878	3878	678	8.76	N/A
541	541	4700	BEV - Essex Apartments	ESSEX ST - B	Beverly	8	National Grid	3878	3878	678	8.76	N/A
542	542	4701	BEV - Essex Apartments	ESSEX ST - C	Beverly	8	National Grid	3878	3878	678	8.76	N/A
543	543	4702	BEV - Essex Apartments	ESSEX ST - D	Beverly	8	National Grid	3878	3878	678	8.76	N/A
544	544	4703	BEV - Essex Apartments	ESSEX ST - E	Beverly	6	National Grid	3097	3097	697	8.76	N/A
545	545	4704	BEV - Essex Apartments	ESSEX ST - F	Beverly	4	National Grid	1939	1939	339	8.76	N/A
546	546	4705	BEV - Essex Apartments	ESSEX ST - G	Beverly	4	National Grid	1939	1939	339	8.76	N/A
547	547	4706	BEV - Essex Apartments	ESSEX ST - H	Beverly	4	National Grid	1939	1939	339	8.76	N/A
548	548	4684	BEV - Kelleher Road Apartments	A1 Kelleher Road	Beverly	8	National Grid	3599	3599	399	6.84	N/A
549	549	4685	BEV - Kelleher Road Apartments	A2 Kelleher Road	Beverly	8	National Grid	3599	3599	399	6.84	N/A
550	550	4686	BEV - Kelleher Road Apartments	B1 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.84	N/A
551	551	4687	BEV - Kelleher Road Apartments	B2 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.84	N/A
552	552	4688	BEV - Kelleher Road Apartments	B3 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.84	N/A
553	553	4689	BEV - Kelleher Road Apartments	B4 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.84	N/A
554	554	4690	BEV - Kelleher Road Apartments	C1 Kelleher Road	Beverly	4	National Grid	1800	1800	N/A	6.84	N/A
555	555	4691	BEV - Kelleher Road Apartments	C2 Kelleher Road	Beverly	4	National Grid	1800	1800	N/A	6.84	N/A
556	556	4693	BEV - Kelleher Road Apartments	D1 Kelleher Road	Beverly	2	National Grid	906	906	N/A	6.84	N/A
557	557	4694	BEV - Kelleher Road Apartments	D2 Kelleher Road	Beverly	2	National Grid	906	906	N/A	6.84	N/A
558	558	4695	BEV - Kelleher Road Apartments	D3 Kelleher Road	Beverly	2	National Grid	906	906	N/A	6.84	N/A
559	559	4692	BEV - Kelleher Road Apartments	Kelleher Road Community	Beverly	1	National Grid	2160	2160	0	6.84	N/A
560	560	4716	BEV - Roger Conant Apartments	77 SOHIER RD - Community	Beverly	1	National Grid	2583	2583	0	14.49	N/A
561	561	4709	BEV - Roger Conant Apartments	77 SOHIER RD A1	Beverly	9	National Grid	5388	5388	888	14.49	N/A
562	562	4710	BEV - Roger Conant Apartments	77 SOHIER RD A2	Beverly	9	National Grid	5388	5388	888	14.49	N/A
563	563	4712	BEV - Roger Conant Apartments	77 SOHIER RD B1	Beverly	8	National Grid	4464	4464	864	14.49	N/A
564	564	4713	BEV - Roger Conant Apartments	77 SOHIER RD B2	Beverly	8	National Grid	4464	4464	864	14.49	N/A
565	565	4714	BEV - Roger Conant Apartments	77 SOHIER RD B3	Beverly	8	National Grid	4464	4464	864	14.49	N/A
566	566	4715	BEV - Roger Conant Apartments	77 SOHIER RD B4	Beverly	8	National Grid	4464	4464	864	14.49	N/A
567	567	4776	BIL - 33 Talbot Ave	33 Talbot Ave	Billerica	33	National Grid	22050	22050	2250	9.23	N/A
568	568	4762	BIL - River St	13 River - Community	Billerica	1	National Grid	1500	1500	0	2.51	N/A
569	569	4754	BIL - River St	13 RIVER ST - 1	Billerica	8	National Grid	5370	5370	570	2.51	N/A
570	570	4755	BIL - River St	13 RIVER ST - 2	Billerica	8	National Grid	5370	5370	570	2.51	N/A
571	571	4756	BIL - River St	13 RIVER ST - 3	Billerica	8	National Grid	5370	5370	570	2.51	N/A
572	572	4757	BIL - River St	13 RIVER ST - 4	Billerica	8	National Grid	5370	5370	570	2.51	N/A
573	573	4758	BIL - River St	13 RIVER ST - 5	Billerica	8	National Grid	5370	5370	570	2.51	N/A
574	574	4759	BIL - River St	13 RIVER ST - 6	Billerica	8	National Grid	5370	5370	570	2.51	N/A
575	575	4760	BIL - River St	13 RIVER ST - 7	Billerica	8	National Grid	5370	5370	570	2.51	N/A
576	576	4761	BIL - River St	13 RIVER ST - 8	Billerica	8	National Grid	5370	5370	570	2.51	N/A
577	577	4769	BIL - River St	16 RIVER ST - 1	Billerica	16	National Grid	17072	17072	2672	2.51	N/A
578	578	4770	BIL - River St	16 RIVER ST - 2	Billerica	8	National Grid	6656	6656	1056	2.51	N/A
579	579	4771	BIL - River St	16 RIVER ST - 3	Billerica	16	National Grid	12262	12262	1862	2.51	N/A
580	580	4772	BIL - River St	16 RIVER ST - 4	Billerica	16	National Grid	12262	12262	1862	2.51	N/A
581	581	4773	BIL - River St	16 RIVER ST - 5	Billerica	16	National Grid	17072	17072	2672	2.51	N/A
582	582	4774	BIL - River St	16 RIVER ST - 6	Billerica	8	National Grid	6656	6656	1056	2.51	N/A
583	583	4775	BIL - River St	16 River St. Community	Billerica	1	National Grid	2965	2965	0	2.51	N/A
584	584	4856	CLI - Presentation Apartments	309 CHURCH STREET - Highrise	Clinton	48	National Grid	37545	37545	11545	4.94	N/A
585	585	4857	CLI - Presentation Apartments	309 CHURCH STREET - Victoria	Clinton	8	National Grid	12018	12018	3518	2.46	N/A
586	586	4850	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 1A	Clinton	8	National Grid	4462	4462	462	4.80	N/A
587	587	4851	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 1B	Clinton	8	National Grid	4624	4624	624	4.80	N/A
588	588	4852	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 2A	Clinton	8	National Grid	4624	4624	624	4.80	N/A
589	589	4853	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 2B	Clinton	8	National Grid	4624	4624	624	4.80	N/A
590	590	4854	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 3A	Clinton	8	National Grid	4624	4624	624	4.80	N/A
591	591	4855	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - Community	Clinton	1	National Grid	1600	1600	0	4.80	N/A
592	592	2882	Hancock St	19 Hancock St	Everett	35	National Grid	8100	6075	2850	9.92	N/A
593	593	4790	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 1	Hanson	4	National Grid	3028	3028	628	2.36	N/A
594	594	4791	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 10	Hanson	4	National Grid	2600	2600	400	3.25	N/A
595	595	4792	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 11	Hanson	4	National Grid	2600	2600	400	2.99	N/A
596	596	4793	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 12	Hanson	4	National Grid	2600	2600	400	3.29	N/A
597	597	4794	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 13	Hanson	4	National Grid	2600	2600	400	3.65	N/A
598	598	4795	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 14	Hanson	4	National Grid	3028	3028	628	3.09	N/A
599	599	4796	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 15	Hanson	4	National Grid	2600	2600	400	4.07	N/A
600	600	4797	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 16	Hanson	4	National Grid	2600	2600	400	4.36	N/A
601	601	4798	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 17	Hanson	4	National Grid	3028	3028	628	3.70	N/A
602	602	4800	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 2	Hanson	4	National Grid	2600	2600	400	3.69	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
603	603	4801	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 3	Hanson	4	National Grid	2600	2600	400	3.39	N/A
604	604	4802	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 4	Hanson	4	National Grid	2600	2600	400	4.09	N/A
605	605	4803	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 5	Hanson	4	National Grid	3028	3028	628	4.22	N/A
606	606	4804	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 6	Hanson	4	National Grid	2600	2600	400	2.62	N/A
607	607	4805	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 7	Hanson	4	National Grid	2600	2600	400	3.95	N/A
608	608	4806	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 8	Hanson	4	National Grid	2600	2600	400	4.18	N/A
609	609	4807	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 9	Hanson	4	National Grid	2600	2600	400	3.73	N/A
610	610	4799	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - Community	Hanson	1	National Grid	4312	4312	0	12.86	N/A
611	611	3777	LAW - Hancock Courts	1 - 19 SAVOIE & 29 - 45 HANCOCK - 9	Lawrence	18	National Grid	15936	15936	6936	7.04	N/A
612	612	3779	LAW - Hancock Courts	1 - 25 BERNARD AVENUE - 11	Lawrence	12	National Grid	10530	10530	4530	8.54	N/A
613	613	3773	LAW - Hancock Courts	1 - 37 LEONARD AVENUE - 5	Lawrence	18	National Grid	15585	15585	6585	9.03	N/A
614	614	3769	LAW - Hancock Courts	141 - 163 BERNARD AVENUE - 1	Lawrence	12	National Grid	10530	10530	4530	8.03	N/A
615	615	3778	LAW - Hancock Courts	2 - 24 BERNARD AVENUE - 10	Lawrence	12	National Grid	11484	11484	5484	9.11	N/A
616	616	3772	LAW - Hancock Courts	2 - 36 LEONARD AVE - 4	Lawrence	18	National Grid	15714	15714	6714	8.47	N/A
617	617	3774	LAW - Hancock Courts	20 - 60 BERNARD AVENUE - 6	Lawrence	18	National Grid	15876	15876	6876	8.25	N/A
618	618	3776	LAW - Hancock Courts	26 - 42 BERNARD AVE & 21 - 37 SAVOIE A	Lawrence	18	National Grid	15936	15936	6936	11.30	N/A
619	619	3775	LAW - Hancock Courts	47 - 63 HANCOCK & 2 - 18 SAVOIE AVENU	Lawrence	18	National Grid	15936	15936	6936	7.84	N/A
620	620	3771	LAW - Hancock Courts	62 - 90 BERNARD AVENUE - 3	Lawrence	15	National Grid	13122	13122	5622	9.23	N/A
621	621	2858	NHM - (SS) 256 State Street	256 State Street	Northampton	6	National Grid	4959	4959	429	1.38	N/A
622	622	3981	SLM - Leefort Terrace	Leefort Community Building	Salem	1	National Grid	1000	1000	0	7.52	N/A
623	623	4094	WIN - Golden Circle or Drive	01 Golden Circle	WInthrop	8	National Grid	4800	4800	400	19.37	N/A
624	624	4095	WIN - Golden Circle or Drive	02 Golden Drive	WInthrop	8	National Grid	4990	4990	590	15.73	N/A
625	625	4096	WIN - Golden Circle or Drive	03-05 Golden Drive	WInthrop	16	National Grid	8856	8856	856	19.37	N/A
626	626	4098	WIN - Golden Circle or Drive	04 Golden Drive	WInthrop	8	National Grid	4990	4990	190	15.73	N/A
627	627	4099	WIN - Golden Circle or Drive	06 Golden Drive	WInthrop	8	National Grid	4990	4990	190	24.09	N/A
628	628	4100	WIN - Golden Circle or Drive	07 Golden Drive	WInthrop	8	National Grid	4990	4990	190	19.37	N/A
629	629	4101	WIN - Golden Circle or Drive	08 Golden Drive	WInthrop	8	National Grid	2400	2400	200	24.09	N/A
630	630	4103	WIN - Golden Circle or Drive	10-12 Golden Drive	WInthrop	16	National Grid	8856	8856	216	21.52	N/A
631	631	4104	WIN - Golden Circle or Drive	11 Golden Drive	WInthrop	8	National Grid	4990	4990	190	33.00	N/A
632	632	4105	WIN - Golden Circle or Drive	13 Golden Drive	WInthrop	8	National Grid	4990	4990	190	19.36	N/A
633	633	4106	WIN - Golden Circle or Drive	14 Golden Drive	WInthrop	8	National Grid	4990	4990	190	21.52	N/A
634	634	4107	WIN - Golden Circle or Drive	15-17 Golden Drive	WInthrop	16	National Grid	8856	8856	456	19.36	N/A
635	635	4108	WIN - Golden Circle or Drive	16-18 Golden Drive	WInthrop	16	National Grid	8856	8856	456	21.52	N/A
636	636	4109	WIN - Golden Circle or Drive	19-21 Golden Drive	WInthrop	16	National Grid	8856	8856	456	19.36	N/A
637	637	4110	WIN - Golden Circle or Drive	20 GOLDEN DRIVE	WInthrop	8	National Grid	4990	4990	190	19.49	N/A
638	638	4111	WIN - Golden Circle or Drive	22-24 GOLDEN DRIVE	WInthrop	16	National Grid	8856	8856	456	19.49	N/A
639	639	4102	WIN - Golden Circle or Drive	COMMUNITY BUILDING - 09 Golden Drive	WInthrop	1	National Grid	2400	2400	0	33.00	N/A
640	640	4084	WIN - Overlook Drive	Overlook Drive 01	Winthrop	12	National Grid	11200	11200	400	12.45	N/A
641	641	4085	WIN - Overlook Drive	Overlook Drive 02	Winthrop	8	National Grid	8000	8000	200	12.45	N/A
642	642	4086	WIN - Overlook Drive	Overlook Drive 03	Winthrop	12	National Grid	11200	11200	400	11.00	N/A
643	643	5097	HAM - Elderly	129 Railroad Avenue	Hamilton	1	National Grid	1240	1240	0	0.13	N/A
644	644	4762	BIL - River St	13 River - Community	Billerica	1	National Grid	1500	1500	0	2.51	N/A
645	645	5165	ATT - Hillcrest Oaks	HANISCH ROAD - 14	Attleboro	4	National Grid	3680	3680	0	N/A	1.14
646	646	5167	ATT - Hillcrest Oaks	CARLON STREET - 13	Attleboro	5	National Grid	4932	4932	0	N/A	1.06
647	647	5171	ATT - Hillcrest Oaks	SOUTH AVE. - 6	Attleboro	8	National Grid	5670	5670	0	N/A	0.93
648	648	4082	WIN - Viking Gardens	107 Putnam - Community Bldg	Winthrop	1	National Grid	800	800	0	6.62	N/A
649	649	5162	ATT - Hillcrest Oaks	CARLON STREET - 11	Attleboro	4	National Grid	3344	3344	0	N/A	1.68
650	650	5168	ATT - Hillcrest Oaks	SNELL STREET - 12	Attleboro	6	National Grid	5140	5140	0	N/A	1.10
651	651	4754	BIL - River St	13 RIVER ST - 1	Billerica	8	National Grid	5370	5370	570	2.51	N/A
652	652	4755	BIL - River St	13 RIVER ST - 2	Billerica	8	National Grid	5370	5370	570	2.51	N/A
653	653	4756	BIL - River St	13 RIVER ST - 3	Billerica	8	National Grid	5370	5370	570	2.51	N/A
654	654	4757	BIL - River St	13 RIVER ST - 4	Billerica	8	National Grid	5370	5370	570	2.51	N/A
655	655	4758	BIL - River St	13 RIVER ST - 5	Billerica	8	National Grid	5370	5370	570	2.51	N/A
656	656	4759	BIL - River St	13 RIVER ST - 6	Billerica	8	National Grid	5370	5370	570	2.51	N/A
657	657	4760	BIL - River St	13 RIVER ST - 7	Billerica	8	National Grid	5370	5370	570	2.51	N/A
658	658	5169	ATT - Hillcrest Oaks	CARLON ST. - 10	Attleboro	6	National Grid	5544	5544	0	N/A	1.09
659	659	4693	BEV - Kelleher Road Apartments	D1 Kelleher Road	Beverly	2	National Grid	906	906	0	6.74	N/A
660	660	4694	BEV - Kelleher Road Apartments	D2 Kelleher Road	Beverly	2	National Grid	906	906	0	6.74	N/A
661	661	4695	BEV - Kelleher Road Apartments	D3 Kelleher Road	Beverly	2	National Grid	906	906	0	6.74	N/A
662	662	5172	ATT - Hillcrest Oaks	CARLON ST - 1	Attleboro	6	National Grid	6300	6300	0	N/A	0.98
663	663	5182	ATT - Hillcrest Oaks	HILLCREST DRIVE - 15	Attleboro	8	National Grid	7204	7204	0	N/A	0.90
664	664	5173	ATT - Hillcrest Oaks	SNELL ST - 2	Attleboro	6	National Grid	6300	6300	0	N/A	1.03
665	665	5184	ATT - Hillcrest Oaks	CARLON STREET - 8	Attleboro	8	National Grid	7402	7402	0	N/A	0.92
666	666	5183	ATT - Hillcrest Oaks	SOUTH AVE. - 7	Attleboro	8	National Grid	7402	7402	0	N/A	0.93
667	667	5174	ATT - Hillcrest Oaks	HILLCREST DR - 3	Attleboro	6	National Grid	6300	6300	0	N/A	1.09
668	668	5170	ATT - Hillcrest Oaks	SOUTH AVE. - 9	Attleboro	6	National Grid	5544	5544	0	N/A	1.29
669	669	4830	Union Street	31 Union Street	Hamilton	3	National Grid	2880	2880	0	2.50	N/A
670	670	5175	ATT - Hillcrest Oaks	CARLON ST - 4	Attleboro	6	National Grid	6300	6300	0	N/A	1.21
671	671	4846	CLI - 367 Water St.	367 Water - Community	Clinton	1	National Grid	1636	1636	0	7.40	N/A
672	672	4690	BEV - Kelleher Road Apartments	C1 Kelleher Road	Beverly	4	National Grid	1800	1800	0	6.74	N/A
673	673	4691	BEV - Kelleher Road Apartments	C2 Kelleher Road	Beverly	4	National Grid	1800	1800	0	6.74	N/A
674	674	5131	EVE - Whittier	12 Whittier Dr & 15 Lynn St - 13	Everett	4	National Grid	1900	1900	0	6.59	N/A
675	675	5144	EVE - Whittier	253 Shute St & 35 Whittier Dr	Everett	4	National Grid	1900	1900	0	6.59	N/A
676	676	5143	EVE - Whittier	255 Shute St & 31 Whittier Dr	Everett	4	National Grid	1900	1900	0	6.59	N/A
677	677	5130	EVE - Whittier	32 Whittier Dr & 33 Lynn St - 12	Everett	4	National Grid	1900	1900	0	6.59	N/A
678	678	4822	HAM - Elderly	125 Railroad Avenue	Hamilton	8	National Grid	5014	5014	1014	2.86	N/A
679	679	4847	CLI - 367 Water St.	367 WATER - 1	Clinton	4	National Grid	1935	1935	335	7.40	N/A
680	680	4841	CLI - 367 Water St.	367 WATER - 4	Clinton	4	National Grid	1935	1935	335	7.40	N/A
681	681	4843	CLI - 367 Water St.	367 WATER - 6	Clinton	4	National Grid	1935	1935	335	7.40	N/A
682	682	4845	CLI - 367 Water St.	367 WATER - 8	Clinton	4	National Grid	1935	1935	335	7.40	N/A
683	683	4823	HAM - Elderly	24 Rust Street	Hamilton	8	National Grid	5014	5014	1014	2.86	N/A
684	684	4692	BEV - Kelleher Road Apartments	Kelleher Road Community	Beverly	1	National Grid	2160	2160	0	6.74	N/A
685	685	4704	BEV - Essex Apartments	ESSEX ST - F	Beverly	4	National Grid	1939	1939	339	8.74	N/A
686	686	4705	BEV - Essex Apartments	ESSEX ST - G	Beverly	4	National Grid	1939	1939	339	8.74	N/A
687	687	4706	BEV - Essex Apartments	ESSEX ST - H	Beverly	4	National Grid	1939	1939	339	8.74	N/A
688	688	4825	HAM - Elderly	135 Railroad Avenue	Hamilton	8	National Grid	5014	5014	1014	3.59	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
689	689	4686	BEV - Kelleher Road Apartments	B1 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.74	N/A
690	690	4687	BEV - Kelleher Road Apartments	B2 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.74	N/A
691	691	4688	BEV - Kelleher Road Apartments	B3 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.74	N/A
692	692	4689	BEV - Kelleher Road Apartments	B4 Kelleher Road	Beverly	6	National Grid	2701	2701	301	6.74	N/A
693	693	4821	HAM - Elderly	30 Rust Street	Hamilton	8	National Grid	5014	5014	1014	3.82	N/A
694	694	5095	Bigelow Gardens	Bigelow Gardens - C	Lancaster	4	National Grid	1837	1837	0	10.45	N/A
695	695	5096	Bigelow Gardens	Bigelow Gardens - Community	Lancaster	1	National Grid	1860	1860	0	10.45	N/A
696	696	4081	WIN - Viking Gardens	107 Putnam - C	Winthrop	10	National Grid	3000	3000	0	6.62	N/A
697	697	4080	WIN - Viking Gardens	107 Putnam Street - B	Winthrop	10	National Grid	3000	3000	0	6.62	N/A
698	698	5142	EVE - Whittier	Community Building	Everett	1	National Grid	3150	3150	0	6.59	N/A
699	699	4839	CLI - 367 Water St.	367 WATER - 2	Clinton	6	National Grid	2889	2889	489	7.40	N/A
700	700	4840	CLI - 367 Water St.	367 WATER - 3	Clinton	6	National Grid	2889	2889	489	7.40	N/A
701	701	4842	CLI - 367 Water St.	367 WATER - 5	Clinton	6	National Grid	2889	2889	489	7.40	N/A
702	702	4844	CLI - 367 Water St.	367 WATER - 7	Clinton	6	National Grid	2889	2889	489	7.40	N/A
703	703	4824	HAM - Elderly	34 Rust Street	Hamilton	8	National Grid	5014	5014	1014	4.42	N/A
704	704	5108	Ramblewood Apts	176 Longmeadow Drive	Holbrook	31	National Grid	28536	28536	4280	N/A	5.45
705	705	4684	BEV - Kelleher Road Apartments	A1 Kelleher Road	Beverly	8	National Grid	3599	3599	399	6.74	N/A
706	706	4685	BEV - Kelleher Road Apartments	A2 Kelleher Road	Beverly	8	National Grid	3599	3599	399	6.74	N/A
707	707	5191	AND - Chestnut Court	D1 Memorial Circle	Andover	4	National Grid	3264	3264	0	7.50	N/A
708	708	5192	AND - Chestnut Court	D2 Memorial Circle	Andover	4	National Grid	3264	3264	0	7.50	N/A
709	709	5193	AND - Chestnut Court	D3 Memorial Circle	Andover	4	National Grid	3264	3264	0	7.50	N/A
710	710	5141	EVE - Whittier	11 & 15 Whittier Dr - 5	Everett	8	National Grid	3800	3800	0	6.59	N/A
711	711	5129	EVE - Whittier	16 Whittier Dr & 9 Proctor Rd - 11	Everett	8	National Grid	3800	3800	0	6.59	N/A
712	712	5135	EVE - Whittier	17 Lynn St & 3 Proctor Rd - 16	Everett	8	National Grid	3800	3800	0	6.59	N/A
713	713	5138	EVE - Whittier	23 & 27 Whittier Dr - 2	Everett	8	National Grid	3800	3800	0	6.59	N/A
714	714	5133	EVE - Whittier	237 Shute St & 37 Lynn St - 15	Everett	8	National Grid	3800	3800	0	6.59	N/A
715	715	5127	EVE - Whittier	28 Whittier Dr & 10 Proctor Rd - 10	Everett	8	National Grid	3800	3800	0	6.59	N/A
716	716	5136	EVE - Whittier	29 Lynn St & 4 Proctor Rd - 17	Everett	8	National Grid	3800	3800	0	6.59	N/A
717	717	5146	EVE - Whittier	36 Whittier Dr & 243 Schute St - 9	Everett	8	National Grid	3800	3800	0	6.59	N/A
718	718	5132	EVE - Whittier	8 Whittier Dr & 10 McKinley St - 14	Everett	8	National Grid	3800	3800	0	6.59	N/A
719	719	5137	EVE - Whittier	9 Lynn St & 4 McKinley St - 18	Everett	8	National Grid	3800	3800	0	6.59	N/A
720	720	5186	AND - Chestnut Court	C1 Memorial Circle	Andover	4	National Grid	3456	3456	0	7.50	N/A
721	721	5187	AND - Chestnut Court	C2 Memorial Circle	Andover	4	National Grid	3456	3456	0	7.50	N/A
722	722	5188	AND - Chestnut Court	C3 Memorial Circle	Andover	4	National Grid	3456	3456	0	7.50	N/A
723	723	5189	AND - Chestnut Court	C4 Memorial Circle	Andover	4	National Grid	3456	3456	0	7.50	N/A
724	724	5190	AND - Chestnut Court	C5 Memorial Circle	Andover	4	National Grid	3456	3456	0	7.50	N/A
725	725	4703	BEV - Essex Apartments	ESSEX ST - E	Beverly	6	National Grid	3097	3097	697	8.74	N/A
726	726	4826	HAM - Congregate	121 Railroad Avenue	Hamilton	12	National Grid	6270	6270	1254	4.44	N/A
727	727	5105	Ramblewood Apts	156 Longmeadow Drive	Holbrook	31	National Grid	28536	28536	4280	N/A	6.45
728	728	5084	Bigelow Gardens	Bigelow Gardens - A	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
729	729	5085	Bigelow Gardens	Bigelow Gardens - B	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
730	730	5086	Bigelow Gardens	Bigelow Gardens - D	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
731	731	5087	Bigelow Gardens	Bigelow Gardens - E	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
732	732	5088	Bigelow Gardens	Bigelow Gardens - F	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
733	733	5089	Bigelow Gardens	Bigelow Gardens - G	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
734	734	5090	Bigelow Gardens	Bigelow Gardens - J	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
735	735	5091	Bigelow Gardens	Bigelow Gardens - K	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
736	736	5092	Bigelow Gardens	Bigelow Gardens - L	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
737	737	5093	Bigelow Gardens	Bigelow Gardens - M	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
738	738	5094	Bigelow Gardens	Bigelow Gardens - N	Lancaster	6	National Grid	2750	2750	0	10.45	N/A
739	739	5026	Holbrook Court	1 HOLBROOK COURT	Holbrook	10	National Grid	7200	7200	2200	4.00	N/A
740	740	2996	EVE - Golden Age Circle	Golden Age Circle - 3	Everett	12	National Grid	6200	6200	1280	4.88	N/A
741	741	5148	EVE - Glendale Towers	Administration Building	Everett	1	National Grid	5320	5320	0	5.79	N/A
742	742	5113	Ramblewood Apts	189 Longmeadow Drive	Holbrook	31	National Grid	28536	28536	4280	N/A	7.33
743	743	5139	EVE - Whittier	17 & 19 Whittier Dr - 3	Everett	8	National Grid	4728	4728	1459	6.59	N/A
744	744	5126	EVE - Whittier	259 & 261 Shute St - 1	Everett	8	National Grid	4728	4728	1459	6.59	N/A
745	745	5140	EVE - Whittier	3 & & Whittier Dr - 4	Everett	8	National Grid	4728	4728	1459	6.59	N/A
746	746	5102	Holbrook Apts	139 Longmeadow Drive	Holbrook	29	National Grid	23880	23880	3582	N/A	8.90
747	747	4673	BEV - Cedar St. Apartments	CEDAR ST - B	Beverly	12	National Grid	5447	5447	647	6.02	N/A
748	748	4674	BEV - Cedar St. Apartments	CEDAR ST - C	Beverly	12	National Grid	5447	5447	647	6.02	N/A
749	749	5024	Holbrook Drive	1 HOLBROOK DRIVE Admin/Community	Holbrook	1	National Grid	2660	2660	0	12.40	N/A
750	750	5584	25 Washington Square	25 Washington Square	Haverhill	72	National Grid	70272	70272	66672	5.68	N/A
751	751	5195	AND - Chestnut Court	F1 Memorial Court	Andover	6	National Grid	8036	8036	0	7.47	N/A
752	752	5196	AND - Chestnut Court	F2 Memorial Circle	Andover	6	National Grid	8036	8036	0	7.47	N/A
753	753	5197	AND - Chestnut Court	G1 Memorial Circle	Andover	6	National Grid	9910	9910	0	7.47	N/A
754	754	5185	ATT - Hillcrest Oaks	CARLON ST - 5	Attleboro	3	National Grid	9622	9622	6622	N/A	3.58
755	755	5258	ATT - Maple Terrace	15-17 A-D Thacher Street - 5	Attleboro	8	National Grid	5000	5000	400	14.82	N/A
756	756	5241	ATT - Oakhurst	1-3 Nickerson Ct. - 8	Attleboro	8	National Grid	4200	4200	0	18.05	N/A
757	757	5238	ATT - Oakhurst	27-41 South Ave. - 3	Attleboro	8	National Grid	4200	4200	0	18.05	N/A
758	758	3017	BDG - Hemlock Drive	Community Building	Hemlock Drive	1	National Grid	3230	3230	0	17.76	N/A
759	759	5918	Binnall House	125 Connors Street	Gardner	134	National Grid	212088	212088	107148	1.20	N/A
760	760	5481	CHR - Meadowview	1-3 MEADOWVIEW DRIVE	Charlton	6	National Grid	6046	6046	2346	12.42	N/A
761	761	5482	CHR - Meadowview	2-4 MEADOWVIEW DRIVE	Charlton	8	National Grid	5470	5470	470	10.67	N/A
762	762	5483	CHR - Meadowview	5-7 MEADOWVIEW DRIVE	Charlton	8	National Grid	5470	5470	470	10.29	N/A
763	763	5484	CHR - Meadowview	6-8 MEADOWVIEW DRIVE	Charlton	8	National Grid	5470	5470	470	11.24	N/A
764	764	5700	Colonial Village	10/12 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
765	765	5701	Colonial Village	14/16 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
766	766	5702	Colonial Village	18/20 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
767	767	5703	Colonial Village	2/4 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
768	768	5704	Colonial Village	22/24 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
769	769	5706	Colonial Village	28/30 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
770	770	5707	Colonial Village	32/34 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
771	771	5708	Colonial Village	36/38 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
772	772	5709	Colonial Village	6/8 Village Drive	Northboro	8	National Grid	3672	3672	0	19.89	N/A
773	773	5705	Colonial Village	Community Building	Northboro	1	National Grid	2400	2400	0	19.89	N/A
774	774	2997	EVE - Glendale Towers	381 Ferry Street	Everett	120	National Grid	111612	111612	51612	5.81	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
775	775	2995	EVE - Golden Age Circle	1-27 Golden Age Circle	Everett	14	National Grid	6300	6300	560	6.15	N/A
776	776	2994	EVE - Golden Age Circle	2-30 Golden Age Circle	Everett	14	National Grid	6300	6300	560	5.73	N/A
777	777	5560	Harborview	60 ELM STREET - 1	Cohasset	4	National Grid	2918	2918	0	15.97	N/A
778	778	5548	Harborview	60 ELM STREET - 10	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
779	779	5549	Harborview	60 ELM STREET - 11	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
780	780	5550	Harborview	60 ELM STREET - 12	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
781	781	5561	Harborview	60 ELM STREET - 13	Cohasset	4	National Grid	2918	2918	0	15.97	N/A
782	782	5551	Harborview	60 ELM STREET - 14	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
783	783	5552	Harborview	60 ELM STREET - 15	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
784	784	5553	Harborview	60 ELM STREET - 16	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
785	785	5547	Harborview	60 Elm Street - 17 - Community	Cohasset	1	National Grid	1737	1737	0	15.97	N/A
786	786	5554	Harborview	60 ELM STREET - 2	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
787	787	5555	Harborview	60 ELM STREET - 3	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
788	788	5556	Harborview	60 ELM STREET - 4	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
789	789	5562	Harborview	60 ELM STREET - 5	Cohasset	4	National Grid	2918	2918	0	15.97	N/A
790	790	5557	Harborview	60 ELM STREET - 6	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
791	791	5558	Harborview	60 ELM STREET - 7	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
792	792	5559	Harborview	60 ELM STREET - 8	Cohasset	4	National Grid	2326	2326	0	15.97	N/A
793	793	5563	Harborview	60 ELM STREET - 9	Cohasset	4	National Grid	2918	2918	0	15.97	N/A
794	794	5001	HAV - Bradford Terrace	29-35 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	5.32	N/A
795	795	5005	HAV - Bradford Terrace	37-39 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	5.91	N/A
796	796	5000	HAV - Bradford Terrace	41-47 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	4.43	N/A
797	797	4999	HAV - Bradford Terrace	49-55 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	7.85	N/A
798	798	5004	HAV - Bradford Terrace	57-59 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	6.99	N/A
799	799	4998	HAV - Bradford Terrace	61-67 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	4.95	N/A
800	800	4997	HAV - Bradford Terrace	69-75 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	4.24	N/A
801	801	5003	HAV - Bradford Terrace	77-79 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	5.71	N/A
802	802	5002	HAV - Bradford Terrace	81-83 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	8.12	N/A
803	803	5534	HAV - Kennedy Circle	17 - 25 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	8.15	N/A
804	804	5530	HAV - Kennedy Circle	18 - 22 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	2.39	N/A
805	805	5531	HAV - Kennedy Circle	24 - 28 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	2.92	N/A
806	806	5535	HAV - Kennedy Circle	30 - 38 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	3.66	N/A
807	807	5533	HAV - Kennedy Circle	7 - 15 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	3.30	N/A
808	808	5532	HAV - Kennedy Circle	8 - 16 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	4.74	N/A
809	809	5099	Holbrook Apts	100 Longmeadow Drive	Holbrook	29	National Grid	19267	19267	1800	27.10	N/A
810	810	5100	Holbrook Apts	121 Longmeadow Drive	Holbrook	29	National Grid	19267	19267	1800	21.34	N/A
811	811	5101	Holbrook Apts	122 Longmeadow Drive	Holbrook	29	National Grid	19267	19267	1800	20.14	N/A
812	812	5103	Holbrook Apts	144 Longmeadow Drive	Holbrook	29	National Grid	19267	19267	1800	23.53	N/A
813	813	5426	Holbrook Apts	THH Longmeadow Drive	Holbrook	26	National Grid	26728	26728	0	N/A	1.57
814	814	5020	Holbrook Drive	1 HOLBROOK DRIVE 10/11	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
815	815	5021	Holbrook Drive	1 HOLBROOK DRIVE 12/13	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
816	816	5022	Holbrook Drive	1 HOLBROOK DRIVE 14/15	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
817	817	5023	Holbrook Drive	1 HOLBROOK DRIVE 16/17	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
818	818	5017	Holbrook Drive	1 HOLBROOK DRIVE 2/3	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
819	819	5016	Holbrook Drive	1 HOLBROOK DRIVE 4/5	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
820	820	5018	Holbrook Drive	1 HOLBROOK DRIVE 6/7	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
821	821	5019	Holbrook Drive	1 HOLBROOK DRIVE 8/9	Holbrook	8	National Grid	5376	5376	1376	12.33	N/A
822	822	5755	Joseph Crehan 667-2	23 - 31 Harrington Circle	Weymouth	12	National Grid	6674	6674	674	15.36	N/A
823	823	5756	Joseph Crehan 667-2	35 - 37 Harrington Circle	Weymouth	8	National Grid	4450	4450	450	15.36	N/A
824	824	5751	Joseph Crehan 667-2	41 - 53 Harrington Circle	Weymouth	16	National Grid	8800	8800	800	15.36	N/A
825	825	5752	Joseph Crehan 667-2	44 - 52 Harrington Circle	Weymouth	12	National Grid	6674	6674	674	15.36	N/A
826	826	5754	Joseph Crehan 667-2	6 - 14 Harrington Circle	Weymouth	12	National Grid	6674	6674	674	15.36	N/A
827	827	5757	Joseph Crehan 667-2	7 - 19 Harrington Circle	Weymouth	16	National Grid	8800	8800	800	15.36	N/A
828	828	5570	Julian D. Steele	762 - 770 Washington Street	Haverhill	20	National Grid	14400	14400	4464	4.83	N/A
829	829	5572	Julian D. Steele	772 Washington Street	Haverhill	1	National Grid	2664	2664	0	4.83	N/A
830	830	5566	Julian D. Steele	774 - 778 Washington Street	Haverhill	12	National Grid	8800	8800	2728	4.83	N/A
831	831	5567	Julian D. Steele	780 - 784 Washington Street	Haverhill	12	National Grid	8800	8800	2728	4.83	N/A
832	832	5565	Julian D. Steele	786-790 Washington Street	Haverhill	12	National Grid	8800	8800	2728	4.83	N/A
833	833	5568	Julian D. Steele	792 - 796 Washington Street	Haverhill	12	National Grid	8800	8800	2728	4.83	N/A
834	834	5564	Julian D. Steele	798 - 802 Washington Street	Haverhill	12	National Grid	8800	8800	2728	4.83	N/A
835	835	5569	Julian D. Steele	804 - 808 Washington Street	Haverhill	12	National Grid	8800	8800	2728	4.83	N/A
836	836	5529	Kennedy Circle	1 - 5 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	2.47	N/A
837	837	5528	Kennedy Circle	2 - 6 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	5.17	N/A
838	838	5432	King's Lynne Apts	115 Newcastle Street	Lynn	54	National Grid	40000	40000	3088	23.97	N/A
839	839	3770	LAW - Hancock Courts	92 - 162 BERNARD AVE - 2	Lawrence	36	National Grid	35190	35190	8790	8.30	N/A
840	840	3780	LAW - Hancock Courts	Administration Building	Lawrence	1	National Grid	1200	1200	0	131.63	N/A
841	841	6082	LYN - Center St	77 Center St	Lynn	2	National Grid	1716	1716	0	N/A	0.84
842	842	6083	LYN - Empire	114 Empire Street	Lynn	3	National Grid	5208	3906	1302	N/A	1.54
843	843	5839	LYN - Essex and Tilton	10 - 16 Tilton	Lynn	16	National Grid	9752	9752	1752	5.37	N/A
844	844	5838	LYN - Essex and Tilton	2 - 8 Tilton	Lynn	16	National Grid	9752	9752	1752	9.69	N/A
845	845	5840	LYN - Essex and Tilton	326 Essex Street	Lynn	16	National Grid	8134	8134	134	7.89	N/A
846	846	6055	LYN - Gaggiano Plaza	170 SOUTH COMMON ST	Lynn	105	National Grid	95450	95450	27200	17.40	N/A
847	847	6079	LYN - Jefferson	94 JEFFERSON ST	Lynn	7	National Grid	1125	1125	0	N/A	0.79
848	848	6066	LYN - McGee House	37 Green Street	Lynn	50	National Grid	54860	54860	14860	4.88	N/A
849	849	5841	LYN - Meadow Court	1 & 3 Meadow Court	Lynn	8	National Grid	4700	4700	700	4.46	N/A
850	850	5875	LYN - Meadow Court	15 & 17 Meadow Court	Lynn	8	National Grid	4400	4400	400	6.89	N/A
851	851	5847	LYN - Meadow Court	19 & 21 Meadow Court	Lynn	8	National Grid	4700	4700	700	6.74	N/A
852	852	5878	LYN - Meadow Court	28 & 30 Meadow Court	Lynn	8	National Grid	4400	4400	400	5.33	N/A
853	853	5880	LYN - Meadow Court	32 & 34 Meadow Court	Lynn	8	National Grid	4400	4400	400	6.74	N/A
854	854	5859	LYN - Meadow Court	40 & 42 Meadow Court	Lynn	8	National Grid	4400	4400	400	7.73	N/A
855	855	5881	LYN - Meadow Court	44 & 46 Meadow Court	Lynn	8	National Grid	4400	4400	400	5.27	N/A
856	856	5855	LYN - Meadow Court	48 & 50 Meadow Court	Lynn	8	National Grid	4400	4400	400	14.60	N/A
857	857	5842	LYN - Meadow Court	5 & 7 Meadow Court	Lynn	8	National Grid	4400	4400	400	5.55	N/A
858	858	5848	LYN - Meadow Court	54 & 56 Meadow Court	Lynn	8	National Grid	4400	4400	400	5.65	N/A
859	859	5843	LYN - Meadow Court	9 & 11 Meadow Court	Lynn	8	National Grid	4700	4700	700	9.20	N/A
860	860	5883	LYN - Meadow Court	Commons Building	Lynn	1	National Grid	2623	2623	0	0.81	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
861	861	6081	LYN - Neptune	72 NEPTUNE ST	Lynn	6	National Grid	7020	7020	2220	N/A	1.36
862	862	5836	LYN - Olive Street	2 Olive Street	Lynn	2	National Grid	1241	1241	0	4.30	N/A
863	863	5837	LYN - Olive Street	6 Olive Street	Lynn	22	National Grid	23804	23804	12804	4.30	N/A
864	864	6072	LYN - Webster	24 Webster St	Lynn	2	National Grid	3664	2748	1364	N/A	0.14
865	865	6073	LYN - Webster	28 Webster St	Lynn	2	National Grid	2904	2178	904	N/A	0.87
866	866	6085	LYN - Western	116 Western Avenue	Lynn	3	National Grid	5812	4359	2103	N/A	1.27
867	867	5888	LYN - Woodman St.	32 & 36 Woodman St.	Lynn	8	National Grid	4870	4870	0	6.42	N/A
868	868	5894	LYN - Woodman St.	38 & 42 Woodman St.	Lynn	8	National Grid	4876	4876	0	6.42	N/A
869	869	5891	LYN - Woodman St.	44 & 48 Woodman St.	Lynn	8	National Grid	4870	4870	0	6.42	N/A
870	870	5893	LYN - Woodman St.	50 & 54 Woodman St.	Lynn	8	National Grid	4876	4876	0	6.42	N/A
871	871	5892	LYN - Woodman St.	56 & 60 Woodman St.	Lynn	8	National Grid	4870	4870	0	6.42	N/A
872	872	6103	MHPI XI	337 Elliott St.	Beverly	4	National Grid	2449	1599	1010	5.89	N/A
873	873	6084	President St	17 President Street	Lynn	2	National Grid	2632	2632	0	N/A	0.62
874	874	5655	Quaker Meadows	37-41 Memorial Park Ave.	Lynn	10	National Grid	9065	9065	0	N/A	0.97
875	875	5654	Quaker Meadows	43-53 Memorial Park Ave	Lynn	18	National Grid	15810	15810	0	N/A	0.61
876	876	5653	Quaker Meadows	55 Memorial Park Ave	Lynn	3	National Grid	3480	3480	0	N/A	0.38
877	877	5652	Quaker Meadows	57-63 Memorial Park Ave	Lynn	16	National Grid	13490	13490	0	N/A	1.88
878	878	5609	Quaker Meadows	71-79 Memorial Park Ave.	Lynn	14	National Grid	13705	13705	0	N/A	0.88
879	879	5656	Quaker Meadows	82-86 Green Street	Lynn	12	National Grid	9795	9795	0	N/A	1.29
880	880	5657	Quaker Meadows	88 Green Street	Lynn	8	National Grid	6300	6300	0	N/A	1.32
881	881	5660	Quaker Meadows	90 Green Street	Lynn	1	National Grid	600	600	0	N/A	33.10
882	882	5658	Quaker Meadows	92 Green Street	Lynn	8	National Grid	6150	6150	0	N/A	1.35
883	883	5659	Quaker Meadows	94-98 Green Street	Lynn	15	National Grid	12495	12495	0	N/A	1.40
884	884	5106	Ramblewood Apts	166 Longmeadow Drive	Holbrook	31	National Grid	20567	20567	2000	N/A	17.79
885	885	5392	Riddlebrook Apts	13 West Street	East Douglas	41	National Grid	30392	30392	5267	N/A	17.91
886	886	5390	SCI - Lincoln Park	Lincoln Park Community Building	Scituate	1	National Grid	1544	1544	0	1.21	N/A
887	887	5384	SCI - Lincoln Park	LINCOLN PARK DRIVE - A	Scituate	4	National Grid	2500	2500	0	1.21	N/A
888	888	5385	SCI - Lincoln Park	LINCOLN PARK DRIVE - B	Scituate	4	National Grid	2500	2500	0	1.21	N/A
889	889	5386	SCI - Lincoln Park	LINCOLN PARK DRIVE - C	Scituate	4	National Grid	2500	2500	0	1.21	N/A
890	890	5387	SCI - Lincoln Park	LINCOLN PARK DRIVE - D	Scituate	7	National Grid	3750	3750	0	1.21	N/A
891	891	5388	SCI - Lincoln Park	LINCOLN PARK DRIVE - E	Scituate	7	National Grid	3750	3750	0	1.21	N/A
892	892	5389	SCI - Lincoln Park	LINCOLN PARK DRIVE - F	Scituate	10	National Grid	10200	10200	3200	1.21	N/A
893	893	5440	SCI - Wheeler Park	Wheeler Park I - 1	Scituate	6	National Grid	2884	2884	0	2.75	N/A
894	894	5444	SCI - Wheeler Park	Wheeler Park I - 2	Scituate	8	National Grid	4424	4424	0	2.75	N/A
895	895	5441	SCI - Wheeler Park	Wheeler Park I - 3	Scituate	6	National Grid	2884	2884	0	2.75	N/A
896	896	5442	SCI - Wheeler Park	Wheeler Park I - 4	Scituate	6	National Grid	2884	2884	0	2.75	N/A
897	897	5445	SCI - Wheeler Park	Wheeler Park I - 5	Scituate	8	National Grid	4424	4424	0	2.75	N/A
898	898	5443	SCI - Wheeler Park	Wheeler Park I - 6	Scituate	6	National Grid	2884	2884	0	2.75	N/A
899	899	5446	SCI - Wheeler Park	Wheeler Park I - Community	Scituate	1	National Grid	1300	1300	0	2.75	N/A
900	900	5452	SCI - Wheeler Park	Wheeler Park II - 1	Scituate	8	National Grid	5976	5976	0	2.75	N/A
901	901	5454	SCI - Wheeler Park	Wheeler Park II - 10	Scituate	8	National Grid	5976	5976	0	2.75	N/A
902	902	5447	SCI - Wheeler Park	Wheeler Park II - 11	Scituate	6	National Grid	5016	5016	0	2.75	N/A
903	903	5455	SCI - Wheeler Park	Wheeler Park II - 2	Scituate	8	National Grid	5976	5976	0	2.75	N/A
904	904	5456	SCI - Wheeler Park	Wheeler Park II - 3	Scituate	8	National Grid	5976	5976	0	2.75	N/A
905	905	5448	SCI - Wheeler Park	Wheeler Park II - 4	Scituate	6	National Grid	5016	5016	0	2.75	N/A
906	906	5449	SCI - Wheeler Park	Wheeler Park II - 5	Scituate	6	National Grid	5016	5016	0	2.75	N/A
907	907	5450	SCI - Wheeler Park	Wheeler Park II - 6	Scituate	6	National Grid	5016	5016	0	2.75	N/A
908	908	5457	SCI - Wheeler Park	Wheeler Park II - 7	Scituate	8	National Grid	5976	5976	0	2.75	N/A
909	909	5451	SCI - Wheeler Park	Wheeler Park II - 8	Scituate	6	National Grid	5016	5016	0	2.75	N/A
910	910	5458	SCI - Wheeler Park	Wheeler Park II - 9	Scituate	8	National Grid	5976	5976	0	2.75	N/A
911	911	5459	SCI - Wheeler Park	Wheeler Park II - Community	Scituate	1	National Grid	1800	1800	0	2.75	N/A
912	912	5405	Westborough Country Village	12 Beach Street Bldg A	Westborough	55	National Grid	51825	51825	13358	5.01	N/A
913	913	5431	Westborough Country Village	12 Beach Street Bldg B	Westborough	22	National Grid	18810	18810	5614	5.01	N/A
914	914	6043	WEY - Lakeview Manor	10 Memorial Dr - Lake St	Weymouth	4	National Grid	4096	4096	0	N/A	0.30
915	915	6069	WEY - Lakeview Manor	110 - 112 Joseph Fern Ct	Weymouth	6	National Grid	6400	6400	0	N/A	0.27
916	916	6063	WEY - Lakeview Manor	124 - 140 Joseph Fern Court	Weymouth	5	National Grid	5890	5890	0	N/A	0.38
917	917	6067	WEY - Lakeview Manor	236 Lake Street	Weymouth	5	National Grid	5890	5890	0	N/A	0.24
918	918	6064	WEY - Lakeview Manor	245 Lake Street	Weymouth	5	National Grid	5890	5890	0	N/A	0.21
919	919	6062	WEY - Lakeview Manor	255 Lake Street	Weymouth	5	National Grid	5890	5890	0	N/A	0.54
920	920	6060	WEY - Lakeview Manor	304 Lake Street	Weymouth	3	National Grid	4342	4342	246	N/A	0.50
921	921	6080	WEY - Lakeview Manor	41 - 47 Joseph Fern Ct	Weymouth	4	National Grid	4096	4096	0	N/A	0.44
922	922	6048	WEY - Lakeview Manor	53 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	N/A	0.13
923	923	6046	WEY - Lakeview Manor	61 - 67 Joseph Fern Ct	Weymouth	4	National Grid	4096	4096	0	N/A	0.44
924	924	6038	WEY - Lakeview Manor	61 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	N/A	0.15
925	925	6032	WEY - Lakeview Manor	81 - 87 Joseph Fern Ct	Weymouth	3	National Grid	3880	3880	0	N/A	0.69
926	926	4087	WIN - Overlook Drive	Overlook Drive 04	Winthrop	8	National Grid	8000	8000	7000	11.05	N/A
927	927	4088	WIN - Overlook Drive	Overlook Drive 05	Winthrop	12	National Grid	11200	11200	10300	11.79	N/A
928	928	4089	WIN - Overlook Drive	Overlook Drive 06	Winthrop	12	National Grid	11200	11200	10300	11.79	N/A
929	929	4090	WIN - Overlook Drive	Overlook Drive 07	Winthrop	8	National Grid	8000	8000	7000	12.67	N/A
930	930	4091	WIN - Overlook Drive	Overlook Drive 08	Winthrop	12	National Grid	11200	11200	10300	12.67	N/A
931	931	4092	WIN - Overlook Drive	Overlook Drive 09	Winthrop	8	National Grid	8000	8000	7000	12.67	N/A
932	932	4093	WIN - Overlook Drive	Overlook Drive 10	Winthrop	8	National Grid	8000	8000	7000	12.67	N/A
933	933	4079	WIN - Viking Gardens	107 Putnam Street - A	Winthrop	10	National Grid	6000	6000	5400	6.60	N/A
934	934	4340	154 - 156 Quincy Street	154 - 156 Quincy	Quincy	3	National Grid	4532	3332	1200	1.97	N/A
935	935	2831	16 Cottage St	16 Cottage St	Worcester	15	National Grid	5717	3965	2343	1.60	N/A
936	936	4707	20 Grossman Street	20 Grossman St.	Quincy	2	National Grid	2820	1910	910	4.78	N/A
937	937	4737	24 Claremont/Lawrence	24 Claremont/Lawrence	Quincy	12	National Grid	3192	2128	1064	8.99	N/A
938	938	4347	31 - 33 Winter Street	31 - 33 Winter Street	Quincy	18	National Grid	5300	3470	1830	6.48	N/A
939	939	4338	351 - 353 Water Street	351 - 353 Water Street	Quincy	4	National Grid	5244	3496	1748	2.91	N/A
940	940	4331	355 Water Street	355 Water Street	Quincy	4	National Grid	5244	3496	1748	3.93	N/A
941	941	4329	356 Washington Street	356 Washington Street	Quincy	11	National Grid	5220	4420	1300	11.56	N/A
942	942	4720	36 Leslie Avenue	36 Leslie Ave	Weymouth	1	National Grid	1500	1000	N/A	9.56	N/A
943	943		Dewey Archambault	657 Merrimack	Lowell	194	National Grid	122850	122850	34398	16.09	N/A
944	944	4349	40 Prout Street	40 Prout Street	Quincy	1	National Grid	1252	916	N/A	5.82	N/A
945	945	4330	422 Washington Street	422 Washington Street - Office	Quincy	1	National Grid	4917	4917	N/A	5.98	N/A
946	946	4711	58 Winter Street	58 Winter St	Quincy	2	National Grid	2696	2192	656	6.38	N/A

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
947	947	4717	62 Winter Street	62 Winter St.	Quincy	3	National Grid	3973	2099	1225	2.90	N/A
948	948	4718	64 Winter Street	64 Winter St.	Quincy	2	National Grid	5402	4288	2258	2.00	N/A
949	949	4345	706 Main Street	706 Main Street	Weymouth	2	National Grid	5034	3084	2284	1.75	N/A
950	950	4341	708 Main Street	708 Main Street	Weymouth	3	National Grid	2784	1856	928	10.07	N/A
951	951	4342	712 Main Street	712 Main Street	Weymouth	4	National Grid	2750	1950	800	5.00	N/A
952	952	114	Blue Mountain	63 Elm Hill	Dorchester	9	National Grid	8400	8400	2460	1.77	N/A
953	953	6146	BRC - Rainbow Terrace	Hawley/Malvern - 7	Brockton	8	National Grid	4324	4324	0	2.01	N/A
954	954	6147	BRC - Rainbow Terrace	Malvern/Rochelle - 8	Brockton	8	National Grid	4324	4324	0	2.03	N/A
955	955		Great Brook Valley	Great Brook Valley 1	Worcester	4	National Grid	3639	3639	0	10.80	N/A
956	956		Great Brook Valley	Great Brook Valley 10	Worcester	4	National Grid	3639	3639	0	10.80	N/A
957	957		Great Brook Valley	Great Brook Valley 11	Worcester	4	National Grid	3639	3639	0	10.80	N/A
958	958		Great Brook Valley	Great Brook Valley 12	Worcester	4	National Grid	3639	3639	0	10.80	N/A
959	959		Great Brook Valley	Great Brook Valley 13	Worcester	4	National Grid	3639	3639	0	10.80	N/A
960	960		Great Brook Valley	Great Brook Valley 14	Worcester	4	National Grid	3639	3639	0	10.80	N/A
961	961		Great Brook Valley	Great Brook Valley 15	Worcester	4	National Grid	3639	3639	0	10.80	N/A
962	962		Great Brook Valley	Great Brook Valley 16	Worcester	6	National Grid	4928	4928	0	10.80	N/A
963	963		Great Brook Valley	Great Brook Valley 17	Worcester	6	National Grid	4928	4928	0	10.80	N/A
964	964		Great Brook Valley	Great Brook Valley 18	Worcester	6	National Grid	4928	4928	0	10.80	N/A
965	965		Great Brook Valley	Great Brook Valley 19	Worcester	6	National Grid	4928	4928	0	10.80	N/A
966	966		Great Brook Valley	Great Brook Valley 2	Worcester	4	National Grid	3639	3639	0	10.80	N/A
967	967		Great Brook Valley	Great Brook Valley 20	Worcester	6	National Grid	4928	4928	0	10.80	N/A
968	968		Great Brook Valley	Great Brook Valley 21	Worcester	6	National Grid	4928	4928	0	10.80	N/A
969	969		Great Brook Valley	Great Brook Valley 22	Worcester	6	National Grid	4928	4928	0	10.80	N/A
970	970		Great Brook Valley	Great Brook Valley 23	Worcester	6	National Grid	4928	4928	0	10.80	N/A
971	971		Great Brook Valley	Great Brook Valley 24	Worcester	6	National Grid	4928	4928	0	10.80	N/A
972	972		Great Brook Valley	Great Brook Valley 25	Worcester	6	National Grid	4928	4928	0	10.80	N/A
973	973		Great Brook Valley	Great Brook Valley 26	Worcester	6	National Grid	4928	4928	0	10.80	N/A
974	974		Great Brook Valley	Great Brook Valley 27	Worcester	6	National Grid	4928	4928	0	10.80	N/A
975	975		Great Brook Valley	Great Brook Valley 28	Worcester	6	National Grid	4928	4928	0	10.80	N/A
976	976		Great Brook Valley	Great Brook Valley 29	Worcester	6	National Grid	4928	4928	0	10.80	N/A
977	977		Great Brook Valley	Great Brook Valley 3	Worcester	4	National Grid	3639	3639	0	10.80	N/A
978	978		Great Brook Valley	Great Brook Valley 30	Worcester	6	National Grid	4928	4928	0	10.80	N/A
979	979		Great Brook Valley	Great Brook Valley 31	Worcester	6	National Grid	4928	4928	0	10.80	N/A
980	980		Great Brook Valley	Great Brook Valley 32	Worcester	6	National Grid	4928	4928	0	10.80	N/A
981	981		Great Brook Valley	Great Brook Valley 33	Worcester	6	National Grid	4928	4928	0	10.80	N/A
982	982		Great Brook Valley	Great Brook Valley 34	Worcester	6	National Grid	4928	4928	0	10.80	N/A
983	983		Great Brook Valley	Great Brook Valley 35	Worcester	6	National Grid	4928	4928	0	10.80	N/A
984	984		Great Brook Valley	Great Brook Valley 36	Worcester	6	National Grid	4928	4928	0	10.80	N/A
985	985		Great Brook Valley	Great Brook Valley 37	Worcester	6	National Grid	4928	4928	0	10.80	N/A
986	986		Great Brook Valley	Great Brook Valley 38	Worcester	6	National Grid	4928	4928	0	10.80	N/A
987	987		Great Brook Valley	Great Brook Valley 39	Worcester	6	National Grid	4928	4928	0	10.80	N/A
988	988		Great Brook Valley	Great Brook Valley 4	Worcester	4	National Grid	3639	3639	0	10.80	N/A
989	989		Great Brook Valley	Great Brook Valley 40	Worcester	6	National Grid	4928	4928	0	10.80	N/A
990	990		Great Brook Valley	Great Brook Valley 41	Worcester	6	National Grid	4928	4928	0	10.80	N/A
991	991		Great Brook Valley	Great Brook Valley 42	Worcester	6	National Grid	4928	4928	0	10.80	N/A
992	992		Great Brook Valley	Great Brook Valley 43	Worcester	6	National Grid	4928	4928	0	10.80	N/A
993	993		Great Brook Valley	Great Brook Valley 44	Worcester	6	National Grid	4928	4928	0	10.80	N/A
994	994		Great Brook Valley	Great Brook Valley 45	Worcester	6	National Grid	4928	4928	0	10.80	N/A
995	995		Great Brook Valley	Great Brook Valley 46	Worcester	6	National Grid	4928	4928	0	10.80	N/A
996	996		Great Brook Valley	Great Brook Valley 47	Worcester	6	National Grid	4928	4928	0	10.80	N/A
997	997		Great Brook Valley	Great Brook Valley 48	Worcester	6	National Grid	4928	4928	0	10.80	N/A
998	998		Great Brook Valley	Great Brook Valley 49	Worcester	6	National Grid	4928	4928	0	10.80	N/A
999	999		Great Brook Valley	Great Brook Valley 5	Worcester	4	National Grid	3639	3639	0	10.80	N/A
1,000	1,000		Great Brook Valley	Great Brook Valley 50	Worcester	6	National Grid	4928	4928	0	10.80	N/A
1,001	1,001		Great Brook Valley	Great Brook Valley 51	Worcester	6	National Grid	4928	4928	0	10.80	N/A
1,002	1,002		Great Brook Valley	Great Brook Valley 52	Worcester	6	National Grid	4928	4928	0	10.80	N/A
1,003	1,003		Great Brook Valley	Great Brook Valley 53	Worcester	6	National Grid	5932	5932	0	10.80	N/A
1,004	1,004		Great Brook Valley	Great Brook Valley 54	Worcester	6	National Grid	5932	5932	0	10.80	N/A
1,005	1,005		Great Brook Valley	Great Brook Valley 55	Worcester	6	National Grid	5932	5932	0	10.80	N/A
1,006	1,006		Great Brook Valley	Great Brook Valley 56	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,007	1,007		Great Brook Valley	Great Brook Valley 57	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,008	1,008		Great Brook Valley	Great Brook Valley 58	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,009	1,009		Great Brook Valley	Great Brook Valley 59	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,010	1,010		Great Brook Valley	Great Brook Valley 6	Worcester	4	National Grid	3639	3639	0	10.80	N/A
1,011	1,011		Great Brook Valley	Great Brook Valley 60	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,012	1,012		Great Brook Valley	Great Brook Valley 61	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,013	1,013		Great Brook Valley	Great Brook Valley 62	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,014	1,014		Great Brook Valley	Great Brook Valley 63	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,015	1,015		Great Brook Valley	Great Brook Valley 64	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,016	1,016		Great Brook Valley	Great Brook Valley 65	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,017	1,017		Great Brook Valley	Great Brook Valley 66	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,018	1,018		Great Brook Valley	Great Brook Valley 67	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,019	1,019		Great Brook Valley	Great Brook Valley 68	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,020	1,020		Great Brook Valley	Great Brook Valley 69	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,021	1,021		Great Brook Valley	Great Brook Valley 7	Worcester	4	National Grid	3639	3639	0	10.80	N/A
1,022	1,022		Great Brook Valley	Great Brook Valley 70	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,023	1,023		Great Brook Valley	Great Brook Valley 71	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,024	1,024		Great Brook Valley	Great Brook Valley 72	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,025	1,025		Great Brook Valley	Great Brook Valley 73	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,026	1,026		Great Brook Valley	Great Brook Valley 74	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,027	1,027		Great Brook Valley	Great Brook Valley 75	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,028	1,028		Great Brook Valley	Great Brook Valley 76	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,029	1,029		Great Brook Valley	Great Brook Valley 77	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,030	1,030		Great Brook Valley	Great Brook Valley 78	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,031	1,031		Great Brook Valley	Great Brook Valley 79	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,032	1,032		Great Brook Valley	Great Brook Valley 8	Worcester	4	National Grid	3639	3639	0	10.80	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Conditioned ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,033	1,033		Great Brook Valley	Great Brook Valley 80	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,034	1,034		Great Brook Valley	Great Brook Valley 81	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,035	1,035		Great Brook Valley	Great Brook Valley 82	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,036	1,036		Great Brook Valley	Great Brook Valley 83	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,037	1,037		Great Brook Valley	Great Brook Valley 84	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,038	1,038		Great Brook Valley	Great Brook Valley 85	Worcester	8	National Grid	6998	6998	0	10.80	N/A
1,039	1,039		Great Brook Valley	Great Brook Valley 86	Worcester	10	National Grid	7952	7952	0	10.80	N/A
1,040	1,040		Great Brook Valley	Great Brook Valley 87	Worcester	10	National Grid	7952	7952	0	10.80	N/A
1,041	1,041		Great Brook Valley	Great Brook Valley 88	Worcester	10	National Grid	7952	7952	0	10.80	N/A
1,042	1,042		Great Brook Valley	Great Brook Valley 89	Worcester	10	National Grid	7952	7952	0	10.80	N/A
1,043	1,043		Great Brook Valley	Great Brook Valley 9	Worcester	4	National Grid	3639	3639	0	10.80	N/A
1,044	1,044		Great Brook Valley	Great Brook Valley 90	Worcester	10	National Grid	7952	7952	0	10.80	N/A
1,045	1,045		Great Brook Valley	Great Brook Valley 91	Worcester	10	National Grid	7952	7952	0	10.80	N/A
1,046	1,046	6201	King's Lynne Apts	10 CANTERBURY CT (12)	Lynn	30	National Grid	24740	24740	4948	N/A	N/A
1,047	1,047	6205	King's Lynne Apts	12 OSBORNE ST (7)	Lynn	16	National Grid	12200	12200	2440	N/A	N/A
1,048	1,048	6198	King's Lynne Apts	15 Kings Hill Drive (11)	Lynn	23	National Grid	18890	18890	3778	N/A	N/A
1,049	1,049	6203	King's Lynne Apts	3 NEWCASTLE STREET (8)	Lynn	19	National Grid	15150	15150	3030	N/A	N/A
1,050	1,050	6204	King's Lynne Apts	66 NEWCASTLE ST (9)	Lynn	33	National Grid	26940	26940	5388	N/A	N/A
1,051	1,051	6200	King's Lynne Apts	9 KINGSWOOD LN (14)	Lynn	25	National Grid	20340	20340	4068	N/A	N/A
1,052	1,052	6202	King's Lynne Apts	9 NEWCASTLE ST (13)	Lynn	9	National Grid	7380	7380	1476	N/A	N/A
1,053	1,053	6331	RKP - Millbrook Park 64	10 Millbrook Park	Rockport	8	National Grid	5664	5664	1664	15.64	N/A
1,054	1,054	6332	RKP - Millbrook Park 64	11 Millbrook Park	Rockport	8	National Grid	5664	5664	1664	15.64	N/A
1,055	1,055	6333	RKP - Millbrook Park 64	12 Millbrook Park	Rockport	8	National Grid	5664	5664	1664	15.64	N/A
1,056	1,056	6330	RKP - Millbrook Park 64	1-4 Millbrook Park	Rockport	4	National Grid	1820	1820	220	15.64	N/A
1,057	1,057	6334	RKP - Millbrook Park 64	5-8 Millbrook Park	Rockport	4	National Grid	1820	1820	220	15.64	N/A
1,058	1,058	6335	RKP - Millbrook Park 64	9 Millbrook Park	Rockport	8	National Grid	5664	5664	1664	15.64	N/A
1,059	1,059	6337	RKP - Millbrook Park 68	14 MILLBROOK PARK	Rockport	8	National Grid	5324	5324	1324	10.54	N/A
1,060	1,060	6338	RKP - Millbrook Park 68	15 Millbrook Park	Rockport	8	National Grid	5324	5324	1324	10.54	N/A
1,061	1,061	6339	RKP - Millbrook Park 68	16 Millbrook Park	Rockport	8	National Grid	5324	5324	1324	10.54	N/A
1,062	1,062	6340	RKP - Millbrook Park 68	17 Millbrook Park	Rockport	8	National Grid	5324	5324	1324	10.54	N/A
1,063	1,063	6341	RKP - Millbrook Park 68	18 Millbrook Park	Rockport	8	National Grid	5324	5324	1324	10.54	N/A
1,064	1,064	1846	sallys place	56 sparhawk st.	amesbury	11	National Grid	4900	4340	700	7.95	N/A
1,065	1,065	6078	WEY - Lakeview Manor	97 - 111 Joseph Fern St	Weymouth	6	National Grid	6400	6400	0	0.74	N/A
1,066	1,066	5760	WEY - Pope Towers	25 Water Street	Weymouth	60	National Grid	46872	46872	16872	7.42	N/A
1,067	1,067	6065	WEY - Lakeview Manor	70 Memorial Drive	Weymouth	5	National Grid	8835	5890	2945	N/A	0.18
1,068	1,068	6044	WEY - Lakeview Manor	296 Lake Street	Weymouth	4	National Grid	6144	4096	2048	N/A	0.25
1,069	1,069	6033	WEY - Lakeview Manor	80 - 86 Joseph Fern Ct	Weymouth	3	National Grid	5820	3880	1940	N/A	0.25
1,070	1,070	6057	WEY - Lakeview Manor	290 Lake Street	Weymouth	4	National Grid	6144	4096	2048	N/A	0.56
1,071	1,071	6042	WEY - Lakeview Manor	252 Lake Street	Weymouth	4	National Grid	6144	4096	2048	N/A	0.57
1,072	1,072	6035	WEY - Lakeview Manor	50 Memorial Drive	Weymouth	4	National Grid	6144	4096	2048	N/A	0.70
1,073	1,073	6052	WEY - Lakeview Manor	19 Memorial Drive	Weymouth	4	National Grid	6144	4096	2048	N/A	0.73
1,074	1,074	6047	WEY - Lakeview Manor	21 - 27 Joseph Fern Ct	Weymouth	3	National Grid	5820	3880	1940	N/A	0.76
1,075	1,075	6034	WEY - Lakeview Manor	7 Memorial Dr - Bldg 1	Weymouth	4	National Grid	6144	4096	2048	N/A	0.76
1,076	1,076	6061	WEY - Lakeview Manor	3 Josie's Way	Weymouth	3	National Grid	6513	4342	2171	N/A	0.92
1,077	1,077	6049	WEY - Lakeview Manor	43 Memorial Drive	Weymouth	4	National Grid	6144	4096	2048	N/A	0.92
1,078	1,078	6071	WEY - Lakeview Manor	54 - 66 Joseph Fern Ct	Weymouth	6	National Grid	9600	6400	3200	N/A	0.96
1,079	1,079	6068	WEY - Lakeview Manor	268 Lake Street	Weymouth	5	National Grid	8835	5890	2945	N/A	1.05
1,080	1,080	6037	WEY - Lakeview Manor	60 Memorial Drive	Weymouth	4	National Grid	6144	4096	2048	N/A	1.13
1,081	1,081	6050	WEY - Lakeview Manor	25 Memorial Drive	Weymouth	4	National Grid	6144	4096	2048	N/A	1.14
1,082	1,082	6051	WEY - Lakeview Manor	21 Memorial Drive	Weymouth	4	National Grid	6144	4096	2048	N/A	1.24
1,083	1,083	6031	WEY - Lakeview Manor	30 Memorial Drive - Bldg 7	Weymouth	4	National Grid	5100	3400	1700	N/A	1.57
1,084	1,084	6041	WEY - Lakeview Manor	214 Lake Street	Weymouth	4	National Grid	6144	4096	2048	N/A	2.30
1,085	1,085	7093	AME - Macy Terrace	31-33 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	8.64	N/A
1,086	1,086	7092	AME - Macy Terrace	28 / 30 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	9.06	N/A
1,087	1,087	7094	AME - Macy Terrace	32-34 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	10.80	N/A
1,088	1,088	7095	AME - Macy Terrace	35-37 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	12.18	N/A
1,089	1,089	7096	AME - Macy Terrace	36-38 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	12.99	N/A
1,090	1,090	5194	AND - Chestnut Court	E1 Memorial Circle	Andover	6	National Grid	5280	5280	0	7.51	N/A
1,091	1,091	5200	ATT - Rivercourt	RIVERCOURT	Attleboro	59	National Grid	44875	44875	12565	10.95	N/A
1,092	1,092	5620	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 10	Auburn	8	National Grid	5184	5184	1184	11.62	N/A
1,093	1,093	5617	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 2	Auburn	8	National Grid	5184	5184	1184	11.62	N/A
1,094	1,094	5618	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 3	Auburn	8	National Grid	5184	5184	1184	11.62	N/A
1,095	1,095	5619	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 4	Auburn	8	National Grid	5184	5184	1184	11.62	N/A
1,096	1,096	5625	AUB - Pakachoag Village	PACACHOAG VILLAGE - 6 - Community	Auburn	4	National Grid	4592	4592	2592	11.62	N/A
1,097	1,097	5628	AUB - Pakachoag Village	PACACHOAG VILLAGE - 7	Auburn	9	National Grid	6450	6450	950	11.62	N/A
1,098	1,098	5627	AUB - Pakachoag Village	PACACHOAG VILLAGE - 9	Auburn	8	National Grid	5200	5200	700	11.62	N/A
1,099	1,099	5629	AUB - Pakachoag Village	PACACHOAG VILLAGE - 8	Auburn	10	National Grid	7700	7700	1200	11.62	N/A
1,100	1,100	5621	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 1	Auburn	9	National Grid	5808	5808	1308	11.62	N/A
1,101	1,101	5624	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 11	Auburn	9	National Grid	5808	5808	1308	11.62	N/A
1,102	1,102	5622	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 5	Auburn	9	National Grid	5808	5808	1308	11.62	N/A
1,103	1,103	5616	AUB - Pakachoag Village	PAKACHOAG VILLAGE - 8 - Community	Auburn	1	National Grid	4000	4000	0	11.62	N/A
1,104	1,104	6812	AUB - Stonehill Heights	200 Oxford St - Community	Auburn	1	National Grid	2500	2500	0	22.17	N/A
1,105	1,105	6808	AUB - Stonehill Heights	200 Oxford St - 4	Auburn	8	National Grid	3000	3000	0	22.31	N/A
1,106	1,106	6807	AUB - Stonehill Heights	200 Oxford St - 3	Auburn	8	National Grid	3000	3000	0	25.13	N/A
1,107	1,107	6811	AUB - Stonehill Heights	200 Oxford St - 7	Auburn	8	National Grid	3000	3000	0	25.90	N/A
1,108	1,108	6809	AUB - Stonehill Heights	200 Oxford St - 5	Auburn	8	National Grid	3000	3000	0	26.03	N/A
1,109	1,109	6810	AUB - Stonehill Heights	200 Oxford St - 6	Auburn	8	National Grid	3000	3000	0	27.16	N/A
1,110	1,110	6806	AUB - Stonehill Heights	200 Oxford St - 2	Auburn	8	National Grid	3000	3000	0	29.27	N/A
1,111	1,111	6805	AUB - Stonehill Heights	200 Oxford St - 1	Auburn	12	National Grid	4100	4100	0	34.14	N/A
1,112	1,112	7013	CHL - Arms	1 SMITH ST - A	Chelmsford	32	National Grid	33292	33292	6658	6.99	N/A
1,113	1,113	7019	CHL - Arms	1 SMITH STREET - B	Chelmsford	32	National Grid	33292	33292	6658	6.99	N/A
1,114	1,114	7020	CHL - Arms	1 Smith St- Community Bldg	Chelmsford	1	National Grid	1628	1628	0	6.99	N/A
1,115	1,115	7022	CHL - Delaney Terrace	8 SHEILA AVE	Chelmsford	50	National Grid	37332	37332	12332	N/A	8.17
1,116	1,116	7021	CHL - McFarlin Manor	10 WILSON ST	Chelmsford	50	National Grid	45148	45148	9029	3.65	N/A
1,117	1,117	2856	FRV - Corky Row 2	222-234, 240-250 Morgan Street	Fall River	4	National Grid	4542	4542	0	8.42	N/A
1,118	1,118	2850	FRV - Corky Row 2	447-453, 451-453 Fourth Street	Fall River	4	National Grid	4542	4542	0	8.75	N/A

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,119	1,119	6607	GAR - 104 Church St	104 CHURCH ST	Gardner	69	National Grid	55000	35500	20500	5.80	N/A
1,120	1,120	6606	GAR - 116 Church St/Congregate	116 CHURCH ST/CONGREGATE	Gardner	108	National Grid	76575	76575	22575	13.24	N/A
1,121	1,121	6597	GAR - Hillside Gardens	BLANCHARD ST - A	Gardner	6	National Grid	2700	2700	0	14.76	N/A
1,122	1,122	6598	GAR - Hillside Gardens	BLANCHARD ST - B	Gardner	6	National Grid	2700	2700	0	14.76	N/A
1,123	1,123	6599	GAR - Hillside Gardens	C- COMMUNITY BLDG	Gardner	1	National Grid	2010	2010	0	14.76	N/A
1,124	1,124	6600	GAR - Hillside Gardens	BLANCHARD ST - D	Gardner	12	National Grid	6900	6900	1600	14.76	N/A
1,125	1,125	6601	GAR - Hillside Gardens	BLANCHARD ST - E	Gardner	12	National Grid	6900	6900	1600	14.76	N/A
1,126	1,126	6602	GAR - Hillside Gardens	BLANCHARD ST - F	Gardner	12	National Grid	6900	6900	1600	14.76	N/A
1,127	1,127	6603	GAR - Hillside Gardens	BLANCHARD ST - G	Gardner	12	National Grid	6900	6900	1600	14.76	N/A
1,128	1,128	6604	GAR - Hillside Gardens	BLANCHARD ST - H	Gardner	12	National Grid	6900	6900	1600	14.76	N/A
1,129	1,129	6605	GAR - Hillside Gardens	BLANCHARD ST - I	Gardner	12	National Grid	6900	6900	1600	14.76	N/A
1,130	1,130	5585	HAV - Summer Street Veterans	17, 21, 25 Mount Vernon Street - A	Haverhill	18	National Grid	19110	19110	5925	N/A	5.54
1,131	1,131	5586	HAV - Summer Street Veterans	134, 140, 146 Summer Street - B	Haverhill	18	National Grid	12740	12740	3950	7.15	N/A
1,132	1,132	6470	Heritage Tower	180 Main Street	Amesbury	102	National Grid	89900	89900	17980	14.14	N/A
1,133	1,133	6532	Heritage Vale	HERITAGE VALE - 6	Amesbury	3	National Grid	1472	1472	0	21.98	N/A
1,134	1,134	6527	Heritage Vale	BLDG. 1	Amesbury	8	National Grid	2900	2900	0	21.98	N/A
1,135	1,135	6528	Heritage Vale	HERITAGE VALE - 2	Amesbury	8	National Grid	2900	2900	0	21.98	N/A
1,136	1,136	6529	Heritage Vale	HERITAGE VALE - 3	Amesbury	8	National Grid	2900	2900	0	21.98	N/A
1,137	1,137	6530	Heritage Vale	HERITAGE VALE - 4	Amesbury	8	National Grid	2900	2900	0	21.98	N/A
1,138	1,138	6531	Heritage Vale	HERITAGE VALE - 5	Amesbury	8	National Grid	2900	2900	0	21.98	N/A
1,139	1,139	5418	Heritage Village	14,18 Centre Drive	Northboro	8	National Grid	7056	7056	2056	N/A	3.43
1,140	1,140	5419	Heritage Village	6,10 Centre Drive	Northboro	8	National Grid	7056	7056	2056	N/A	3.43
1,141	1,141	5416	Heritage Village	7,11 Centre Drive	Northboro	5	National Grid	4960	4960	960	N/A	3.43
1,142	1,142	5417	Heritage Village	1,3,5 Centre Drive / Common	Northboro	2	National Grid	5952	5952	4452	N/A	3.43
1,143	1,143	5420	Heritage Village	15,17,19 Centre Drive	Northboro	9	National Grid	7936	7936	2236	N/A	3.43
1,144	1,144	2795	NAN - Fould's Terrace	7, 9, 11 Fould's Terrace	North Andover	12	National Grid	6450	6450	450	15.60	N/A
1,145	1,145	6518	Powow Villa 1	1-6 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	7.77	N/A
1,146	1,146	6519	Powow Villa 1	7-12 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	7.77	N/A
1,147	1,147	6520	Powow Villa 1	13-18 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	7.77	N/A
1,148	1,148	6521	Powow Villa 1	19-24 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	7.77	N/A
1,149	1,149	6522	Powow Villa 1	25-31 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	7.77	N/A
1,150	1,150	6526	Powow Villa 2	Community Building	Amesbury	1	National Grid	1680	1680	0	18.90	N/A
1,151	1,151	6523	Powow Villa 2	31-40 POWOW VILLA	Amesbury	10	National Grid	4928	4928	428	18.90	N/A
1,152	1,152	6524	Powow Villa 2	41-50 POWOW VILLA	Amesbury	10	National Grid	4928	4928	428	18.90	N/A
1,153	1,153	6525	Powow Villa 2	51-60 POWOW VILLA	Amesbury	10	National Grid	4928	4928	428	18.90	N/A
1,154	1,154	2257	President Street	17 President Street	Lynn	2	National Grid	3948	2632	1316	N/A	1.24
1,155	1,155	4471	QUI - David J. Crowley	3 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	14.30	N/A
1,156	1,156	6962	SAU - Laurel Gardens	Laurel Gardens - Community	Saugus	1	National Grid	1430	1430	0	21.60	N/A
1,157	1,157	6963	SAU - Laurel Gardens	Laurel Gardens - 166-169	Saugus	4	National Grid	1833	1833	0	21.60	N/A
1,158	1,158	6964	SAU - Laurel Gardens	Laurel Gardens - 146-149	Saugus	5	National Grid	2176	2176	0	21.60	N/A
1,159	1,159	6969	SAU - Laurel Gardens	Laurel Gardens - 107-112	Saugus	6	National Grid	2840	2840	0	21.60	N/A
1,160	1,160	6970	SAU - Laurel Gardens	Laurel Gardens - 130-145	Saugus	16	National Grid	4442	4442	0	21.60	N/A
1,161	1,161	6971	SAU - Laurel Gardens	Laurel Gardens - 150-165	Saugus	16	National Grid	4442	4442	0	21.60	N/A
1,162	1,162	6972	SAU - Laurel Gardens	Laurel Gardens - 170-185	Saugus	16	National Grid	4442	4442	0	21.60	N/A
1,163	1,163	6965	SAU - Laurel Gardens	Laurel Gardens - 125-129	Saugus	5	National Grid	2280	2280	0	21.60	N/A
1,164	1,164	6966	SAU - Laurel Gardens	Laurel Gardens - 101-106	Saugus	6	National Grid	2736	2736	0	21.60	N/A
1,165	1,165	6967	SAU - Laurel Gardens	Laurel Gardens - 113-118	Saugus	6	National Grid	2736	2736	0	21.60	N/A
1,166	1,166	6968	SAU - Laurel Gardens	Laurel Gardens - 119-124	Saugus	6	National Grid	2736	2736	0	21.60	N/A
1,167	1,167	6973	SAU - Laurel Tower	2 Rice St.	Saugus	100	National Grid	66549	66549	18634	17.55	N/A
1,168	1,168	6878	SAU - Sweetser's Corner	5 & 7 Baker	Saugus	2	National Grid	4158	4158	1248	N/A	2.43
1,169	1,169	6877	SAU - Sweetser's Corner	3 Baker St.	Saugus	22	National Grid	16802	16802	5041	N/A	2.43
1,170	1,170	4147	SLM - Farrel Court	17-1, 17-2, 17-3 & 17-4 Farrel Court	Salem	4	National Grid	4800	3600	1200	N/A	1.09
1,171	1,171	4149	SLM - Farrel Court	21-1, 21-2, 21-3, & 21-4 Farrel Court	Salem	4	National Grid	4800	3600	1200	N/A	1.24
1,172	1,172	4148	SLM - Farrel Court	19-1, 19-2, 19-3, 19-4 Farrel Court	Salem	4	National Grid	4800	3600	1200	N/A	1.34
1,173	1,173	6871	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	8	National Grid	6030	6030	2030	11.87	N/A
1,174	1,174	6873	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	8	National Grid	6030	6030	2030	11.87	N/A
1,175	1,175	6876	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	8	National Grid	6030	6030	2030	11.87	N/A
1,176	1,176	6862	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	8	National Grid	6030	6030	2030	11.87	N/A
1,177	1,177	6864	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	8	National Grid	6030	6030	2030	11.87	N/A
1,178	1,178	6867	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	8	National Grid	6030	6030	2030	11.87	N/A
1,179	1,179	6869	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	1	National Grid	1884	1884	0	11.87	N/A
1,180	1,180	6860	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	1	National Grid	658	658	0	11.87	N/A
1,181	1,181	6870	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,182	1,182	6872	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,183	1,183	6874	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,184	1,184	6875	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,185	1,185	6861	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,186	1,186	6863	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,187	1,187	6865	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,188	1,188	6866	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,189	1,189	6868	SMS - Eugene Murphy Village	READ STREET & BRAYTON POINT ROAD	Somerset	3	National Grid	3000	3000	1500	11.87	N/A
1,190	1,190	6852	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 2	Somerset	8	National Grid	5280	5280	1280	13.66	N/A
1,191	1,191	6854	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 4	Somerset	8	National Grid	5280	5280	1280	13.66	N/A
1,192	1,192	6855	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 5	Somerset	8	National Grid	5280	5280	1280	13.66	N/A
1,193	1,193	6853	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 3	Somerset	12	National Grid	7930	7930	1930	13.66	N/A
1,194	1,194	6856	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 6	Somerset	12	National Grid	7930	7930	1930	13.66	N/A
1,195	1,195	6851	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 1	Somerset	4	National Grid	2249	2249	249	13.66	N/A
1,196	1,196	6857	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 7	Somerset	4	National Grid	2249	2249	249	13.66	N/A
1,197	1,197	6858	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE - 8	Somerset	4	National Grid	2249	2249	249	13.66	N/A
1,198	1,198	6859	SMS - John F. Kennedy Terrace	75 JOHN F. KENNEDY TERRACE- Cmty B	Somerset	1	National Grid	1674	1674	0	13.66	N/A
1,199	1,199	6897	State Veterans	101-107 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,200	1,200	6898	State Veterans	110-116 CONSTITUTION ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,201	1,201	6899	State Veterans	118-124 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,202	1,202	6900	State Veterans	130-136 CONSTITUTION ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,203	1,203	6902	State Veterans	14-20 CONSTITUTION ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,204	1,204	6901	State Veterans	141-147 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,205	1,205	6903	State Veterans	153-159 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,206	1,206	6904	State Veterans	164-170 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,207	1,207	6905	State Veterans	57-63 CONSTITUTION ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,208	1,208	6906	State Veterans	63-69 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,209	1,209	6907	State Veterans	70-76 CONSTITUTION ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,210	1,210	6908	State Veterans	90-96 CONSTITUTION ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,211	1,211	6909	State Veterans	92-98 COOLIDGE ST	Revere	4	National Grid	3220	3220	0	12.43	N/A
1,212	1,212	6886	State Veterans	44-46 COOLIDGE ST	Revere	2	National Grid	2000	2000	0	12.43	N/A
1,213	1,213	6880	State Veterans	102-104 COOLIDGE ST	Revere	2	National Grid	1610	1610	0	12.43	N/A
1,214	1,214	6881	State Veterans	107 & 109 ADAMS ST	Revere	2	National Grid	1610	1610	0	12.43	N/A
1,215	1,215	6882	State Veterans	117 & 119 ADAMS ST	Revere	2	National Grid	1610	1610	0	12.43	N/A
1,216	1,216	6883	State Veterans	16 & 18 RAY RD	Revere	2	National Grid	1610	1610	0	12.43	N/A
1,217	1,217	6884	State Veterans	26-28 COOLIDGE ST	Revere	2	National Grid	1610	1610	0	12.43	N/A
1,218	1,218	6885	State Veterans	93 & 95 ADAMS ST	Revere	2	National Grid	1610	1610	0	12.43	N/A
1,219	1,219	6920	State Veterans	110-104 ADAMS ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,220	1,220	6921	State Veterans	114-120 ADAMS ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,221	1,221	6922	State Veterans	134-140 ADAMS ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,222	1,222	6923	State Veterans	187-193 CONSTITUTION ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,223	1,223	6924	State Veterans	188-194 CONSTITUTION ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,224	1,224	6925	State Veterans	210-216 CONSTITUTION ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,225	1,225	6926	State Veterans	230-236 COOLIDGE ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,226	1,226	6927	State Veterans	86-92 ADAMS ST	Revere	4	National Grid	3452	3452	0	12.43	N/A
1,227	1,227	6937	State Veterans	100-106 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,228	1,228	6938	State Veterans	105-111 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,229	1,229	6940	State Veterans	11-17 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,230	1,230	6939	State Veterans	111-117 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,231	1,231	6941	State Veterans	129-135 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,232	1,232	6944	State Veterans	13-17 RAY, 69 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,233	1,233	6942	State Veterans	130 COOLEDGE, 25-29 RAY	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,234	1,234	6943	State Veterans	131-137 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,235	1,235	6945	State Veterans	140-146 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,236	1,236	6946	State Veterans	141-147 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,237	1,237	6947	State Veterans	163-169 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,238	1,238	6948	State Veterans	176-182 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,239	1,239	6949	State Veterans	187-193 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,240	1,240	6950	State Veterans	22-26 RAY,150 COOLDG	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,241	1,241	6951	State Veterans	32-38 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,242	1,242	6952	State Veterans	33-39 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,243	1,243	6953	State Veterans	37-43 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,244	1,244	6954	State Veterans	4-6-8 RAY,83 CONST	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,245	1,245	6955	State Veterans	60 COOLDG,4,6,8 CON.	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,246	1,246	6956	State Veterans	79-85 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,247	1,247	6957	State Veterans	80-86 CONSTITUTION	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,248	1,248	6958	State Veterans	82-88 COOLIDGE	Revere	4	National Grid	4000	4000	0	12.43	N/A
1,249	1,249	6887	State Veterans	121-123 COOLIDGE ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,250	1,250	6888	State Veterans	133-135 ADAMS ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,251	1,251	6889	State Veterans	158-160 COOLIDGE ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,252	1,252	6890	State Veterans	190-192 COOLIDGE ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,253	1,253	6891	State Veterans	25,27 COOLIDGE ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,254	1,254	6892	State Veterans	49-51 CONSTITUTION ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,255	1,255	6893	State Veterans	57-59 COOLIDGE ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,256	1,256	6894	State Veterans	77-78 COOLIDGE ST	Revere	3	National Grid	2250	2250	0	12.43	N/A
1,257	1,257	6959	State Veterans	219-225 COOLIDGE	Revere	4	National Grid	4160	4160	0	12.43	N/A
1,258	1,258	6960	State Veterans	239-245 COOLIDGE	Revere	4	National Grid	4160	4160	0	12.43	N/A
1,259	1,259	6910	State Veterans	108-114 COOLIDGE ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,260	1,260	6911	State Veterans	120-126 CONSTITUTION ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,261	1,261	6912	State Veterans	175-181 COOLIDGE ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,262	1,262	6913	State Veterans	25-31 CONSTITUTION ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,263	1,263	6919	State Veterans	250-256 COOLIDGE ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,264	1,264	6914	State Veterans	28-34 CONSTITUTION ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,265	1,265	6915	State Veterans	38-44 CONSTITUTION ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,266	1,266	6916	State Veterans	43-49 COOLIDGE ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,267	1,267	6917	State Veterans	89-95 COOLIDGE ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,268	1,268	6918	State Veterans	95-101 CONSTITUTION ST	Revere	4	National Grid	3312	3312	0	12.43	N/A
1,269	1,269	6928	State Veterans	175-181 CONSTITUTION ST	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,270	1,270	6929	State Veterans	176-182 CONSTITUTION ST	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,271	1,271	6930	State Veterans	197-203 CONSTITUTION ST	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,272	1,272	6931	State Veterans	198-204 CONSTITUTION ST	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,273	1,273	6932	State Veterans	209-215 CONSTITUTION ST	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,274	1,274	6933	State Veterans	220-226 COOLIDGE ST	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,275	1,275	6934	State Veterans	229-235 COOLIDGE	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,276	1,276	6935	State Veterans	240-246 COOLIDGE	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,277	1,277	6936	State Veterans	249-255 COOLIDGE	Revere	4	National Grid	3936	3936	0	12.43	N/A
1,278	1,278	5764	WEY - Joseph Crehan	48, 52 Calnan Circle	Weymouth	8	National Grid	4450	4450	0	15.87	N/A
1,279	1,279	5761	WEY - Joseph Crehan	21, 25, 29 Calnan Circle	Weymouth	12	National Grid	6674	6674	0	15.87	N/A
1,280	1,280	5758	WEY - Joseph Crehan	22, 26, 30 Calnan Circle	Weymouth	12	National Grid	6674	6674	0	15.87	N/A
1,281	1,281	5763	WEY - Joseph Crehan	49, 53, 57 Calnan Circle	Weymouth	12	National Grid	6674	6674	0	15.87	N/A
1,282	1,282	5762	WEY - Joseph Crehan	58, 62, 66 Calnan Circle	Weymouth	12	National Grid	6674	6674	0	15.87	N/A
1,283	1,283	5753	WEY - Joseph Crehan	6, 10, 14 Calnan Circle	Weymouth	12	National Grid	6674	6674	0	15.87	N/A
1,284	1,284	5759	WEY - Joseph Crehan	7, 11, 15 Calnan Circle	Weymouth	12	National Grid	6674	6674	0	15.87	N/A
1,285	1	831	Oak Terrace	Pine St	Boston	19	NSTAR	25680	25680	1880	4.49	N/A
1,286	2	1042	15-25 Hemenway Apartments	17 Hemenway St.	Boston	4	NSTAR	4381	2621	897	N/A	5.34
1,287	3	1043	15-25 Hemenway Apartments	19 Hemenway St.	Boston	4	NSTAR	4284	2524	877	N/A	7.05
1,288	4	1044	15-25 Hemenway Apartments	21 Hemenway St.	Boston	4	NSTAR	4284	2524	877	N/A	6.42
1,289	5	1045	15-25 Hemenway Apartments	23 Hemenway St.	Boston	4	NSTAR	4323	2563	885	N/A	4.58
1,290	6	1046	15-25 Hemenway Apartments	25 Hemenway St.	Boston	4	NSTAR	4284	2524	877	N/A	5.15

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,291	7	1246	33 Bradlee Street	33 Bradlee Street	Boston	13	NSTAR	5800	2820	1980	8.12	N/A
1,292	8	1247	9 Half Moon Street	9 Half Moon Street	Boston	12	NSTAR	4400	4400	2480	6.23	N/A
1,293	9	1248	394 Washington Street	394 Washington Street	Boston	12	NSTAR	4200	4200	2400	10.38	N/A
1,294	10	1308	248 Edgell Rd	248 Edgell Rd	Framingham	14	NSTAR	8676	8676	8556	11.11	N/A
1,295	11	1323	17 Holliston St	17 Holliston St	Medway	14	NSTAR	5939	2828	1148	6.89	N/A
1,296	12	1341	206-210 Otis St Apartments	206-210 Otis Street Bldg	Cambridge	8	NSTAR	10142	10142	1900	N/A	0.24
1,297	13	1345	73 Hollis St	73 Hollis St.	Framingham	53	NSTAR	15057	9867	4567	8.66	N/A
1,298	14	1361	Anchor's Weigh	300 Commandant's Way	Chelsea	87	NSTAR	124300	124300	44670	N/A	7.60
1,299	15	1380	1392 Dorchester Avenue	1392 Dorchester Avenue	Dorchester	12	NSTAR	9840	7847	6090	N/A	0.25
1,300	16	1381	7 Toledo Terrace	7 Toledo Terrace	Dorchester	3	NSTAR	3600	2700	900	N/A	2.46
1,301	17	1383	19-21 Faulkner	19-21 Faulkner Street	Dorchester	6	NSTAR	7340	5847	1493	N/A	7.26
1,302	18	1983	402 Rindge Apartments	402 Rindge Avenue	Cambridge	273	NSTAR	255200	255200	81845	6.35	N/A
1,303	19	2084	Oxford Terrace	Oxford Terrace	Fairhaven	108	NSTAR	71712	71712	17712	5.83	N/A
1,304	20	2218	6-8 Fairmont Street (Mass 3-3)	6 Fairmont Street	Cambridge	5	NSTAR	4422	4422	113	N/A	42.30
1,305	21	2219	6-8 Fairmont Street (Mass 3-3)	8 Fairmont Street	Cambridge	5	NSTAR	4422	4422	113	N/A	42.30
1,306	22	2419	15-25 Hemenway St.	15 Hemenway STreet	Boston	4	NSTAR	5914	4015	2006	N/A	3.59
1,307	23	2420	15-25 Hemenway St.	17 Hemenway STreet	Boston	4	NSTAR	5381	3621	2297	N/A	2.07
1,308	24	2421	15-25 Hemenway St.	19 Hemenway Street	Boston	4	NSTAR	5285	3525	1878	N/A	3.16
1,309	25	2422	15-25 Hemenway St.	21 Hemenway Street	Boston	4	NSTAR	5285	3525	1878	N/A	3.02
1,310	26	2423	15-25 Hemenway St.	23 Hemenway Street	Boston	4	NSTAR	5285	3525	1878	N/A	2.23
1,311	27	2445	121 Jackson Street	121 Jackson Bldg 5-10	Cambridge	6	NSTAR	4689	4689	939	N/A	6.20
1,312	28	2450	226 Norfolk Street	226 Norfolk Street	Cambridge	3	NSTAR	3542	2673	869	N/A	5.48
1,313	29	2519	Amy Lowell House	65 Martha Rd.	Boston	151	NSTAR	115000	115000	28024	N/A	44.20
1,314	30	2544	713 Dudley Apartments	3 Monadnock St.	Boston	43	NSTAR	35000	30000	5525	3.77	N/A
1,315	31	2545	713 Dudley Apartments	713 Dudley St.	Boston	28	NSTAR	26000	23000	3290	2.66	N/A
1,316	32	2631	Adams Court	200 Stevens Street - A	Hyannis	16	NSTAR	8040	8040	0	16.42	N/A
1,317	33	2658	Adams Court	200 Stevens Street - B	Hyannis	16	NSTAR	8040	8040	0	16.42	N/A
1,318	34	2659	Adams Court	200 Stevens Street - C	Hyannis	16	NSTAR	8040	8040	0	16.42	N/A
1,319	35	2660	Adams Court	200 Stevens Street - D	Hyannis	16	NSTAR	8040	8040	0	16.42	N/A
1,320	36	2661	Adams Court	200 Stevens Street Community Building	Hyannis	1	NSTAR	8040	7040	1000	16.42	N/A
1,321	37	2673	Anderson Park	250 Cambridge St	Boston	64	NSTAR	86006	86006	29219	2.56	N/A
1,322	38		Granite Lena	712 Blue-Hill Avenue	Boston	1	NSTAR	1226	1226	118	N/A	35.80
1,323	39		Chelsea Homes LP	62 Blossom St.	Boston	3	NSTAR	2223	1937	286	N/A	3.21
1,324	40		Chelsea Homes LP	90 Shawmut St	Boston	3	NSTAR	2900	2590	310	N/A	26.34
1,325	41		Chelsea Homes LP	18 Watts St	Boston	2	NSTAR	2010	1675	335	N/A	5.67
1,326	42		Chelsea Homes LP	79 Shawmut St	Boston	3	NSTAR	2871	2484	387	N/A	5.75
1,327	43		Chelsea Homes LP	77 Shawmut St	Boston	3	NSTAR	2612	2207	405	N/A	5.06
1,328	44		Cottage Brook Apts	16 Magnolia St	Dorchester	2	NSTAR	3059	3059	500	N/A	4.83
1,329	45		Chelsea Homes LP	38 Bellingham St.	Boston	3	NSTAR	3099	2582	517	N/A	4.32
1,330	46		Chelsea Homes LP	47 Washington Ave.	Boston	3	NSTAR	2533	1981	552	N/A	2.20
1,331	47		Cottage Brook Apts	20 Magnolia St	Dorchester	2	NSTAR	3159	3159	600	N/A	2.05
1,332	48		Cottage Brook Apts	8 Magnolia St	Dorchester	2	NSTAR	3159	3159	600	N/A	1.58
1,333	49		Granite Lena	2 Abbott Street	Boston	2	NSTAR	2237	2237	673	N/A	4.58
1,334	50		Chelsea Homes LP	68-70 Shawmut St	Boston	6	NSTAR	6506	5692	814	N/A	1.37
1,335	51		Cottage Brook Apts	12 Magnolia St	Dorchester	2	NSTAR	3421	3421	862	N/A	0.59
1,336	52		Chelsea Homes LP	212-214 Poplar St/12-14 Sixth St	Boston	7	NSTAR	6289	5396	893	N/A	2.48
1,337	53		Cottage Brook Apts	19 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	2.39
1,338	54		Cottage Brook Apts	21 Leyland St	Dorchester	3	NSTAR	3978	3978	900	N/A	3.30
1,339	55		Cottage Brook Apts	23 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	2.20
1,340	56		Cottage Brook Apts	25 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	1.77
1,341	57		Cottage Brook Apts	27 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	4.54
1,342	58		Cottage Brook Apts	31 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	4.27
1,343	59		Cottage Brook Apts	33 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	2.11
1,344	60		Cottage Brook Apts	35 Leyland St	Dorchester	3	NSTAR	3978	3078	900	N/A	2.13
1,345	61		Cottage Brook Apts	37 Leyland St	Dorchester	4	NSTAR	6519	5519	1000	N/A	3.35
1,346	62		Scouting Way	156 Prospect Street	Boston	3	NSTAR	3708	2658	1050	N/A	3.82
1,347	63		Cottage Brook Apts	24 Magnolia St	Dorchester	2	NSTAR	3670	3670	1111	N/A	3.24
1,348	64		Chelsea Homes LP	48-50 Chester Ave	Boston	6	NSTAR	6315	5054	1261	N/A	1.00
1,349	65		Cottage Brook Apts	10 Magnolia St	Dorchester	2	NSTAR	3839	3839	1280	N/A	5.23
1,350	66		Squirrel Brand	17 Boardman Street	Boston	2	NSTAR	4220	3165	1291	N/A	0.18
1,351	67		Chelsea Homes LP	52-54 Shurtleff St.	Boston	6	NSTAR	5336	3984	1352	N/A	0.70
1,352	68		UE - Dixwell Park	2 Brookside Avenue	Boston	3	NSTAR	4320	3320	1410	N/A	1.28
1,353	69		UE - Dixwell Park	189 Boylston Street	Boston	3	NSTAR	4320	3320	1461	N/A	3.84
1,354	70		St Patrick's Place	26 York Street	Boston	6	NSTAR	5591	4287	1605	N/A	1.77
1,355	71		Cottage Brook Apts	29 Leyland St	Dorchester	3	NSTAR	4773	3873	1695	N/A	8.93
1,356	72		Granite Lena	714 Blue-Hill Avenue	Boston	3	NSTAR	5928	4446	1821	N/A	3.15
1,357	73		St Patrick's Place	40 York Street	Boston	4	NSTAR	6797	4974	1908	N/A	1.42
1,358	74		Chelsea Homes LP	133-139 Shawmut St	Boston	12	NSTAR	10632	8485	2147	N/A	2.34
1,359	75		Brighton Allston Apartments	495 Washington St.	Boston	6	NSTAR	6724	5043	2181	N/A	3.72
1,360	76		Brighton Allston Apartments	497 Washington St.	Boston	6	NSTAR	6724	5043	2181	N/A	0.40
1,361	77		Brighton Allston Apartments	499 Washington St.	Boston	6	NSTAR	6724	5043	2181	N/A	3.93
1,362	78		154 / 156 Boylston	154/156 Boylston	Brookline	6	NSTAR	8600	6360	2400	N/A	2.35
1,363	79		Westland Ave. Apartments	65-67 Westland Ave	Boston	16	NSTAR	13372	13372	2410	N/A	10.43
1,364	80		Broadway I	587 Broadway St	Boston	6	NSTAR	5750	4658	2476	N/A	1.44
1,365	81		Broadway I	589 Broadway St	Boston	6	NSTAR	5750	4658	2476	N/A	0.87
1,366	82		Broadway I	593 Broadway St	Boston	6	NSTAR	5750	4658	2476	N/A	0.38
1,367	83		Broadway I	591 Broadway St	Boston	6	NSTAR	5750	4658	2476	N/A	0.32
1,368	84		1017 Beacon	1017 Beacon Street	Brookline	16	NSTAR	6500	6500	2500	5.88	N/A
1,369	85		UE - Montebello Road	62 Montebello Road	Boston	7	NSTAR	8400	6900	2636	N/A	3.23
1,370	86		Chelsea Homes LP	30-34	Boston	12	NSTAR	11463	8808	2655	N/A	1.55
1,371	87		Fenway Lodging House	57 Hemenway St	Boston	13	NSTAR	5000	4230	2684	N/A	11.03
1,372	88		St Patrick's Place	30 York Street	Boston	6	NSTAR	10932	8094	2886	N/A	3.47
1,373	89		Westland Ave Apts	83 Westland Ave	Boston	5	NSTAR	11666	11666	2975	N/A	3.00
1,374	90		Westland Ave. Apartments	83 Westland Ave.	Boston	5	NSTAR	11666	11666	2975	N/A	3.00
1,375	91		Granite Lena	9 Charlotte Street	Boston	3	NSTAR	6606	4954	3048	N/A	1.40
1,376	92		Westland Ave Apts	65-67 Westland Ave	Boston	16	NSTAR	13372	13372	3410	N/A	7.37

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,377	93		Granite Lena	16 McLellan Street	Boston	15	NSTAR	14277	11422	3963	N/A	4.57
1,378	94		Granite Lena	6 Esmond Street	Boston	5	NSTAR	10283	7712	3972	N/A	3.10
1,379	95		Granite Lena	4 Esmond Street	Boston	6	NSTAR	10694	8020	4224	N/A	1.83
1,380	96		UE - Dixwell Park	12	Boston	12	NSTAR	12090	7990	4274	N/A	1.65
1,381	97		Granite Lena	12 McLellan Street	Boston	15	NSTAR	14049	11239	4281	N/A	2.18
1,382	98		Squirrel Brand	12 Boardman Street	Boston	18	NSTAR	19600	19600	4373	N/A	12.91
1,383	99		Granite Lena	183 Harvard Street	Boston	14	NSTAR	14361	11489	4708	N/A	2.75
1,384	100		Granite Lena	788 Blue-Hill Avenue	Boston	9	NSTAR	13861	10396	4903	N/A	3.89
1,385	101		UE - Walnut Washington	11 & 15 Waldren Road	Boston	11	NSTAR	16704	11639	5070	N/A	2.89
1,386	102		Granite Lena	185 Harvard Street	Boston	14	NSTAR	14182	11319	5212	N/A	1.71
1,387	103		Granite Lena	3 Charlotte Street	Boston	6	NSTAR	11947	8960	5264	N/A	0.98
1,388	104		64-70 Burbank St. Apt	64 Burbank St.	Boston	18	NSTAR	18568	18568	6166	N/A	12.90
1,389	105		64-70 Burbank St. Apt	70 Burbank St.	Boston	18	NSTAR	18568	18568	6166	N/A	0.97
1,390	106		Granite Lena	33 Wales Street	Boston	12	NSTAR	14468	11575	6559	N/A	2.36
1,391	107		Granite Lena	31 Wales Street	Boston	12	NSTAR	14579	11663	6681	N/A	1.21
1,392	108		UE - Dixwell Park	1 & 2 Candor Place and 309 Chestnut Aven	Boston	9	NSTAR	15180	11805	6780	N/A	2.31
1,393	109		Granite Lena	91 Esmond Street	Boston	17	NSTAR	19332	15466	6867	N/A	3.75
1,394	110		71 Westland Apartments	69-71 Westland Ave.	Boston	20	NSTAR	21000	21000	7354	N/A	2.90
1,395	111		UE - Walnut Washington	361 & 363 Walnut Avenue	Boston	24	NSTAR	27216	21196	8437	N/A	4.65
1,396	112		Westland Ave Apts	66 Westland Ave	Boston	29	NSTAR	33391	33391	8514	N/A	8.40
1,397	113		Westland Ave. Apartments	66 Westland Ave.	Boston	29	NSTAR	33391	33391	8514	N/A	8.40
1,398	114		UE - Walnut Washington	38 Walnut Park	Boston	12	NSTAR	20160	16704	11792	N/A	1.30
1,399	115		St Patrick's Place	50 York Street	Boston	16	NSTAR	30360	21910	11925	N/A	3.31
1,400	116		West Fenway Elderly Housing	110 Petersbrough St	Boston	48	NSTAR	40752	40752	12574	N/A	8.48
1,401	117		Westland Ave Apts	72-78 Westland Ave	Boston	45	NSTAR	56520	56520	14412	N/A	5.55
1,402	118		Westland Ave. Apartments	72-78 Westland Ave.	Boston	44	NSTAR	56520	56520	15801	N/A	5.06
1,403	119		Fenway Views Condominiums	108 Peterborough	Boston	55	NSTAR	60085	60085	16804	N/A	6.48
1,404	120		Coleman House II	677b Winchester St.	Brighton	46	NSTAR	41123	41123	16823	5.34	N/A
1,405	121		Golda Meir II	160b Stanton St.	Brighton	75	NSTAR	61500	61500	20825	9.85	N/A
1,406	122		senior living on Bellingham Hill	100 bellingham st.	Chelsea	60	NSTAR	45000	43200	21000	9.72	N/A
1,407	123		Tribune	46 Irving Street	Framingham	53	NSTAR	59800	59800	24209	N/A	2.81
1,408	124		Coleman House 1	677 Winchester St.	Brighton	100	NSTAR	78000	78000	28085	9.91	N/A
1,409	125		Unquity House	30 Curtis Road	Milton	140	NSTAR	103290	103290	28412	14.19	N/A
1,410	126		Ulin House	30 Wallingford Rd.	Brighton	242	NSTAR	140889	140889	41635	8.19	N/A
1,411	127		Leventhal House	40 Wallingford Rd.	Brighton	254	NSTAR	158387	158387	41718	11.40	N/A
1,412	128		Golda Meir 1	160 Stanton St.	Brighton	124	NSTAR	112250	112250	44415	7.76	N/A
1,413	129		Genesis House	28 Wallingford Rd.	Brighton	209	NSTAR	187656	117794	69862	6.63	N/A
1,414	130	60	Auburn Court	42 Pilgrim Street	Cambridge	6	NSTAR	5750	5750	1655	1.64	N/A
1,415	131	61	Auburn Court	46 Pilgrim Street	Cambridge	12	NSTAR	12240	12240	1475	2.50	N/A
1,416	132	53	Auburn Court	84 Auburn Park	Cambridge	14	NSTAR	15441	15441	2171	2.23	N/A
1,417	133	2632	Barnstable and Hyannis House	32 Sea Street Extension	Barnstable	36	NSTAR	30720	30720	7392	10.13	N/A
1,418	134	2664	Barnstable and Hyannis House	54 Sea Street Extension	Barnstable	36	NSTAR	30720	30720	7392	10.13	N/A
1,419	135	1957	Batavia Cooperative	29, 31, 33 Symphony Road	Boston	7	NSTAR	6262	6262	1566	N/A	15.57
1,420	136	2817	Bayberry House	58 Rose Morin Drive - 1	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,421	137	2826	Bayberry House	58 Rose Morin Drive - 10	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,422	138	2827	Bayberry House	58 Rose Morin Drive - 11	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,423	139	2818	Bayberry House	58 Rose Morin Drive - 2	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,424	140	2819	Bayberry House	58 Rose Morin Drive - 3	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,425	141	2820	Bayberry House	58 Rose Morin Drive - 4	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,426	142	2821	Bayberry House	58 Rose Morin Drive - 5	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,427	143	2822	Bayberry House	58 Rose Morin Drive - 6	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,428	144	2823	Bayberry House	58 Rose Morin Drive - 7	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,429	145	2824	Bayberry House	58 Rose Morin Drive - 8	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,430	146	2825	Bayberry House	58 Rose Morin Drive - 9	Falmouth	6	NSTAR	2520	2520	N/A	6.74	N/A
1,431	147	1328	Bedford Towers	231 Middle Street	New Bedford	117	NSTAR	86163	83259	10781	8.78	N/A
1,432	148	1591	Brian Honan Apts	10-16 Clevemont (G)	Allston	4	NSTAR	7020	7020	2340	1.11	N/A
1,433	149	1594	Brian Honan Apts	65-71 Hano St. (F)	Allston	4	NSTAR	4416	4416	1472	2.83	N/A
1,434	150	1933	Brigham House	341 Mount Auburn Street	Watertown	62	NSTAR	100000	100000	25000	5.51	N/A
1,435	151	1213	Brookledge Cummins	60 Brookledge Street	Boston	50	NSTAR	57000	57000	5000	N/A	35.90
1,436	152	1214	Brookledge Cummins	610 Cummins Hwy	Boston	40	NSTAR	45000	45000	4000	N/A	28.73
1,437	153	89	Brunswick Holborn Apts	42 Holborn St	Roxbury	9	NSTAR	7249	7249	N/A	3.17	N/A
1,438	154	91	Brunswick Holborn Apts	538-544 Warren St	Roxbury	8	NSTAR	9842	9842	N/A	2.18	N/A
1,439	155	92	Brunswick Holborn Apts	564-566 Warren St	Roxbury	12	NSTAR	9572	9572	N/A	1.34	N/A
1,440	156	90	Brunswick Holborn Apts	572 Warren St	Roxbury	20	NSTAR	17144	17144	N/A	1.75	N/A
1,441	157	2425	Burns Apartments	30 Churchill Avenue	Cambridge	60	NSTAR	42545	27545	15134	N/A	25.95
1,442	158	2426	Burns Apartments	50 Churchill Avenue	Cambridge	138	NSTAR	85091	54822	30269	N/A	25.95
1,443	159	2633	Captain Eldredge House	30 Pine Avenue	Barnstable	18	NSTAR	10000	10000	5485	6.68	N/A
1,444	160	635	CCHDI	184-188 Harvard St.	Cambridge	17	NSTAR	22000	22000	2000	N/A	7.20
1,445	161	1809	CCHI	160-164 Richdale	Cambridge	7	NSTAR	10249	7749	2947	0.77	N/A
1,446	162	1790	CCHI	54-56 Sciarappa Street	Cambridge	6	NSTAR	5830	5830	1512	N/A	0.55
1,447	163	1959	Coffin Lofts	516 Pleasant St.	New Bedford	18	NSTAR	66024	60974	42782	N/A	0.95
1,448	164	141	Columbia Road Apts	422 Columbia Road	Dorchester	35	NSTAR	32286	26905	8606	1.23	N/A
1,449	165	147	Columbia Road Apts	435 Columbia Road	Dorchester	16	NSTAR	18050	14440	5566	1.13	N/A
1,450	166	150	Columbia Road Apts	455 & 457 Columbia Road	Dorchester	6	NSTAR	8920	6690	2994	1.28	N/A
1,451	167	145	Columbia Road Apts	466 Columbia Road	Dorchester	12	NSTAR	14876	11157	6608	2.01	N/A
1,452	168	144	Columbia Road Apts	468 Columbia Road	Dorchester	13	NSTAR	14876	12100	6434	0.68	N/A
1,453	169	922	Commonwealth Apts	1287 Commonwealth Avenue	Allston	8	NSTAR	10100	10100	1650	N/A	34.05
1,454	170	2508	Corcoran Park	10 May Street	Cambridge	8	NSTAR	6269	6269	333	N/A	19.12
1,455	171	2512	Corcoran Park	11 Corcoran Lane	Cambridge	8	NSTAR	6258	6258	330	N/A	20.86
1,456	172	2515	Corcoran Park	12 May Street	Cambridge	8	NSTAR	6257	6257	323	N/A	28.63
1,457	173	2546	Corcoran Park	14 Corcoran Lane	Cambridge	6	NSTAR	11300	11300	420	N/A	16.52
1,458	174	2510	Corcoran Park	15 Corcoran Lane	Cambridge	6	NSTAR	11298	11298	420	N/A	21.98
1,459	175	2540	Corcoran Park	19 Corcoran Lane	Cambridge	4	NSTAR	3943	3943	391	N/A	17.50
1,460	176	2549	Corcoran Park	2 Corcoran Lane	Cambridge	4	NSTAR	4703	4703	299	N/A	26.31
1,461	177	2551	Corcoran Park	20 Saint Sauveur Court	Cambridge	8	NSTAR	6088	6088	1967	N/A	7.35
1,462	178	2539	Corcoran Park	23 Corcoran Lane	Cambridge	6	NSTAR	11300	11300	420	N/A	13.29

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,463	179	2514	Corcoran Park	4 Corcoran Lane	Cambridge	4	NSTAR	3943	3943	391	N/A	11.94
1,464	180	2538	Corcoran Park	50 Lawn Street	Cambridge	8	NSTAR	6256	6256	322	N/A	16.62
1,465	181	2537	Corcoran Park	52 Lawn Street	Cambridge	4	NSTAR	3943	3943	391	N/A	9.01
1,466	182	2516	Corcoran Park	53 Lawn Street	Cambridge	7	NSTAR	6257	6257	323	N/A	11.35
1,467	183	2511	Corcoran Park	55 Thingvalla	Cambridge	6	NSTAR	11208	11208	330	1.07	N/A
1,468	184	2536	Corcoran Park	56 Lawn Street	Cambridge	4	NSTAR	3943	3943	391	N/A	12.38
1,469	185	2543	Corcoran Park	59 Thingvalla Avenue	Cambridge	6	NSTAR	11300	11300	420	N/A	18.59
1,470	186	2513	Corcoran Park	6 Corcoran Lane	Cambridge	6	NSTAR	11304	11304	420	N/A	17.15
1,471	187	2535	Corcoran Park	60 Lawn Street	Cambridge	6	NSTAR	11283	11283	403	N/A	12.61
1,472	188	2541	Corcoran Park	63 Thingvalla Ave	Cambridge	6	NSTAR	11282	11282	402	N/A	17.19
1,473	189	2531	Corcoran Park	64 Lawn Street	Cambridge	8	NSTAR	8901	5934	2967	N/A	2.10
1,474	190	2542	Corcoran Park	67 Thingvalla Avenue	Cambridge	6	NSTAR	11282	11282	402	N/A	21.03
1,475	191	2509	Corcoran Park	8 May Street	Cambridge	6	NSTAR	11300	11300	420	N/A	6.48
1,476	192	1229	Cromwell Court	Bldg 1 (1 & 2)	Hyannis	24	NSTAR	26307	26307	1695	0.59	N/A
1,477	193	1230	Cromwell Court	Bldg 2 (3 & 4)	Hyannis	24	NSTAR	25827	25827	1703	0.74	N/A
1,478	194	1231	Cromwell Court	Bldg 3 (5 & 6)	Hyannis	24	NSTAR	24432	24432	436	1.09	N/A
1,479	195	1232	Cromwell Court	Bldg 4 (7 & 8)	Hyannis	24	NSTAR	26307	26307	1695	0.70	N/A
1,480	196	1233	Cromwell Court	Bldg 5 (9, 10, 11)	Hyannis	28	NSTAR	29883	29883	2319	0.36	N/A
1,481	197	2085	Dana Court	180 Adams St.	Fairhaven	55	NSTAR	57600	57600	30100	3.69	N/A
1,482	198	2681	Danube Apartments	137 Columbia Road	Dorchester	14	NSTAR	13602	13602	2850	N/A	1.96
1,483	199	2674	Danube Apartments	27-29 Montebello Road	Jamaica Plain	12	NSTAR	10168	8824	2054	N/A	4.28
1,484	200	2675	Danube Apartments	34-40 Danube St	Dorcester	18	NSTAR	26925	17999	10710	N/A	2.08
1,485	201	2685	Danube Apartments	825 Blue Hill Ave + 5 Calder	Dorchester	10	NSTAR	11586	9788	2330	4.24	N/A
1,486	202	2686	Danube Apartments	829 Blue Hill Ave + 1-3 Calder	Dorchester	11	NSTAR	10890	9587	1303	N/A	10.38
1,487	203	1107	Dartmouth Hotel	144 Dudley St.	Roxbury	45	NSTAR	81500	81500	58190	N/A	3.61
1,488	204	823	Dorchester	620-622 Dorchester Ave	South Boston	6	NSTAR	5160	3870	3110	6.06	0.90
1,489	205	1251	Dudley Village	(Bldg I) 564-570 Dudley	Dorchester	16	NSTAR	28392	22872	9591	N/A	3.68
1,490	206	1252	Dudley Village	(Bldg II) 580-590 Dudley	Dorchester	11	NSTAR	15954	14870	4026	N/A	8.71
1,491	207	1965	East Canton Street	79 East Canton Street	Boston	20	NSTAR	13984	13984	2331	N/A	22.80
1,492	208	1966	East Canton Street	89 East Canton Street	Boston	20	NSTAR	13984	13984	2331	N/A	22.12
1,493	209	2526	Ebenezer Homes	160 West Springfield St.	Boston	4	NSTAR	3240	3240	850	N/A	2.44
1,494	210	2527	Ebenezer Homes	162 West Springfield St.	Boston	4	NSTAR	3240	3240	850	N/A	2.10
1,495	211	2528	Ebenezer Homes	164 West Springfield St.	Boston	4	NSTAR	3240	3240	850	6.75	2.57
1,496	212	2529	Ebenezer Homes	166 West Springfield St.	Boston	4	NSTAR	3240	3240	850	N/A	2.29
1,497	213	2530	Ebenezer Homes	168 West Springfield St.	Boston	4	NSTAR	3120	3120	850	5.43	2.58
1,498	214	2532	Ebenezer Homes	170 West Springfield St.	Boston	4	NSTAR	3120	3120	850	N/A	2.37
1,499	215	2533	Ebenezer Homes	172 West Springfield St.	Boston	4	NSTAR	3120	3120	850	N/A	3.47
1,500	216	2534	Ebenezer Homes	174 West Springfield St.	Boston	4	NSTAR	3120	3120	850	4.98	2.93
1,501	217	1788	Elderly Assisted Living	259 Lowell Street	Somerville	97	NSTAR	100000	100000	51500	8.44	N/A
1,502	218	1432	Elderly Assisted Living	405 Alewife Brook Parkway	Somerville	99	NSTAR	105774	105774	52314	6.36	N/A
1,503	219	1587	Erie Ellington	132 Ellington Street	Dorchester	2	NSTAR	3200	2400	800	2.00	0.34
1,504	220	2725	Forest Street	45 Forest Street	Lexington	6	NSTAR	4858	3058	1800	6.15	N/A
1,505	221	2449	Garfield Street	1713 Massachusetts Avenue	Cambridge	8	NSTAR	7485	7485	284	0.79	N/A
1,506	222	928	Glenville Apts	66 Glenville	Allston	20	NSTAR	15750	12600	3150	N/A	19.27
1,507	223	929	Glenville Apts	70 Glenville	Allston	16	NSTAR	15750	14160	1590	N/A	40.67
1,508	224	1149	Glenville Apts	74 Glenville	Allston	16	NSTAR	17384	14234	3150	N/A	17.97
1,509	225	931	Glenville Apts	82 Glenville	Allston	16	NSTAR	15750	12600	3150	N/A	20.89
1,510	226	2722	Greeley Village	Tewksbury Street - 1	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,511	227	2743	Greeley Village	Tewksbury Street - 10	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,512	228	2744	Greeley Village	Tewksbury Street - 11	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,513	229	2745	Greeley Village	Tewksbury Street - 12	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,514	230	2746	Greeley Village	Tewksbury Street - 13	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,515	231	2747	Greeley Village	Tewksbury Street - 14	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,516	232	2748	Greeley Village	Tewksbury Street - 15	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,517	233	2749	Greeley Village	Tewksbury Street - 16	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,518	234	2750	Greeley Village	Tewksbury Street - 17	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,519	235	2751	Greeley Village	Tewksbury Street - 18	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,520	236	2752	Greeley Village	Tewksbury Street - 19	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,521	237	2735	Greeley Village	Tewksbury Street - 2	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,522	238	2753	Greeley Village	Tewksbury Street - 20	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,523	239	2754	Greeley Village	Tewksbury Street - 21	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,524	240	2755	Greeley Village	Tewksbury Street - 22	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,525	241	2756	Greeley Village	Tewksbury Street - 23	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,526	242	2757	Greeley Village	Tewksbury Street - 24	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,527	243	2758	Greeley Village	Tewksbury Street - 25	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,528	244	2759	Greeley Village	Tewksbury Street - 26	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,529	245	2736	Greeley Village	Tewksbury Street - 3	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,530	246	2737	Greeley Village	Tewksbury Street - 4	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,531	247	2738	Greeley Village	Tewksbury Street - 5	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,532	248	2739	Greeley Village	Tewksbury Street - 6	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,533	249	2740	Greeley Village	Tewksbury Street - 7	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,534	250	2741	Greeley Village	Tewksbury Street - 8	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,535	251	2742	Greeley Village	Tewksbury Street - 9	Lexington	4	NSTAR	2294	2294	694	17.70	N/A
1,536	252	2076	Green Meadows	1-4 McGann Terrace	Fairhaven	4	NSTAR	2520	2520	2020	8.72	N/A
1,537	253	2077	Green Meadows	10-16 McGann Terrace	Fairhaven	6	NSTAR	2520	2520	2020	8.72	N/A
1,538	254	2108	Green Meadows	100 McGann Terrace 2	Fairhaven	52	NSTAR	36720	36720	10720	3.03	N/A
1,539	255	2078	Green Meadows	17-22 McGann Terrace	Fairhaven	6	NSTAR	2520	2520	2020	8.72	N/A
1,540	256	2079	Green Meadows	23-26 McGann Terrace	Fairhaven	4	NSTAR	2520	2520	2020	8.72	N/A
1,541	257	2080	Green Meadows	27-32 McGann Terrace	Fairhaven	6	NSTAR	2520	2520	2020	8.72	N/A
1,542	258	2081	Green Meadows	33-36 McGann Terrace	Fairhaven	4	NSTAR	2520	2520	2020	8.72	N/A
1,543	259	3624	MAT - Homestead Court	Homestead Court - 3	Mattapoisett	1	NSTAR	783	783	N/A	4.36	N/A
1,544	260	3622	MAT - Homestead Court	Homestead Court - 1	Mattapoisett	1	NSTAR	947	947	N/A	3.81	N/A
1,545	261	3629	MAT - Homestead Court	Homestead Court - 8	Mattapoisett	1	NSTAR	947	947	N/A	5.32	N/A
1,546	262	3627	MAT - Homestead Court	Homestead Court - 6	Mattapoisett	1	NSTAR	783	783	N/A	6.77	N/A
1,547	263	3625	MAT - Homestead Court	Homestead Court - 4	Mattapoisett	1	NSTAR	947	947	N/A	5.64	N/A
1,548	264	3623	MAT - Homestead Court	Homestead Court - 2	Mattapoisett	1	NSTAR	783	783	N/A	7.35	N/A

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,549	265	3628	MAT - Homestead Court	Homestead Court - 7	Mattapoisett	1	NSTAR	947	947	N/A	6.07	N/A
1,550	266	2943	FRM - St. Lo Road	41-43 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	8.31	N/A
1,551	267	2939	FRM - St. Lo Road	3-5 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	8.65	N/A
1,552	268	3626	MAT - Homestead Court	Homestead Court - 5	Mattapoisett	1	NSTAR	783	783	N/A	8.79	N/A
1,553	269	2444	121 Jackson Street	121 Jackson Bldg 1-4	Cambridge	4	NSTAR	3126	3126	625	N/A	6.22
1,554	270	63	Auburn Court	117 Pacific Street	Cambridge	3	NSTAR	3449	3449	1129	N/A	4.42
1,555	271	58	Auburn Court	41 Pilgrim Street	Cambridge	6	NSTAR	6350	6350	595	N/A	9.27
1,556	272	1590	Brian Honan Apts	35-39 Blaine St.	Allston	3	NSTAR	4371	4371	1457	N/A	5.03
1,557	273	920	Commonwealth Apts	1291 Commonwealth Avenue	Allston	6	NSTAR	10100	10100	1650	N/A	2.04
1,558	274	236	Cottage Brook Apts	49 Stoughton St	Dorchester	8	NSTAR	5792	5549	867	N/A	5.01
1,559	275	258	Cottage Brook Apts	624 Dudley St	Dorchester	3	NSTAR	4415	3357	1423	N/A	2.66
1,560	276	256	Cottage Brook Apts	628 Dudley St	Dorchester	4	NSTAR	5639	4466	1562	N/A	2.6
1,561	277	271	Cottage Brook Apts	88-100 Brook Ave	Dorchester	1	NSTAR	10876	8202	2674	N/A	1.63
1,562	278	2803	FAL - Salt Sea	Salt Sea Lane - 1	Falmouth	4	NSTAR	2140	2140	340	3.69	N/A
1,563	279	3073	FAL - Salt Sea	Salt Sea Lane - 2	Falmouth	4	NSTAR	2140	2140	340	3.69	N/A
1,564	280	3074	FAL - Salt Sea	Salt Sea Lane - 3	Falmouth	4	NSTAR	2140	2140	340	3.69	N/A
1,565	281	3075	FAL - Salt Sea	Salt Sea Lane - 4	Falmouth	4	NSTAR	2140	2140	340	3.69	N/A
1,566	282	3076	FAL - Salt Sea	Salt Sea Lane - 5	Falmouth	4	NSTAR	2140	2140	340	3.69	N/A
1,567	283	3077	FAL - Salt Sea	Salt Sea Lane - 6	Falmouth	4	NSTAR	2140	2140	340	3.69	N/A
1,568	284	2114	Greenwood Terrace (Wesport HA)	666 State Road Community Building	Westport	1	NSTAR	1142	574	1141	9.86	N/A
1,569	285	1164	Hope in Boston	17 - 19 Browning	Dorchester	2	NSTAR	4608	3072	1536	0.04	N/A
1,570	286	1165	Hope in Boston	219 -221 Harvard St	Dorchester	2	NSTAR	4608	3072	1536	N/A	0.08
1,571	287	1115	Howard Dacia Homes	11 Balfour St.	Roxbury	3	NSTAR	5148	3861	1980	N/A	1.01
1,572	288	1125	Howard Dacia Homes	13 Dalkeith St.	Roxbury	2	NSTAR	3600	2400	1488	N/A	0.07
1,573	289	1117	Howard Dacia Homes	153 Howard St.	Roxbury	2	NSTAR	3600	2400	1488	N/A	0.14
1,574	290	1118	Howard Dacia Homes	164 Howard St.	Roxbury	1	NSTAR	2303	1535	1021	N/A	0.81
1,575	291	1119	Howard Dacia Homes	170 Howard St.	Roxbury	1	NSTAR	2303	1535	1021	N/A	0.07
1,576	292	1120	Howard Dacia Homes	18 Dewey St.	Roxbury	2	NSTAR	4605	3070	2041	N/A	0.57
1,577	293	1121	Howard Dacia Homes	23 Dacia St.	Roxbury	2	NSTAR	3600	2400	1488	N/A	0.25
1,578	294	1122	Howard Dacia Homes	27 Dacia St.	Roxbury	2	NSTAR	3600	2400	1488	N/A	0.46
1,579	295	1123	Howard Dacia Homes	33 Dacia St.	Roxbury	2	NSTAR	4605	3070	2041	N/A	0.22
1,580	296	1126	Howard Dacia Homes	91 Wayland St.	Roxbury	2	NSTAR	4605	3070	2041	N/A	0.28
1,581	297	1127	Howard Dacia Homes	95 Wayland St.	Roxbury	1	NSTAR	2303	1535	1021	N/A	0.33
1,582	298	1243	Interfaith	688 Mass Ave	Boston	5	NSTAR	5424	5424	1014	N/A	9.13
1,583	299	2322	LP - Brown Kaplan	16-18 Wilbert Road	Boston	2	NSTAR	2058	2058	N/A	N/A	0.40
1,584	300	2321	LP - Brown Kaplan	20-24 Wilbert Road	Boston	3	NSTAR	4000	4000	N/A	N/A	0.34
1,585	301	2329	LP - Brown Kaplan	22-26 Lorne Street	Boston	3	NSTAR	3517	3517	N/A	N/A	0.24
1,586	302	2324	LP - Brown Kaplan	2-4-6 Wilbert Road	Boston	3	NSTAR	3517	3517	N/A	N/A	0.20
1,587	303	2317	LP - Brown Kaplan	27-33 Wilbert Road	Boston	4	NSTAR	4814	4814	N/A	N/A	0.24
1,588	304	2318	LP - Brown Kaplan	35-41 Wilbert Road	Boston	4	NSTAR	4814	4814	N/A	N/A	0.19
1,589	305	2328	LP - Brown Kaplan	38-42 Lorne Street	Boston	3	NSTAR	3517	3517	N/A	N/A	0.01
1,590	306	2320	LP - Brown Kaplan	42-44 Wilbert Road	Boston	2	NSTAR	2058	2058	N/A	N/A	0.54
1,591	307	2319	LP - Brown Kaplan	43-45 Wilbert Road	Boston	2	NSTAR	2541	2541	N/A	N/A	2.76
1,592	308	2327	LP - Brown Kaplan	54-56 Lorne Street	Boston	2	NSTAR	2058	2058	N/A	N/A	0.66
1,593	309	2325	LP - Brown Kaplan	8-12 Wilbert Circle	Boston	3	NSTAR	3517	3517	N/A	N/A	0.21
1,594	310	2323	LP - Brown Kaplan	8-14 Wilbert Road	Boston	4	NSTAR	4814	4814	N/A	N/A	0.28
1,595	311	1283	Madison Park III	101-111 Dewitt Drive (odd numbers)	Boston	6	NSTAR	8550	5700	2850	N/A	1.84
1,596	312	1279	Madison Park III	17-31 Kerr Way (odd numbers)	Boston	8	NSTAR	12150	8100	4050	N/A	0.51
1,597	313	1282	Madison Park III	2-16 Kerr Way (even numbers)	Boston	8	NSTAR	12600	8400	4200	N/A	0.05
1,598	314	1290	Madison Park III	4-12 Estabrook Road (even numbers)	Boston	5	NSTAR	7200	4800	2400	N/A	0.93
1,599	315	1274	Madison Park III	67-81 Ruggles St (odd numbers)	Boston	8	NSTAR	12150	8100	4050	N/A	0.18
1,600	316	3142	Madison Park IV	# 2 - 1 Brook Marshall Raod	Boston	12	NSTAR	10098	10098	N/A	N/A	0.52
1,601	317	3141	Madison Park IV	# 3 - 20 Sojourner Truth Court	Boston	10	NSTAR	8628	8628	N/A	N/A	0.28
1,602	318	3140	Madison Park IV	# 4 - 2 Sojourner Truth Court	Boston	9	NSTAR	6615	6615	N/A	N/A	0.04
1,603	319	3144	Madison Park IV	# 5 - 59 Dewitt Drive	Boston	11	NSTAR	9363	9363	N/A	N/A	0.47
1,604	320	3126	Madison Park IV	# 6 - 773 Shawmut Avenue	Boston	10	NSTAR	7350	7350	N/A	N/A	0.33
1,605	321	3145	Madison Park IV	# 7 - 1 Kerr Place	Boston	12	NSTAR	10098	10098	N/A	N/A	0.21
1,606	322	3139	Madison Park IV	# 8 - 80 Dewitt Drive	Boston	11	NSTAR	9363	9363	N/A	N/A	0.12
1,607	323	3138	Madison Park IV	# 9 - 58 Dewitt Drive	Boston	11	NSTAR	9363	9363	N/A	N/A	0.11
1,608	324	3136	Madison Park IV	#10 - 40 Dewitt Drive	Boston	9	NSTAR	6615	6615	N/A	N/A	0.28
1,609	325	3127	Madison Park IV	#12 - 713 Shawmut Avenue	Boston	6	NSTAR	4410	4410	N/A	N/A	0.35
1,610	326	3125	Madison Park IV	#14 - 112 Madison Park Court	Boston	10	NSTAR	8628	8628	N/A	N/A	0.24
1,611	327	910	NSI (CND)	102 Grove St	Chelsea	3	NSTAR	1972	1971	1	N/A	0.27
1,612	328	909	NSI (CND)	75 Essex St	Chelsea	3	NSTAR	1972	1971	1	N/A	0.27
1,613	329	911	NSI (CND)	98 Marlborough St.	Chelsea	3	NSTAR	1972	1972	1	N/A	0.27
1,614	330	2575	Pine Street	95-97 Pine St.	Cambridge	12	NSTAR	15436	10880	5121	N/A	0.64
1,615	331	3071	PLY - 43 Heather Drive (Scattered S	43 Heather Drive (Scattered Site)	Plymouth	1	NSTAR	1066	1066	N/A	8.08	N/A
1,616	332	2961	PLY - Castle Hill	Castle Court Community Building	Plymouth	1	NSTAR	1008	1008	N/A	3.34	N/A
1,617	333	2951	PLY - Scattered Site Development	12 Hughes Street	Plymouth	1	NSTAR	1066	1066	N/A	4.86	N/A
1,618	334	2952	PLY - Scattered Site Development	12 Worral Road	Plymouth	1	NSTAR	1066	1066	N/A	5.97	N/A
1,619	335	2938	PLY - Scattered Site Development	25 Montgomery Drive	Plymouth	1	NSTAR	1066	1066	N/A	7.04	N/A
1,620	336	1092	Putnam Place	264 Putnam Place	Cambridge	8	NSTAR	9172	9172	1834	N/A	3.32
1,621	337	2214	River Howard Homes	Building A	Cambridge	5	NSTAR	11011	11011	1487	N/A	5.26
1,622	338	2217	River Howard Homes	River Howard - Building D	Cambridge	4	NSTAR	11011	11011	1487	N/A	2.74
1,623	339	2454	Roosevelt Towers	190-200 Willow Street	Cambridge	6	NSTAR	7020	5265	2883	1.45	2.65
1,624	340	2453	Roosevelt Towers	560-570 Windsor Street	Cambridge	6	NSTAR	7020	5265	1755	1.31	3.93
1,625	341	1142	Roxbury Development	2 Dunmore	Roxbury	3	NSTAR	3696	2772	1096	N/A	3.3
1,626	342	1146	Roxbury Development	204 Hampden	Roxbury	3	NSTAR	5000	3750	1550	N/A	1.77
1,627	343	1145	Roxbury Development	206 Hampden	Roxbury	3	NSTAR	5000	3750	2020	N/A	0.48
1,628	344	1144	Roxbury Development	208 Hampden	Roxbury	2	NSTAR	5000	3750	2730	N/A	0.37
1,629	345	1148	Roxbury Development	395 Dudley	Roxbury	6	NSTAR	14430	11544	7350	N/A	0.61
1,630	346	1130	Roxbury Triangle	116 Mt Pleasant	Roxbury	3	NSTAR	5760	4320	2325	N/A	0.28
1,631	347	1131	Roxbury Triangle	120 Mt Pleasant	Roxbury	3	NSTAR	5280	3960	2316	N/A	0.30
1,632	348	1132	Roxbury Triangle	122 Mt Pleasant	Roxbury	3	NSTAR	4800	3600	1782	N/A	0.66
1,633	349	1017	Scouting Way	144-154 Prospect Street	Cambridge	6	NSTAR	6834	6834	N/A	N/A	1.1
1,634	350	1019	Scouting Way	6-12 Scouting Way	Cambridge	4	NSTAR	4422	4422	N/A	N/A	1.1

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,635	351	907	Spencer Green	2-22 Vernon St	Chelsea	9	NSTAR	9280	9280	N/A	N/A	0.91
1,636	352	1154	Stafford Heights	121-123 Moreland St.	Boston	3	NSTAR	9776	7332	6056	N/A	0.31
1,637	353	1157	Stafford Heights	6 - 10 Stafford St.	Boston	3	NSTAR	9776	7332	6056	N/A	0.36
1,638	354	2116	UE - Academy House	2) 36 Academy Court-60 Academy Terrace	Roxbury	12	NSTAR	16141	16141	3000	N/A	2.70
1,639	355	2118	UE - Academy House	4) 1-19 Weaver Way (odd)	Roxbury	9	NSTAR	8500	8500	700	N/A	12.13
1,640	356	2123	UE - Academy House	9) 2-16 Slayton Way (even)	Roxbury	10	NSTAR	13658	13658	3605	N/A	2.44
1,641	357	939	UE - Dixwell Park	21 & 23 Dixwell Street	Boston	6	NSTAR	8440	5340	3100	N/A	2.76
1,642	358	1797	UE - Ennis Highland	13 & 15 Ennis Road	Roxbury	2	NSTAR	3744	3744	N/A	N/A	0.09
1,643	359	2194	Washington Elms MASS 3-1	100 Harvard Street	Cambridge	12	NSTAR	12504	11854	3650	N/A	2.24
1,644	360	2195	Washington Elms MASS 3-1	110 Harvard Street	Cambridge	11	NSTAR	12504	11854	3650	N/A	0.35
1,645	361	2204	Washington Elms MASS 3-1	111 Washington Street	Cambridge	12	NSTAR	12504	11854	3650	N/A	0.37
1,646	362	2198	Washington Elms MASS 3-1	140 Harvard Street	Cambridge	12	NSTAR	12504	11854	3650	N/A	0.54
1,647	363	2206	Washington Elms MASS 3-1	141 Washington Street	Cambridge	12	NSTAR	12504	11854	3650	N/A	0.13
1,648	364	2208	Washington Elms MASS 3-1	161 Washington Street	Cambridge	12	NSTAR	12504	11854	3650	N/A	0.94
1,649	365	2965	Willow Street Homes	42-28 Willow	Cambridge	4	NSTAR	6696	6696	144	N/A	0.96
1,650	366	2966	Willow Street Homes	50-54 Willow Street	Cambridge	3	NSTAR	5478	5478	N/A	N/A	0.96
1,651	367	2964	Willow Street Homes	56-58 Willow Street	Cambridge	8	NSTAR	8382	8382	110	N/A	0.96
1,652	368	1926	Woods at Wareham	36 Swifts Beach Road - Bldg 10	Wareham	6	NSTAR	41472	41472	8294	N/A	0.70
1,653	369	1920	Woods at Wareham	36 Swifts Beach Road - Bldg 11	Wareham	6	NSTAR	41472	41472	8294	N/A	0.22
1,654	370	1919	Woods at Wareham	36 Swifts Beach Road - Bldg 12	Wareham	6	NSTAR	54144	54144	10828	N/A	0.09
1,655	371	1927	Woods at Wareham	36 Swifts Beach Road - Bldg 13	Wareham	6	NSTAR	41472	41472	8294	N/A	0.79
1,656	372	1928	Woods at Wareham	36 Swifts Beach Road - Bldg 14	Wareham	6	NSTAR	41472	41472	8294	N/A	0.37
1,657	373	1925	Woods at Wareham	36 Swifts Beach Road - Bldg 15	Wareham	6	NSTAR	54144	54144	10828	N/A	0.12
1,658	374	1929	Woods at Wareham	36 Swifts Beach Road - Bldg 16	Wareham	6	NSTAR	41472	41472	8294	N/A	0.61
1,659	375	1914	Woods at Wareham	36 Swifts Beach Road - Bldg 2	Wareham	6	NSTAR	54144	54144	10828	N/A	0.31
1,660	376	1915	Woods at Wareham	36 Swifts Beach Road - Bldg 3	Wareham	6	NSTAR	41472	41472	8294	N/A	0.14
1,661	377	1916	Woods at Wareham	36 Swifts Beach Road - Bldg 4	Wareham	6	NSTAR	54144	54144	10828	N/A	0.38
1,662	378	1924	Woods at Wareham	36 Swifts Beach Road - Bldg 5	Wareham	6	NSTAR	54144	54144	10828	N/A	0.08
1,663	379	1917	Woods at Wareham	36 Swifts Beach Road - Bldg 6	Wareham	6	NSTAR	41472	41472	8294	N/A	0.31
1,664	380	1921	Woods at Wareham	36 Swifts Beach Road - Bldg 7	Wareham	8	NSTAR	48384	48384	9676	N/A	0.16
1,665	381	1922	Woods at Wareham	36 Swifts Beach Road - Bldg 8	Wareham	6	NSTAR	41472	41472	8294	N/A	0.73
1,666	382	1923	Woods at Wareham	36 Swifts Beach Road - Bldg 9	Wareham	6	NSTAR	54144	54144	10828	N/A	0.16
1,667	383	3918	DEN - Windmill Village	Community Building	Dennis	1	NSTAR	2160	2160	N/A	5.41	N/A
1,668	384	2945	FRM - St. Lo Road	55-57 St. Lo Road (2)	Framingham	2	NSTAR	884	884	N/A	13.45	N/A
1,669	385	2946	FRM - St. Lo Road	18-20 St. Lo Road (2)	Framingham	2	NSTAR	884	884	N/A	18.15	N/A
1,670	386	2446	Serenity 44 Wilson St.	44 Wilson St	Hopkinton	1	NSTAR	8066	8066	N/A	9.23	N/A
1,671	387	1455	Irving Square Apartments	75 Irving Street	Framingham	46	NSTAR	41496	34580	10932	N/A	6.81
1,672	388	2941	FRM - St. Lo Road	34-36 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	10.45	N/A
1,673	389	3670	FRM - St. Lo Road	46 - 48 Guadal Canal (1)	Framingham	2	NSTAR	720	720	N/A	12.95	N/A
1,674	390	2963	FRM - St. Lo Road	14-16 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	13.26	N/A
1,675	391	2949	FRM - St. Lo Road	42-44 Guadal Canal (1)	Framingham	2	NSTAR	720	720	N/A	13.40	N/A
1,676	392	2944	FRM - St. Lo Road	45-47 St. Lo Road (2)	Framingham	2	NSTAR	884	884	N/A	11.70	N/A
1,677	393	2940	FRM - St. Lo Road	22-24 St. Lo Road (2)	Framingham	2	NSTAR	884	884	N/A	12.22	N/A
1,678	394	3672	FRM - St. Lo Road	6 - 8 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	15.37	N/A
1,679	395	3630	MAT - Homestead Court	Homestead Court - 9	Mattapoisett	1	NSTAR	783	783	N/A	10.60	N/A
1,680	396	3631	MAT - Homestead Court	Homestead Court - 10	Mattapoisett	1	NSTAR	783	783	N/A	11.12	N/A
1,681	397	2806	126 Union Ave	126 Union Ave	Framingham	15	NSTAR	6027	4257	1770	5.58	N/A
1,682	398	2807	132 Union Ave	132 Union Ave	Framingham	17	NSTAR	5190	2853	2337	12.77	N/A
1,683	399	2875	147 Centre St	147 Centre St	Dorchester	11	NSTAR	3700	2775	2050	5.23	N/A
1,684	400	2967	78-80 Porter Road	78 Porter Road	Cambridge	26	NSTAR	26970	21576	10788	N/A	1.83
1,685	401	2682	ACT - Windsor Green	68 Windsor Avenue - 1	Acton	20	NSTAR	5920	5920	1920	48.91	N/A
1,686	402	3581	ACU - Presidential Terrace	Presidential Terrace - 1 & 2	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,687	403	3582	ACU - Presidential Terrace	Presidential Terrace - 11 thru 14	Acushnet	4	NSTAR	2232	2232	N/A	4.36	N/A
1,688	404	3583	ACU - Presidential Terrace	Presidential Terrace - 15 & 16	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,689	405	3584	ACU - Presidential Terrace	Presidential Terrace - 17 & 18	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,690	406	3585	ACU - Presidential Terrace	Presidential Terrace - 3 & 4	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,691	407	3586	ACU - Presidential Terrace	Presidential Terrace - 5 & 6	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,692	408	3587	ACU - Presidential Terrace	Presidential Terrace - 7 & 8	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,693	409	3588	ACU - Presidential Terrace	Presidential Terrace - 9 & 10	Acushnet	8	NSTAR	4660	4660	N/A	4.36	N/A
1,694	410	3589	ACU - Presidential Terrace	Presidential Terrace - Community Building	Acushnet	1	NSTAR	2250	2250	N/A	4.36	N/A
1,695	411	3086	Alaska St	23-25 Alaska St	Roxbury	17	NSTAR	7000	5250	2550	6.79	N/A
1,696	412	2672	Anderson Place	1-20 Anderson	Boston	23	NSTAR	21706	21080	6670	N/A	0.70
1,697	413	1266	Ashford Street Lodging	40-42 Ashford Street	Allston	12	NSTAR	8232	5488	3444	4.26	N/A
1,698	414	3317	Aunt Sarah's (Fed)	93 Pleasant Street	Barnstable	8	NSTAR	6944	6944	3126	5.40	N/A
1,699	415	2900	Beacon St	1876 Beacon St	Brookline	15	NSTAR	5780	4335	3530	7.69	N/A
1,700	416	2841	Beale St.	27 Beale St.	Dorchester	11	NSTAR	4000	3000	2350	7.19	N/A
1,701	417	3544	Brampton Circle	10-13 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,702	418	3545	Brampton Circle	14-17 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,703	419	3546	Brampton Circle	18-21 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,704	420	3547	Brampton Circle	22-25 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,705	421	3542	Brampton Circle	2-5 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,706	422	3548	Brampton Circle	26-29 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,707	423	3549	Brampton Circle	30-33 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,708	424	3550	Brampton Circle	34-37 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,709	425	3551	Brampton Circle	38-41 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,710	426	3552	Brampton Circle	42-45 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,711	427	3553	Brampton Circle	46-49 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,712	428	3554	Brampton Circle	50-53 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,713	429	3555	Brampton Circle	54-57 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,714	430	3556	Brampton Circle	58-61 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,715	431	3557	Brampton Circle	62-65 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,716	432	3558	Brampton Circle	66-69 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,717	433	3543	Brampton Circle	6-9 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,718	434	3559	Brampton Circle	70-73 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,719	435	3560	Brampton Circle	74-77 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,720	436	3561	Brampton Circle	78-81 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,721	437	3562	Brampton Circle	82-85 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,722	438	3563	Brampton Circle	86-89 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,723	439	3564	Brampton Circle	90-93 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	6.60	N/A
1,724	440	3565	Brampton Circle	DAVIS RD Community	Hopkinton	1	NSTAR	1000	1000	N/A	8.33	N/A
1,725	441	925	Brighton Allston Apartments	1387 Commonwealth Ave	Allston	20	NSTAR	24250	24250	7113	N/A	3.26
1,726	442	2415	Burbank Redevelopment	64-70 Burbank Street	Boston	36	NSTAR	37136	37136	12332	N/A	1.93
1,727	443	2464	CAM - John F. Kennedy Apartments	55 Essex Street	Cambridge	69	NSTAR	56913	38902	18011	6.07	N/A
1,728	444	2429	CAM - LBJ Apartments	150 Erie Street	Cambridge	180	NSTAR	113634	100178	38324	25.32	N/A
1,729	445	2144	CAM - Manning Apartments	237 Franklin Avenue	Cambridge	199	NSTAR	125276	87143	38133	30.33	N/A
1,730	446	2428	CAM - Millers River	15 Lambert Street	Cambridge	298	NSTAR	182387	126462	55925	9.15	N/A
1,731	447	2221	CAM - Newtowne Court	Door 1-9	Cambridge	37	NSTAR	38148	26685	11483	N/A	3.07
1,732	448	2222	CAM - Newtowne Court	Door 2-10	Cambridge	37	NSTAR	38148	26685	11483	N/A	3.25
1,733	449	2227	CAM - Newtowne Court	Doors 11-19	Cambridge	37	NSTAR	38148	26685	11483	N/A	3.69
1,734	450	2229	CAM - Newtowne Court	Doors 12-20	Cambridge	37	NSTAR	38148	26685	11483	N/A	1.39
1,735	451	2226	CAM - Newtowne Court	Doors 33-35	Cambridge	15	NSTAR	15259	10674	4586	N/A	7.29
1,736	452	2225	CAM - Newtowne Court	Doors 34-36	Cambridge	15	NSTAR	15259	10674	4586	N/A	3.82
1,737	453	2427	CAM - R.C. Weaver Apartment	81 Clifton Street	Cambridge	20	NSTAR	12558	12558	3436	18.99	N/A
1,738	454	2456	CAM - Roosevelt Towers	Cambridge and Willow	Cambridge	27	NSTAR	36552	27414	9138	1.57	N/A
1,739	455	2455	CAM - Roosevelt Towers	Cambridge and Windsor	Cambridge	27	NSTAR	36552	27414	9138	1.25	N/A
1,740	456	2459	CAM - Roosevelt Towers	RT Mid-Rise	Cambridge	75	NSTAR	98056	85919	27454	5.88	N/A
1,741	457	2458	CAM - Roosevelt Towers	Willow Street	Cambridge	27	NSTAR	36552	27414	9138	1.21	N/A
1,742	458	2457	CAM - Roosevelt Towers	Windsor Street	Cambridge	27	NSTAR	36552	27414	9138	1.39	N/A
1,743	459	2463	CAM - Russell Apartments	2050 Massachusetts Avenue	Cambridge	51	NSTAR	38969	38969	10694	2.57	N/A
1,744	460	2231	CAM - Truman Apartments	25 Eighth Street	Cambridge	60	NSTAR	40114	30258	9856	20.23	N/A
1,745	461	2203	CAM - Washington Elms MASS 3-1	101 Washington Street	Cambridge	12	NSTAR	12504	11854	650	N/A	2.18
1,746	462	2196	CAM - Washington Elms MASS 3-1	120 Harvard Street	Cambridge	11	NSTAR	12504	11854	650	N/A	1.33
1,747	463	2205	CAM - Washington Elms MASS 3-1	121 Washington Street	Cambridge	12	NSTAR	12504	11854	650	N/A	2.18
1,748	464	2197	CAM - Washington Elms MASS 3-1	130 Harvard Street	Cambridge	12	NSTAR	12504	11854	650	N/A	2.28
1,749	465	2199	CAM - Washington Elms MASS 3-1	150 Harvard Street	Cambridge	11	NSTAR	12504	11854	650	N/A	0.82
1,750	466	2207	CAM - Washington Elms MASS 3-1	151 Washington Street	Cambridge	12	NSTAR	12504	11854	650	N/A	1.99
1,751	467	2200	CAM - Washington Elms MASS 3-1	160 Harvard Street	Cambridge	11	NSTAR	12504	11854	650	N/A	2.07
1,752	468	2201	CAM - Washington Elms MASS 3-1	170 Windsor Street	Cambridge	11	NSTAR	12504	11854	650	N/A	2.50
1,753	469	2202	CAM - Washington Elms MASS 3-1	180 Windsor Street	Cambridge	12	NSTAR	12504	11854	650	N/A	0.00
1,754	470	2874	Centre St	289 Centre St	Dorchester	12	NSTAR	4000	2667	2200	6.33	N/A
1,755	471	2761	Cheriton Grove Apartments	20 Cheriton Road	West Roxbury	21	NSTAR	45000	45000	19623	5.88	N/A
1,756	472	3084	Church St	8 Church St	Dorchester	13	NSTAR	5856	3904	4361	6.73	N/A
1,757	473	2897	Comm Ave	1202 Commonwealth Ave	Allston	61	NSTAR	18000	18000	8850	9.46	N/A
1,758	474	2648	DAR - Munroe Terrace	Anderson Way - 1	Dartmouth	10	NSTAR	7920	7920	N/A	4.58	N/A
1,759	475	2651	DAR - Munroe Terrace	Anderson Way - 10	Dartmouth	10	NSTAR	7920	7920	N/A	4.58	N/A
1,760	476	2652	DAR - Munroe Terrace	Anderson Way - 3	Dartmouth	8	NSTAR	5820	5820	N/A	4.58	N/A
1,761	477	2653	DAR - Munroe Terrace	Anderson Way - 4	Dartmouth	8	NSTAR	5820	5820	N/A	4.58	N/A
1,762	478	2649	DAR - Munroe Terrace	Anderson Way - 5	Dartmouth	10	NSTAR	7920	7920	N/A	4.58	N/A
1,763	479	2654	DAR - Munroe Terrace	Anderson Way - 6	Dartmouth	8	NSTAR	5820	5820	N/A	4.58	N/A
1,764	480	2650	DAR - Munroe Terrace	Anderson Way - 7	Dartmouth	10	NSTAR	7920	7920	N/A	4.58	N/A
1,765	481	2655	DAR - Munroe Terrace	Anderson Way - 8	Dartmouth	8	NSTAR	5820	5820	N/A	4.58	N/A
1,766	482	2656	DAR - Munroe Terrace	Anderson Way - 9	Dartmouth	8	NSTAR	5820	5820	N/A	4.58	N/A
1,767	483	2657	DAR - Munroe Terrace	Anderson Way - Community Building	Dartmouth	1	NSTAR	2536	2536	N/A	4.58	N/A
1,768	484	3592	DED - Doggett Circle	Doggett Circle - 11	Dedham	8	NSTAR	1500	1500	N/A	17.06	N/A
1,769	485	3590	DED - Doggett Circle	Doggett Circle - 1	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,770	486	3591	DED - Doggett Circle	Doggett Circle - 10	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,771	487	3593	DED - Doggett Circle	Doggett Circle - 2	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,772	488	3594	DED - Doggett Circle	Doggett Circle - 3	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,773	489	3595	DED - Doggett Circle	Doggett Circle - 4	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,774	490	3596	DED - Doggett Circle	Doggett Circle - 5	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,775	491	3597	DED - Doggett Circle	Doggett Circle - 6	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,776	492	3598	DED - Doggett Circle	Doggett Circle - 7	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,777	493	3599	DED - Doggett Circle	Doggett Circle - 8	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,778	494	3600	DED - Doggett Circle	Doggett Circle - 9	Dedham	8	NSTAR	4488	4488	N/A	17.06	N/A
1,779	495	3606	DED - O'Neil Drive	1 - 2 O'Neil Drive	Dedham	12	NSTAR	8110	8110	N/A	12.42	N/A
1,780	496	3609	DED - O'Neil Drive	12 - 18 O'Neil Drive	Dedham	28	NSTAR	18944	18944	N/A	9.13	N/A
1,781	497	3610	DED - O'Neil Drive	19 - 21 O'Neil Drive	Dedham	12	NSTAR	8420	8420	N/A	9.13	N/A
1,782	498	3607	DED - O'Neil Drive	3 - 6 O'Neil Drive	Dedham	16	NSTAR	11124	11124	N/A	12.42	N/A
1,783	499	3612	DED - O'Neil Drive	O'Neil Drive Community Building	Dedham	1	NSTAR	2765	2765	N/A	14.44	N/A
1,784	500	3601	DED - Parkway Court	Parkway Court - 1	Dedham	3	NSTAR	1375	1375	N/A	1.14	N/A
1,785	501	3602	DED - Parkway Court	Parkway Court - 2	Dedham	6	NSTAR	3175	3175	N/A	1.14	N/A
1,786	502	3603	DED - Parkway Court	Parkway Court - 3	Dedham	8	NSTAR	3925	3925	N/A	1.14	N/A
1,787	503	3604	DED - Parkway Court	Parkway Court - 4	Dedham	7	NSTAR	3925	3925	N/A	1.14	N/A
1,788	504	3605	DED - Parkway Court	Parkway Court Office	Dedham	1	NSTAR	2194	2194	N/A	1.14	N/A
1,789	505	3921	DEN - Center Street Village	1 Center Street Village	Dennis	8	NSTAR	5600	5600	1600	12.36	N/A
1,790	506	3922	DEN - Center Street Village	2 Center Street Village	Dennis	8	NSTAR	5600	5600	1600	12.36	N/A
1,791	507	3923	DEN - Center Street Village	3 Center Street Village	Dennis	8	NSTAR	5600	5600	1600	12.36	N/A
1,792	508	3924	DEN - Center Street Village	4 Center Street Village	Dennis	1	NSTAR	2400	2400	N/A	12.36	N/A
1,793	509	3925	DEN - Center Street Village	5 Center Street Village	Dennis	10	NSTAR	8400	8400	3400	12.36	N/A
1,794	510	3926	DEN - Center Street Village	6 Center Street Village	Dennis	10	NSTAR	8400	8400	3400	12.36	N/A
1,795	511	3881	DEN - Old Bass River Village	Old Bass River Village - 1	Dennis	4	NSTAR	2250	2250	1250	12.16	N/A
1,796	512	3890	DEN - Old Bass River Village	Old Bass River Village - 2	Dennis	12	NSTAR	11140	11140	5140	12.16	N/A
1,797	513	3919	DEN - Old Bass River Village	Old Bass River Village - 3	Dennis	8	NSTAR	4500	4500	500	12.16	N/A
1,798	514	3920	DEN - Old Bass River Village	Old Bass River Village - 4	Dennis	8	NSTAR	4500	4500	500	12.16	N/A
1,799	515	3893	DEN - Windmill Village	109 Upper County Road A	Dennis	20	NSTAR	21600	21600	1600	5.37	N/A
1,800	516	3917	DEN - Windmill Village	109 Upper County Road B	Dennis	20	NSTAR	25480	25480	5480	5.43	N/A
1,801	517	4203	10 12 Pine St	10-12 Pine St	Framingham	15	NSTAR	3661	2223	1438	19.73	N/A
1,802	518	3368	154 Union	154 Union Ave	Framingham	18	NSTAR	4913	4913	593	22.41	N/A
1,803	519	4625	231 Careswell St.	1248 Ocean St.	Marshfield	1	NSTAR	864	864	N/A	5.00	N/A
1,804	520	4614	231 Careswell St.	231 Careswell St.	Marshfield	1	NSTAR	1536	1536	N/A	8.35	N/A
1,805	521	4621	231 Careswell St.	305 Webster St.	Marshfield	1	NSTAR	960	960	N/A	7.61	N/A
1,806	522	4620	231 Careswell St.	6 Anderson Dr.	Marshfield	1	NSTAR	972	972	N/A	6.12	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Comm ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,807	523	4619	231 Careswell St.	62 Arlieta St.	Marshfield	1	NSTAR	1360	1360	N/A	3.16	N/A
1,808	524	4616	231 Careswell St.	635 Ocean St.	Marshfield	1	NSTAR	768	768	N/A	9.71	N/A
1,809	525	4628	231 Careswell St.	74 Webster St.	Marshfield	1	NSTAR	1196	1196	N/A	7.28	N/A
1,810	526	4623	231 Careswell St.	91 Chicatawbut Ave	Marshfield	1	NSTAR	1890	1890	N/A	3.54	N/A
1,811	527	1365	Adams Templeton Apt	445 Adams Street	Dorchester	75	NSTAR	46445	46445	13933.5	N/A	7.65
1,812	528	4328	Admiral's Tower Co-op	150 Captains Row	Chelsea	100	NSTAR	72792	72792	22042	N/A	12.43
1,813	529	4517	Beaconwood	13 and 15 Wilson Circle	Newton	2	NSTAR	1400	1400	N/A	34.04	N/A
1,814	530	4515	Beaconwood	21 and 23 Wilson Circle	Newton	2	NSTAR	1400	1400	N/A	31.04	N/A
1,815	531	4512	Beaconwood	27 and 29 Hargrave	Newton	2	NSTAR	1400	1400	N/A	32.30	N/A
1,816	532	4514	Beaconwood	3 and 5 Wilson Circle	Newton	2	NSTAR	1400	1400	N/A	44.23	N/A
1,817	533	4510	Beaconwood	35 and 37 Hargrave	Newton	2	NSTAR	1400	1400	N/A	29.49	N/A
1,818	534	4513	Beaconwood	36 and 38 Hargrave	Newton	2	NSTAR	1400	1400	N/A	42.20	N/A
1,819	535	4516	Beaconwood	4 and 6 Wilson Circle	Newton	2	NSTAR	1400	1400	N/A	17.41	N/A
1,820	536	4508	Beaconwood	41 and 43 Hargrave	Newton	2	NSTAR	1400	1400	N/A	34.40	N/A
1,821	537	4332	Blue Ledge Co-op	15 Blue Ledge Drive	Roslindale	80	NSTAR	72186	72186	24974	6.66	N/A
1,822	538	/127	Blue Mountain	141 Homestead	Dorchester	10	NSTAR	14692	11019	4775	N/A	2.44
1,823	539	/106	Blue Mountain	46 Cheney	Dorchester	12	NSTAR	15424	11568	5424	N/A	2.04
1,824	540	/107	Blue Mountain	68 Cheney	Dorchester	6	NSTAR	12688	9516	4688	N/A	1.63
1,825	541	/119	Blue Mountain	75 Elm Hill	Dorchester	6	NSTAR	8821	8821	721	N/A	25.60
1,826	542	3715	Boston Rehabilitation Assoc.	1391-1395 Comm Ave.	Allston	42	NSTAR	50136	41780	8356	N/A	5.65
1,827	543	3731	Boston Rehabilitation Assoc.	15 Royce Rd.	Allston	31	NSTAR	29598	24665	4933	N/A	5.06
1,828	544	3714	Boston Rehabilitation Assoc.	181 Parsons St.	Brighton	23	NSTAR	14432	14432	N/A	0.20	N/A
1,829	545	3716	Boston Rehabilitation Assoc.	66 The Fenway	Allston	33	NSTAR	31296	26080	5216	N/A	5.14
1,830	546	3732	Boston Rehabilitation Assoc.	94-98 Chester St.	Allston	23	NSTAR	43716	28711	15005	N/A	1.68
1,831	547	1589	Brian Honan Apts	59-61 Everett Sq.	Allston	3	NSTAR	2480	2480	N/A	N/A	0.46
1,832	548	1593	Brian Honan Apts	61-63 Hano St.	Allston	3	NSTAR	2400	2400	N/A	N/A	1.24
1,833	549	1595	Brian Honan Apts	63 Everett Sq.	Allston	3	NSTAR	2480	2480	N/A	N/A	1.09
1,834	550	974	Brighton Allston Apartments	501 Washington St	Allston	11	NSTAR	8504	6378	N/A	N/A	0.52
1,835	551	2215	CAM - River Howard Homes	Building B	Cambridge	9	NSTAR	11011	11011	1487	1.57	N/A
1,836	552	2216	CAM - River Howard Homes	Building C	Cambridge	7	NSTAR	11011	11011	1487	1.36	N/A
1,837	553	130	Ceylon Field Apts	14-14A Circuit St	Dorchester	8	NSTAR	9117	7092	1980	N/A	3.39
1,838	554	4552	Chesterbrook Gardens	10-16 Brookway Road	Waltham	4	NSTAR	3686	3686	N/A	4.54	N/A
1,839	555	4554	Chesterbrook Gardens	14-24 Brookway Court	Waltham	6	NSTAR	5640	5640	N/A	0.44	N/A
1,840	556	4553	Chesterbrook Gardens	9-15 Brookway Court	Waltham	4	NSTAR	3686	3686	N/A	1.01	N/A
1,841	557	3206	CHT - Anchorage	228 Crowell Road	Chatham	8	NSTAR	4096	4096	96	16.46	N/A
1,842	558	3205	CHT - Anchorage	232 Crowell Road	Chatham	8	NSTAR	4096	4096	96	16.46	N/A
1,843	559	3204	CHT - Anchorage	244 Crowell Road	Chatham	8	NSTAR	4096	4096	96	16.46	N/A
1,844	560	3203	CHT - Anchorage	252 Crowell Road	Chatham	8	NSTAR	4096	4096	96	16.46	N/A
1,845	561	3207	CHT - Anchorage	256 Crowell Road	Chatham	8	NSTAR	4096	4096	96	16.46	N/A
1,846	562	2729	CHT - Anchorage	Community Building	Chatham	1	NSTAR	1360	1360	N/A	16.46	N/A
1,847	563	2730	CHT - Congregate	3 Captain's Landing	Chatham	19	NSTAR	12544	12544	N/A	4.92	N/A
1,848	564	4334	Constitution Co-op	42 Park Street	Charlestown	120	NSTAR	58304	58304	21724	11.21	N/A
1,849	565	2833	Depot Crossing	125 Minot Ave	Wareham	32	NSTAR	10000	10000	N/A	2.97	N/A
1,850	566	1449	Dorchester House Apartments	10 Ellet Street	Dorchester	91	NSTAR	59400	59400	N/A	9.24	N/A
1,851	567	4194	Drake Village	18 Drake Road	Arlington	8	NSTAR	4000	3960	200	5.25	N/A
1,852	568	4195	Drake Village	22 Drake Road	Arlington	8	NSTAR	4000	3960	200	4.91	N/A
1,853	569	4196	Drake Village	23 Drake Road	Arlington	8	NSTAR	4000	3960	200	7.57	N/A
1,854	570	4197	Drake Village	26 Drake Road	Arlington	8	NSTAR	4000	3960	200	4.99	N/A
1,855	571	4198	Drake Village	27 Drake Road	Arlington	8	NSTAR	4000	3960	200	7.51	N/A
1,856	572	4199	Drake Village	30 Drake Road	Arlington	8	NSTAR	4000	3960	200	6.48	N/A
1,857	573	4200	Drake Village	31 Drake Road	Arlington	8	NSTAR	4000	3960	200	7.10	N/A
1,858	574	4201	Drake Village	34 Drake Road	Arlington	8	NSTAR	4000	3960	200	6.06	N/A
1,859	575	4202	Drake Village	38 Drake Road	Arlington	8	NSTAR	4000	3960	200	4.76	N/A
1,860	576	3087	Dudley St	430 Dudley St	Roxbury	17	NSTAR	5526	4145	2976	8.40	N/A
1,861	577	3088	Dudley St	432 Dudley St	Roxbury	17	NSTAR	6426	4820	3876	6.84	N/A
1,862	578	3089	Dudley St	434 Dudley St	Roxbury	17	NSTAR	6426	4820	3876	7.42	N/A
1,863	579	3090	Dudley St	436 Dudley St	Roxbury	17	NSTAR	5526	3920	2976	8.46	N/A
1,864	580	1968	East Canton Street	109 East Canton Street	Boston	20	NSTAR	13984	13984	N/A	3.49	N/A
1,865	581	1967	East Canton Street	99 East Canton Street	Boston	20	NSTAR	13984	13984	N/A	3.43	N/A
1,866	582	4644	East Dedham Family	114-120 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	5.53	N/A
1,867	583	3757	East Dedham Family	13-19 Veterans Road	Dedham	4	NSTAR	3840	3840	N/A	5.46	N/A
1,868	584	4650	East Dedham Family	14-20 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	7.43	N/A
1,869	585	4655	East Dedham Family	27-33 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	9.26	N/A
1,870	586	4653	East Dedham Family	28-32 Veterans Road	Dedham	3	NSTAR	2846	2846	N/A	6.14	N/A
1,871	587	4646	East Dedham Family	34-40 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	6.46	N/A
1,872	588	3759	East Dedham Family	37-43 Veterans Road	Dedham	4	NSTAR	3840	3840	N/A	9.21	N/A
1,873	589	4647	East Dedham Family	42-48 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	6.96	N/A
1,874	590	4656	East Dedham Family	45-51 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	5.22	N/A
1,875	591	3756	East Dedham Family	5-11 Veterans Road	Dedham	4	NSTAR	3840	3840	N/A	6.78	N/A
1,876	592	3760	East Dedham Family	53-59 Veterans Road	Dedham	4	NSTAR	3840	3840	N/A	2.15	N/A
1,877	593	4658	East Dedham Family	61-65 Veterans Road	Dedham	3	NSTAR	2826	2826	N/A	4.16	N/A
1,878	594	4657	East Dedham Family	67-73 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	3.38	N/A
1,879	595	4640	East Dedham Family	75-81 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	3.90	N/A
1,880	596	4642	East Dedham Family	82-88 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	3.11	N/A
1,881	597	4645	East Dedham Family	98-104 Veterans Road	Dedham	4	NSTAR	3456	3456	N/A	5.64	N/A
1,882	598	3072	Eastern Ave	423 Eastern Ave	Chelsea	21	NSTAR	4500	3000	1980	10.83	N/A
1,883	599	4610	Ellis Street	31/33 Ellis Street	Walpole	2	NSTAR	1252	1252	N/A	9.17	N/A
1,884	600	4609	Ellis Street	35/37 Ellis Street	Walpole	2	NSTAR	1252	1252	N/A	6.56	N/A
1,885	601	4608	Ellis Street	39/41 Ellis Street	Walpole	2	NSTAR	1252	1252	N/A	9.14	N/A
1,886	602	4607	Ellis Street	43/45 Ellis Street	Walpole	2	NSTAR	1252	1252	N/A	5.46	N/A
1,887	603	4604	Ellis Street	51/53 Ellis Street	Walpole	2	NSTAR	1252	1252	N/A	8.93	N/A
1,888	604	2086	FAI - Anthony Haven	227 Main St.	Fairhaven	24	NSTAR	30400	29400	18400	3.55	N/A
1,889	605	2082	FAI - Green Meadows	37-42 McGann Terrace	Fairhaven	6	NSTAR	2520	2520	2020	9.53	N/A
1,890	606	1496	FAI - Green Meadows	5-9 McGann Terrace	Fairhaven	4	NSTAR	2520	2520	2020	9.53	N/A
1,891	607	2802	FAL - Mayflower	Choate Lane - A	Falmouth	4	NSTAR	1400	1400	N/A	7.27	N/A
1,892	608	2814	FAL - Mayflower	Choate Lane - B	Falmouth	4	NSTAR	1400	1400	N/A	7.27	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,893	609	2815	FAL - Mayflower	Choate Lane - C	Falmouth	10	NSTAR	4200	4200	N/A	7.27	N/A
1,894	610	2816	FAL - Mayflower	Choate Lane - D	Falmouth	6	NSTAR	2200	2200	N/A	7.27	N/A
1,895	611	3078	FAL - Salt Sea	Salt Sea Lane - 7	Falmouth	6	NSTAR	4920	4920	2220	3.68	N/A
1,896	612	2877	Fessenden Rd	22 Fessenden Road	Arlington	15	NSTAR	5000	3750	2750	8.01	N/A
1,897	613	4336	Franklin Park Villa Co-op	131 Morton Street	Jamaica Plain	62	NSTAR	52300	52300	18200	7.72	N/A
1,898	614	2947	FRM - St. Lo Road	1 Corregidor Road	Framingham	2	NSTAR	884	884	N/A	13.99	N/A
1,899	615	4400	FRM - St. Lo Road	13 St. Lo Rd	Framingham	1	NSTAR	884	884	N/A	6.49	N/A
1,900	616	4401	FRM - St. Lo Road	15 St. Lo Rd	Framingham	1	NSTAR	884	884	N/A	13.44	N/A
1,901	617	4402	FRM - St. Lo Road	17 Corregidor Rd	Framingham	1	NSTAR	884	884	N/A	8.87	N/A
1,902	618	4439	FRM - St. Lo Road	17 St. Lo Road	Framingham	1	NSTAR	884	884	N/A	4.70	N/A
1,903	619	3687	FRM - St. Lo Road	27 -29 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	11.69	N/A
1,904	620	3688	FRM - St. Lo Road	28 - 30 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	13.72	N/A
1,905	621	2948	FRM - St. Lo Road	31 - 33 St. Lo Road	Framingham	2	NSTAR	720	720	N/A	13.45	N/A
1,906	622	4407	FRM - St. Lo Road	32 St. Lo Rd	Framingham	1	NSTAR	884	884	N/A	11.19	N/A
1,907	623	3693	FRM - St. Lo Road	36 - 38 Guadal Canal	Framingham	2	NSTAR	884	884	N/A	12.52	N/A
1,908	624	2942	FRM - St. Lo Road	37 - 39 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	12.99	N/A
1,909	625	3694	FRM - St. Lo Road	39 - 41 Guadal Canal	Framingham	2	NSTAR	884	884	N/A	5.85	N/A
1,910	626	3695	FRM - St. Lo Road	40 - 42 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	16.07	N/A
1,911	627	4412	FRM - St. Lo Road	40 Guadal Canal Rd	Framingham	1	NSTAR	884	884	N/A	8.01	N/A
1,912	628	4413	FRM - St. Lo Road	43 Guadal Canal Rd.	Framingham	1	NSTAR	884	884	N/A	6.45	N/A
1,913	629	4441	FRM - St. Lo Road	46 - 48 St. Lo Rd	Framingham	2	NSTAR	884	884	N/A	15.09	N/A
1,914	630	4416	FRM - St. Lo Road	49 St. Lo Rd.	Framingham	1	NSTAR	884	884	N/A	3.98	N/A
1,915	631	3671	FRM - St. Lo Road	51 - 53 St. Lo Road	Framingham	2	NSTAR	720	720	N/A	16.02	N/A
1,916	632	4446	FRM - St. Lo Road	9 St. Lo Rd	Framingham	1	NSTAR	884	884	N/A	19.11	N/A
1,917	633	281	Geneva Apts	231/233 Geneva Ave	Dorchester	9	NSTAR	5150	3850	N/A	7.10	N/A
1,918	634	1235	Haynes House	725-751 Shawmut Ave	Roxbury	131	NSTAR	139608	139608	40008	2.70	N/A
1,919	635	3002	High Cliff Senior Hsg (Fed)	23 Prince Street	Plymouth	82	NSTAR	66630	66130	18742	5.70	N/A
1,920	636	1057	Hovey Avenue Apartments	35 Hovey Avenue	Cambridge	17	NSTAR	12960	12960	N/A	0.88	N/A
1,921	637	1124	Howard Dacia Homes	84 Dacia St.	Roxbury	2	NSTAR	4605	3070	N/A	3.03	N/A
1,922	638	1395	Humboldt Apartments	51 Humboldt Avenue	Roxbury	22	NSTAR	24559	21809	10752	1.30	N/A
1,923	639	3741	Hyde Square	83 Minden Street	Jamaica Plain	2	NSTAR	3493	3393	100	0.35	N/A
1,924	640	3325	Inman/CAST II	1221 Cambridge St.	Cambridge	116	NSTAR	102610	100704	20910	1.62	N/A
1,925	641	3327	Inman/CAST II	49-53 Columbia St.	Cambridge	9	NSTAR	11931	8668	5202	0.35	N/A
1,926	642	1242	Interfaith	282 Columbus Ave	Boston	28	NSTAR	31230	31230	11674	N/A	7.13
1,927	643	1241	Interfaith	564 Mass Ave	Boston	5	NSTAR	5074	5074	949	N/A	17.36
1,928	644	1236	Interfaith	68 West Concord St	Boston	31	NSTAR	38493	32994	13635	N/A	9.38
1,929	645	3298	Jamaica Plain Scattered Sites Coop	69 Walden St	Jamaica Plain	3	NSTAR	3021	3021	1502	N/A	1.77
1,930	646	2667	BRN - Arthur Scott Williams House	290 Sandalwood	Cotuit	8	NSTAR	4084	4084	2914	13.48	N/A
1,931	647	4192	Cusack Terrace	8 Summer Street	Arlington	67	NSTAR	70000	56000	38175	4.47	N/A
1,932	648	3611	DED - O'Neil Drive	22 - 23 O'Neil Drive	Dedham	12	NSTAR	7974	7974	0	14.36	N/A
1,933	649	3608	DED - O'Neil Drive	7 - 11 O'Neil Drive	Dedham	16	NSTAR	11124	11124	0	14.36	N/A
1,934	650	4659	DUX - Duxborough Village	59 CHESTNUT STREET - 1	Duxbury	8	NSTAR	5760	5760	960	5.37	N/A
1,935	651	4660	DUX - Duxborough Village	59 CHESTNUT STREET - 2	Duxbury	6	NSTAR	4712	4712	1112	5.37	N/A
1,936	652	4661	DUX - Duxborough Village	59 CHESTNUT STREET - 3	Duxbury	8	NSTAR	5760	5760	960	5.37	N/A
1,937	653	4662	DUX - Duxborough Village	59 CHESTNUT STREET - 4	Duxbury	6	NSTAR	4712	4712	1112	5.37	N/A
1,938	654	4663	DUX - Duxborough Village	59 CHESTNUT STREET - 5	Duxbury	8	NSTAR	5760	5760	960	5.37	N/A
1,939	655	4664	DUX - Duxborough Village	59 CHESTNUT STREET - 6	Duxbury	8	NSTAR	5760	5760	960	5.37	N/A
1,940	656	4665	DUX - Duxborough Village	59 CHESTNUT STREET - 7	Duxbury	8	NSTAR	5760	5760	960	5.37	N/A
1,941	657	4666	DUX - Duxborough Village	59 CHESTNUT STREET - Community	Duxbury	1	NSTAR	1879	1879	0	5.37	N/A
1,942	658	4726	Hyde Square	104 Minden St	Jamaica Plain	2	NSTAR	4952	4952	2238	N/A	0.61
1,943	659	4724	Hyde Square	11 Kenney St	Jamaica Plain	3	NSTAR	3957	3957	593	N/A	2.83
1,944	660	4727	Hyde Square	112 Minden St	Jamaica Plain	2	NSTAR	3752	3752	1093	N/A	2.62
1,945	661	3744	Hyde Square	13 Round Hill	Jamaica Plain	2	NSTAR	4162	4062	100	N/A	3.72
1,946	662	4728	Hyde Square	148 Minden St	Jamaica Plain	2	NSTAR	3716	3716	672	N/A	3.77
1,947	663	4722	Hyde Square	18 Arcola St	Jamaica Plain	3	NSTAR	2768	2768	415	N/A	3.59
1,948	664	4731	Hyde Square	31 Walden St	Jamaica Plain	3	NSTAR	3984	3984	593	N/A	2.32
1,949	665	4732	Hyde Square	37 Walden St	Jamaica Plain	3	NSTAR	3912	3912	593	N/A	1.47
1,950	666	3743	Hyde Square	47 Walden Street	Jamaica Plain	3	NSTAR	4023	3923	693	N/A	1.78
1,951	667	4668	Hyde Square	6 Schiller St	Jamaica Plain	3	NSTAR	3870	3870	593	N/A	1.27
1,952	668	4729	Hyde Square	7 Walden St	Jamaica Plain	2	NSTAR	4023	4023	1444	N/A	0.73
1,953	669	3618	Jamaica Plain Scattered Sites Coop	76-78 Spring Park	Jamaica Plain	6	NSTAR	10399	7713	3759	N/A	0.49
1,954	670	2442	Jefferson Park Fed	1000 Jackson	Cambridge	53	NSTAR	54888	48908	12519	N/A	7.22
1,955	671	2443	Jefferson Park Fed	21-44 Jackson Place	Cambridge	24	NSTAR	27352	27352	5470	N/A	4.32
1,956	672	2435	Jefferson Park Fed	2-19 Jackson Place Building 6	Cambridge	18	NSTAR	21358	21358	4272	N/A	3.97
1,957	673	2436	Jefferson Park Fed	45-60 Jackson Circle Bldg 7	Cambridge	16	NSTAR	20101	20101	4040	N/A	3.97
1,958	674	2437	Jefferson Park Fed	61-76 Jackson Circle Bldg 8	Cambridge	16	NSTAR	20101	20101	4040	N/A	4.72
1,959	675	2438	Jefferson Park Fed	77-92 Jackson Circle Bldg 9	Cambridge	16	NSTAR	20101	20101	4040	N/A	4.67
1,960	676	2439	Jefferson Park Fed	93-108 Jackson Circle Bldg 10	Cambridge	16	NSTAR	20101	20101	4040	N/A	6.39
1,961	677	1393	John Boyle O'Reilly Apartments	345 Dorchester Street	South Boston	91	NSTAR	40000	39000	5000	N/A	19.20
1,962	678	2593	Julia Martin House	90 Bickford St.	Jamaica Plain	56	NSTAR	44892	44892	14892	8.03	N/A
1,963	679	1818	Kingston Pines	21 Anderson Avenue	Kingston	1	NSTAR	4660	4660	3580	N/A	3.98
1,964	680	1960	Lawton's Corner	749 Purchase St.	New Bedford	17	NSTAR	66800	62050	43345	1.61	N/A
1,965	681	1354	Lee St.	47 Lee St	Cambridge	1	NSTAR	6827	5127	1700	4.56	N/A
1,966	682	2723	LEX - Hill Street	87 Hill Steet	Lexington	4	NSTAR	2357	2357	53	9.72	N/A
1,967	683	2724	LEX - Mass Ave	561-563 Mass Ave	Lexington	2	NSTAR	2863	2863	0	7.21	N/A
1,968	684	2726	LEX - Tewksbury Street	27 Tewksbury Street	Lexington	4	NSTAR	2357	2356	1781	9.00	N/A
1,969	685	2720	LEX - Vynebrook Village	Building D	Lexington	12	NSTAR	6050	6050	1250	19.42	N/A
1,970	686	1151	Long Glen II	52 Glenville Ave	Allston	15	NSTAR	17360	17360	5600	N/A	4.37
1,971	687	2326	LP - Brown Kaplan	7-11 Wilbert Circle	Boston	3	NSTAR	3749	3749	750	N/A	0.61
1,972	688	1997	LP - Olmsted Green I	1 West Main - 1 - 9 Catbird Court	Mattapan	6	NSTAR	5902	5902	1180	N/A	3.78
1,973	689	1998	LP - Olmsted Green I	11 - 19 Catbird Court	Mattapan	5	NSTAR	4143	4143	829	N/A	17.80
1,974	690	1999	LP - Olmsted Green I	11 West Main - 29 West Main	Mattapan	10	NSTAR	10752	10752	2150	N/A	4.50
1,975	691	1995	LP - Olmsted Green I	21 - 33 Catbird Court	Mattapan	7	NSTAR	6075	6075	1215	N/A	5.46
1,976	692	1996	LP - Olmsted Green I	3 West Main - 9 West Main	Mattapan	4	NSTAR	3179	3179	636	N/A	9.45
1,977	693	1994	LP - Olmsted Green I	35 - 45 Catbird Court	Mattapan	6	NSTAR	6064	6064	1213	N/A	10.00
1,978	694	2000	LP - Olmsted Green I	51 - 55 Catbird Court	Mattapan	3	NSTAR	3183	3183	637	N/A	16.78

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
1,979	695	2001	LP - Olmsted Green I	57 - 67 Catbird Court	Mattapan	6	NSTAR	3696	3696	1139	N/A	6.22
1,980	696	2002	LP - Olmsted Green I	69 - 75 Catbird Court	Mattapan	4	NSTAR	3918	3918	784	N/A	20.15
1,981	697	1578	Lyman School Apartments	30 Gove Street	East Boston	45	NSTAR	45000	45000	21086	2.22	N/A
1,982	698	1293	McNamara House	210 Everett Street	Allston	80	NSTAR	63538	63538	14259	3.13	N/A
1,983	699	2614	Meadowbrook (Carver Elderly Hous	1 Meadowbrook Way	Carver	40	NSTAR	10000	10000	2000	14.24	N/A
1,984	700	4568	Menotomy Manor 200-1	47 - 53 Fremont Ct	Arlington	4	NSTAR	3442	3442	0	4.22	N/A
1,985	701	4569	Menotomy Manor 200-1	5 - 11 Fremont Ct	Arlington	4	NSTAR	3442	3442	0	4.00	N/A
1,986	702	4567	Menotomy Manor 200-1	58 - 64 Fremont Street	Arlington	4	NSTAR	3442	3442	0	4.40	N/A
1,987	703	4566	Menotomy Manor 200-1	82 - 88 Fremont Street	Arlington	4	NSTAR	3442	3442	0	4.74	N/A
1,988	704	4565	Menotomy Manor 200-1	90 - 96 Fremont Street	Arlington	4	NSTAR	3442	3442	0	3.18	N/A
1,989	705	4584	Menotomy Manor 200-2	102 and 104 Fremont Street	Arlington	2	NSTAR	1760	1760	0	7.44	N/A
1,990	706	4599	Menotomy Manor 200-2	103A and B Gardner St	Arlington	2	NSTAR	1610	1610	0	2.71	N/A
1,991	707	4592	Menotomy Manor 200-2	106 A and B Fremont St	Arlington	2	NSTAR	1564	1564	0	5.79	N/A
1,992	708	4590	Menotomy Manor 200-2	106A and B Sunnyside Ave	Arlington	2	NSTAR	1564	1564	0	8.24	N/A
1,993	709	4595	Menotomy Manor 200-2	107A and B Sunnyside Ave	Arlington	2	NSTAR	1564	1564	0	12.92	N/A
1,994	710	4574	Menotomy Manor 200-2	108 and 110 Sunnyside Ave	Arlington	2	NSTAR	1760	1760	0	5.98	N/A
1,995	711	4588	Menotomy Manor 200-2	109 and 111 Gardner Street	Arlington	2	NSTAR	1760	1760	0	7.42	N/A
1,996	712	4596	Menotomy Manor 200-2	110A and B Fremont Street	Arlington	2	NSTAR	1610	1610	0	9.72	N/A
1,997	713	4600	Menotomy Manor 200-2	112A & B Fremont St.	Arlington	2	NSTAR	1872	1872	0	4.11	N/A
1,998	714	4578	Menotomy Manor 200-2	112A and B Sunnyside Ave	Arlington	2	NSTAR	1872	1872	0	5.16	N/A
1,999	715	4613	Menotomy Manor 200-2	114A & B Sunnyside Ave.	Arlington	2	NSTAR	1610	1610	0	6.73	N/A
2,000	716	4591	Menotomy Manor 200-2	114A and B Fremont Street	Arlington	2	NSTAR	1564	1564	0	2.61	N/A
2,001	717	4598	Menotomy Manor 200-2	12A and B Memorial Way	Arlington	2	NSTAR	1610	1610	0	4.12	N/A
2,002	718	4602	Menotomy Manor 200-2	15A & B Memorial Way	Arlington	2	NSTAR	1872	1872	0	6.16	N/A
2,003	719	4589	Menotomy Manor 200-2	2 and 4 Memorial Way	Arlington	2	NSTAR	1760	1760	0	5.56	N/A
2,004	720	4586	Menotomy Manor 200-2	3 and 5 Memorial Way	Arlington	2	NSTAR	1760	1760	0	8.55	N/A
2,005	721	4593	Menotomy Manor 200-2	7A and B Memorial Way	Arlington	2	NSTAR	1564	1564	0	6.28	N/A
2,006	722	4587	Menotomy Manor 200-2	8 and 10 Memorial Way	Arlington	2	NSTAR	1760	1760	0	7.10	N/A
2,007	723	4611	Menotomy Manor 200-2	88A & B Sunnyside Ave	Arlington	2	NSTAR	1872	1872	0	9.62	N/A
2,008	724	4585	Menotomy Manor 200-2	9 and 11 Memorial Way	Arlington	2	NSTAR	1760	1760	0	8.82	N/A
2,009	725	1265	Metropolitan	1 Nassau St	Boston	251	NSTAR	257600	257600	7600	8.36	N/A
2,010	726	1163	MHPI 8	528 Mass. Ave.	boston	15	NSTAR	14000	14000	6000	5.93	N/A
2,011	727	1305	Mission Springs Housing for the Eld	100 Summer Street	Holliston	75	NSTAR	64500	64500	63996	N/A	4.15
2,012	728	4954	MLL - Kennedy Terrace	KENNEDY TERRACE - B	Millis	4	NSTAR	1911	1911	311	13.80	N/A
2,013	729	4955	MLL - Kennedy Terrace	KENNEDY TERRACE - C	Millis	12	NSTAR	8112	8112	1512	13.80	N/A
2,014	730	4956	MLL - Kennedy Terrace	KENNEDY TERRACE - D	Millis	12	NSTAR	8112	8112	1512	13.80	N/A
2,015	731	4957	MLL - Kennedy Terrace	KENNEDY TERRACE - E	Millis	4	NSTAR	1911	1911	311	13.80	N/A
2,016	732	4958	MLL - Kennedy Terrace	Kennedy Terrace - Rec/Office	Millis	1	NSTAR	1627	1627	0	13.80	N/A
2,017	733	4960	MLL - King Terrace	403 (Bldg B)	Millis	12	NSTAR	8400	8400	1800	12.27	N/A
2,018	734	4961	MLL - King Terrace	405 (Bldg C)	Millis	4	NSTAR	2400	2400	600	12.27	N/A
2,019	735	4962	MLL - King Terrace	407 (Bldg D)	Millis	4	NSTAR	2400	2400	600	12.27	N/A
2,020	736	4963	MLL - King Terrace	409 (Bldg E)	Millis	4	NSTAR	2400	2400	600	12.27	N/A
2,021	737	4964	MLL - King Terrace	411 (Bldg A)	Millis	18	NSTAR	11280	11280	2280	12.27	N/A
2,022	738	1355	Morville House	100 Norway Street	Boston	176	NSTAR	134500	134500	33300	6.51	N/A
2,023	739	2883	Mt Pleasant Ave	28 Mt. Pleasant Ave.	Roxbury	20	NSTAR	7635	5090	4635	7.20	N/A
2,024	740	1402	Norfolk St	193 Norfolk Street	Cambridge	3	NSTAR	3812	2542	1812	5.27	N/A
2,025	741	3003	Northfield Senior Housing (Fed)	84 Nicks Rock Road	Plymouth	30	NSTAR	28800	28800	11790	5.88	N/A
2,026	742	828	Oak Terrace	888 Washington St	Boston	42	NSTAR	43600	43600	5800	4.29	N/A
2,027	743	829	Oak Terrace	Maple St	Boston	8	NSTAR	11144	11144	0	4.45	N/A
2,028	744	830	Oak Terrace	Oak St	Boston	19	NSTAR	25680	25680	1880	4.45	N/A
2,029	745	3093	One Lenox	1 East Lenox St	Roxbury	26	NSTAR	12500	12500	3660	9.51	N/A
2,030	746	3471	ORL - Tonset Woods	Tonset Woods - Alders	Orleans	12	NSTAR	7346	7346	1346	13.34	N/A
2,031	747	3472	ORL - Tonset Woods	Tonset Woods - Birches	Orleans	12	NSTAR	7346	7346	1346	13.34	N/A
2,032	748	3473	ORL - Tonset Woods	Tonset Woods - Cedars	Orleans	12	NSTAR	7346	7346	1346	13.34	N/A
2,033	749	3470	ORL - Tonset Woods	Tonset Woods - Community	Orleans	1	NSTAR	2500	2500	0	13.34	N/A
2,034	750	3466	ORL - Tonset Woods	Tonset Woods - Elms	Orleans	10	NSTAR	6864	6864	1864	13.34	N/A
2,035	751	3474	ORL - Tonset Woods	Tonset Woods - Hemlocks	Orleans	12	NSTAR	7346	7346	1346	13.34	N/A
2,036	752	3467	ORL - Tonset Woods	Tonset Woods - Maples	Orleans	10	NSTAR	6864	6864	1864	13.34	N/A
2,037	753	3468	ORL - Tonset Woods	Tonset Woods - Oaks	Orleans	10	NSTAR	6864	6864	1864	13.34	N/A
2,038	754	3469	ORL - Tonset Woods	Tonset Woods - Pines	Orleans	10	NSTAR	6864	6864	1864	13.34	N/A
2,039	755	3475	ORL - Tonset Woods	Tonset Woods - Willows	Orleans	12	NSTAR	7346	7346	1346	13.34	N/A
2,040	756	1347	Peter Faneuil House	60 Joy Street	Boston	48	NSTAR	32210	29932	11135	N/A	12.79
2,041	757	2955	PLY - Castle Hill	Castle Court - 1	Plymouth	9	NSTAR	7124	7124	3434	3.34	N/A
2,042	758	2956	PLY - Castle Hill	Castle Court - 2	Plymouth	8	NSTAR	5876	5876	2596	3.34	N/A
2,043	759	2957	PLY - Castle Hill	Castle Court - 3	Plymouth	9	NSTAR	7124	7124	3434	3.34	N/A
2,044	760	2958	PLY - Castle Hill	Castle Court - 4	Plymouth	8	NSTAR	5876	5876	2596	3.34	N/A
2,045	761	2959	PLY - Castle Hill	Castle Court - 5	Plymouth	8	NSTAR	5876	5876	2596	3.34	N/A
2,046	762	2960	PLY - Castle Hill	Castle Court - 6	Plymouth	8	NSTAR	5876	5876	2596	3.34	N/A
2,047	763	2970	PLY - Cherry Hill	128 Court Street	Plymouth	81	NSTAR	87980	87980	51530	4.13	N/A
2,048	764	2953	PLY - Scattered Site Development	20 Hughes Street	Plymouth	1	NSTAR	1066	1066		13.39	N/A
2,049	765	2969	PLY - South Pond	32 South Pond	Plymouth	8	NSTAR	5130	5130	0	5.48	N/A
2,050	766	2971	PLY - Southfield	105 South Street	Plymouth	60	NSTAR	59502	59502	32502	3.13	N/A
2,051	767	2984	PLY - Veterans	1-18 Olmstead Terrace (Type C)	Plymouth	2	NSTAR	2232	2232	0	6.64	N/A
2,052	768	2992	PLY - Veterans	13-15 Standish Court (Type C)	Plymouth	2	NSTAR	2232	2232	0	6.64	N/A
2,053	769	2975	PLY - Veterans	16-18 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.64	N/A
2,054	770	2980	PLY - Veterans	17-19 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.64	N/A
2,055	771	2985	PLY - Veterans	20-22 Olmstead Terrace (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.64	N/A
2,056	772	2974	PLY - Veterans	20-22 Standish Court	Plymouth	2	NSTAR	2250	2250	0	6.64	N/A
2,057	773	2977	PLY - Veterans	21-23-25-27 Standish Court (Type D)	Plymouth	4	NSTAR	4030	4030	0	6.64	N/A
2,058	774	2986	PLY - Veterans	24-26 Olmstead Terrace (Type C)	Plymouth	2	NSTAR	2232	2232	0	6.64	N/A
2,059	775	3737	Angela Westover House	49 Parley Avenue	Boston	1	NSTAR	8286	7386	3161	5.19	N/A
2,060	776	3745	Catherine Gallagher	195/197 Heath Street	Jamaica Plain	2	NSTAR	3127	3127	501	4.50	N/A
2,061	777	5049	Cobble Hill Apts	50 Washington Street	Somerville	75	NSTAR	64400	64400	16100	N/A	6.31
2,062	778	5050	Cobble Hill Apts	60 Washington Street	Somerville	37	NSTAR	31162	31162	7790	N/A	7.36
2,063	779	5051	Cobble Hill Apts	74 Washington Street	Somerville	37	NSTAR	31162	31162	7790	N/A	8.72
2,064	780	923	Commonwealth Apts	1285 Commonwealth Avenue	Allston	8	NSTAR	10366	10366	1870	N/A	26.38

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,065	781	921	Commonwealth Apts	1289 Commonwealth Avenue	Allston	8	NSTAR	9520	7680	2960	N/A	20.25
2,066	782	4952	Frederick Court	21 & 25 Frederick Court	Brewster	8	NSTAR	6080	6080	2080	N/A	1.03
2,067	783	4953	Frederick Court	Community Building	Brewster	1	NSTAR	1972	1972	0	10.24	N/A
2,068	784	3705	FRM - St. Lo Road	47 - 49 Guadal Canal	Framingham	2	NSTAR	884	884	0	20.03	N/A
2,069	785	5064	Gallivan Boulevard	1019 Morton Street - 130	Boston	1	NSTAR	1092	1092	N/A	4.85	N/A
2,070	786	5342	Gallivan Boulevard	1-3 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	2.71	N/A
2,071	787	5060	Gallivan Boulevard	98-100 Standard Street	Boston	2	NSTAR	1800	1800	0	3.99	N/A
2,072	788	5061	Gallivan Boulevard	1005 Morton Street - 127	Boston	1	NSTAR	1092	1092	N/A	8.86	N/A
2,073	789	5062	Gallivan Boulevard	1009 Morton Street - 128	Boston	1	NSTAR	1092	1092	N/A	9.30	N/A
2,074	790	980	Granite Lena	786 Blue-Hill Avenue	Dorchester	9	NSTAR	8649	8649	2162	N/A	0.85
2,075	791	5052	Keystone	151 Hallet Street	Dorchester	223	NSTAR	229500	229500	59795	N/A	8.24
2,076	792	2721	LEX - Vynebrook Village	Community Building	Lexington	1	NSTAR	1936	1936	0	24.76	N/A
2,077	793	1310	Madison Park III	Management Office: 122 Dweitt Drive	Boston	1	NSTAR	6000	6000	5000	10.09	N/A
2,078	794	5041	MAY - Powdermill Circle	POWDERMILL CIRCLE - 7	Maynard	8	NSTAR	4426	4426	426	4.93	N/A
2,079	795	5039	MAY - Powdermill Circle	POWDERMILL CIRCLE - 5	Maynard	8	NSTAR	4426	4426	426	4.94	N/A
2,080	796	5040	MAY - Powdermill Circle	POWDERMILL CIRCLE - 6	Maynard	8	NSTAR	4426	4426	426	5.15	N/A
2,081	797	5036	MAY - Powdermill Circle	POWDERMILL CIRCLE - 2	Maynard	8	NSTAR	4426	4426	426	5.16	N/A
2,082	798	5037	MAY - Powdermill Circle	POWDERMILL CIRCLE - 3	Maynard	8	NSTAR	4426	4426	426	5.21	N/A
2,083	799	5035	MAY - Powdermill Circle	POWDERMILL CIRCLE - 1	Maynard	8	NSTAR	4426	4426	426	5.39	N/A
2,084	800	5038	MAY - Powdermill Circle	POWDERMILL CIRCLE - 4	Maynard	8	NSTAR	4426	4426	426	5.73	N/A
2,085	801	2982	PLY - Veterans	29-31 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.76	N/A
2,086	802	2988	PLY - Veterans	3-5 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.76	N/A
2,087	803	2983	PLY - Veterans	32-34 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.76	N/A
2,088	804	2990	PLY - Veterans	8-10-12-14 Standish Court (Type D)	Plymouth	4	NSTAR	1632	1632	0	6.76	N/A
2,089	805	2991	PLY - Veterans	9-11 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	6.76	N/A
2,090	806	2976	PLY - Veterans	33-35 Standish Court (Type C)	Plymouth	2	NSTAR	2232	2232	0	6.76	N/A
2,091	807	2987	PLY - Veterans	28-30 Olmstead Terrace (Type A)	Plymouth	2	NSTAR	2250	2250	0	6.76	N/A
2,092	808	2989	PLY - Veterans	4-6 Standish Court (Type A)	Plymouth	2	NSTAR	2250	2250	0	6.76	N/A
2,093	809	2981	PLY - Veterans	24-26-28-30 Standish Court (Type D)	Plymouth	4	NSTAR	4030	4030	0	6.76	N/A
2,094	810	4848	Pondview	560 Centre St	Jamaica Plain	60	NSTAR	50297	50297	4255	0.80	N/A
2,095	811	1441	Pondview Apartments	31 Germainia Street	Jamaica Plain	60	NSTAR	56200	56200	10158	N/A	2.16
2,096	812	1638	Renwood-PWA	36 Edgewood St	Roxbury	3	NSTAR	4830	3825	1005	4.30	N/A
2,097	813	4680	Rockvale	43 Rockvale Circle	Jamaica Plain	3	NSTAR	7800	7799	4836	N/A	0.78
2,098	814	4676	Rockvale	32 Rockvale Circle	Jamaica Plain	3	NSTAR	4991	4990	2027	N/A	2.02
2,099	815	4677	Rockvale	40 Rockvale Circle	Jamaica Plain	3	NSTAR	5400	5399	2436	N/A	1.70
2,100	816	4678	Rockvale	39 Rockvale Circle	Jamaica Plain	3	NSTAR	5736	5735	5735	N/A	0.75
2,101	817	4679	Rockvale	28 Rockvale Circle	Jamaica Plain	3	NSTAR	4600	4599	1441	N/A	3.71
2,102	818	827	Rogers/Preble	30-36 Rogers/48 Preble	South Boston	9	NSTAR	10580	7860	4966	3.25	N/A
2,103	819	1147	Roxbury Development	389 Dudley	Roxbury	6	NSTAR	14430	11544	7620	N/A	1.90
2,104	820	1143	Roxbury Development	4 Dunmore	Roxbury	3	NSTAR	3696	2772	1096	N/A	16.76
2,105	821	2879	Russell Terrace	12 Russell Terrace	Arlington	21	NSTAR	4092	3069	1572	9.74	N/A
2,106	822	3730	Saint Polycarp Apartments	460 Mystic Ave	Somerville	24	NSTAR	29456	29456	7656	2.26	N/A
2,107	823	4502	STH - Calthea & Washington Street	35-41 CALTHEA ST	Stoneham	4	NSTAR	3352	3352	1007	2.03	N/A
2,108	824	4503	STH - Calthea & Washington Street	43-49 CALTHEA ST	Stoneham	4	NSTAR	3352	3352	1007	2.89	N/A
2,109	825	4500	STH - Calthea & Washington Street	19-25 CALTHEA ST	Stoneham	4	NSTAR	3352	3352	1007	3.73	N/A
2,110	826	4499	STH - Calthea & Washington Street	11-17 CALTHEA ST	Stoneham	4	NSTAR	3352	3352	1007	4.41	N/A
2,111	827	4498	STH - Calthea & Washington Street	3-9 CALTHEA ST	Stoneham	4	NSTAR	3744	3744	1124	5.11	N/A
2,112	828	4504	STH - Calthea & Washington Street	51-57 CALTHEA ST	Stoneham	4	NSTAR	3352	3352	1007	5.72	N/A
2,113	829	4501	STH - Calthea & Washington Street	27-33 CALTHEA ST	Stoneham	4	NSTAR	3352	3352	1007	6.08	N/A
2,114	830	4495	STH - Calthea & Washington Street	67-73 CALTHEA ST	Stoneham	4	NSTAR	3744	3744	1124	5.51	N/A
2,115	831	4494	STH - Calthea & Washington Street	59-65 CALTHEA ST	Stoneham	4	NSTAR	3744	3744	1124	6.79	N/A
2,116	832	4493	STH - Calthea & Washington Street	44-50 WASHINGTON ST	Stoneham	4	NSTAR	3744	3744	1124	7.03	N/A
2,117	833	4496	STH - Calthea & Washington Street	75-81 CALTHEA ST	Stoneham	4	NSTAR	3744	3744	1124	7.05	N/A
2,118	834	4583	STH - Washington Ave Vetereans	29-31 WASHINGTON AVE	Stoneham	2	NSTAR	1624	1624	0	0.39	N/A
2,119	835	4577	STH - Washington Ave Vetereans	20-22 WASHINGTON AVE	Stoneham	2	NSTAR	1624	1624	0	5.45	N/A
2,120	836	4580	STH - Washington Ave Vetereans	28-30 WASHINGTON AVE	Stoneham	2	NSTAR	1624	1624	0	5.85	N/A
2,121	837	4579	STH - Washington Ave Vetereans	24-26 WASHINGTON AVE	Stoneham	2	NSTAR	2032	2032	0	5.85	N/A
2,122	838	4575	STH - Washington Ave Vetereans	22-24 PROSPECT ST	Stoneham	2	NSTAR	1624	1624	0	7.59	N/A
2,123	839	4573	STH - Washington Ave Vetereans	41-43 WASHINGTON AVE	Stoneham	2	NSTAR	2032	2032	0	6.24	N/A
2,124	840	4582	STH - Washington Ave Vetereans	25-27 WASHINGTON AVE	Stoneham	2	NSTAR	1624	1624	0	8.00	N/A
2,125	841	4581	STH - Washington Ave Vetereans	32-34 WASHINGTON AVE	Stoneham	2	NSTAR	1624	1624	0	8.03	N/A
2,126	842	4571	STH - Washington Ave Vetereans	33-35 WASHINGTON AVE	Stoneham	2	NSTAR	2032	2032	0	6.62	N/A
2,127	843	4572	STH - Washington Ave Vetereans	37-39 WASHINGTON AVE	Stoneham	2	NSTAR	1624	1624	0	8.58	N/A
2,128	844	4570	STH - Washington Ave Vetereans	18-20 PROSPECT ST	Stoneham	2	NSTAR	2032	2032	0	8.84	N/A
2,129	845	4576	STH - Washington Ave Vetereans	16-18 WASHINGTON AVE	Stoneham	2	NSTAR	2032	2032	0	9.30	N/A
2,130	846	1200	SUD - Musketahquid Village	55 Hudson Road (comm. bldg)	Sudbury	1	NSTAR	2750	2750	0	16.02	N/A
2,131	847	2871	Sydney St	179 Sydney St	Dorchester	12	NSTAR	3700	2775	1900	7.26	N/A
2,132	848	2124	UE - Academy House	10) 45-63 Slayton Way (odd)	Roxbury	15	NSTAR	18687	18687	4500	N/A	3.18
2,133	849	2117	UE - Academy House	3) 72-98 Academy Terrace(even);10A-10C	Roxbury	15	NSTAR	26504	26504	4598	N/A	3.31
2,134	850	2119	UE - Academy House	5) 45-77 Weaver Way (odd)	Roxbury	11	NSTAR	12200	12200	2396	N/A	6.49
2,135	851	2125	UE - Academy House	11) 26-64 Slayton Way(even)	Roxbury	14	NSTAR	18458	18458	6054	N/A	3.05
2,136	852	2122	UE - Academy House	8) 22-46 Slayton Way (even); 26-36 Weave	Roxbury	23	NSTAR	30720	30720	6500	N/A	3.18
2,137	853	2121	UE - Academy House	7) 52-60 Slayton Way (even); 12-20 Weave	Roxbury	11	NSTAR	14587	14587	4585	N/A	5.34
2,138	854	2120	UE - Academy House	6) 40-66 Weaver Court (even); 70-82 Weav	Roxbury	29	NSTAR	37604	37604	6661	N/A	3.86
2,139	855	1796	UE - Academy House	1) 2-20 Academy Court (even); 1-33 Slayton	Roxbury	53	NSTAR	78368	78368	21935	N/A	2.35
2,140	856	1312	UE - Amory Residences	10 Amory Street	Roxbury	8	NSTAR	10090	10090	3210	N/A	3.37
2,141	857	1311	UE - Amory Residences	89-97 Amory Street	Roxbury	9	NSTAR	11530	11530	3165	N/A	3.62
2,142	858	1181	UE - Bancroft Apartments	1871 Columbus Ave	Roxbury	6	NSTAR	8610	8610	2550	N/A	20.84
2,143	859	1566	UE - Egleston Crossing	3089-3095 Washington Street & 3-7 Beetho	Boston	20	NSTAR	19868	19868	4197	N/A	13.49
2,144	860	1431	UE - Harvard Hill	60 Hazelton St	Boston	15	NSTAR	21459	21459	10009	N/A	2.42
2,145	861	1429	UE - Harvard Hill	436 Harvard St	Boston	14	NSTAR	21585	19164	11111	N/A	2.37
2,146	862	1222	UE - JP Apartments	3294-3296 Washington St	Jamaica Plain	6	NSTAR	8888	6666	3851	3.30	N/A
2,147	863	1225	UE - JP Apartments	3302-3304 Washington St	Jamaica Plain	6	NSTAR	8968	6726	3871	3.36	N/A
2,148	864	1221	UE - JP Apartments	9-15 Walk Hill St	Jamaica Plain	9	NSTAR	13916	11247	5536	2.23	N/A
2,149	865	1224	UE - JP Apartments	3298-3300 Washington St	Jamaica Plain	6	NSTAR	8944	6711	3803	3.70	N/A
2,150	866	1217	UE - JP Apartments	3 Morse St	Dorchester	9	NSTAR	10664	8034	4820	3.77	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,151	867	1218	UE - JP Apartments	7 Morse St	Dorchester	6	NSTAR	10292	7719	3953	4.09	N/A
2,152	868	1227	UE - JP Apartments	5-7 Woodside Ave	Jamaica Plain	6	NSTAR	10120	7590	4036	4.72	N/A
2,153	869	1494	UE - Theroch Apartments	47 Nazing Street	Boston	8	NSTAR	13250	9900	3350	N/A	7.95
2,154	870	1500	UE - Theroch Apartments	108 Maple Street	Boston	6	NSTAR	13500	10470	4350	N/A	7.04
2,155	871	1524	UE - Theroch Apartments	32- 36 Ellington Street	Boston	12	NSTAR	15504	12240	5264	N/A	5.82
2,156	872	1495	UE - Theroch Apartments	266 Seavers Street	Boston	14	NSTAR	38000	30800	10200	N/A	4.35
2,157	873	1518	UE - Theroch Apartments	100-106 Maple Street	Boston	12	NSTAR	25250	18400	9650	N/A	4.71
2,158	874	1503	UE - Theroch Apartments	107-109 Elm Street	Boston	16	NSTAR	29250	23334	12070	N/A	4.00
2,159	875	1519	UE - Theroch Apartments	18-24 Sonoma St	Boston	16	NSTAR	25782	22157	7632	N/A	7.80
2,160	876	1113	UE - Wardman Apartments	65 Westminster Avenue	Roxbury	14	NSTAR	9699	8349	1350	7.12	N/A
2,161	877	1316	UE - Westminster Court	60 âúñ74 Westminster Court	Roxbury	16	NSTAR	21415	19415	9995	N/A	2.82
2,162	878	1317	UE - Westminster Court	78 - 108 Westminster Court	Roxbury	25	NSTAR	26554	20602	5952	N/A	6.87
2,163	879	1315	UE - Westminster Court	30 - 54 Westminster Court	Roxbury	29	NSTAR	32700	31036	9108	N/A	5.18
2,164	880	1392	Van Ness Terrace	238 Warren Street	Roxbury	50	NSTAR	66383	66131	22301	N/A	3.07
2,165	881	4641	WLP - Diamond Pond Terrace	Diamond Pond Community Bldg	Walpole	1	NSTAR	1820	1820	0	4.94	N/A
2,166	882	4632	WLP - Diamond Pond Terrace	1 DIAMOND POND TERRACE	Walpole	4	NSTAR	2642	2642	642	4.94	N/A
2,167	883	4633	WLP - Diamond Pond Terrace	2 DIAMOND POND TERRACE	Walpole	4	NSTAR	2642	2642	642	4.94	N/A
2,168	884	4637	WLP - Diamond Pond Terrace	5 DIAMOND POND TERRACE	Walpole	4	NSTAR	2754	2754	754	4.94	N/A
2,169	885	4636	WLP - Diamond Pond Terrace	4 DIAMOND POND TERRACE	Walpole	10	NSTAR	5990	5990	990	4.94	N/A
2,170	886	4639	WLP - Diamond Pond Terrace	7 DIAMOND POND TERRACE	Walpole	8	NSTAR	6224	6224	1224	4.94	N/A
2,171	887	4635	WLP - Diamond Pond Terrace	3 DIAMOND POND TERRACE	Walpole	12	NSTAR	8775	8775	2275	4.94	N/A
2,172	888	4638	WLP - Diamond Pond Terrace	6 DIAMOND POND TERRACE	Walpole	12	NSTAR	9026	9026	2026	4.94	N/A
2,173	889	4630	WLP - Neponset View	9 NEPONSET VIEW TERRACE	Walpole	1	NSTAR	1440	1440	0	N/A	2.45
2,174	890	4615	WLP - Neponset View	1 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,175	891	4617	WLP - Neponset View	2 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,176	892	4618	WLP - Neponset View	3 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,177	893	4622	WLP - Neponset View	4 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,178	894	4624	WLP - Neponset View	5 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,179	895	4626	WLP - Neponset View	6 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,180	896	4627	WLP - Neponset View	7 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,181	897	4629	WLP - Neponset View	8 NEPONSET VIEW TERRACE	Walpole	9	NSTAR	4340	4340	290	N/A	2.45
2,182	898	2109	WPO - Greenwood Terrace	666 State Road 2	Westport	8	NSTAR	4568	4000	568	4.83	N/A
2,183	899	2110	WPO - Greenwood Terrace	666 State Road 3	Westport	8	NSTAR	4568	4000	568	4.83	N/A
2,184	900	2111	WPO - Greenwood Terrace	666 State Road 4	Westport	8	NSTAR	4568	4000	568	4.83	N/A
2,185	901	2112	WPO - Greenwood Terrace	666 State Road 5	Westport	8	NSTAR	4568	4000	568	4.83	N/A
2,186	902	2113	WPO - Greenwood Terrace	666 State Road 6	Westport	8	NSTAR	4568	4000	568	4.83	N/A
2,187	903	1487	WPO - Greenwood Terrace	666 State Road 1	Westport	8	NSTAR	4568	4000	568	5.12	N/A
2,188	904	5800	360 Union	360 Union Ave	Framingham	10	NSTAR	6538	4150	2595	8.73	N/A
2,189	905	1838	Atlas Lofts	88 Gerrish Avenue	Chelsea	53	NSTAR	51447	46447	9365	N/A	22.53
2,190	906	5636	Bent Park (Fed)	10 Bent Avenue	Wayland	14	NSTAR	7680	7680	680	4.17	N/A
2,191	907	5637	Bent Park (Fed)	12 Bent Avenue	Wayland	14	NSTAR	7680	7680	680	4.17	N/A
2,192	908	5633	Bent Park (Fed)	4 Bent Avenue	Wayland	14	NSTAR	7680	7680	680	4.17	N/A
2,193	909	5634	Bent Park (Fed)	6 Bent Avenue	Wayland	14	NSTAR	7680	7680	680	4.17	N/A
2,194	910	5635	Bent Park (Fed)	8 Bent Avenue	Wayland	14	NSTAR	7680	7680	680	4.17	N/A
2,195	911	4327	BRAYTON CIRCLE	11-12 Brayton Circle	Canton	2	NSTAR	2025	2025	425	0.52	N/A
2,196	912	4322	BRAYTON CIRCLE	1-2 Brayton Circle	Canton	2	NSTAR	2034	2034	434	0.52	N/A
2,197	913	4323	BRAYTON CIRCLE	3-4 Brayton Circle	Canton	2	NSTAR	2025	2025	425	0.52	N/A
2,198	914	4324	BRAYTON CIRCLE	5-6 Brayton Circle	Canton	2	NSTAR	2034	2034	434	0.52	N/A
2,199	915	4325	BRAYTON CIRCLE	7-8 Brayton Circle	Canton	2	NSTAR	2034	2034	434	0.52	N/A
2,200	916	4326	BRAYTON CIRCLE	9-10 Brayton Circle	Canton	2	NSTAR	2034	2034	434	0.52	N/A
2,201	917	1592	Brian Honan Apts	31-41 Everett Sq.	Allston	6	NSTAR	6732	6732	2244	N/A	1.39
2,202	918	1400	Brian Honan Apts	43-55 Everett Sq.	Allston	7	NSTAR	10800	10800	3600	N/A	5.10
2,203	919	4333	Castle Cove Co-op	225 West 2nd Street	South Boston	65	NSTAR	95760	95760	34955	4.09	N/A
2,204	920	3535	CCHI	151-157 Allston	Cambridge	6	NSTAR	10364	10364	2706	N/A	1.62
2,205	921	3533	CCPLP	26 Pleasant	Cambridge	6	NSTAR	9520	9520	2386	N/A	1.90
2,206	922	5031	Cobble Hill Apts	84 Washington Street	Sommerville	75	NSTAR	120000	120000	20000	N/A	5.52
2,207	923	5369	Gallivan Boulevard	100-102 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	6.13	N/A
2,208	924	5070	Gallivan Boulevard	10-12 Woodbole Ave - 39	Boston	2	NSTAR	1800	1800	0	6.05	N/A
2,209	925	5071	Gallivan Boulevard	10-12 Woodruff Way - 55	Boston	2	NSTAR	1800	1800	0	5.28	N/A
2,210	926	5063	Gallivan Boulevard	1015 Morton Street - 129	Boston	1	NSTAR	1092	1092	0	6.39	N/A
2,211	927	5072	Gallivan Boulevard	102 - 104 Standard Street - 15	Boston	2	NSTAR	1800	1800	0	8.27	N/A
2,212	928	5065	Gallivan Boulevard	1023 Morton Street - 131	Boston	1	NSTAR	1092	1092	0	4.98	N/A
2,213	929	5068	Gallivan Boulevard	1027 Morton Street - 132	Boston	1	NSTAR	1092	1092	0	6.40	N/A
2,214	930	5073	Gallivan Boulevard	103 - 105 Standard Street - 18	Boston	2	NSTAR	1800	1800	0	3.05	N/A
2,215	931	5335	Gallivan Boulevard	103-105 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	8.16	N/A
2,216	932	5069	Gallivan Boulevard	1033 Morton Street - 133	Boston	1	NSTAR	1092	1092	0	4.47	N/A
2,217	933	5066	Gallivan Boulevard	1037 Morton Street - 134	Boston	1	NSTAR	1092	1092	0	10.34	N/A
2,218	934	5324	Gallivan Boulevard	106-108 Standard Street	Boston	2	NSTAR	1932	1932	0	6.70	N/A
2,219	935	5343	Gallivan Boulevard	107-109 Standard Street	Boston	2	NSTAR	2064	2064	0	8.42	N/A
2,220	936	5334	Gallivan Boulevard	107-109 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	8.25	N/A
2,221	937	5491	Gallivan Boulevard	110-112 Standard St.	Boston	2	NSTAR	1800	1800	0	6.02	N/A
2,222	938	5381	Gallivan Boulevard	111-113 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	10.98	N/A
2,223	939	5380	Gallivan Boulevard	115-117 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	8.10	N/A
2,224	940	5311	Gallivan Boulevard	116-118 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	5.89	N/A
2,225	941	5319	Gallivan Boulevard	119-121 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	2.90	N/A
2,226	942	5368	Gallivan Boulevard	120-122 Standard Street	Boston	2	NSTAR	2064	2064	0	5.11	N/A
2,227	943	5310	Gallivan Boulevard	120-122 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	4.90	N/A
2,228	944	5383	Gallivan Boulevard	12-14 Woodgate Street	Boston	2	NSTAR	2068	2068	0	3.54	N/A
2,229	945	5318	Gallivan Boulevard	123-125 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	6.45	N/A
2,230	946	5367	Gallivan Boulevard	124-126 Standard Street	Boston	2	NSTAR	2064	2064	0	7.95	N/A
2,231	947	5309	Gallivan Boulevard	124-126 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	7.08	N/A
2,232	948	5350	Gallivan Boulevard	127-129 Standard Street	Boston	2	NSTAR	2064	2064	0	11.87	N/A
2,233	949	5366	Gallivan Boulevard	128-130 Standard Street	Boston	2	NSTAR	2064	2064	0	3.88	N/A
2,234	950	5351	Gallivan Boulevard	131-133 Standard Street	Boston	2	NSTAR	2064	2064	0	2.49	N/A
2,235	951	5279	Gallivan Boulevard	13-15 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	8.25	N/A
2,236	952	5305	Gallivan Boulevard	132-134 Standard Street	Boston	2	NSTAR	1800	1800	0	2.69	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,237	953	5304	Gallivan Boulevard	136-138 Standard Street	Boston	2	NSTAR	1800	1800	0	1.78	N/A
2,238	954	5288	Gallivan Boulevard	137-139 Standard Street	Boston	2	NSTAR	1800	1800	0	4.83	N/A
2,239	955	5364	Gallivan Boulevard	140-142 Standard Street	Boston	2	NSTAR	2064	2064	0	7.79	N/A
2,240	956	5291	Gallivan Boulevard	140-142 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	2.92	N/A
2,241	957	5352	Gallivan Boulevard	141-143 Standard Street	Boston	2	NSTAR	2064	2064	0	4.14	N/A
2,242	958	5274	Gallivan Boulevard	141-143 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	5.35	N/A
2,243	959	5354	Gallivan Boulevard	14-16 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	1.94	N/A
2,244	960	5296	Gallivan Boulevard	14-16 Woodruff Way	Boston	2	NSTAR	1800	1800	0	6.14	N/A
2,245	961	5303	Gallivan Boulevard	144-146 Standard Street	Boston	2	NSTAR	1800	1800	0	1.78	N/A
2,246	962	5306	Gallivan Boulevard	144-146 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	3.26	N/A
2,247	963	5353	Gallivan Boulevard	145-147 Standard Street	Boston	2	NSTAR	2064	2064	0	4.78	N/A
2,248	964	5280	Gallivan Boulevard	145-147 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	4.15	N/A
2,249	965	5363	Gallivan Boulevard	148-150 Standard Street	Boston	2	NSTAR	2064	2064	0	3.82	N/A
2,250	966	5326	Gallivan Boulevard	151-153 Standard Street	Boston	2	NSTAR	1932	1932	0	7.33	N/A
2,251	967	5315	Gallivan Boulevard	15-17 Woodruff Way	Boston	2	NSTAR	1800	1800	0	3.65	N/A
2,252	968	5302	Gallivan Boulevard	152-154 Standard Street	Boston	2	NSTAR	1800	1800	0	8.14	N/A
2,253	969	5301	Gallivan Boulevard	156-158 Standard Street	Boston	2	NSTAR	1800	1800	0	8.00	N/A
2,254	970	5286	Gallivan Boulevard	16-18 Woodgate Street	Boston	2	NSTAR	1800	1800	0	6.83	N/A
2,255	971	5359	Gallivan Boulevard	18-20 Woodruff Way	Boston	2	NSTAR	2064	2064	0	8.06	N/A
2,256	972	5278	Gallivan Boulevard	19-21 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	1.87	N/A
2,257	973	5374	Gallivan Boulevard	19-21 Woodruff Way	Boston	2	NSTAR	2064	2064	0	2.61	N/A
2,258	974	5285	Gallivan Boulevard	20-22 Woodgate Street	Boston	2	NSTAR	1800	1800	0	5.98	N/A
2,259	975	5356	Gallivan Boulevard	21-23 Woodgate Street	Boston	2	NSTAR	2064	2064	0	9.13	N/A
2,260	976	5329	Gallivan Boulevard	22-24 Woodruff Way	Boston	2	NSTAR	1932	1932	0	11.45	N/A
2,261	977	5340	Gallivan Boulevard	23-25 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	5.34	N/A
2,262	978	5316	Gallivan Boulevard	23-25 Woodruff Way	Boston	2	NSTAR	1800	1800	0	4.89	N/A
2,263	979	5330	Gallivan Boulevard	2-4 Woodruff Way	Boston	2	NSTAR	1932	1932	0	8.18	N/A
2,264	980	5349	Gallivan Boulevard	24-26 Woodgate Street	Boston	2	NSTAR	2064	2064	0	11.26	N/A
2,265	981	5320	Gallivan Boulevard	25-27 Woodgate Street	Boston	2	NSTAR	1920	1920	0	5.59	N/A
2,266	982	5300	Gallivan Boulevard	26-28 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	5.87	N/A
2,267	983	5295	Gallivan Boulevard	26-28 Woodruff Way	Boston	2	NSTAR	1800	1800	0	1.38	N/A
2,268	984	5339	Gallivan Boulevard	27-29 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	5.44	N/A
2,269	985	5376	Gallivan Boulevard	27-29 Woodruff Way	Boston	2	NSTAR	2064	2064	0	6.19	N/A
2,270	986	5348	Gallivan Boulevard	28-30 Woodgate Street	Boston	2	NSTAR	2064	2064	0	9.95	N/A
2,271	987	5289	Gallivan Boulevard	29-31 Woodgate Street	Boston	2	NSTAR	1800	1800	0	6.87	N/A
2,272	988	5294	Gallivan Boulevard	30-32 Woodruff Way	Boston	2	NSTAR	1800	1800	0	4.11	N/A
2,273	989	5317	Gallivan Boulevard	31-33 Woodruff Way	Boston	2	NSTAR	1800	1800	0	8.24	N/A
2,274	990	5284	Gallivan Boulevard	32-34 Woodgate Street	Boston	2	NSTAR	1800	1800	0	5.46	N/A
2,275	991	5290	Gallivan Boulevard	33-35 Woodgate Street	Boston	2	NSTAR	1800	1800	0	7.33	N/A
2,276	992	5299	Gallivan Boulevard	34-36 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	5.50	N/A
2,277	993	5292	Gallivan Boulevard	34-36 Woodruff Way	Boston	2	NSTAR	1800	1800	0	3.95	N/A
2,278	994	5377	Gallivan Boulevard	35-37 Woodruff Way	Boston	2	NSTAR	2064	2064	0	12.16	N/A
2,279	995	5347	Gallivan Boulevard	36-38 Woodgate Street	Boston	2	NSTAR	2064	2064	0	7.63	N/A
2,280	996	5357	Gallivan Boulevard	37-39 Woodgate Street	Boston	2	NSTAR	2064	2064	0	6.04	N/A
2,281	997	5358	Gallivan Boulevard	38-40 Woodruff Way	Boston	2	NSTAR	2064	2064	0	8.29	N/A
2,282	998	5308	Gallivan Boulevard	39-41 Woodruff Way	Boston	2	NSTAR	1800	1800	0	4.57	N/A
2,283	999	5346	Gallivan Boulevard	40-42 Woodgate Street	Boston	2	NSTAR	2064	2064	0	12.32	N/A
2,284	1,000	5328	Gallivan Boulevard	41-43 Woodgate Street	Boston	2	NSTAR	1932	1932	0	3.09	N/A
2,285	1,001	5283	Gallivan Boulevard	44-46 Woodgate Street	Boston	2	NSTAR	1800	1800	0	2.78	N/A
2,286	1,002	5277	Gallivan Boulevard	47-49 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	3.31	N/A
2,287	1,003	5361	Gallivan Boulevard	48-50 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	3.78	N/A
2,288	1,004	5282	Gallivan Boulevard	48-50 Woodgate Street	Boston	2	NSTAR	1800	1800	0	11.98	N/A
2,289	1,005	5379	Gallivan Boulevard	49-51 Woodruff Way	Boston	2	NSTAR	2064	2064	0	12.51	N/A
2,290	1,006	5269	Gallivan Boulevard	50-52 Woodruff Way	Boston	2	NSTAR	1800	1800	0	7.75	N/A
2,291	1,007	5276	Gallivan Boulevard	51-53 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	11.77	N/A
2,292	1,008	5297	Gallivan Boulevard	52-54 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	8.24	N/A
2,293	1,009	5345	Gallivan Boulevard	52-54 Woodgate Street	Boston	2	NSTAR	2064	2064	0	7.03	N/A
2,294	1,010	5378	Gallivan Boulevard	53-55 Woodruff Way	Boston	2	NSTAR	2064	2064	0	6.63	N/A
2,295	1,011	5375	Gallivan Boulevard	54-56 Woodruff Way	Boston	2	NSTAR	2064	2064	0	7.37	N/A
2,296	1,012	4916	Gallivan Boulevard	55-57 Woodbole Avenue	Boston	2	NSTAR	2064	2064	0	5.62	N/A
2,297	1,013	4917	Gallivan Boulevard	56-58 Woodbole Avenue	Boston	2	NSTAR	2064	2064	0	8.30	N/A
2,298	1,014	5341	Gallivan Boulevard	5-7 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	6.41	N/A
2,299	1,015	5332	Gallivan Boulevard	57-59 Woodruff Way	Boston	2	NSTAR	1932	1932	0	10.26	N/A
2,300	1,016	5370	Gallivan Boulevard	58-60 Woodruff Way	Boston	2	NSTAR	2064	2064	0	8.55	N/A
2,301	1,017	5323	Gallivan Boulevard	59-61 Woodbole Ave	Boston	2	NSTAR	1932	1932	0	4.43	N/A
2,302	1,018	5365	Gallivan Boulevard	62-64 Woodruff Way	Boston	2	NSTAR	2064	2064	0	10.60	N/A
2,303	1,019	5338	Gallivan Boulevard	63-65 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	8.87	N/A
2,304	1,020	5331	Gallivan Boulevard	66-68 Woodbole Ave	Boston	2	NSTAR	1932	1932	0	6.25	N/A
2,305	1,021	5298	Gallivan Boulevard	66-68 Woodruff Way	Boston	2	NSTAR	1800	1800	0	6.79	N/A
2,306	1,022	5275	Gallivan Boulevard	67-69 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	5.17	N/A
2,307	1,023	5355	Gallivan Boulevard	6-8 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	3.53	N/A
2,308	1,024	5360	Gallivan Boulevard	6-8 Woodruff Way	Boston	2	NSTAR	2064	2064	0	5.35	N/A
2,309	1,025	5373	Gallivan Boulevard	70-72 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	4.35	N/A
2,310	1,026	5293	Gallivan Boulevard	70-72 Woodruff Way	Boston	2	NSTAR	1800	1800	0	4.32	N/A
2,311	1,027	5337	Gallivan Boulevard	71-73 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	8.56	N/A
2,312	1,028	5372	Gallivan Boulevard	74-76 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	10.38	N/A
2,313	1,029	5327	Gallivan Boulevard	74-76 Woodruff Way	Boston	2	NSTAR	1932	1932	0	7.83	N/A
2,314	1,030	5322	Gallivan Boulevard	75-77 Woodbole Ave	Boston	2	NSTAR	1932	1932	0	7.30	N/A
2,315	1,031	5371	Gallivan Boulevard	78-80 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	6.93	N/A
2,316	1,032	5287	Gallivan Boulevard	78-80 Woodruff Way	Boston	2	NSTAR	1800	1800	0	5.25	N/A
2,317	1,033	5273	Gallivan Boulevard	79-81 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	6.09	N/A
2,318	1,034	5325	Gallivan Boulevard	8-10 Woodgate Street	Boston	2	NSTAR	1932	1932	0	10.80	N/A
2,319	1,035	5314	Gallivan Boulevard	82-84 Woodbole AVe	Boston	2	NSTAR	1800	1800	0	3.08	N/A
2,320	1,036	5344	Gallivan Boulevard	82-84 Woodruff Way	Boston	2	NSTAR	2064	2064	0	7.52	N/A
2,321	1,037	5272	Gallivan Boulevard	83-85 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	4.05	N/A
2,322	1,038	5313	Gallivan Boulevard	86-88 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	3.63	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,323	1,039	5333	Gallivan Boulevard	86-88 Woodruff Way	Boston	2	NSTAR	2064	2064	0	11.41	N/A
2,324	1,040	5336	Gallivan Boulevard	87-89 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	10.62	N/A
2,325	1,041	5312	Gallivan Boulevard	90-92 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	6.74	N/A
2,326	1,042	5281	Gallivan Boulevard	9-11 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	9.54	N/A
2,327	1,043	5271	Gallivan Boulevard	91-93 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	4.05	N/A
2,328	1,044	5067	Gallivan Boulevard	99 Standard Street - 17	Boston	1	NSTAR	1092	1092	0	7.01	N/A
2,329	1,045	5321	Gallivan Boulevard	99-101 Woodbole Ave	Boston	2	NSTAR	1932	1932	0	8.29	N/A
2,330	1,046	3729	Gilman Street Apartments	109 Gilman Street	Somerville	6	NSTAR	8748	6561	2187	N/A	1.35
2,331	1,047	1294	Hano Apartments	1-3 Hano	Brighton	2	NSTAR	2968	2200	768	2.40	N/A
2,332	1,048	1297	Hano Apartments	13-15 Hano	Brighton	2	NSTAR	2968	2200	768	2.89	N/A
2,333	1,049	1298	Hano Apartments	17-19 Hano	Brighton	2	NSTAR	2968	2200	768	1.63	N/A
2,334	1,050	1299	Hano Apartments	21-23 Hano	Brighton	2	NSTAR	2968	2200	768	3.64	N/A
2,335	1,051	1300	Hano Apartments	25-27 Hano	Brighton	2	NSTAR	2968	2200	768	3.75	N/A
2,336	1,052	1301	Hano Apartments	29-31 Hano	Brighton	2	NSTAR	2968	2200	768	1.93	N/A
2,337	1,053	1302	Hano Apartments	33-35 Hano	Brighton	2	NSTAR	2968	2200	768	2.89	N/A
2,338	1,054	1303	Hano Apartments	37-39 Hano	Brighton	2	NSTAR	2968	2200	768	3.55	N/A
2,339	1,055	1295	Hano Apartments	5-7 Hano	Brighton	2	NSTAR	2968	2200	768	3.49	N/A
2,340	1,056	1296	Hano Apartments	9-11 Hano	Brighton	2	NSTAR	2968	2200	768	2.72	N/A
2,341	1,057	5493	Harbor Point	16 Harbor Crest court	Dorchester	32	NSTAR	77400	74388	7740	N/A	27.40
2,342	1,058	5494	Harbor Point	270 Mt. Vernon Street	Dorchester	3	NSTAR	53300	53300	50300	N/A	8.33
2,343	1,059	5501	Harbor Point	77 North Point Drive	Dorchester	90	NSTAR	142470	139458	14247	N/A	30.70
2,344	1,060	4319	HEMEN WAY	660 WASHINGTON STREET - Main Buildin	Canton	12	NSTAR	17270	17270	5270	5.67	N/A
2,345	1,061	4320	HEMEN WAY	660 WASHINGTON STREET - North Wing	Canton	23	NSTAR	16788	16788	5288	5.67	N/A
2,346	1,062	4321	HEMEN WAY	660 WASHINGTON STREET - South Wing	Canton	21	NSTAR	13744	13744	4244	5.67	N/A
2,347	1,063	5215	Innis Apartments	170-180 Central Ave	Chelsea	36	NSTAR	30240	30240	0	11.15	N/A
2,348	1,064	5212	Innis Apartments	230 & 232 Central Ave	Chelsea	12	NSTAR	10800	10800	0	10.34	N/A
2,349	1,065	5211	Innis Apartments	234 & 236 Central Ave	Chelsea	12	NSTAR	10800	10800	0	11.59	N/A
2,350	1,066	5216	Innis Apartments	55 & 61 Watts	Chelsea	12	NSTAR	10800	10800	2562	10.45	N/A
2,351	1,067	5214	Innis Apartments	72 & 76 Willow St/210 & 216 Central Ave	Chelsea	24	NSTAR	10800	10800	0	20.12	N/A
2,352	1,068	4313	JULIUS RUBIN COURT	JOSEPHINE STREET - A	Canton	14	NSTAR	11364	11364	164	12.66	N/A
2,353	1,069	4314	JULIUS RUBIN COURT	JOSEPHINE STREET - B	Canton	14	NSTAR	11364	11364	164	12.66	N/A
2,354	1,070	4315	JULIUS RUBIN COURT	JOSEPHINE STREET - C	Canton	14	NSTAR	11364	11364	164	12.66	N/A
2,355	1,071	4316	JULIUS RUBIN COURT	JOSEPHINE STREET - D	Canton	14	NSTAR	11364	11364	164	12.66	N/A
2,356	1,072	4317	JULIUS RUBIN COURT	JOSEPHINE STREET - E	Canton	8	NSTAR	5048	5048	248	12.66	N/A
2,357	1,073	4318	JULIUS RUBIN COURT	JOSEPHINE STREET - F	Canton	10	NSTAR	7572	7572	72	12.66	N/A
2,358	1,074	6089	Kennilworth Williams	37 Williams Street	Roxbury	21	NSTAR	25630	25130	7081	N/A	10.07
2,359	1,075	6088	Kennilworth Williams	6 Kennilworth Street	Roxbury	17	NSTAR	27320	27320	6320	N/A	12.03
2,360	1,076	2717	LEX - Vynebrook Village	Building A	Lexington	12	NSTAR	6050	6050	1250	17.81	N/A
2,361	1,077	2718	LEX - Vynebrook Village	Building B	Lexington	12	NSTAR	6050	6050	1250	19.58	N/A
2,362	1,078	2719	LEX - Vynebrook Village	Building C	Lexington	12	NSTAR	6050	6050	1250	18.76	N/A
2,363	1,079	3717	Linden Street Apartments	10 Charlestown Street	Somerville	6	NSTAR	6474	5412	1062	N/A	11.65
2,364	1,080	3718	Linden Street Apartments	20 Charlestown Street	Somerville	6	NSTAR	6474	5412	1062	N/A	7.85
2,365	1,081	3720	Linden Street Apartments	20 Merriam Street	Somerville	6	NSTAR	6474	5412	1062	N/A	14.67
2,366	1,082	3719	Linden Street Apartments	24 Charlestown Street	Somerville	6	NSTAR	8800	6592	2300	N/A	4.93
2,367	1,083	3721	Linden Street Apartments	26 Merriam Street	Somerville	6	NSTAR	6474	5412	1062	N/A	14.67
2,368	1,084	3723	Linden Street Apartments	30 Linden Street	Somerville	6	NSTAR	4160	3666	494	N/A	6.67
2,369	1,085	3722	Linden Street Apartments	32 Merriam Street	Somerville	6	NSTAR	4160	3666	494	N/A	6.67
2,370	1,086	3725	Linden Street Apartments	34 Linden Street	Somerville	6	NSTAR	4160	3666	494	N/A	11.81
2,371	1,087	3724	Linden Street Apartments	36 Linden Street	Somerville	6	NSTAR	4160	3666	494	2.52	N/A
2,372	1,088	3130	Madison Park IV	#11 - 693 Shawmut Avenue	Boston	11	NSTAR	9363	9363	0	N/A	0.01
2,373	1,089	6093	MHPI 1	1456 Tremont St	Roxbury	8	NSTAR	4822	4222	1022	1.15	N/A
2,374	1,090	6094	MHPI III	5 Grotto Glen Rd.	Jamaica Plain	12	NSTAR	5600	5300	1900	4.43	N/A
2,375	1,091	6095	MHPI IV	3 Boylston Pl.	Jamaica Plain	10	NSTAR	4425	3625	1162	8.20	N/A
2,376	1,092	6096	MHPI IV	33 Bartlett St.	Roxbury	10	NSTAR	4425	3625	1162	7.98	N/A
2,377	1,093	6097	MHPI IV	65 Bailey St.	Dorchester	12	NSTAR	5000	4700	770	8.07	N/A
2,378	1,094	6102	MHPI IX	12 School St.	Roxbury	12	NSTAR	9568	8368	2037	5.05	N/A
2,379	1,095	6099	MHPI V	38 Dickens St.	Dorchester	8	NSTAR	4882	4882	182	6.56	N/A
2,380	1,096	6098	MHPI V	64 Bowdoin St.	Dorchester	8	NSTAR	4882	4882	182	7.28	N/A
2,381	1,097	6100	MHPI VI	25 Virginia St.	Dorchester	15	NSTAR	5900	4900	1490	5.52	N/A
2,382	1,098	6101	MHPI VII	333 Market St.	Brighton	18	NSTAR	22500	22500	4000	1.85	N/A
2,383	1,099	5059	Millbrook Square	17 Mill Street	Arlington	146	NSTAR	122541	122541	12951	N/A	17.53
2,384	1,100	4849	Nate Smith House	155 Lamartine St	Jamaica Plain	45	NSTAR	36049	36049	9957	5.98	N/A
2,385	1,101	/216	New Port Antonio	14 Irwin	Dorchester	6	NSTAR	4896	3896	1896	N/A	3.10
2,386	1,102	/222	New Port Antonio	181 Ruthven	Dorchester	10	NSTAR	13824	9824	4920	N/A	2.19
2,387	1,103	/223	New Port Antonio	185 Ruthven	Dorchester	6	NSTAR	6534	6524	938	N/A	5.32
2,388	1,104	/224	New Port Antonio	186 Ruthven	Dorchester	12	NSTAR	11928	8928	4458	N/A	1.33
2,389	1,105		Potter Street	1 Shawnee Ct AR-G83L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,390	1,106		Potter Street	102 Navaho Ct I-33R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,391	1,107		Potter Street	103 Navaho Ct I-31L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,392	1,108		Potter Street	105 Navaho Ct I-31L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,393	1,109		Potter Street	107 Navaho Ct I-30L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,394	1,110		Potter Street	109 Navaho Ct I-29L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,395	1,111		Potter Street	111 Mashpee Ct C-28L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,396	1,112		Potter Street	113 Mashpee Ct C-27:	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,397	1,113		Potter Street	116 Mashpee Ct C-26R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,398	1,114		Potter Street	117 Mashpee Ct C-25L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,399	1,115		Potter Street	119 Mashpee Ct C-24L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,400	1,116		Potter Street	121 Mashpee Ct - 23L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,401	1,117		Potter Street	124 Mashpee Ct C-22R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,402	1,118		Potter Street	125 Mashpee Ct C-21L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,403	1,119		Potter Street	127 Mashpee Ct C-20L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,404	1,120		Potter Street	129 Mashpee Ct C-19L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,405	1,121		Potter Street	13 Shawnee Ct AR-G77L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,406	1,122		Potter Street	131 Dakota Ct B-100l	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,407	1,123		Potter Street	133 Dakota Ct B-18L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,408	1,124		Potter Street	135 Dakota Ct B - 17L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,409	1,125		Potter Street	137 Dakota Ct B-16L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,410	1,126		Potter Street	138 Dakota Ct b-16R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,411	1,127		Potter Street	140 Dakota Ct B-15R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,412	1,128		Potter Street	141 Dakota Ct B-14L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,413	1,129		Potter Street	143 Dakota B-13L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,414	1,130		Potter Street	145 Dakota CT B-12L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,415	1,131		Potter Street	147 Dakaota Ct B - 11L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,416	1,132		Potter Street	15 Shawnee Ct AR-G76L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,417	1,133		Potter Street	152 Gayhead Ct A - 10R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,418	1,134		Potter Street	153 Gayhead Ct A - 9L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,419	1,135		Potter Street	155 Gayhead CT A-8L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,420	1,136		Potter Street	157 Gayhead Ct A - 7L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,421	1,137		Potter Street	159 Gayhead CT A- 6L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,422	1,138		Potter Street	161 Gayhead Ct A - 5L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,423	1,139		Potter Street	163 Gayhead CT A - 4L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,424	1,140		Potter Street	165 Gayhead CT A - 3L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,425	1,141		Potter Street	167 Gayhead Ct A - 2L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,426	1,142		Potter Street	169 Gayhead Ct A -1L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,427	1,143		Potter Street	17 Shawnee Ct AR-G75L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,428	1,144		Potter Street	20 Shawnee Ct AR-G74L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,429	1,145		Potter Street	21 Mohawk Ct AR 773L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,430	1,146		Potter Street	23 Mohawk Ct AR-F72L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,431	1,147		Potter Street	25 Mohawk Ct AR-F711	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,432	1,148		Potter Street	27 Mohawk Ct AR-F70L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,433	1,149		Potter Street	29 Mohawk Ct AR-F69L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,434	1,150		Potter Street	3 Shawnee CT AR-G82L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,435	1,151		Potter Street	34 Mohawk Ct AT-F67R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,436	1,152		Potter Street	35 Mohawk Ct AR-F66L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,437	1,153		Potter Street	37 Cherokee Ct A-E65L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,438	1,154		Potter Street	39 Cherokee Ct A-E64L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,439	1,155		Potter Street	41 Cherokee Ct A-E63L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,440	1,156		Potter Street	44 Cherokee Ct A-E62R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,441	1,157		Potter Street	45 Cherokee Ct A-E61l	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,442	1,158		Potter Street	47 Cherokee Ct A-E60L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,443	1,159		Potter Street	49 Cherokee Ct A-E59L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,444	1,160		Potter Street	5 Shawnee Ct AR-g81L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,445	1,161		Potter Street	51 Cherokee Ct A-E58L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,446	1,162		Potter Street	53 Cherokee Ct A-E57L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,447	1,163		Potter Street	55 Cherokee Ct A-E56L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,448	1,164		Potter Street	57 Apache Ct Area H 54L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,449	1,165		Potter Street	59 Apache Ct AR-H53L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,450	1,166		Potter Street	61 Apache Ct AR-H52L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,451	1,167		Potter Street	63 Apache Ct AR-H51L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,452	1,168		Potter Street	65 Apache Ct AR-H50L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,453	1,169		Potter Street	67 Apache Ct AR-H49L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,454	1,170		Potter Street	7 Shawnee Ct AR-G80L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,455	1,171		Potter Street	70 Apache Ct AR-H48R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,456	1,172		Potter Street	71 Apache Ct At-h47L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,457	1,173		Potter Street	73 Apache Ct AR-H46L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,458	1,174		Potter Street	75 Apache Ct AR-H45L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,459	1,175		Potter Street	77 Apache Ct AR-H44L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,460	1,176		Potter Street	79 Pawnee Ct AR-D43L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,461	1,177		Potter Street	82 Pawnee Ct A-D43AR	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,462	1,178		Potter Street	83 Pawnee CT AR-D42L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,463	1,179		Potter Street	85 Pawnee Ct AR-D41L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,464	1,180		Potter Street	88 Pawnee Ct Ar-D40R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,465	1,181		Potter Street	9 Shawnee Ct AR-G79L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,466	1,182		Potter Street	90 Pawnee Ct D-39R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,467	1,183		Potter Street	91 Pawnee Ct Ar D37L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,468	1,184		Potter Street	93 Pawnee Ct D-376	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,469	1,185		Potter Street	98 Pawnee Ct D-36R	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,470	1,186		Potter Street	99 Navaho Ct I-34L	New Bedford	2	NSTAR	2010	2010	0	6.42	N/A
2,471	1,187	1953	Prence Grant Apartments	40 Parsonage Street Bldg G	Marshfield	4	NSTAR	2750	2750	150	5.81	N/A
2,472	1,188	5030	Savin Hill Apts	130 Aukland	Dorchester	132	NSTAR	117715	91375	27085	2.25	N/A
2,473	1,189	5638	Union Park	230 - 232 Walnut Street	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,474	1,190	5643	Union Park	242 Walnut & 30 Sixth	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,475	1,191	5644	Union Park	309 Spruce St/54 Orange	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,476	1,192	5640	Union Park	32 & 34 Sixth Street	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,477	1,193	5642	Union Park	38 & 40 Sixth Street	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,478	1,194	5645	Union Park	44 - 46 Orange Street	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,479	1,195	5641	Union Park	44 & 46 Sixth Street	Chelsea	8	NSTAR	5000	5000	1000	1.72	N/A
2,480	1,196	4191	ARL - Winslow	4 Winslow Street	Arlington	132	NSTAR	105300	105300	42600	13.80	N/A
2,481	1,197	5582	BED - Ashby Place	ASHBY PLACE - H	Bedford	8	NSTAR	6200	6200	1200	13.55	N/A
2,482	1,198	5578	BED - Ashby Place	ASHBY PLACE - F	Bedford	8	NSTAR	5800	5800	1300	13.55	N/A
2,483	1,199	5579	BED - Ashby Place	ASHBY PLACE - G	Bedford	8	NSTAR	5800	5800	1300	13.55	N/A
2,484	1,200	5580	BED - Ashby Place	ASHBY PLACE - J	Bedford	8	NSTAR	5800	5800	1300	13.55	N/A
2,485	1,201	5581	BED - Ashby Place	ASHBY PLACE - K	Bedford	8	NSTAR	5800	5800	1300	13.55	N/A
2,486	1,202	5573	BED - Ashby Place	ASHBY PLACE - A	Bedford	8	NSTAR	5516	5516	1516	13.55	N/A
2,487	1,203	5574	BED - Ashby Place	ASHBY PLACE - B	Bedford	8	NSTAR	5516	5516	1516	13.55	N/A
2,488	1,204	5575	BED - Ashby Place	ASHBY PLACE - C	Bedford	8	NSTAR	5516	5516	1516	13.55	N/A
2,489	1,205	5576	BED - Ashby Place	ASHBY PLACE - D	Bedford	8	NSTAR	5516	5516	1516	13.55	N/A
2,490	1,206	5577	BED - Ashby Place	ASHBY PLACE - E	Bedford	8	NSTAR	5516	5516	1516	13.55	N/A
2,491	1,207	5571	BED - Ashby Place	ASHBY PLACE - I - COMMUNITY BLDG	Bedford	1	NSTAR	2024	2024	0	13.55	N/A
2,492	1,208	5362	BOS - Gallivan Boulevard	30-32 Woodbole Ave	Boston	2	NSTAR	2064	2064	0	6.59	N/A
2,493	1,209	5270	BOS - Gallivan Boulevard	95-97 Woodbole Ave	Boston	2	NSTAR	1800	1800	0	7.34	N/A
2,494	1,210	660	BOS - Heath St Family Developmen	42 Horan Way (Building 15)	Boston	15	NSTAR	20556	20556	1556	4.35	N/A

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,495	1,211	662	BOS - Heath St Family Developmen	42 Horan Way (Building 17)	Boston	15	NSTAR	21316	21316	2318	4.10	N/A
2,496	1,212	661	BOS - Heath St Family Developmen	42 Horan Way (Building 16)	Boston	12	NSTAR	20556	15556	20056	3.74	N/A
2,497	1,213	1486	Brian Honan Apts	57 Everett Sq.	Allston	13	NSTAR	21300	21300	7100	5.03	N/A
2,498	1,214	2548	CAM - Corcoran Park	40 St. Sauveur Court	Cambridge	8	NSTAR	6258	6258	330	N/A	9.96
2,499	1,215	5209	CHE - Prattville Apartments	77 & 79 Burma Road	Chelsea	16	NSTAR	18000	18000	0	8.50	N/A
2,500	1,216	5208	CHE - Prattville Apartments	71 & 73 Burma Road	Chelsea	16	NSTAR	18000	18000	0	8.19	N/A
2,501	1,217	5204	CHE - Prattville Apartments	19 & 23 Guam Road	Chelsea	16	NSTAR	18000	18000	0	8.18	N/A
2,502	1,218	5207	CHE - Prattville Apartments	57 & 59 Burma Road	Chelsea	16	NSTAR	18000	18000	0	8.18	N/A
2,503	1,219	5210	CHE - Prattville Apartments	91 & 93 Burma Road	Chelsea	16	NSTAR	18000	18000	0	8.16	N/A
2,504	1,220	5203	CHE - Prattville Apartments	9 & 13 Guam Road	Chelsea	16	NSTAR	18000	18000	0	7.77	N/A
2,505	1,221	5205	CHE - Prattville Apartments	29 & 33 Guam Road	Chelsea	16	NSTAR	18000	18000	0	7.50	N/A
2,506	1,222	5206	CHE - Prattville Apartments	61 & 65 Exeter Street	Chelsea	16	NSTAR	18000	18000	0	7.17	N/A
2,507	1,223	5646	CHE - Union Park	Community Building	Chelsea	1	NSTAR	900	900	0	1.73	N/A
2,508	1,224	5399	Harbor Point	15 South Point Drive	Dorchester	225	NSTAR	419015	419015	41902	N/A	14.05
2,509	1,225	5500	Harbor Point	55 Westwind Road	Dorchester	246	NSTAR	349570	349570	34957	N/A	15.49
2,510	1,226	5499	Harbor Point	47 South Point Drive	Dorchester	232	NSTAR	349570	349065	34957	N/A	10.52
2,511	1,227	5502	Harbor Point	96 Westwind	Dorchester	64	NSTAR	101070	99568	10107	N/A	33.38
2,512	1,228	5495	Harbor Point	20 South Point Drive	Dorchester	54	NSTAR	82800	79788	8280	N/A	37.51
2,513	1,229	5498	Harbor Point	40 Westwind Road	Dorchester	130	NSTAR	355380	349990	35538	N/A	5.06
2,514	1,230	6111	Hillcrest Village	33 ROCKWOOD ROAD - 20	Norfolk	8	NSTAR	5656	5656	1756	13.02	N/A
2,515	1,231	6112	Hillcrest Village	33 ROCKWOOD ROAD - 60	Norfolk	8	NSTAR	5656	5656	1756	13.02	N/A
2,516	1,232	6105	Hillcrest Village	33 ROCKWOOD ROAD - 10	Norfolk	8	NSTAR	5208	5208	1608	13.02	N/A
2,517	1,233	6106	Hillcrest Village	33 ROCKWOOD ROAD - 30	Norfolk	8	NSTAR	5208	5208	1608	13.02	N/A
2,518	1,234	6107	Hillcrest Village	33 ROCKWOOD ROAD - 40	Norfolk	8	NSTAR	5208	5208	1608	13.02	N/A
2,519	1,235	6108	Hillcrest Village	33 ROCKWOOD ROAD - 50	Norfolk	8	NSTAR	5208	5208	1608	13.02	N/A
2,520	1,236	6109	Hillcrest Village	33 ROCKWOOD ROAD - 70	Norfolk	8	NSTAR	5208	5208	1608	13.02	N/A
2,521	1,237	6110	Hillcrest Village	33 ROCKWOOD ROAD - 80	Norfolk	8	NSTAR	5208	5208	1608	13.02	N/A
2,522	1,238	6113	Hillcrest Village	33 ROCKWOOD ROAD - Community	Norfolk	1	NSTAR	2188	2188	0	13.02	N/A
2,523	1,239	168	Hope Bay	12 Norwell	Dorchester	3	NSTAR	2583	2583	583	1.56	N/A
2,524	1,240	165	Hope Bay	8 Norwell	Dorchester	3	NSTAR	2583	2583	583	1.56	N/A
2,525	1,241	167	Hope Bay	11 Norwell	Dorchester	3	NSTAR	2640	2640	640	1.33	N/A
2,526	1,242	170	Hope Bay	15A Norwell	Dorchester	3	NSTAR	2520	2520	520	1.23	N/A
2,527	1,243	100	Hope Bay	109 Brunswick	Dorchester	3	NSTAR	2535	2035	585	1.21	N/A
2,528	1,244	163	Hope Bay	6 Norwell	Dorchester	3	NSTAR	2583	2583	583	0.85	N/A
2,529	1,245	173	Hope Bay	25 Norwell	Dorchester	2	NSTAR	2709	2709	709	0.79	N/A
2,530	1,246	104	Hope Bay	10 Norwell	Dorchester	3	NSTAR	2706	2706	706	0.57	N/A
2,531	1,247	6256	K Landing	1200 State Street	Brewster	108	NSTAR	128899	128899	20091	N/A	7.18
2,532	1,248	185	Morrant Bay Apartments	229-237 Quincy	Dorchester	15	NSTAR	20000	15000	5000	N/A	3.62
2,533	1,249	195	Morrant Bay Apartments	177-185 Magnolia	Dorchester	15	NSTAR	15423	11423	4423	N/A	3.55
2,534	1,250	194	Morrant Bay Apartments	180 Howard/34-38 Cunningham	Dorchester	15	NSTAR	17645	13218	4427	N/A	3.05
2,535	1,251	202	Morrant Bay Apartments	97-99 Woodledge	Dorchester	12	NSTAR	17075	12889	4186	N/A	2.82
2,536	1,252	193	Morrant Bay Apartments	89 Fayston	Dorchester	12	NSTAR	12325	9232	3093	N/A	2.53
2,537	1,253	200	Morrant Bay Apartments	100-102 Woodledge	Dorchester	6	NSTAR	9543	7197	2346	N/A	2.94
2,538	1,254	188	Morrant Bay Apartments	4-6 Dunkeld	Dorchester	12	NSTAR	12558	9404	3154	N/A	2.16
2,539	1,255	191	Morrant Bay Apartments	8-10 Dunkeld	Dorchester	12	NSTAR	12428	9309	3119	N/A	2.17
2,540	1,256	201	Morrant Bay Apartments	104-106 Woodledge	Dorchester	6	NSTAR	8544	6452	2092	N/A	3.03
2,541	1,257	192	Morrant Bay Apartments	5-7 Dunkeld	Dorchester	12	NSTAR	12325	9232	3093	N/A	2.03
2,542	1,258	196	Morrant Bay Apartments	193 Magnolia	Dorchester	3	NSTAR	4159	3159	1359	1.08	N/A
2,543	1,259	197	Morrant Bay Apartments	193A Magnolia	Dorchester	3	NSTAR	3159	3159	1000	1.08	N/A
2,544	1,260	198	Morrant Bay Apartments	195 Magnolia	Dorchester	3	NSTAR	3159	2159	1000	1.08	N/A
2,545	1,261	199	Morrant Bay Apartments	195A Magnolia	Dorchester	3	NSTAR	3159	2159	1000	1.08	N/A
2,546	1,262	554	Mystic Bay	5 Hallie Garden	Dorchester	6	NSTAR	4680	4680	680	2.51	N/A
2,547	1,263	219	New Port Antonio	8 Irwin	Dorchester	16	NSTAR	12320	10320	2320	N/A	7.72
2,548	1,264	206	New Port Antonio	52-54-56 Brunswick	Dorchester	9	NSTAR	10464	8464	3464	N/A	4.38
2,549	1,265	211	New Port Antonio	63 Cheney	Dorchester	9	NSTAR	11880	9880	4097	N/A	3.63
2,550	1,266	208	New Port Antonio	58 Cheney	Dorchester	15	NSTAR	15980	11980	4553	N/A	2.98
2,551	1,267	210	New Port Antonio	62 Cheney	Dorchester	14	NSTAR	16356	11356	6006	N/A	2.25
2,552	1,268	212	New Port Antonio	67 Cheney	Dorchester	6	NSTAR	11016	8016	4830	N/A	2.77
2,553	1,269	205	New Port Antonio	35 Brunswick	Dorchester	10	NSTAR	11502	9502	4502	N/A	2.84
2,554	1,270	209	New Port Antonio	60 Cheney	Dorchester	14	NSTAR	15980	10980	5630	N/A	2.22
2,555	1,271	220	New Port Antonio	8 Montana	Dorchester	9	NSTAR	12288	9288	3288	N/A	3.76
2,556	1,272	218	New Port Antonio	26 Irwin	Dorchester	6	NSTAR	4356	3356	1356	N/A	7.42
2,557	1,273	215	New Port Antonio	24 Deckard	Dorchester	9	NSTAR	11016	8016	4051	N/A	2.39
2,558	1,274	221	New Port Antonio	28 Wyoming	Dorchester	6	NSTAR	11454	9454	3454	N/A	2.77
2,559	1,275	207	New Port Antonio	58-60 Brunswick	Dorchester	12	NSTAR	10863	8863	3863	N/A	2.43
2,560	1,276	204	New Port Antonio	31 Brunswick	Dorchester	10	NSTAR	11076	9076	2398	N/A	3.77
2,561	1,277	225	New Port Antonio	190 Ruthven	Dorchester	6	NSTAR	15549	13549	9953	N/A	0.72
2,562	1,278	214	New Port Antonio	20 Deckard	Dorchester	7	NSTAR	7452	6452	1732	N/A	3.94
2,563	1,279	217	New Port Antonio	20 Irwin	Dorchester	6	NSTAR	5049	4049	1049	N/A	6.34
2,564	1,280	227	New Port Antonio	4 Wellington	Dorchester	4	NSTAR	4104	4094	1614	N/A	3.24
2,565	1,281	213	New Port Antonio	71 Cheney	Dorchester	3	NSTAR	6048	4048	2817	N/A	1.84
2,566	1,282	229	New Port Antonio	6 Wellington	Dorchester	3	NSTAR	3240	3230	216	N/A	22.29
2,567	1,283	231	New Port Antonio	8 Wellington	Dorchester	3	NSTAR	3240	3230	216	N/A	22.29
2,568	1,284	232	New Port Antonio	55 Elm Hill	Dorchester	7	NSTAR	9711	6711	4968	N/A	0.90
2,569	1,285	230	New Port Antonio	7 Wellington	Dorchester	3	NSTAR	3240	3230	329	N/A	9.14
2,570	1,286	226	New Port Antonio	515 Warren	Dorchester	3	NSTAR	3264	3254	240	N/A	10.91
2,571	1,287	228	New Port Antonio	5 Wellington	Dorchester	3	NSTAR	3240	3230	216	N/A	11.75
2,572	1,288	6313	Pine Oaks 1	Pine Oaks 41 - 48	Harwich	8	NSTAR	5200	5200	0	0.95	N/A
2,573	1,289	6307	Pine Oaks 1	Pine Oaks 13 - 20	Harwich	8	NSTAR	5200	5200	0	0.84	N/A
2,574	1,290	6309	Pine Oaks 1	Pine Oaks 27 - 32	Harwich	6	NSTAR	3900	3900	0	0.84	N/A
2,575	1,291	2128	Pine Oaks 1	Pine Oaks 1 - 4	Harwich	4	NSTAR	2304	2304	0	1.17	N/A
2,576	1,292	6305	Pine Oaks 1	Pine Oaks 7 - 10	Harwich	4	NSTAR	2304	2304	0	1.11	N/A
2,577	1,293	6308	Pine Oaks 1	Pine Oaks 21 - 26	Harwich	6	NSTAR	3900	3900	0	0.60	N/A
2,578	1,294	6311	Pine Oaks 1	Pine Oaks 35 - 38	Harwich	4	NSTAR	2600	2600	0	0.90	N/A
2,579	1,295	6314	Pine Oaks 1	Pine Oaks 49 - 52	Harwich	4	NSTAR	2600	2600	0	0.83	N/A
2,580	1,296	6316	Pine Oaks 1	Pine Oaks 55 - 58	Harwich	4	NSTAR	2600	2600	0	0.81	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,581	1,297	6317	Pine Oaks 1	Pine Oaks 59 - 60	Harwich	2	NSTAR	2300	1360	0	1.33	N/A
2,582	1,298	6318	Pine Oaks 1	Community Building	Harwich	1	NSTAR	3926	3926	0	0.40	N/A
2,583	1,299	6304	Pine Oaks 1	Pine Oaks 5 - 6	Harwich	2	NSTAR	1152	1152	0	1.14	N/A
2,584	1,300	6312	Pine Oaks 1	Pine Oaks 39 - 40	Harwich	2	NSTAR	1300	1300	1299	0.97	N/A
2,585	1,301	6310	Pine Oaks 1	Pine Oaks 33 - 34	Harwich	2	NSTAR	1300	1300	1299	0.82	N/A
2,586	1,302	6315	Pine Oaks 1	Pine Oaks 53 - 54	Harwich	2	NSTAR	1300	1300	0	0.77	N/A
2,587	1,303	6306	Pine Oaks 1	Pine Oaks 11 - 12	Harwich	2	NSTAR	1300	1300	0	0.56	N/A
2,588	1,304	1950	Prence Grant Apartments	780 Webster Street Bldg D	Marshfield	5	NSTAR	3250	3250	0	6.56	N/A
2,589	1,305	1948	Prence Grant Apartments	780 Webster Street Bldg B	Marshfield	4	NSTAR	2600	2600	0	7.97	N/A
2,590	1,306	1952	Prence Grant Apartments	40 Parsonage Street Bldg F	Marshfield	4	NSTAR	2600	2600	0	7.81	N/A
2,591	1,307	1947	Prence Grant Apartments	780 Webster Street Bldg A	Marshfield	4	NSTAR	2675	2675	0	7.40	N/A
2,592	1,308	1954	Prence Grant Apartments	40 Parsonage Street Bldg H	Marshfield	4	NSTAR	2600	2600	0	6.87	N/A
2,593	1,309	1949	Prence Grant Apartments	780 Webster Street Bldg C	Marshfield	2	NSTAR	1300	1300	0	9.94	N/A
2,594	1,310	1951	Prence Grant Apartments	780 Webster Street Bldg E	Marshfield	3	NSTAR	2025	2025	0	4.35	N/A
2,595	1,311	6226	RH Village	9 Main St	Orleans	100	NSTAR	100780	100780	26580	N/A	4.50
2,596	1,312	6343	Riley House	39 Maple Avenue	Hyde Park	41	NSTAR	46834	46834	11136	6.93	N/A
2,597	1,313	5202	Robert Fortes	541 Shawmut Ave.	Boston	44	NSTAR	43425	43425	19423	6.84	N/A
2,598	1,314	3184	Ruggles-Shawmut	41 Ruggles Street	Roxbury	43	NSTAR	32510	32510	4416	4.68	N/A
2,599	1,315	3097	Sean Brooke House	116 Lindsey St	116 Lindsey St	19	NSTAR	15534	15534	5086	5.30	N/A
2,600	1,316	1391	Seton Manor	200 Corey Road	Brighton	19	NSTAR	11000	8500	2500	20.25	N/A
2,601	1,317	3728	Sewall Street Apartments	10 Sewall Street	Somerville	14	NSTAR	7326	7326	2050	5.11	N/A
2,602	1,318	2184	Smith House	757 Shawmut Avenue	Roxbury	132	NSTAR	100224	100224	33432	9.18	N/A
2,603	1,319	4810	Spencer Row	215 Spencer Ave	Chelsea	32	NSTAR	35732	35332	8634	N/A	7.94
2,604	1,320	6321	St Mary Apartments	88 Lexington Street	Waltham	70	NSTAR	77100	77100	30940	6.47	N/A
2,605	1,321	1245	The Bowditch School	82 Green Street	Boston	50	NSTAR	18500	18500	9900	9.40	N/A
2,606	1,322	3733	The Forbes Building	545 Centre St.	Jamaica Plain	147	NSTAR	88616	88616	0	9.06	N/A
2,607	1,323	1934	The Village at Brookline	Building 7 (99 Kent St.)	Brookline	116	NSTAR	92628	92628	12628	6.00	N/A
2,608	1,324	1931	The Village at Brookline	Building 1 (70 Pearl St.)	Brookline	90	NSTAR	84370	84370	14370	4.37	N/A
2,609	1,325	1932	The Village at Brookline	Building 2 (55 Village Way)	Brookline	70	NSTAR	65352	65352	5352	3.75	N/A
2,610	1,326	1935	The Village at Brookline	Townhouses	Brookline	31	NSTAR	50208	50208	5208	3.35	N/A
2,611	1,327	2465	Tuttle House	35 Tuttle Street	Boston	27	NSTAR	12000	12000	1800	7.02	N/A
2,612	1,328	1313	UE - Amory Residences	20 Amory Street	Roxbury	47	NSTAR	57290	56848	16055	N/A	12.76
2,613	1,329	1178	UE - Bancroft Apartments	1- 11 Bancroft Street	Roxbury	18	NSTAR	22680	22680	8100	N/A	17.54
2,614	1,330	1182	UE - Bancroft Apartments	51- 55 Forest Hill Street	Jamaica Plain	9	NSTAR	8915	8915	1625	N/A	44.14
2,615	1,331	1314	UE - Dimock-Bragdon	1841-1865 Columbus Ave.	Roxbury	54	NSTAR	85134	66063	39734	N/A	2.11
2,616	1,332	1567	UE - Egleston Crossing	3033/3037 Washington Street	Boston	44	NSTAR	47711	47711	9683	N/A	14.90
2,617	1,333	1430	UE - Harvard Hill	70 Hazelton Street	Boston	8	NSTAR	9024	9024	3024	N/A	3.36
2,618	1,334	1219	UE - JP Apartments	48-56 School St	Roxbury	14	NSTAR	20221	14994	8297	4.87	N/A
2,619	1,335	1220	UE - JP Apartments	78-84 Stoughton St/96 Sumner St	Dorchester	17	NSTAR	18912	14331	7428	4.81	N/A
2,620	1,336	1216	UE - JP Apartments	337 Harvard St/4 Lorne St	Dorchester	12	NSTAR	18372	13779	6475	4.22	N/A
2,621	1,337	1226	UE - JP Apartments	3316-3322 Washington St	Jamaica Plain	12	NSTAR	17584	13185	7209	4.30	N/A
2,622	1,338	1501	UE - Theroch Apartments	17-21 Sonoma Street	Boston	27	NSTAR	29000	21600	10400	N/A	6.69
2,623	1,339	1111	UE - Wardman Apartments	50 Walnut Park	Roxbury	6	NSTAR	11146	7646	3500	7.21	N/A
2,624	1,340	1112	UE - Wardman Apartments	79 Walnut Park	Roxbury	14	NSTAR	11970	10750	1220	6.62	N/A
2,625	1,341	1480	Victory Gardens Apartments	54 Orleans Street	East Boston	87	NSTAR	124278	124278	39750	N/A	5.70
2,626	1,342	5438	Villages @ Fawcett's Pond	148 West Main Street - C	Hyannis	43	NSTAR	15648	15648	0	N/A	5.91
2,627	1,343	5439	Villages @ Fawcett's Pond	148 West Main Street - D	Hyannis	57	NSTAR	17760	17760	0	N/A	4.25
2,628	1,344	6327	Walnut House	409 Walnut Avenue	Roxbury	34	NSTAR	22217	22217	5217	8.03	N/A
2,629	1,345	3727	Walnut Street Apartments	110 Walnut Street	Somerville	12	NSTAR	12272	9228	3044	N/A	2.60
2,630	1,346	2558	West End Place	150 Staniford Street	Boston	187	NSTAR	244707	210232	64713	N/A	12.90
2,631	1,347	3091	Westland Ave	81 Westland Ave	Boston	32	NSTAR	7460	7460	2660	12.15	N/A
2,632	1,348	3092	Westland Ave	85 Westland Ave	Boston	33	NSTAR	7860	7860	2910	10.49	N/A
2,633	1,349	1223	Winter Valley	600 Canton Ave Bldg 5	Milton	32	NSTAR	27135	27135	7135	N/A	10.40
2,634	1,350	1781	Woodlands (Plympton Elderly Hous	165 County Road	Plympton	40	NSTAR	23000	23000	3000	10.16	N/A
2,635	1,351	1930	Woods at Wareham	36 Swifts Beach Road - Office	Wareham	1	NSTAR	5120	5120	4128	N/A	4.42
2,636	1,352	6402	1 Wise	1 Wise St	Jamaica Plain	8	NSTAR	2560	1920	1329	6.75	N/A
2,637	1,353	6403	9 Valentine	9 Valentine St	Roxbury	6	NSTAR	3108	3108	2319	7.31	N/A
2,638	1,354	4811	ACT - Windsor Green	68 Windsor Avenue - 2	Acton	16	NSTAR	5920	5920	0	25.48	N/A
2,639	1,355	4812	ACT - Windsor Green	68 Windsor Avenue - 3	Acton	16	NSTAR	5920	5920	0	25.13	N/A
2,640	1,356	4813	ACT - Windsor Green	68 Windsor Avenue - 4	Acton	8	NSTAR	5920	5920	0	12.54	N/A
2,641	1,357	4814	ACT - Windsor Green	68 Windsor Avenue - 5	Acton	8	NSTAR	5920	5920	0	12.54	N/A
2,642	1,358	6257	Angel House	309 South Street	Hyannis	1	NSTAR	3384	2538		13.71	N/A
2,643	1,359	6258	Angel House	309 South Street - B	Hyannis	1	NSTAR	1241	1241	0	13.71	N/A
2,644	1,360	4116	ARL - Chestnut Manor	54 Medford Street	Arlington	100	NSTAR	61250	60350	10350	12.26	N/A
2,645	1,361	4193	ARL - Hauser Building	37 Drake Road	Arlington	144	NSTAR	280000	280000	211600	4.53	N/A
2,646	1,362	3867	WOB - Webster	A/55-60 webster ave	Woburn	6	NSTAR	5376	5376	1666	N/A	0.29
2,647	1,363	3869	WOB - Webster	C/41-44 webster ave	Woburn	4	NSTAR	3472	3472	1077	N/A	0.29
2,648	1,364	3870	WOB - Webster	D/33-40 webster ave	Woburn	8	NSTAR	6720	6720	2085	N/A	0.29
2,649	1,365	3872	WOB - Webster	F/19-26 webster ave	Woburn	8	NSTAR	7104	7104	2204	N/A	0.29
2,650	1,366	3873	WOB - Webster	G/15-18 webster ave	Woburn	4	NSTAR	3472	3472	1077	N/A	0.29
2,651	1,367	3875	WOB - Webster	I/1-6 webster ave	Woburn	6	NSTAR	5376	5376	1666	N/A	0.29
2,652	1,368	1816	Woods at Wareham	36 Swifts Beach Road, Bldg 1	Wareham	8	NSTAR	48384	48384	9676.8	N/A	0.32
2,653	1,369	3860	WOB - Creston	Creston F	Woburn	7	NSTAR	6840	6840	2120	N/A	0.65
2,654	1,370	1272	Madison Park III	83 Ruggles St, 1-9 Raynor Circle (odd numl	Boston	6	NSTAR	9000	6000	3000	N/A	0.85
2,655	1,371	3859	WOB - Creston	26-36 Creston E	Woburn	6	NSTAR	5760	5760	1785	N/A	0.93
2,656	1,372	3868	WOB - Webster	B/45-54 webster ave	Woburn	10	NSTAR	9410	9410	2920	N/A	0.93
2,657	1,373	3871	WOB - Webster	E/27-32 webster ave	Woburn	6	NSTAR	5936	5936	1841	N/A	0.93
2,658	1,374	3874	WOB - Webster	H/7-14 webster ave	Woburn	8	NSTAR	7552	7552	2342	N/A	0.93
2,659	1,375	3864	WOB - Creston	Creston I	Woburn	5	NSTAR	4920	4920	1525	N/A	0.98
2,660	1,376	1745	THANKFUL CHASES PATHWAY	19, 21, 23 Thankful Chases Pathway-Buildi	Harwich	3	NSTAR	3290	3290	176	N/A	1.10
2,661	1,377	3857	WOB - Creston	55-63 Creston C	Woburn	5	NSTAR	4920	4920	1525	N/A	1.20
2,662	1,378	4010	WOB - Spring Ct	Spring Court Ext. - 13	Woburn	8	NSTAR	7176	7176	2226	N/A	1.45
2,663	1,379	4011	WOB - Spring Ct	Spring Court Ext. - 14	Woburn	8	NSTAR	7176	7176	2226	N/A	1.45
2,664	1,380	4012	WOB - Spring Ct	Spring Court Ext. - 15	Woburn	8	NSTAR	7176	7176	2226	N/A	1.45
2,665	1,381	4013	WOB - Spring Ct	Spring Court Ext. - 16	Woburn	8	NSTAR	7176	7176	2226	N/A	1.45
2,666	1,382	4014	WOB - Spring Ct	Spring Court Ext. - 17	Woburn	8	NSTAR	7176	7176	2226	N/A	1.45

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,667	1,383	3856	WOB - Creston	75-87 Creston B	Woburn	7	NSTAR	8840	8840	2120	N/A	1.58
2,668	1,384	3858	WOB - Creston	37-53 Creston D	Woburn	9	NSTAR	8760	8760	2715	N/A	1.60
2,669	1,385	2498	Mashpee Village	1 Wampanoag Drive, Bldg. F	Mashpee	8	NSTAR	6600	6600	2108	N/A	1.90
2,670	1,386	3494	WOB - Creston	89-96 Creston A	Woburn	8	NSTAR	7920	7920	2455	N/A	1.96
2,671	1,387	110	Blue Mountain	54 Elm Hill	Dorchester	12	NSTAR	10140	10140	3474	N/A	2.06
2,672	1,388	105	Blue Mountain	40 Cheney	Dorchester	12	NSTAR	15132	11349	7338	N/A	2.08
2,673	1,389	126	Blue Mountain	135 Homestead	Dorchester	12	NSTAR	14692	11019	6898	N/A	2.12
2,674	1,390	2501	Mashpee Village	1 Wampanoag Drive, Bldg. I	Mashpee	8	NSTAR	6600	6600	1608	N/A	2.15
2,675	1,391	109	Blue Mountain	38 Crawford	Dorchester	9	NSTAR	8682	8682	2554	N/A	2.24
2,676	1,392	111	Blue Mountain	58 Elm Hill	Dorchester	6	NSTAR	5718	5718	1821	N/A	2.39
2,677	1,393	123	Blue Mountain	89 Georgia	Dorchester	6	NSTAR	9360	9360	1872	N/A	2.40
2,678	1,394	118	Blue Mountain	74 Elm Hill	Dorchester	9	NSTAR	9888	9888	2781	N/A	2.49
2,679	1,395	2500	Mashpee Village	1 Wampanoag Drive, Bldg. H	Mashpee	8	NSTAR	6600	6600	1608	N/A	2.52
2,680	1,396	120	Blue Mountain	79 Elm Hill	Dorchester	4	NSTAR	6596	4947	2611	N/A	2.52
2,681	1,397	2497	Mashpee Village	1 Wampanoag Drive, Bldg. E	Mashpee	6	NSTAR	5300	5300	1284	N/A	2.88
2,682	1,398	2493	Mashpee Village	1 Wampanoag Drive, Bldg. A	Mashpee	8	NSTAR	6600	6600	1064	N/A	2.96
2,683	1,399	1102	UE - Cleaves Court	5, 7, 9, 11, 15 17 Cleaves St	Boston	18	NSTAR	21840	15840	6000	N/A	3.00
2,684	1,400	2494	Mashpee Village	1 Wampanoag Drive, Bldg. B	Mashpee	8	NSTAR	6600	6600	1132	N/A	3.05
2,685	1,401	122	Blue Mountain	73 Georgia	Dorchester	9	NSTAR	7899	7899	2335	N/A	3.27
2,686	1,402	125	Blue Mountain	131 Homestead	Dorchester	12	NSTAR	11019	11019	3225	N/A	3.32
2,687	1,403	117	Blue Mountain	72 Elm Hill	Dorchester	6	NSTAR	11628	11628	4255	N/A	3.46
2,688	1,404	124	Blue Mountain	91 Georgia	Dorchester	6	NSTAR	5739	5739	1466	N/A	3.49
2,689	1,405	1059	UE - Walnut Washington	3224, 3226, 3228, 3230, 3232 & 3234 Wash	Roxbury	18	NSTAR	19845	13845	6000	N/A	3.56
2,690	1,406	2499	Mashpee Village	1 Wampanoag Drive, Bldg. G	Mashpee	8	NSTAR	6600	6600	1676	N/A	3.58
2,691	1,407	115	Blue Mountain	67 Elm Hill	Dorchester	7	NSTAR	10880	8160	4168	N/A	3.60
2,692	1,408	128	Blue Mountain	32 Maple	Dorchester	12	NSTAR	10381	10381	2587	N/A	3.73
2,693	1,409	1523	UE - Theroch Apartments	129, 131, 133, 135 Columbia Rd.	Boston	48	NSTAR	66400	66400	23500	N/A	3.90
2,694	1,410	2496	Mashpee Village	1 Wampanoag Drive, Bldg. D	Mashpee	8	NSTAR	6600	6600	1064	N/A	3.92
2,695	1,411	129	Blue Mountain	36 Maple	Dorchester	12	NSTAR	11139	11139	3721	N/A	4.05
2,696	1,412	116	Blue Mountain	71 Elm Hill	Dorchester	7	NSTAR	8160	8160	1536	N/A	4.18
2,697	1,413	121	Blue Mountain	71 Georgia	Dorchester	9	NSTAR	8640	8640	3076	N/A	4.23
2,698	1,414	1105	UE - Cleaves Court	6, 8, 10, 12, 14 16 Cleaves St	Boston	18	NSTAR	21986	15986	6000	N/A	4.30
2,699	1,415	2503	Mashpee Village	1 Wampanoag Drive, Bldg. K	Mashpee	8	NSTAR	6600	6600	1064	N/A	4.44
2,700	1,416	2502	Mashpee Village	1 Wampanoag Drive, Bldg. J	Mashpee	8	NSTAR	6600	6600	1064	N/A	4.67
2,701	1,417	3997	WOB - Spring Ct	Spring Court Ext. - 1	Woburn	6	NSTAR	5428	5428	1683	N/A	4.67
2,702	1,418	4003	WOB - Spring Ct	Spring Court Ext. - 11	Woburn	6	NSTAR	5428	5428	1683	N/A	4.67
2,703	1,419	3999	WOB - Spring Ct	Spring Court Ext. - 3	Woburn	6	NSTAR	5428	5428	1683	N/A	4.67
2,704	1,420	4000	WOB - Spring Ct	Spring Court Ext. - 5	Woburn	6	NSTAR	5428	5428	1683	N/A	4.67
2,705	1,421	4001	WOB - Spring Ct	Spring Court Ext. - 7	Woburn	6	NSTAR	5428	5428	1683	N/A	4.67
2,706	1,422	4002	WOB - Spring Ct	Spring Court Ext. - 9	Woburn	6	NSTAR	5428	5428	1683	N/A	4.67
2,707	1,423	4008	WOB - Spring Ct	Spring Court Ext. - 10	Woburn	4	NSTAR	3680	3680	1140	N/A	4.68
2,708	1,424	4009	WOB - Spring Ct	Spring Court Ext. - 12	Woburn	4	NSTAR	3680	3680	1140	N/A	4.68
2,709	1,425	4004	WOB - Spring Ct	Spring Court Ext. - 2	Woburn	4	NSTAR	3680	3680	1140	N/A	4.68
2,710	1,426	4005	WOB - Spring Ct	Spring Court Ext. - 4	Woburn	4	NSTAR	3680	3680	1140	N/A	4.68
2,711	1,427	4006	WOB - Spring Ct	Spring Court Ext. - 6	Woburn	4	NSTAR	3680	3680	1140	N/A	4.68
2,712	1,428	4007	WOB - Spring Ct	Spring Court Ext. - 8	Woburn	4	NSTAR	3680	3680	1140	N/A	4.68
2,713	1,429	113	Blue Mountain	62 Elm Hill	Dorchester	12	NSTAR	10233	10233	3567	N/A	4.87
2,714	1,430	2495	Mashpee Village	1 Wampanoag Drive, Bldg. C	Mashpee	8	NSTAR	6600	6600	1064	N/A	5.11
2,715	1,431	3865	WOB - Creston	Creston J	Woburn	10	NSTAR	10560	10560	3275	N/A	5.12
2,716	1,432	2506	Mashpee Village	1 Wampanoag Drive, Bldg. N	Mashpee	8	NSTAR	6600	6600	1064	N/A	5.17
2,717	1,433	2505	Mashpee Village	1 Wampanoag Drive, Bldg. M	Mashpee	8	NSTAR	6600	6600	1064	N/A	5.31
2,718	1,434	2210	CAM - Putnam Gardens	Doors 1,2, and 3	Cambridge	33	NSTAR	29077	22905	9634	N/A	5.35
2,719	1,435	114	Blue Mountain	63 Elm Hill	Dorchester	9	NSTAR	8400	8400	2460	N/A	6.18
2,720	1,436	1520	UE - Theroch Apartments	209, 211, 223, 225 Columbia Rd.	Boston	12	NSTAR	18794	14224	7570	N/A	6.34
2,721	1,437	6231	NBD - Nashmont	534,536,538,540 NASH ROAD	New Bedford	4	NSTAR	4300	4300	0	N/A	1.91
2,722	1,438	6230	NBD - Nashmont	90,92,94,96 NEWCOMB STREET	New Bedford	4	NSTAR	4300	4300	0	N/A	1.91
2,723	1,439	6228	NBD - Nashmont	59,61,63,65 STANLEY STREET	New Bedford	4	NSTAR	3400	3400	0	N/A	1.91
2,724	1,440	6227	NBD - Nashmont	65,67,69,71 BARRETT STREET	New Bedford	4	NSTAR	3400	3400	0	N/A	1.91
2,725	1,441	6229	NBD - Nashmont	72,74,76,78 NEWCOMB STREET	New Bedford	4	NSTAR	3400	3400	0	N/A	1.91
2,726	1,442	6241	NBD - Nashmont	530,532,...,540 MT. PLEASANT STREET	New Bedford	6	NSTAR	6858	6858	0	N/A	1.91
2,727	1,443	6235	NBD - Nashmont	39,41,...,49 STANLEY STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,728	1,444	6232	NBD - Nashmont	506,508,...,516 MT. PLEASANT STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,729	1,445	6237	NBD - Nashmont	510,512,...,520 NASH ROAD	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,730	1,446	6236	NBD - Nashmont	522,524,...,532 NASH ROAD	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,731	1,447	6238	NBD - Nashmont	57,59,...,67 NEWCOMB STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,732	1,448	6240	NBD - Nashmont	58,60,...,68 NEWCOMB STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,733	1,449	6234	NBD - Nashmont	73,75,...,83 BARRETT STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,734	1,450	6239	NBD - Nashmont	81,83,...,91 NEWCOMB STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,735	1,451	6233	NBD - Nashmont	85,87,...,95 BARRETT STREET	New Bedford	6	NSTAR	5670	5670	0	N/A	1.91
2,736	1,452	6326	SLAM	7 St. Luke's St	Allston	7	NSTAR	4400	3600	880	2.17	N/A
2,737	1,453	6323	40 Prescott	40 Prescott	Brookline	8	NSTAR	8285	6333	1657	2.43	N/A
2,738	1,454	2452	Transition House	1035 Cambridge Street, B10	Cambridge	10	NSTAR	6500	5000	2500	3.54	N/A
2,739	1,455	6246	NBD - Ben Rose I	32/30,26/24 DELANO STREET	New Bedford	4	NSTAR	4800	4800	0	5.06	N/A
2,740	1,456	4606	ARL - Menotomy Manor 200-2	108A, B & C Fremont St.	Arlington	3	NSTAR	2622	2622	0	5.13	N/A
2,741	1,457	4497	STH - Calthea & Washington Street	1 CALTHEA, 32-42 WASHINGTON ST	Stoneham	4	NSTAR	3352	3352	1007	5.26	N/A
2,742	1,458	6261	NBD - Demedeiros Apartments I	39/37,35/33,31/29 DESAUTELS STREET	New Bedford	6	NSTAR	3600	3600	0	5.30	N/A
2,743	1,459	6729	NBD - Loftus Street	291-293 Loftus St	New Bedford	2	NSTAR	2400	2400	0	5.43	N/A
2,744	1,460	6254	NBD - Ben Rose I	865/867,871/873,877/879 WATER STREET	New Bedford	6	NSTAR	7200	7200	0	5.45	N/A
2,745	1,461	4594	ARL - Menotomy Manor 200-2	105A, B and C Gardner Street	Arlington	3	NSTAR	2622	2622	0	5.56	N/A
2,746	1,462	6249	NBD - Ben Rose I	899/901,905/907 WATER STREET	New Bedford	4	NSTAR	4900	4900	0	5.69	N/A
2,747	1,463	6294	NBD - Blue Meadows	37,39,...,47 BLUEFIELD STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,748	1,464	6295	NBD - Blue Meadows	413,415,...,423 DARTMOUTH STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,749	1,465	6298	NBD - Blue Meadows	425,427,...,435 DARTMOUTH STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,750	1,466	6299	NBD - Blue Meadows	437,439,...,447 DARTMOUTH STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,751	1,467	6300	NBD - Blue Meadows	449,451,...,459 DARTMOUTH STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,752	1,468	6297	NBD - Blue Meadows	49,51,...,59 BLUEFIELD STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,753	1,469	6296	NBD - Blue Meadows	61,63,...,71 BLUEFIELD STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,754	1,470	6293	NBD - Blue Meadows	70,72,...,80 BLUEFIELD STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,755	1,471	6302	NBD - Blue Meadows	73,75,...,83 BLUEFIELD STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,756	1,472	6292	NBD - Blue Meadows	82,84,...,92 BLUEFIELD STREET	New Bedford	6	NSTAR	5250	5250	0	5.72	N/A
2,757	1,473	6286	NBD - Blue Meadows	102,104,106,112,114,122 BLUEFIELD STR	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,758	1,474	6290	NBD - Blue Meadows	107,115,117,123,125,129 BLUEFIELD STR	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,759	1,475	6288	NBD - Blue Meadows	11,13,...,21 BLUEFIELD STREET	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,760	1,476	6291	NBD - Blue Meadows	151,159,161,165,167,169 BLUEFIELD STR	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,761	1,477	6285	NBD - Blue Meadows	152,158,160,164,166,168 BLUEFIELD STR	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,762	1,478	6283	NBD - Blue Meadows	393,395,...,403 DARTMOUTH STREET	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,763	1,479	6284	NBD - Blue Meadows	4,12,14,18,20,26 BLUEFIELD STREET	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,764	1,480	6287	NBD - Blue Meadows	46,50,52,54,56,58 MATTHEW STREET	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,765	1,481	6289	NBD - Blue Meadows	85,91,93,95,97,99 BLUEFIELD STREET	New Bedford	6	NSTAR	5150	5150	0	5.72	N/A
2,766	1,482	6279	NBD - Blue Meadows	135,137,139,141 BLUEFIELD STREET	New Bedford	4	NSTAR	3300	3300	0	5.72	N/A
2,767	1,483	6280	NBD - Blue Meadows	143,145,147,149 BLUEFIELD STREET	New Bedford	4	NSTAR	3300	3300	0	5.72	N/A
2,768	1,484	6281	NBD - Blue Meadows	180,182,184,186 ROACKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	5.72	N/A
2,769	1,485	6278	NBD - Blue Meadows	29,31,33,35 BLUEFIELD STREET	New Bedford	4	NSTAR	3300	3300	0	5.72	N/A
2,770	1,486	6282	NBD - Blue Meadows	160,162,...,168 ROCKDALE AVENUE	New Bedford	5	NSTAR	3848	3848	0	5.72	N/A
2,771	1,487	6277	NBD - Blue Meadows	101,103,105 BLUEFIELD STREET	New Bedford	3	NSTAR	2860	2860	0	5.72	N/A
2,772	1,488	6276	NBD - Blue Meadows	23,25,27 BLUEFIELD STREET	New Bedford	3	NSTAR	2860	2860	0	5.72	N/A
2,773	1,489	6275	NBD - Blue Meadows	42,44,46 BLUEFIELD STREET	New Bedford	3	NSTAR	2860	2860	0	5.72	N/A
2,774	1,490	6301	NBD - Blue Meadows	461,463,...,471 DARTMOUTH STREET	New Bedford	6	NSTAR	7022	7022	0	5.72	N/A
2,775	1,491	6253	NBD - Ben Rose I	688/690,694/696,700/702 FIRST STREET	New Bedford	6	NSTAR	7200	7200	0	6.00	N/A
2,776	1,492	6245	NBD - Ben Rose I	23/21,17/15 DIVISION STREET	New Bedford	4	NSTAR	4800	4800	0	6.07	N/A
2,777	1,493	6252	NBD - Ben Rose I	662/664,668/670,674/676 FIRST STREET	New Bedford	6	NSTAR	7200	7200	0	6.33	N/A
2,778	1,494	6719	NBD - Church St II	342-344 Church St	New Bedford	2	NSTAR	3600	3600	0	6.37	N/A
2,779	1,495	3085	Marlborough St	186 Marlborough St	Boston	16	NSTAR	7793	7793	2876	6.43	N/A
2,780	1,496	6259	NBD - Demedeiros Apartments I	27/25,23/21 WHITMAN STREET	New Bedford	4	NSTAR	2400	2400	0	6.77	N/A
2,781	1,497	6244	NBD - Ben Rose I	49/47,45/43 DELANO STREET	New Bedford	4	NSTAR	4800	4800	0	6.94	N/A
2,782	1,498	6127	NBD - Parkdale	115,117,...,123 SUMMIT STREET	New Bedford	5	NSTAR	3594	3594	0	7.28	N/A
2,783	1,499	6133	NBD - Parkdale	109,111,...,119 HATHAWAY BLVD	New Bedford	6	NSTAR	5200	5200	0	7.28	N/A
2,784	1,500	6129	NBD - Parkdale	125,127,...,135 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	7.28	N/A
2,785	1,501	6131	NBD - Parkdale	142,144,...,152 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	7.28	N/A
2,786	1,502	6128	NBD - Parkdale	153,155,...,163 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	7.28	N/A
2,787	1,503	6130	NBD - Parkdale	154,156,...,164 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	7.28	N/A
2,788	1,504	6132	NBD - Parkdale	97,99,..., 107 HATHAWAY BLVD	New Bedford	6	NSTAR	5200	5200	0	7.28	N/A
2,789	1,505	6121	NBD - Parkdale	130,132,134,136,138,140 SUMMIT STREE	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,790	1,506	6120	NBD - Parkdale	137,139,141,143 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,791	1,507	6119	NBD - Parkdale	145,147,149,151 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,792	1,508	6126	NBD - Parkdale	165,167,169,171 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,793	1,509	6122	NBD - Parkdale	73,75,...,83 HATHAWAY BLVD	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,794	1,510	6123	NBD - Parkdale	85,87,....95 HATHAWAY BLVD	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,795	1,511	6118	NBD - Parkdale	926,928,930,932 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,796	1,512	6124	NBD - Parkdale	936,938,940,942 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,797	1,513	6134	NBD - Parkdale	954,956,958,960 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,798	1,514	6125	NBD - Parkdale	962,964,966,968 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	7.28	N/A
2,799	1,515	6114	NBD - Parkdale	946,948,950 ROCKDALE AVENUE	New Bedford	3	NSTAR	2860	2860	0	7.28	N/A
2,800	1,516	6115	NBD - Parkdale	972,974,976 ROCKDALE AVENUE	New Bedford	3	NSTAR	2860	2860	0	7.28	N/A
2,801	1,517	6116	NBD - Parkdale	980,982,942 ROCKDALE AVE	New Bedford	3	NSTAR	2860	2860	0	7.28	N/A
2,802	1,518	6117	NBD - Parkdale	990,992,994 ROCKDALE AVENUE	New Bedford	3	NSTAR	2860	2860	0	7.28	N/A
2,803	1,519	6260	NBD - Demedeiros Apartments I	27/25,23/21 DESAUTELS STREET	New Bedford	4	NSTAR	2450	2450	0	7.72	N/A
2,804	1,520	6262	NBD - Demedeiros Apartments I	47/45,43/41,39/37,35/33,31/29 WHITMAN S	New Bedford	10	NSTAR	6000	6000	0	8.64	N/A
2,805	1,521	6788	STH - Parker Chase	11 PARKER CHASE RD - Common	Stoneham	1	NSTAR	1792	1792	0	10.70	N/A
2,806	1,522	6717	NBD - Richmond St	52-54 Richmond St	New Bedford	2	NSTAR	1600	1600	0	12.64	N/A
2,807	1,523	4304	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 1	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,808	1,524	4305	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 2	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,809	1,525	4306	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 3	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,810	1,526	4307	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 4	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,811	1,527	4308	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 5	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,812	1,528	4309	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 6	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,813	1,529	4310	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 7	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,814	1,530	4311	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 8	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,815	1,531	4312	CAN - NEWELL S. HAGAN COURT	203 WASHINGTON STREET - 9	Canton	8	NSTAR	5000	5000	0	15.20	N/A
2,816	1,532	6657	WOB - Nichols Street Extension	13-18 NICHOLS STREET EXT/BLDG 3	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,817	1,533	6653	WOB - Nichols Street Extension	1-6 NICHOLS STTREET EXT/BLDG 1	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,818	1,534	6658	WOB - Nichols Street Extension	19-24 NICHOLS STREET EXT/BLDG 4	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,819	1,535	6659	WOB - Nichols Street Extension	25-30 NICHOLS STREET EXT/BLDG 5	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,820	1,536	6660	WOB - Nichols Street Extension	31-36 NICHOLS STREET EXT/BLDG 6	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,821	1,537	6661	WOB - Nichols Street Extension	37-42 NICHOLS STREET EXT/BLDG 7	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,822	1,538	6662	WOB - Nichols Street Extension	43-48 NICHOLS STREET EXT/BLDG 8	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,823	1,539	6663	WOB - Nichols Street Extension	49-54 NICHOLS STREET EXT/BLDG 9	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,824	1,540	6655	WOB - Nichols Street Extension	7-12 NICHOLS STREET EXT/BLDG 2	Woburn	6	NSTAR	3230	3230	0	17.53	N/A
2,825	1,541	6664	WOB - Nichols Street Extension	NICHOLS ST EXT REC CTR/BLDG 10	Woburn	1	NSTAR	1320	1320	0	17.53	N/A
2,826	1,542	1184	SUD - Musketahquid Village	55 Hudson Road, #1	Sudbury	4	NSTAR	2670	2670	0	17.66	N/A
2,827	1,543	1195	SUD - Musketahquid Village	55 Hudson Road, #12	Sudbury	4	NSTAR	2670	2670	0	17.66	N/A
2,828	1,544	1194	SUD - Musketahquid Village	55 Hudson Road, #11	Sudbury	4	NSTAR	2582	2582	0	17.66	N/A
2,829	1,545	1197	SUD - Musketahquid Village	55 Hudson Road, #14	Sudbury	4	NSTAR	2582	2582	0	17.66	N/A
2,830	1,546	1185	SUD - Musketahquid Village	55 Hudson Road, #2	Sudbury	4	NSTAR	2582	2582	0	17.66	N/A
2,831	1,547	1186	SUD - Musketahquid Village	55 Hudson Road, #3	Sudbury	4	NSTAR	2582	2582	0	17.66	N/A
2,832	1,548	1190	SUD - Musketahquid Village	55 Hudson Road, #7	Sudbury	4	NSTAR	2582	2582	0	17.66	N/A
2,833	1	3398	FIT - Arlington	114 Arlington	Fitchburg	1	Unitil	838	838	N/A	7.85	N/A
2,834	2	3402	FIT - Ashburnham	238 Ashburnham	Fitchburg	1	Unitil	1355	1355	N/A	6.87	N/A
2,835	3	3389	FIT - Canton Valley	Canton Valley Community	Fitchburg	1	Unitil	1620	1620	N/A	9.07	N/A
2,836	4	3390	FIT - Canton Valley	431-441 Canton Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,837	5	6721	FIT - Canton Valley	19-29 Valley Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,838	6	6722	FIT - Canton Valley	31-41 Valley Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,839	7	6723	FIT - Canton Valley	26-38 Valley Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,840	8	6724	FIT - Canton Valley	379-389 Canton Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,841	9	6725	FIT - Canton Valley	393-403 Canton Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,842	10	6726	FIT - Canton Valley	407-417 Canton Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,843	11	6727	FIT - Canton Valley	1-11 Valley Street	Fitchburg	6	Unitil	1760	1760	0	9.07	N/A
2,844	12	3393	FIT - CJ Durkin Tower	50 Days St	Fitchburg	121	Unitil	83168	83168	22668	16.21	N/A
2,845	13	3403	FIT - Congress	15 Congress St	Fitchburg	2	Unitil	1053	1053	0	5.18	N/A
2,846	14	3378	FIT - Daniel Heights	Daniel Community	Fitchburg	1	Unitil	1152	1152	N/A	7.52	N/A
2,847	15	3379	FIT - Daniel Heights	14-16-18-20 DANIELS STREET	Fitchburg	4	Unitil	1880	1880	80	7.52	N/A
2,848	16	3380	FIT - Daniel Heights	28-30-32-34 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	7.52	N/A
2,849	17	3381	FIT - Daniel Heights	27-29-31-33 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	7.52	N/A
2,850	18	3382	FIT - Daniel Heights	13-15-17-19 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	7.52	N/A
2,851	19	3383	FIT - Daniel Heights	6 & 10 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	7.52	N/A
2,852	20	3384	FIT - Daniel Heights	22 & 26 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	7.52	N/A
2,853	21	3386	FIT - Daniel Heights	5 & 9 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	7.52	N/A
2,854	22	3387	FIT - Daniel Heights	21 & 25 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	7.52	N/A
2,855	23	3388	FIT - Daniel Heights	36 & 40 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	7.52	N/A
2,856	24	3406	FIT - Forest	24 Forest st	Fitchburgh	1	Unitil	1282	1282	N/A	15.11	N/A
2,857	25	3404	FIT - Milk	174 Milk St	Fitchburg	1	Unitil	1002	1002	N/A	6.34	N/A
2,858	26	3391	FIT - Wallace Tower	54 WALLACE AVE	Fitchburg	130	Unitil	129024	34836	64024	10.23	N/A
2,859	27	6502	LUN - Pearl Brook	131 White St. - A & B	Lunenburg	8	Unitil	4000	4000	0	9.27	N/A
2,860	28	6503	LUN - Pearl Brook	131 White St. - C & D	Lunenburg	8	Unitil	4000	4000	0	9.27	N/A
2,861	29	6504	LUN - Pearl Brook	131 White St. - E & F	Lunenburg	8	Unitil	4000	4000	0	9.27	N/A
2,862	30	6505	LUN - Pearl Brook	131 White St. - G & H	Lunenburg	8	Unitil	4000	4000	0	9.27	N/A
2,863	31	6506	LUN - Pearl Brook	131 White St. - J & K	Lunenburg	8	Unitil	4000	4000	0	9.27	N/A
2,864	32	6507	LUN - Pearl Brook	131 White St. - L & M	Lunenburg	8	Unitil	4000	4000	0	9.27	N/A
2,865	33	6508	LUN - Pearl Brook	131 White St. - Building C	Lunenburg	1	Unitil	1200	1200	0	9.27	N/A
2,866	34	3400	FIT - Clinton	95 Clinton St	Fitchburg	1	Unitil	1140	1140	N/A	7.49	N/A
2,867	35		Prichard Street	16 Prichard St	Fitchburg	100	Unitil	79040	79040	21341	N/A	4.61
2,868	36	6716	Green Acres	13 Normandy Rd	Fitchburg	1	Unitil	1000	1000	N/A	34.00	N/A
2,869	37	6711	FIT - Green Acres	48 & 50 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	5.9482	N/A
2,870	38	6712	FIT - Green Acres	60 & 62 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	6.1125	N/A
2,871	39	6710	FIT - Green Acres	39 & 41 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	6.2475	N/A
2,872	40	6713	FIT - Green Acres	65 & 67 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	6.3559	N/A
2,873	41	6686	FIT - Green Acres	87-93 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	4.1363	N/A
2,874	42	6715	FIT - Green Acres	917 & 919 Water St	Fitchburg	2	Unitil	1960	1960	607	7.5533	N/A
2,875	43	6678	FIT - Green Acres	43-49 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	4.507	N/A
2,876	44	6679	FIT - Green Acres	47-53 Wanoosnock Rd	Fitchburg	4	Unitil	3408	3408	1057	4.5582	N/A
2,877	45	6684	FIT - Green Acres	76-82 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	4.749	N/A
2,878	46	6707	FIT - Green Acres	139 & 141 Normandy Rd	Fitchburg	2	Unitil	2240	2240	695	7.59	N/A
2,879	47	6676	FIT - Green Acres	17-23 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	5.4932	N/A
2,880	48	6680	FIT - Green Acres	48-54 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	5.5132	N/A
2,881	49	6675	FIT - Green Acres	14-20 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	5.5322	N/A
2,882	50	6677	FIT - Green Acres	33-39 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	5.5543	N/A
2,883	51	7124	FIT - Green Acres	87-93 NORMANDY ROAD	Fitchburg	4	Unitil	3408	3408	1057	5.9539	N/A
2,884	52	6691	FIT - Green Acres	41-47 Leyte Rd	Fitchburg	4	Unitil	3422	3422	1061	6.2584	N/A
2,885	53	6685	FIT - Green Acres	78-84 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	6.3781	N/A
2,886	54	6714	FIT - Green Acres	887 & 889 Water St	Fitchburg	2	Unitil	1960	1960	607	11.113	N/A
2,887	55	6704	FIT - Green Acres	873-879 Water St	Fitchburg	4	Unitil	3976	3976	1232	5.5029	N/A
2,888	56	6692	FIT - Green Acres	59-65 Leyte Rd	Fitchburg	4	Unitil	3422	3422	1061	6.5388	N/A
2,889	57	6682	FIT - Green Acres	53-59 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	6.7155	N/A
2,890	58	6699	FIT - Green Acres	108-114 Normandy Rd	Fitchburg	4	Unitil	3976	3976	1232	6.391	N/A
2,891	59	6698	FIT - Green Acres	97-103 Leyte Rd	Fitchburg	4	Unitil	3422	3422	1061	7.63	N/A
2,892	60	6697	FIT - Green Acres	90-96 Leyte Rd	Fitchburg	4	Unitil	3422	3422	1061	8.08	N/A
2,893	1		Ashfield House LLC	369 Main Street	Ashfield	18	WMECO	21541	17133	7325	5.64	N/A
2,894	2		Center City Housing	116 Hancock/ 130 Tyler	Springfield	11	WMECO	13980	11184	3446	N/A	1.12
2,895	3		Center City Housing	91/93 Pine Street	Springfield	12	WMECO	26830	26830	16098	N/A	0.33
2,896	4		Power Town Apartments	11 Fourth St	Turners Falls	6	WMECO	23808	17856	16920	N/A	0.05
2,897	5		Power Town Apartments	118 Avenue A	Turners Falls	9	WMECO	59264	44448	53056	N/A	0.31
2,898	6		Power Town Apartments	13 4th St	Turners Falls	3	WMECO	6912	4608	3984	N/A	0.15
2,899	7		Power Town Apartments	15 Fourth st	Turners Falls	3	WMECO	13200	9900	10272	N/A	0.62
2,900	8		Power Town Apartments	152 Avenue A	Turners Falls	23	WMECO	41250	41250	27266	N/A	2.01
2,901	9		Power Town Apartments	175 Avenue A	Turners Falls	12	WMECO	28600	28600	14880	N/A	1.34
2,902	10		Power Town Apartments	18 Fourth St	Turners Falls	7	WMECO	41250	41250	32010	N/A	0.51
2,903	11		Power Town Apartments	25 4th St	Turners Falls	13	WMECO	40600	30450	26920	N/A	1.37
2,904	12		Paul P Flak	Lee Lang Terrace - 24	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,905	13		Paul P Flak	Lee Lang Terrace - 121	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,906	14		Paul P Flak	Lee Lang Terrace - 122	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,907	15		Paul P Flak	Lee Lang Terrace - 104	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,908	16		Paul P Flak	Lee Lang Terrace - 36	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,909	17		Paul P Flak	Lee Lang Terrace - 48	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,910	18		Paul P Flak	Lee Lang Terrace - 58	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,911	19		Paul P Flak	Lee Lang Terrace - 74	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,912	20		Paul P Flak	Lee Lang Terrace - 109	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,913	21		Paul P Flak	Lee Lang Terrace - 110	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,914	22		Paul P Flak	Lee Lang Terrace - Community Building	West Springfield	1	WMECO	2200	2200	N/A	5.22	N/A
2,915	23		Oxford Place	Oxford Place - 1	West Springfield	44	WMECO	25248	25248	N/A	7.11	N/A
2,916	24		Oxford Place	Oxford Place - 2	West Springfield	28	WMECO	13440	13440	N/A	7.11	N/A
2,917	25		Oxford Place	Oxford Place - 3	West Springfield	14	WMECO	6912	6912	N/A	7.11	N/A
2,918	26		Oxford Place	Oxford Place - 4	West Springfield	14	WMECO	6912	6912	N/A	7.11	N/A
2,919	27		Oxford Place	Oxford Place Community Building	West Springfield	1	WMECO	5440	5440	N/A	7.11	N/A
2,920	28		Grove Village	14-26 Grove Street - 1	West Springfield	10	WMECO	6570	6570	N/A	16.35	N/A
2,921	29		Grove Village	36-46 Grove Street - 2	West Springfield	10	WMECO	6570	6570	N/A	16.35	N/A
2,922	30		Grove Village	112-114 Druids Lane - 29 Grove Street - 3	West Springfield	12	WMECO	4150	4150	N/A	16.35	N/A
2,923	31		Paul P Flak	Lee Lang Terrace - 115	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A
2,924	32		Paul P Flak	Lee Lang Terrace - 117	West Springfield	4	WMECO	2368	2368	N/A	5.22	N/A

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
2,925	33	3120	Wilson Street	88-98 Wilson Street	Ludlow	6	WMECO	3641	3641	641	5.07	N/A
2,926	34	3099	State Street	7 Hampden	Ludlow	8	WMECO	4900	2060	3028	10.18	N/A
2,927	35	3119	Wilson Street	138 - 152 Wilson Street	Ludlow	8	WMECO	4352	4352	352	5.39	N/A
2,928	36	3117	Wilson Street	116-130 Wilson Street	Ludlow	8	WMECO	4352	4352	352	5.52	N/A
2,929	37	3112	Colonial Manor	109-113 Wilson Street	Ludlow	10	WMECO	4750	4750	750	5.59	N/A
2,930	38	3114	Colonial Manor	108 -112 Wilson Street	Ludlow	10	WMECO	4750	4750	750	6.50	N/A
2,931	39	3116	Colonial Manor	Community Building	Ludlow	1	WMECO	4472	4472	0	7.06	N/A
2,932	40	3115	Colonial Manor	100 - 106 Wilson Street	Ludlow	14	WMECO	6850	6850	1110	6.15	N/A
2,933	41	3113	Colonial Manor	101-107 Wilson Street	Ludlow	14	WMECO	6850	6850	1110	6.44	N/A
2,934	42	3098	State Street	52 Meadow - 19 Hampden	Ludlow	8	WMECO	4900	2060	3028	3.30	N/A
2,935	43	3421	AGA - Brady Village	775 Springfield Street - 3	Agawam	2	WMECO	2704	1352	1352	N/A	0.05
2,936	44	3039	AGA - Colonial Haven	866 Main Street - 13	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,937	45	3044	AGA - Colonial Haven	866 Main Street - 5	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,938	46	3046	AGA - Colonial Haven	866 Main Street - 7	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,939	47	3048	AGA - Colonial Haven	866 Main Street - 9	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,940	48	3040	AGA - Colonial Haven	866 Main Street Community Building	Agawam	1	WMECO	1373	1373	N/A	15.11	N/A
2,941	49	3035	AGA - Colonial Haven	886 Main Street - 1	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,942	50	3036	AGA - Colonial Haven	886 Main Street - 10	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,943	51	3037	AGA - Colonial Haven	886 Main Street - 11	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,944	52	3038	AGA - Colonial Haven	886 Main Street - 12	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,945	53	3041	AGA - Colonial Haven	886 Main Street - 2	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,946	54	3042	AGA - Colonial Haven	886 Main Street - 3	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,947	55	3043	AGA - Colonial Haven	886 Main Street - 4	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,948	56	3045	AGA - Colonial Haven	886 Main Street - 6	Agawam	4	WMECO	2376	2376	376	15.11	N/A
2,949	57	3121	LUD - Chestnut Street	39 Chestnut Street	Ludlow	34	WMECO	25974	25974	8974	0.03	N/A
2,950	58	3095	LUD - State Street	26 Meadow	Ludlow	8	WMECO	4900	2060	3028	8.27	N/A
2,951	59	3096	LUD - State Street	46 Meadow	Ludlow	8	WMECO	4900	2060	3028	8.36	N/A
2,952	60	3094	LUD - State Street	69 State - 20 Meadow	Ludlow	8	WMECO	4900	2060	3028	8.91	N/A
2,953	61	3100	LUD - State Street	87 State - Community Room	Ludlow	1	WMECO	1640	1640	N/A	0.22	N/A
2,954	62	3118	LUD - Wilson Street	132 - 136 Wilson Street	Ludlow	3	WMECO	2560	2560	560	5.57	N/A
2,955	63	3053	AGA - Meadowbrook Manor	45-52 Meadowbrook Manor	Agawam	8	WMECO	5112	5112	1112	11.98	N/A
2,956	64	3830	Golden Courts	GOLDEN COURT APTS - A	Hadley	6	WMECO	3000	3000	N/A	7.10	N/A
2,957	65	3831	Golden Courts	GOLDEN COURT APTS - B	Hadley	4	WMECO	2000	2000	N/A	7.10	N/A
2,958	66	3832	Golden Courts	GOLDEN COURT APTS - C	Hadley	6	WMECO	3000	3000	N/A	7.10	N/A
2,959	67	3838	Golden Courts	GOLDEN COURT APTS - Community	Hadley	1	WMECO	2051	2051	N/A	3.49	N/A
2,960	68	3833	Golden Courts	GOLDEN COURT APTS - D	Hadley	4	WMECO	2000	2000	N/A	7.10	N/A
2,961	69	3834	Golden Courts	GOLDEN COURT APTS - F	Hadley	6	WMECO	3000	3000	N/A	7.10	N/A
2,962	70	3835	Golden Courts	GOLDEN COURT APTS - G	Hadley	4	WMECO	2000	2000	N/A	7.10	N/A
2,963	71	3836	Golden Courts	GOLDEN COURT APTS - H	Hadley	6	WMECO	3000	3000	N/A	7.10	N/A
2,964	72	3837	Golden Courts	GOLDEN COURT APTS - I	Hadley	4	WMECO	2000	2000	N/A	7.10	N/A
2,965	73	3953	Sunrise Terrace	Sunrise Community Bldg	Montague	1	WMECO	1740	1740	N/A	16.58	N/A
2,966	74	3047	AGA - Colonial Haven	886 Main Street - 8	Agawam	4	WMECO	2376	2376	376	15.19	N/A
2,967	75	3027	AGA - Country View	95 North Westfield Street - 1	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,968	76	3028	AGA - Country View	95 North Westfield Street - 2	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,969	77	3029	AGA - Country View	95 North Westfield Street - 3	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,970	78	3030	AGA - Country View	95 North Westfield Street - 4	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,971	79	3031	AGA - Country View	95 North Westfield Street - 5	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,972	80	3032	AGA - Country View	95 North Westfield Street - 6	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,973	81	3033	AGA - Country View	95 North Westfield Street - 7	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,974	82	3034	AGA - Country View	95 North Westfield Street Community Buildi	Agawam	6	WMECO	2670	2670	210	18.48	N/A
2,975	83	3050	AGA - Meadowbrook Manor	13-20 Meadowbrook Manor	Agawam	8	WMECO	5112	5112	1112	11.98	N/A
2,976	84	3049	AGA - Meadowbrook Manor	1-12 Meadow Brook Manor	Agawam	12	WMECO	7668	7668	1668	11.98	N/A
2,977	85	3463	AGA - Brady Village	775 Springfield Street - 9	Agawam	2	WMECO	1352	1352	0	0.71	N/A
2,978	86	3051	AGA - Meadowbrook Manor	21-32 Meadowbrook Manor	Agawam	12	WMECO	7668	7668	1668	11.97	N/A
2,979	87	3052	AGA - Meadowbrook Manor	33-44 Meadowbrook Manor	Agawam	12	WMECO	7668	7668	1668	11.97	N/A
2,980	88	3054	AGA - Meadowbrook Manor	53-64 Meadowbrook Manor	Agawam	12	WMECO	7668	7668	1668	11.97	N/A
2,981	89	3055	AGA - Meadowbrook Manor	66-68 Meadowbrook Manor - Community Bu	Agawam	1	WMECO	9360	9360	0	11.97	N/A
2,982	90	898	Eastgate	100 Baymeadow Rd.	Springfield	1	WMECO	3598	3598	598	10.89	N/A
2,983	91	3954	MNT - Keith Block	CANAL ST	Monatgue	31	WMECO	24282	24282	5682	6.17	N/A
2,984	92	3945	MNT - Sunrise Terrace	BULKLEY ST - 1	Montague	6	WMECO	2950	2950	250	16.58	N/A
2,985	93	3946	MNT - Sunrise Terrace	BULKLEY ST - 2	Montague	4	WMECO	1950	1950	150	16.58	N/A
2,986	94	3949	MNT - Sunrise Terrace	BULKLEY ST - 5	Montague	6	WMECO	2950	2950	250	16.58	N/A
2,987	95	3952	MNT - Sunrise Terrace	BULKLEY ST - 8	Montague	6	WMECO	2950	2950	250	16.58	N/A
2,988	96	3948	MNT - Sunrise Terrace	MONTAGUE ST - 4	Montague	4	WMECO	1950	1950	150	16.58	N/A
2,989	97	3950	MNT - Sunrise Terrace	MONTAGUE ST - 6	Montague	4	WMECO	1950	1950	150	16.58	N/A
2,990	98	3951	MNT - Sunrise Terrace	MONTAGUE ST - 7	Montague	4	WMECO	1950	1950	150	16.58	N/A
2,991	99	3947	MNT - Sunrise Terrace	WILLMARK AVE - 3	Montague	6	WMECO	2950	2950	250	16.58	N/A
2,992	100	4391	Pinegrove Manor	293 HIGH STREET - A	Dalton	13	WMECO	7581	7581	1081	5.56	N/A
2,993	101	4392	Pinegrove Manor	293 High Street - C	Dalton	4	WMECO	3534	3534	734	3.28	N/A
2,994	102	4393	Pinegrove Manor	293 High Street - D	Dalton	12	WMECO	7648	7648	1048	3.93	N/A
2,995	103	4384	Pomeroy Manor	EAST DEMING STREET - 1	Dalton	4	WMECO	2106	2106	106	20.57	N/A
2,996	104	4385	Pomeroy Manor	EAST DEMING STREET - 2	Dalton	8	WMECO	4186	4186	186	20.57	N/A
2,997	105	4387	Pomeroy Manor	EAST DEMING STREET - 3	Dalton	8	WMECO	4186	4186	186	20.57	N/A
2,998	106	4708	Chestnut Park Apartments	10 Chestnut Street	Springfield	240	WMECO	335105	335105	50225	6.75	N/A
2,999	107	4698	Chestnut Park Apartments	115 Dwight Street	Springfield	96	WMECO	84420	84420	21195	10.71	N/A
3,000	108	4697	Chestnut Park Apartments	185 Dwight Street	Springfield	33	WMECO	47993	47993	26543	6.37	N/A
3,001	109	4696	Chestnut Park Apartments	68 Harrison Avenue	Springfield	120	WMECO	155803	155803	14687	7.53	N/A
3,002	110	4785	EHA - Dickinson Court	15 LIBERTY ST - 1	Easthampton	10	WMECO	7068	7068	1068	5.10	N/A
3,003	111	4787	EHA - Dickinson Court	15 LIBERTY ST - 2	Easthampton	8	WMECO	5332	5332	1332	5.68	N/A
3,004	112	4786	EHA - Dickinson Court	15 LIBERTY ST - 3	Easthampton	8	WMECO	4464	4464	464	5.68	N/A
3,005	113	4788	EHA - Dickinson Court	15 LIBERTY ST - 4	Easthampton	4	WMECO	2914	2914	914	5.10	N/A
3,006	114	4782	EHA - Sunrise Manor	LAURA AVE - 4	Easthampton	6	WMECO	3840	3840	240	N/A	0.55
3,007	115	4779	EHA - Sunrise Manor	PARADISE DRIVE - 1	Easthampton	6	WMECO	4192	4192	592	N/A	0.24
3,008	116	4780	EHA - Sunrise Manor	PARADISE DRIVE - 2	Easthampton	6	WMECO	3840	3840	240	N/A	0.55
3,009	117	4781	EHA - Sunrise Manor	PARADISE DRIVE - 3	Easthampton	6	WMECO	3840	3840	240	N/A	0.55
3,010	118	4783	EHA - Sunrise Manor	PARADISE DRIVE - 5	Easthampton	6	WMECO	3840	3840	240	N/A	0.55

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
3,011	119	4784	EHA - Sunrise Manor	PARADISE DRIVE Community Bldg	Easthampton	1	WMECO	864	864	0	0.03	N/A
3,012	120	4389	Pomeroy Manor	EAST DEMING STREET - 4	Dalton	6	WMECO	3146	3146	146	20.82	N/A
3,013	121	4386	Pomeroy Manor	EAST DEMING STREET - 5	Dalton	8	WMECO	4186	4186	186	20.82	N/A
3,014	122	4388	Pomeroy Manor	EAST DEMING STREET - 6	Dalton	6	WMECO	3146	3146	146	20.82	N/A
3,015	123	4390	Pomeroy Manor	EAST DEMING STREET - Community	Dalton	1	WMECO	900	900	0	20.82	N/A
3,016	124	4460	SPR - Forest Park	12-22 BARNEY LN - K	Springfield	6	WMECO	3161	3161	161	1.47	N/A
3,017	125	4459	SPR - Forest Park	16-34 TRAFTON RD - J	Springfield	10	WMECO	9864	9864	3059	1.47	N/A
3,018	126	4456	SPR - Forest Park	24-30 BARNEY LN - G	Springfield	4	WMECO	1679	1679	79	1.47	N/A
3,019	127	4451	SPR - Forest Park	64-70 BARNEY LN - B	Springfield	4	WMECO	1971	1971	171	1.45	N/A
3,020	128	4465	SPR - Forest Park	COMMUNITY ROOM	Springfield	1	WMECO	3012	3012	0	1.45	N/A
3,021	129	4453	SPR - Forest Park	32-42 BARNEY LN - D	Springfield	6	WMECO	3161	3161	161	1.45	N/A
3,022	130	4458	SPR - Forest Park	4-14 TRAFTON RD - I	Springfield	6	WMECO	3161	3161	161	1.45	N/A
3,023	131	4457	SPR - Forest Park	520-530 DICKINSON ST - H	Springfield	6	WMECO	3161	3161	161	1.45	N/A
3,024	132	4462	SPR - Forest Park	64-74 TRAFTON RD - M	Springfield	6	WMECO	3161	3161	161	1.45	N/A
3,025	133	4463	SPR - Forest Park	76-86 TRAFTON RD - N	Springfield	6	WMECO	3161	3161	161	1.45	N/A
3,026	134	4464	SPR - Forest Park	88-102 TRAFTON RD - O	Springfield	8	WMECO	4205	4205	205	1.45	N/A
3,027	135	4455	SPR - Forest Park	496-514 DICKINSON ST - F	Springfield	10	WMECO	5220	5220	220	1.45	N/A
3,028	136	4450	SPR - Forest Park	72-90 BARNEY LN - A	Springfield	10	WMECO	5249	5249	249	1.45	N/A
3,029	137	4454	SPR - Forest Park	472-490 DICKINSON ST - E	Springfield	10	WMECO	5764	5764	764	1.45	N/A
3,030	138	4461	SPR - Forest Park	36-62 TRAFTON RD - L	Springfield	14	WMECO	8990	8990	590	1.45	N/A
3,031	139	4452	SPR - Forest Park	44-62 BARNEY LN - C	Springfield	10	WMECO	9864	9864	3059	1.45	N/A
3,032	140	5028	John C Nutting	35 & 36 Chestnut Ct	Amherst	8	WMECO	2425	2425	0	23.68	N/A
3,033	141	5464	SPR - Duggan	77-85 Layzon Bros Rd	Springfield	4	WMECO	3328	3328	665	N/A	6.93
3,034	142	5467	SPR - Duggan	105-111 Layzon Bros Rd	Springfield	4	WMECO	2240	2240	448	N/A	5.05
3,035	143	5466	SPR - Duggan	97-103 Layzon Bros Rd	Springfield	4	WMECO	2240	2240	448	N/A	5.05
3,036	144	5462	SPR - Duggan	61-67 Layzon Bros Rd	Springfield	4	WMECO	3328	3328	665	N/A	4.92
3,037	145	5463	SPR - Duggan	69-75 Layzon Bros Rd	Springfield	4	WMECO	4480	4480	896	N/A	4.32
3,038	146	5460	SPR - Duggan	399-401 Goodwin St	Springfield	2	WMECO	1904	1904	380	N/A	4.80
3,039	147	5465	SPR - Duggan	87-93 Layzon Bros Rd	Springfield	4	WMECO	4480	4480	896	N/A	4.10
3,040	148	5849	Reed Village	104 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	2.59
3,041	149	6176	Reed Village	106 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	6.86
3,042	150	6178	Reed Village	108 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	3.07
3,043	151	5850	Reed Village	13 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	2.83
3,044	152	5851	Reed Village	14 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	2.84
3,045	153	5884	Reed Village	21 ASTER	Springfield	4	WMECO	3850	3850	770	N/A	2.58
3,046	154	5852	Reed Village	30 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	5.20
3,047	155	5853	Reed Village	32 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	3.54
3,048	156	5854	Reed Village	32 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	6.64
3,049	157	5856	Reed Village	34 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	4.15
3,050	158	5857	Reed Village	36 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	3.01
3,051	159	5858	Reed Village	38 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	3.68
3,052	160	6211	Reed Village	39 ASTER	Springfield	3	WMECO	2850	2850	570	N/A	3.78
3,053	161	5860	Reed Village	40 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	3.44
3,054	162	5862	Reed Village	42 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	3.80
3,055	163	5861	Reed Village	44 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	4.00
3,056	164	6174	Reed Village	49 LIONEL BENOIT	Springfield	1	WMECO	2000	2000	450	14.525	N/A
3,057	165	5865	Reed Village	5 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	1.45
3,058	166	5882	Reed Village	50 LIONEL BENOIT	Springfield	3	WMECO	2950	2950	570	N/A	3.88
3,059	167	5866	Reed Village	52 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	4.51
3,060	168	5867	Reed Village	54 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	4.28
3,061	169	5868	Reed Village	557 BAY	Springfield	3	WMECO	2850	2850	570	N/A	1.53
3,062	170	5886	Reed Village	577 BAY	Springfield	4	WMECO	5700	5700	1100	N/A	3.66
3,063	171	5870	Reed Village	58 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	4.30
3,064	172	5871	Reed Village	581 BAY	Springfield	3	WMECO	2850	2850	570	N/A	2.13
3,065	173	5887	Reed Village	587 BAY	Springfield	4	WMECO	5700	5700	1100	N/A	3.29
3,066	174	6159	Reed Village	593 BAY	Springfield	3	WMECO	2850	2850	570	N/A	2.80
3,067	175	6212	Reed Village	6 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	6.70
3,068	176	5889	Reed Village	605 BAY	Springfield	10	WMECO	8550	4275	500	N/A	5.40
3,069	177	5889	Reed Village	607 BAY	Springfield	10	WMECO	8850	4275	500	N/A	5.40
3,070	178	5872	Reed Village	613 BAY	Springfield	3	WMECO	2850	2850	570	N/A	2.34
3,071	179	5873	Reed Village	62 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	4.84
3,072	180	6207	Reed Village	62 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	7.65
3,073	181	6160	Reed Village	64 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	1.25
3,074	182	5874	Reed Village	66 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	2.97
3,075	183	5876	Reed Village	70 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	3.99
3,076	184	6175	Reed Village	72 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	1.45
3,077	185	5877	Reed Village	74 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	6.99
3,078	186	5885	Reed Village	82 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	4.63
3,079	187	5879	Reed Village	86 EDMUND WYNNE	Springfield	3	WMECO	2850	2850	570	N/A	3.43
3,080	188	5890	Reed Village	9 ASTER	Springfield	10	WMECO	8550	8550	1710	N/A	3.66
3,081	189	6177	Reed Village	98 LIONEL BENOIT	Springfield	3	WMECO	2850	2850	570	N/A	6.69
3,082	190	5814	Robinson Gardens	17 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	5.42
3,083	191	5824	Robinson Gardens	40 ROBERT DYER	Springfield	2	WMECO	2546	2546	500	N/A	5.54
3,084	192	6345	Robinson Gardens	51 ROBERT DYER	Springfield	1	WMECO	3678	3678	700	7.85	N/A
3,085	193	6347	Robinson Gardens	52 ROBERT DYER	Springfield	2	WMECO	2546	2546	500	N/A	4.38
3,086	194	5820	Robinson Gardens	57 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	4.31
3,087	195	5806	Robinson Gardens	67 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	5.06
3,088	196	5829	Robinson Gardens	7 ROBERT DYER	Springfield	4	WMECO	3344	3344	600	N/A	6.36
3,089	197	6156	Robinson Gardens	8 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	6.46
3,090	198	5736	Duggan	45-51 Layzon Bros. Rd.	Springfield	4	WMECO	2240	2240	420	N/A	8.18
3,091	199	5728	Duggan	467-469 Goodwin St.	Springfield	2	WMECO	1664	1664	300	N/A	9.20
3,092	200	5725	Duggan	487-489 Goodwin St.	Springfield	2	WMECO	1664	1664	300	N/A	9.28
3,093	201	5722	Duggan	503-505 Goodwin St.	Springfield	2	WMECO	1664	1664	300	N/A	13.63
3,094	202	5733	Duggan	6-8 Rodney Smith Circle	Springfield	2	WMECO	1870	1870	300	N/A	8.96
3,095	203	5748	Duggan	9-15 Arthur Picard Circle	Springfield	4	WMECO	3604	3604	550	N/A	11.03
3,096	204	6179	Reed Village	118,120,122,124 Lionel Benoit	Springfield	4	WMECO	5700	5700	1100	N/A	3.25

Total Electric Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Electric Utility	Total ft2	Cond ft2	Common area ft2	kWh/ bldg ft2	kWh/ common ft2
3,097	205	5863	Reed Village	46-48-50 Edmund Wynne Circle	Springfield	3	WMECO	2850	2850	570	N/A	3.88
3,098	206	6353	Reed Village	96 lionel benoit	Springfield	3	WMECO	2850	2850	570	N/A	1.34
3,099	207	5813	Robinson Gardens	102 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	6.14
3,100	208	5804	Robinson Gardens	107 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	4.59
3,101	209	6348	Robinson Gardens	113 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	4.02
3,102	210	5823	Robinson Gardens	119 ROBERT DYER	Springfield	4	WMECO	3304	3304	600	N/A	4.52
3,103	211	6350	Robinson Gardens	131 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	3.82
3,104	212	6350	Robinson Gardens	133 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	3.85
3,105	213	5808	Robinson Gardens	134 ROBERT DYER	Springfield	2	WMECO	2546	2546	500	N/A	3.66
3,106	214	6157	Robinson Gardens	139 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	4.35
3,107	215	5805	Robinson Gardens	142 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	3.48
3,108	216	5825	Robinson Gardens	71 ROBERT DYER	Springfield	4	WMECO	3304	3304	600	N/A	5.09
3,109	217	6346	Robinson Gardens	72 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	4.61
3,110	218	5807	Robinson Gardens	79 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	4.02
3,111	219	6155	Robinson Gardens	85 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	3.00
3,112	220	6349	Robinson Gardens	94 ROBERT DYER	Springfield	2	WMECO	2546	2546	500	N/A	4.29
3,113	221	6352	Robinson Gardens	95 ROBERT DYER	Springfield	2	WMECO	1672	1672	330	N/A	4.56
3,114	222	5822	Robinson Gardens	99 ROBERT DYER	Springfield	4	WMECO	3022	3022	600	N/A	6.60
3,115	223	7062	EHA - Cliffview Manor	TOWER LANE, LUSSIER CIRCLE - 3	Easthampton	8	WMECO	4835	4835	0	14.92	N/A
3,116	224	7061	EHA - Cliffview Manor	TOWER LANE, LUSSIER CIRCLE - 2	Easthampton	8	WMECO	4835	4835	0	14.92	N/A
3,117	225	7060	EHA - Cliffview Manor	TOWER LANE & LUSSIER CIRCLE - 1	Easthampton	8	WMECO	4835	4835	0	14.92	N/A
3,118	226	7064	EHA - Cliffview Manor	LUSSIER CIRCLE, ECHO LANE - 5	Easthampton	8	WMECO	4835	4835	0	14.92	N/A
3,119	227	7063	EHA - Cliffview Manor	LUSSIER CIRCLE, ECHO LANE - 4	Easthampton	8	WMECO	4835	4835	0	14.92	N/A
3,120	228	7066	EHA - Cliffview Manor	LUSSIER CIRCLE - 6	Easthampton	10	WMECO	5670	5670	0	14.92	N/A
3,121	229	7069	EHA - Cliffview Manor	ECHO LANE - 9	Easthampton	10	WMECO	5670	5670	0	14.92	N/A
3,122	230	7068	EHA - Cliffview Manor	ECHO LANE - 8	Easthampton	10	WMECO	5670	5670	0	14.92	N/A
3,123	231	7067	EHA - Cliffview Manor	ECHO LANE - 7	Easthampton	10	WMECO	5670	5670	0	14.92	N/A
3,124	232	7065	EHA - Cliffview Manor	ECHO LANE - 10	Easthampton	10	WMECO	5670	5670	0	14.92	N/A
3,125	233	7059	EHA - Cliffview Manor	37 LUSSIER CIRCLE - Community	Easthampton	1	WMECO	3045	3045	0	14.92	N/A
3,126	234	6422	GRE - Elm Terrace 1 and 2	Community Building	Greenfield	1	WMECO	7896	7896	0	11.40	N/A
3,127	235	6428	GRE - Morgan-Allen House	491 MAIN ST	Greenfield	20	WMECO	11048	11048	1048	7.29	N/A
3,128	236	5743	SPR - Duggan	60-66 LAYZON BROS RD	Springfield	4	WMECO	3328	3328	666	N/A	5.95
3,129	237	5461	SPR - Duggan	55-59 LAYZON BROS RD	Springfield	3	WMECO	2496	2496	499	N/A	3.52
3,130	238	5724	SPR - Duggan	499-501 GOODWIN ST	Springfield	2	WMECO	1664	1664	333	N/A	6.67
3,131	239	5726	SPR - Duggan	483-485 GOODWIN ST	Springfield	2	WMECO	1664	1664	333	N/A	4.53
3,132	240	5750	SPR - Duggan	48-54 LAYZON BROS RD	Springfield	4	WMECO	3604	3604	721	N/A	5.43
3,133	241	5727	SPR - Duggan	471-473 GOODWIN ST	Springfield	2	WMECO	1664	1664	333	N/A	4.60
3,134	242	5730	SPR - Duggan	451-453 GOODWIN ST	Springfield	2	WMECO	1664	1664	333	N/A	5.23
3,135	243	5738	SPR - Duggan	20,22,24 ARTHUR PICARD CIRCLE	Springfield	3	WMECO	2496	2496	499	N/A	5.01
3,136	244	5747	SPR - Duggan	17-23 ARTHUR PICARD CIRCLE	Springfield	4	WMECO	3604	3604	721	N/A	4.67
3,137	245	5737	SPR - Duggan	14,16,18 ARTHUR PICARD CIRCLE	Springfield	3	WMECO	2496	2496	499	N/A	4.95
3,138	246	5742	SPR - Duggan	137-143 LAYZON BROS RD	Springfield	3	WMECO	3300	3300	660	N/A	6.90
3,139	247	5732	SPR - Duggan	134-136 LAYZON BROS RD	Springfield	2	WMECO	1870	1870	374	N/A	5.06
3,140	248	5745	SPR - Duggan	121-127 LAYZON BROS RD	Springfield	4	WMECO	3604	3604	721	N/A	3.87
3,141	249	5744	SPR - Duggan	113-119 LAYZON BROS RD	Springfield	4	WMECO	3604	3604	721	N/A	5.11
3,142	250	5739	SPR - Duggan	10-14 LAYZON BROS RD	Springfield	3	WMECO	2496	2496	499	N/A	2.49
3,143	251	5749	SPR - Duggan	1-7 ARTHUR PICARD CIRCLE	Springfield	4	WMECO	3604	3604	721	N/A	6.37
3,144	252	5869	SPR - Reed Village	569-571-573 BAY ST	Springfield	3	WMECO	2850	2850	570	N/A	2.59

3,144

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1	1	6357	ADA - 19 Commercial St	19 COMMERCIAL ST	Adams	4	Berkshire Gas	4824	2712	0	180487	4900	1.80
2	2	6461	GRE - Briar Way	245 Briar Way	Greenfield	1	Berkshire Gas	1280	1280	N/A	40539	519	0.41
3	3	6488	GRE - Scattered Site	23 MILL ST	Greenfield	2	Berkshire Gas	2894	2894	0	42873	1241	0.43
4	4	6466	GRE - 37 Woodleigh	37 Woodleigh Ave	Greenfield	1	Berkshire Gas	2880	2880	N/A	44279	1275	0.44
5	5	6459	GRE - Briar Way	190 Briar Way	Greenfield	1	Berkshire Gas	1280	1280	N/A	46994	602	0.47
6	6	6455	GRE - Sullivan Lane	31 Sullivan Ln	Greenfield	2	Berkshire Gas	2400	2400	0	48461	1163	0.48
7	7	6465	GRE - 279 Elm St	279 Elm St	Greenfield	1	Berkshire Gas	1921	1921	N/A	48490	931	0.48
8	8	4355	Ashland Park	150 Ashland Street	North Adams	126	Berkshire Gas	81509	81509	27677	49225	40123	0.49
9	9	1035	Redfield House	48 Elizabeth Street	Pittsfield	24	Berkshire Gas	33200	33200	12115	51717	17170	0.52
10	10	6462	GRE - Briar Way	87 Briar Way	Greenfield	1	Berkshire Gas	1280	1280	N/A	52595	673	0.53
11	11	6364	STK - Heaton Court	5 PINE STREET - A	Stockbridge	8	Berkshire Gas	5800	5800	0	54166	3142	0.54
12	12	3310	Central Annex	99 2nd Street	Pittsfield	62	Berkshire Gas	60537	60537	3373	54307	32876	0.54
13	13	6378	WIL - Meadowvale	35 ADAMS ROAD/Community Building	Williamstown	1	Berkshire Gas	2400	2400	N/A	57035	1369	0.57
14	14	6398	AMH - Sunrise Avenue	34 & 36 SUNRISE AVE	Amherst	8	Berkshire Gas	4918	4918	0	58014	2853	0.58
15	15	6377	WIL - Meadowvale	35 ADAMS ROAD/BLDG. B	Williamstown	16	Berkshire Gas	10800	10800	2800	58709	6341	0.59
16	16	6445	GRE - Conway-Wells	111 CONWAY ST	Greenfield	2	Berkshire Gas	1586	1586	0	60666	962	0.61
17	17	6546	PIT - Wilson Park	82-88 MEMORIAL DR	Pittsfield	4	Berkshire Gas	4032	4032	0	61453	2478	0.61
18	18	6490	GRE - Scattered Site	24 Pierce St	Greenfield	1	Berkshire Gas	1940	1940	N/A	61479	1193	0.61
19	19	6374	WIL - Meadowvale	35 ADAMS ROAD	Williamstown	14	Berkshire Gas	9600	9600	2600	63163	6064	0.63
20	20	6467	GRE - 87-89 ELM St	87 Elm St	Greenfield	2	Berkshire Gas	2112	2112	0	63574	1343	0.64
21	21	3311	Central Annex	10 Union Street	Pittsfield	39	Berkshire Gas	45761	45761	13506	63970	29273	0.64
22	22	6493	GRE - Scattered Site	300 CONWAY ST & 275 ELM ST	Greenfield	2	Berkshire Gas	1586	1586	0	64179	1018	0.64
23	23	6555	PIT - Wilson Park	162-168 MOHEGAN ST	Pittsfield	4	Berkshire Gas	4032	4032	0	65259	2631	0.65
24	24	4391	DAL - Pinegrove Manor	293 HIGH STREET - A	Dalton	13	Berkshire Gas	7581	7581	1081	70550	5348	0.71
25	25	6542	PIT - Wilson Park	22-24 MOHAWK ST & 4-6 MEMORIAL	Pittsfield	4	Berkshire Gas	3648	3648	0	72454	2643	0.72
26	26	6361	LEN - Church St Property	11 CHURCH STREET	Lenox	2	Berkshire Gas	2274	2274	0	72890	1658	0.73
27	27	6428	GRE - Morgan-Allen House	491 MAIN ST	Greenfield	20	Berkshire Gas	11048	11048	1048	73563	8127	0.74
28	28	6547	PIT - Wilson Park	68-76 MEMORIAL DR	Pittsfield	5	Berkshire Gas	4750	4750	0	73911	3511	0.74
29	29	6535	PIT - Wilson Park	126-132 MOHEGAN ST	Pittsfield	4	Berkshire Gas	4380	4380	0	75642	3313	0.76
30	30	6545	PIT - Wilson Park	121,123,125,127 CALUMET ST	Pittsfield	4	Berkshire Gas	4380	4380	0	76792	3364	0.77
31	31	6553	PIT - Wilson Park	33-41 MOHAWK ST	Pittsfield	5	Berkshire Gas	4750	4750	0	76990	3657	0.77
32	32	6548	PIT - Wilson Park	94-100 MEMORIAL DR	Pittsfield	4	Berkshire Gas	4032	4032	0	78737	3175	0.79
33	33	6541	PIT - Wilson Park	80,82 MOHAWK & 152,154 MOHEGAN	Pittsfield	4	Berkshire Gas	3648	3648	0	78767	2873	0.79
34	34	4945	AMH - Chestnut Court	Chestnut Court - 2	Amherst	8	Berkshire Gas	3905	3905	0	78871	3080	0.79
35	35	6537	PIT - Wilson Park	174 MOHEGAN ST	Pittsfield	1	Berkshire Gas	960	960	N/A	81882	786	0.82
36	36	6550	PIT - Wilson Park	66-74 MOHAWK ST	Pittsfield	5	Berkshire Gas	4750	4750	0	82017	3896	0.82
37	37	6544	PIT - Wilson Park	85-91 MEMORIAL DR	Pittsfield	4	Berkshire Gas	3840	3840	0	82355	3162	0.82
38	38	6539	PIT - Wilson Park	67,69,71 MOHAWK ST & 135,137 Calu	Pittsfield	5	Berkshire Gas	4280	4280	0	82500	3531	0.83
39	39	6557	PIT - Wilson Park	134-140 MEMORIAL DRIVE	Pittsfield	4	Berkshire Gas	4032	4032	0	84978	3426	0.85
40	40	6356	ADA - 174 North Summer St	174 NORTH SUMMER ST.	Adams	3	Berkshire Gas	1880	1880	0	85327	1604	0.85
41	41	6543	PIT - Wilson Park	48-54 MOHAWK ST	Pittsfield	4	Berkshire Gas	4380	4380	0	85798	3758	0.86
42	42	4392	DAL - Pinegrove Manor	293 High Street - C	Dalton	4	Berkshire Gas	3534	3534	734	86796	3067	0.87
43	43	6536	PIT - Wilson Park	57-65 MEMORIAL DR	Pittsfield	5	Berkshire Gas	4280	4280	0	87460	3743	0.87
44	44	6549	PIT - Wilson Park	101-107 MEMORIAL DRIVE	Pittsfield	4	Berkshire Gas	4032	4032	0	94107	3794	0.94
45	45	6560	PIT - Wilson Park	54-62 MEMORIAL DR	Pittsfield	5	Berkshire Gas	4224	4224	0	95763	4045	0.96
46	46	2839	ADA - 9-11 Hoosac Street	11 North Hoosac Street	Adams	1	Berkshire Gas	787	787	N/A	96841	762	0.97
47	47	4946	AMH - Chestnut Court	Chestnut Court - 3	Amherst	8	Berkshire Gas	3905	3905	0	103487	4041	1.03
48	48	6558	PIT - Wilson Park	40-48 MEMORIAL DR	Pittsfield	5	Berkshire Gas	4224	4224	0	104228	4403	1.04
49	49	6538	PIT - Wilson Park	140-142 MOHEGAN & 75-77-79 MOHA	Pittsfield	5	Berkshire Gas	4280	4280	0	106776	4570	1.07
50	50	6562	PIT - Wilson Park	29-37 MEMORIAL DR	Pittsfield	5	Berkshire Gas	4224	4224	0	111524	4711	1.12
51	51	4948	AMH - Chestnut Court	Chestnut Court - 5	Amherst	4	Berkshire Gas	1730	1730	0	112217	1941	1.12
52	52	4947	AMH - Chestnut Court	Chestnut Court - 4	Amherst	4	Berkshire Gas	1730	1730	0	112374	1944	1.12
53	53	6463	GRE - 159 Conway St	159 Conway St	Greenfield	1	Berkshire Gas	1364	1364	N/A	117062	1597	1.17
54	54	6464	GRE - 9 Grove St	9 Grove St	Greenfield	1	Berkshire Gas	1128	1128	N/A	118625	1338	1.19
55	55	4944	AMH - Chestnut Court	Chestnut Court - 1	Amherst	6	Berkshire Gas	3680	3680	680	120842	4447	1.21
56	56	6396	WIL - Cole Ave/Stetson Road	383-385 STETSON ROAD	Williamstown	2	Berkshire Gas	1200	1200	0	120969	1452	1.21
57	57	2838	ADA - 9-11 Hoosac Street	9 North Hoosac Street	Adams	1	Berkshire Gas	787	787	N/A	147510	1161	1.48
58	58	2836	ADA - 20 Sayles Street	20 Sayles Street	Adams	3	Berkshire Gas	1830	1830	0	174212	3188	1.74
59	59	6355	ADA - 102-104 Columbia St	102-104 COLUMBIA ST	Adams	2	Berkshire Gas	1200	1200	0	174969	2100	1.75
60	60	2840	ADA - 113-123 Colombia Street	113 Columbia Street	Adams	6	Berkshire Gas	3900	3900	0	192794	7519	1.93
61	1	2571	640-642 Chicopee Street, 11-21 Walter	640-642 Chicopee Street, 11-21 Walter	Chicopee	18	Colombia Gas	26056	19542	10225	70935	13862	0.71
62	2		767 Main Street School	767 Main Street	West Springfield	28	Colombia Gas	35700	35700	N/A	6400	2285	0.06
63	3	2789	Bingham Way	Building A	North Andover	12	Colombia Gas	6112	6112	112	86463	5285	0.86
64	4	2790	Bingham Way	Building B	North Andover	12	Colombia Gas	6112	6112	112	86463	5285	0.86
65	5	2791	Bingham Way	Building C	North Andover	12	Colombia Gas	6112	6112	112	86463	5285	0.86
66	6	2793	Bingham Way	Bingham Community Building	North Andover	1	Colombia Gas	1300	1300	0	86463	1124	0.86
67	7	2792	Bingham Way	Building D	North Andover	6	Colombia Gas	4920	4920	1920	86463	4254	0.86
68	8	3121	Chestnut Street	39 Chestnut Street	Ludlow	34	Colombia Gas	25974	25974	N/A	53000	13766	0.53
69	9	4785	Dickinson Court	15 Liberty Street - 1	Easthampton	10	Colombia Gas	7068	7068	N/A	44500	3145	0.45
70	10	4787	Dickinson Court	15 Liberty Street - 2	Easthampton	8	Colombia Gas	5332	5332	N/A	44500	2373	0.45
71	11	4786	Dickinson Court	15 Liberty Street - 3	Easthampton	8	Colombia Gas	4464	4464	N/A	44500	1986	0.45
72	12	4788	Dickinson Court	15 Liberty Street - 4	Easthampton	4	Colombia Gas	2914	2914	N/A	44500	1297	0.45
73	13	2788	Fountain Drive	Community Building	North Andover	1	Colombia Gas	1269	1269	0	67858	861	0.68
74	14	2786	Fountain Drive	2-8 Fountain Drive	North Andover	4	Colombia Gas	2160	2160	160	67858	1466	0.68
75	15	2785	Fountain Drive	1-11 Fountain Drive	North Andover	6	Colombia Gas	4250	4250	1250	67858	2884	0.68
76	16	2784	Fountain Drive	11A-23 Fountain Drive	North Andover	6	Colombia Gas	4250	4250	1250	67858	2884	0.68
77	17	2783	Fountain Drive	25-35 Fountain Drive	North Andover	6	Colombia Gas	4250	4250	1250	67858	2884	0.68
78	18	2787	Fountain Drive	28-38 Fountain Drive	North Andover	6	Colombia Gas	4250	4250	1250	67858	2884	0.68
79	19	2782	Fountain Drive	37-47 Fountain Drive	North Andover	6	Colombia Gas	4250	4250	1250	67858	2884	0.68
80	20	2781	Fountain Drive	49-59 Fountain Drive	North Andover	6	Colombia Gas	4250	4250	1250	67858	2884	0.68
81	21		Grove Village	14-26 Grove Street - 1	West Springfield	10	Colombia Gas	6570	6570	N/A	17900	1176	0.18
82	22		Grove Village	36-46 Grove Street - 2	West Springfield	10	Colombia Gas	6570	6570	N/A	17900	1176	0.18
83	23		Grove Village	112-114 Druids Lane - 29 Grove Street	West Springfield	12	Colombia Gas	4150	4150	N/A	17900	743	0.18
84	24		Grove Village	94-110 Druids Lane - 4	West Springfield	12	Colombia Gas	4150	4150	N/A	17900	743	0.18
85	25		Grove Village	74-86 Druids Lane - 5	West Springfield	10	Colombia Gas	3445	3445	N/A	17900	617	0.18
86	26		Grove Village	79-89 Druids Lane - 6	West Springfield	10	Colombia Gas	3445	3445	N/A	17900	617	0.18
87	27		Grove Village	115 Druids Ln - 4957 Grove Street - 7	West Springfield	10	Colombia Gas	3445	3445	N/A	17900	617	0.18
88	28		Grove Village	Community Building	West Springfield	1	Colombia Gas	2400	2400	N/A	17900	430	0.18
89	29	2801	O'Connor Heights	1-22 O'Connor	North Andover	30	Colombia Gas	40320	40320	20320	17920	7225	0.18
90	30		O'Connor Heights	Second St.	North Andover	18	Colombia Gas	18950	18950	0	23830	4516	0.24
91	31		O'Connor Heights	Second St.	North Andover	4	Colombia Gas	3790	3790	0	23830	903	0.24
92	32		O'Connor Heights	Second St.	North Andover	4	Colombia Gas	3790	3790	0	23830	903	0.24
93	33		O'Connor Heights	Second St.	North Andover	4	Colombia Gas	3790	3790	0	23830	903	0.24
94	34		Oxford Place	Oxford Place - 1	West Springfield	44	Colombia Gas	25248	25248	N/A	6400	1616	0.06

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
95	35		Oxford Place	Oxford Place - 2	West Springfield	28	Colombia Gas	13440	13440	N/A	6400	860	0.06
96	36		Oxford Place	Oxford Place - 3	West Springfield	14	Colombia Gas	6912	6912	N/A	6400	442	0.06
97	37		Oxford Place	Oxford Place - 4	West Springfield	14	Colombia Gas	6912	6912	N/A	6400	442	0.06
98	38		Oxford Place	Oxford Place Community Building	West Springfield	1	Colombia Gas	5440	5440	N/A	6400	348	0.06
99	39		Paul P Flak	Lee Lang Terrace - 24	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
100	40		Paul P Flak	Lee Lang Terrace - 121	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
101	41		Paul P Flak	Lee Lang Terrace - 122	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
102	42		Paul P Flak	Lee Lang Terrace - 104	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
103	43		Paul P Flak	Lee Lang Terrace - 36	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
104	44		Paul P Flak	Lee Lang Terrace - 48	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
105	45		Paul P Flak	Lee Lang Terrace - 58	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
106	46		Paul P Flak	Lee Lang Terrace - 74	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
107	47		Sunrise Manor	Paradise Drive - 1	Easthampton	6	Colombia Gas	4192	4192	N/A	76570	3210	0.77
108	48		Sunrise Manor	Paradise Drive - 2	Easthampton	6	Colombia Gas	3840	3840	N/A	76570	2940	0.77
109	49		Sunrise Manor	Paradise Drive - 3	Easthampton	6	Colombia Gas	3840	3840	N/A	76570	2940	0.77
110	50		Sunrise Manor	Laura Ave - 4	Easthampton	6	Colombia Gas	3840	3840	N/A	76570	2940	0.77
111	51		Sunrise Manor	Paradise Drive - 5	Easthampton	6	Colombia Gas	3840	3840	N/A	76570	2940	0.77
112	52		Sunrise Manor	Paradise Drive - 6 - Community Building	Easthampton	1	Colombia Gas	864	864	N/A	76570	662	0.77
113	53	2570	65-71 West Street 6 Park Street	65-71 West Street 6 Park Street	Chicopee	15	Colombia Gas	22480	17984	7919	76632	13781	0.77
114	54	1323	17 Holliston St	17 Holliston St	Medway	14	Colombia Gas	5939	2828	1148	162127	4585	1.62
115	55	3022	10 Heritage Circle	10 Heritage Circle	Bridgewater	50	Colombia Gas	36666	36666	11666	30779	11285	0.31
116	56	3104	65 Grove Street	65 Grove Street	Bridgewater	2	Colombia Gas	2272	2272	0	31118	707	0.31
117	57		71 R Summer Street	71 R Summer Street	Taunton	6	Colombia Gas	3858	3858	N/A	1298	30	0.01
118	58		71Summer Street	71 Summer Street	Taunton	5	Colombia Gas	5268	5268	N/A	2735	68	0.01
119	59		9 Martel Avenue	9 Martel Avenue	Taunton	4	Colombia Gas	2500	2500	N/A	46748	68	0.03
120	60	711	Andover Commons	30 Railroad Street	Andover	159	Colombia Gas	135921	135921	45471	46748	63540	0.47
121	61	712	Andover Commons	30 Railroad St - Boiler Bldg	Andover	8	Colombia Gas	25002	25002	18202	46748	11688	0.47
122	62		Ardmore Apartments	150,152,154,156,158,160 OAK ST	Taunton	70	Colombia Gas	37000	37000	N/A	38978	2591	0.07
123	63	713	Brockton Commons	55 City Hall Plaza	Brockton	139	Colombia Gas	136293	136293	36611	38978	53124	0.39
124	64		Caswell Grove	417 Middleboro Avenue	Taunton	59	Colombia Gas	30620	30620	N/A	115000	1709	0.06
125	65		Colonial Manor	Wilson Street - 1	Ludlow	10	Colombia Gas	4750	4750	N/A	115000	5463	1.15
126	66		Colonial Manor	Wilson Street - 2	Ludlow	14	Colombia Gas	6850	6850	N/A	115000	7878	1.15
127	67		Colonial Manor	Wilson Street - 3	Ludlow	10	Colombia Gas	4750	4750	N/A	115000	5463	1.15
128	68		Colonial Manor	Wilson Street - 4	Ludlow	14	Colombia Gas	6850	6850	N/A	115000	7878	1.15
129	69		Colonial Manor	Wilson Street - Community Building	Ludlow	1	Colombia Gas	4472	4472	N/A	115000	5143	1.15
130	70		Fitzsimmons Arms	30 OLNEY STREET	Taunton	103	Colombia Gas	79825	79825	N/A	10040	4722	0.06
131	71		John Shea Court	21 Hodges Street	Taunton	57	Colombia Gas	22982	22982	N/A	7103	2307	0.10
132	72		Paul Bunker	103-111 Paul Bunker Drive	Taunton	5	Colombia Gas	6028	6028	N/A	7103	428	0.07
133	73		Paul Bunker	62-72 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
134	74		Paul Bunker	50-60 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
135	75		Paul Bunker	38-48 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
136	76		Paul Bunker	26-36 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
137	77		Paul Bunker	14-24 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
138	78		Paul Bunker	2-12 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
139	79		Paul Bunker	101-93 Paul Bunker Drive	Taunton	5	Colombia Gas	6028	6028	N/A	7103	428	0.07
140	80		Paul Bunker	81-91 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
141	81		Paul Bunker	69-79 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
142	82		Paul Bunker	41-51 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
143	83		Paul Bunker	29-39 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
144	84		Paul Bunker	17-27 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
145	85		Paul Bunker	5-15 Paul Bunker Drive	Taunton	6	Colombia Gas	6028	6028	N/A	7103	428	0.07
146	86		Paul Bunker	61-67 Paul Bunker Drive	Taunton	4	Colombia Gas	5282	5282	N/A	8106	428	0.08
147	87		Paul Bunker	53-59 Paul Bunker Drive	Taunton	4	Colombia Gas	5282	5282	N/A	8106	428	0.08
148	88		Paul Bunker	74-84 Paul Bunker Drive	Taunton	6	Colombia Gas	3014	3014	N/A	14206	428	0.14
149	89		Paul Bunker	1-3 Paul Bunker Drive	Taunton	4	Colombia Gas	2712	2712	N/A	15788	428	0.16
150	90		Paul Bunker	59 Ingell Street	Taunton	2	Colombia Gas	1700	1700	N/A	25187	428	0.25
151	91		Paul Bunker	Community Room	Taunton	1	Colombia Gas	858	858	N/A	49904	428	0.50
152	92		Paul P Flak	Lee Lang Terrace - 109	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
153	93		Paul P Flak	Lee Lang Terrace - 110	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
154	94		Paul P Flak	Lee Lang Terrace - 115	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
155	95		Paul P Flak	Lee Lang Terrace - 117	West Springfield	4	Colombia Gas	2368	2368	N/A	66600	1577	0.67
156	96		Paul P Flak	Lee Lang Terrace - Community Building	West Springfield	1	Colombia Gas	2200	2200	N/A	66600	1465	0.67
157	97	1034	Pine Street Apartments	157 Pine Street	Springfield	15	Colombia Gas	10000	5000	5000	125355	6268	1.25
158	98		State Street	69 State Street/20 Meadow -1	Ludlow	8	Colombia Gas	4900	4900	N/A	71000	3479	0.71
159	99		State Street	26 Meadow - 2	Ludlow	8	Colombia Gas	4900	4900	N/A	71000	3479	0.71
160	100		State Street	46 Meadow - 3	Ludlow	8	Colombia Gas	4900	4900	N/A	71000	3479	0.71
161	101		State Street	19 Hampden/52 Meadow - 4	Ludlow	8	Colombia Gas	4900	4900	N/A	71000	3479	0.71
162	102		State Street	7 Hampden Street - 5	Ludlow	8	Colombia Gas	4900	4900	N/A	71000	3479	0.71
163	103		State Street	Community Building	Ludlow	1	Colombia Gas	1640	1640	N/A	71000	1164	0.71
164	104	1172	Union Street Apartments	145 Union Street	Springfield	11	Colombia Gas	13510	10750	2760	49225	5292	0.49
165	105	3117	Wilson Street	116-130 Wilson Street	Ludlow	8	Colombia Gas	4352	4352	352	22731	989	0.23
166	106	3119	Wilson Street	138 - 152 Wilson Street	Ludlow	8	Colombia Gas	4352	4352	352	31749	1382	0.32
167	107	3118	Wilson Street	132 - 136 Wilson Street	Ludlow	3	Colombia Gas	2560	2560	560	54747	1402	0.55
168	108	3120	Wilson Street	88-98 Wilson Street	Ludlow	6	Colombia Gas	3641	3641	641	60412	2200	0.60
169	109	3878	LAW - Stadium Courts	186 - 200 PHILLIPS ST - 1	Lawrence	8	Colombia Gas	7800	7800	2420	723249900	7232	0.93
170	110	3879	LAW - Stadium Courts	28 - 42 EAST LAUREL - 11	Lawrence	8	Colombia Gas	6664	6664	2064	617915300	6179	0.93
171	111	3880	LAW - Stadium Courts	16 - 26 EAST LAUREL - 10	Lawrence	6	Colombia Gas	5304	5304	1644	491810200	4918	0.93
172	112	3882	LAW - Stadium Courts	44 - 58 EAST LAUREL - 12	Lawrence	8	Colombia Gas	6664	6664	2064	617915300	6179	0.93
173	113	3883	LAW - Stadium Courts	11 - 25 NORTH PARISH ROAD - 13	Lawrence	8	Colombia Gas	7204	7204	2234	667986300	6680	0.93
174	114	3884	LAW - Stadium Courts	213 - 227 OSGOOD ST - 14	Lawrence	8	Colombia Gas	6664	6664	2064	617915300	6179	0.93
175	115	3461	AGA - Brady Village	775 Springfield Street - 8	Agawam	4	Colombia Gas	3240	3240	0	47294	1532	0.47
176	116	3057	AGA - The Danahy Schoolhouse	New Building	Agawam	10	Colombia Gas	9600	9600	4600	46673	4481	0.47
177	117	3056	AGA - The Danahy Schoolhouse	Old Building	Agawam	25	Colombia Gas	10000	10000	0	46673	4667	0.47
178	118	3415	AGA - Wade Village	26 & 28 Franklin Street	Agawam	2	Colombia Gas	1496	1496	0	22713	340	0.23
179	119	3362	CHI - Birch Bark Place	630 Chicopee Street	Chicopee	72	Colombia Gas	56300	56300	20300	18345	10329	0.18
180	120	3347	CHI - Edward J. Bury Apartments	17 & 21 & 25 BENOIT CIRCLE	Chicopee	12	Colombia Gas	7980	7980	1980	76942	6140	0.77
181	121	3346	CHI - Edward J. Bury Apartments	27 & 33 & 37 BENOIT CIRCLE	Chicopee	12	Colombia Gas	7980	7980	1980	76942	6140	0.77
182	122	3343	CHI - Edward J. Bury Apartments	335-339 EAST MAIN ST & 4 BENOIT C	Chicopee	12	Colombia Gas	8220	8220	2220	76942	6325	0.77
183	123	3345	CHI - Edward J. Bury Apartments	41 - 45 - 49 BENOIT CIRCLE	Chicopee	12	Colombia Gas	7980	7980	1980	76942	6140	0.77
184	124	3348	CHI - Edward J. Bury Apartments	52 & 12 BENOIT CIRCLE	Chicopee	8	Colombia Gas	5340	5340	1340	76942	4109	0.77
185	125	3349	CHI - Edward J. Bury Apartments	EDWARD J. BURY APARTMENTS - Co	Chicopee	1	Colombia Gas	1512	1512	0	76942	1163	0.77
186	126	2676	FRN - Central Park Terrace - 1	CPT1: East Park Street - 1	Franklin	8	Colombia Gas	5000	5000	1000	97080	4854	0.97
187	127	3786	FRN - Central Park Terrace - 1	CPT1: East Park Street - 7	Franklin	8	Colombia Gas	5000	5000	1000	97080	4854	0.97
188	128	3782	FRN - Central Park Terrace - 1	CPT1: West Park Street - 3	Franklin	8	Colombia Gas	5000	5000	1000	97080	4854	0.97

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
189	129	3342	Governor George Robinson	1 - 12 ROBINSON DRIVE	Chicopee	12	Colombia Gas	4700	4700	0	94689	4450	0.95
190	130	3423	Governor George Robinson	13-24 ROBINSON DRIVE	Chicopee	12	Colombia Gas	4500	4500	0	94689	4261	0.95
191	131	3329	Governor George Robinson	15-22 GROCKI DRIVE	Chicopee	8	Colombia Gas	4350	4350	350	94689	4119	0.95
192	132	3328	Governor George Robinson	1-8 GROCKI DRIVE	Chicopee	8	Colombia Gas	4350	4350	350	94689	4119	0.95
193	133	3332	Governor George Robinson	23-28 GROCKI DRIVE	Chicopee	6	Colombia Gas	3270	3270	270	94689	3096	0.95
194	134	3424	Governor George Robinson	25-36 ROBINSON DRIVE	Chicopee	12	Colombia Gas	4700	4700	0	94689	4450	0.95
195	135	3330	Governor George Robinson	29-34 GROCKI DRIVE	Chicopee	8	Colombia Gas	4350	4350	350	94689	4119	0.95
196	136	3338	Governor George Robinson	34-52 Peloquin Dr	Chicopee	10	Colombia Gas	5664	5664	664	96288	5454	0.96
197	137	3340	Governor George Robinson	70-92 Peloquin Drive	Chicopee	12	Colombia Gas	6696	6696	696	96289	6447	0.96
198	138	3331	Governor George Robinson	9 - 15 GROCKI DRIVE	Chicopee	6	Colombia Gas	3270	3270	270	94689	3096	0.95
199	139	3341	Governor George Robinson	94-108 Peloquin Drive	Chicopee	14	Colombia Gas	7788	7788	788	96288	7499	0.96
200	140	3773	LAW - Hancock Courts	1 - 37 LEONARD AVENUE - 5	Lawrence	18	Colombia Gas	15585	15585	6585	123969	19321	1.24
201	141	3769	LAW - Hancock Courts	141 - 163 BERNARD AVENUE - 1	Lawrence	12	Colombia Gas	10530	10530	4530	123969	13054	1.24
202	142	3778	LAW - Hancock Courts	2 - 24 BERNARD AVENUE - 10	Lawrence	12	Colombia Gas	11484	11484	5484	123969	14237	1.24
203	143	3772	LAW - Hancock Courts	2 - 36 LEONARD AVE - 4	Lawrence	18	Colombia Gas	15714	15714	6714	123969	19481	1.24
204	144	3774	LAW - Hancock Courts	20 - 60 BERNARD AVENUE - 6	Lawrence	18	Colombia Gas	15876	15876	6876	123969	19681	1.24
205	145	3771	LAW - Hancock Courts	62 - 90 BERNARD AVENUE - 3	Lawrence	15	Colombia Gas	13122	13122	5622	123969	16267	1.24
206	146	3523	NHM - Forsander Apartments	High St - K	Northampton	8	Colombia Gas	4550	4550	550	104449	4752	1.04
207	147	3525	NHM - Forsander Apartments	High St - M	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
208	148	3526	NHM - Forsander Apartments	High St - N	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
209	149	3527	NHM - Forsander Apartments	High St - O	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
210	150	3528	NHM - Forsander Apartments	High St - P	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
211	151	3529	NHM - Forsander Apartments	High St - Q	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
212	152	3530	NHM - Forsander Apartments	High St - R	Northampton	8	Colombia Gas	4550	4550	550	104449	4752	1.04
213	153	2863	NHM - Forsander Apartments	High Street - J	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
214	154	3524	NHM - Forsander Apartments	High Street - L	Northampton	8	Colombia Gas	4500	4500	500	104449	4700	1.04
215	155	2864	NHM - Salvo House	81 Conz Street	Northampton	192	Colombia Gas	126000	126000	43200	11232	14152	0.11
216	156	2861	NHM - Tobin Manor	56 Maple Street	Northampton	49	Colombia Gas	45000	45000	18590	28427	12792	0.28
217	157	3441	RAN - Walter Lyon	10-17 ELDERLY DRIVE	Randolph	8	Colombia Gas	5824	5824	1824	76479	4454	0.76
218	158	3442	RAN - Walter Lyon	20-27 ELDERLY DRIVE	Randolph	8	Colombia Gas	5824	5824	1824	82374	4797	0.82
219	159	3443	RAN - Walter Lyon	30-37 ELDERLY DRIVE	Randolph	8	Colombia Gas	5824	5824	1824	80312	4677	0.80
220	160	3444	RAN - Walter Lyon	40-47 ELDERLY DRIVE	Randolph	8	Colombia Gas	5824	5824	1824	78226	4556	0.78
221	161	3445	RAN - Walter Lyon	50-57 ELDERLY DRIVE	Randolph	8	Colombia Gas	5824	5824	1824	82224	4789	0.82
222	162	3446	RAN - Walter Lyon	60-67 ELDERLY DRIVE	Randolph	8	Colombia Gas	5824	5824	1824	83378	4856	0.83
223	163	3885	LAW - Stadium Courts	197 - 211 OSGOOD ST - 15	Lawrence	8	Colombia Gas	6664	6664	2064	617915300	6179	0.93
224	164	3886	LAW - Stadium Courts	185 - 195 OSGOOD ST - 16	Lawrence	6	Colombia Gas	5304	5304	1644	491810200	4918	0.93
225	165	2865	NHM - Bridge Street	96 Bridge Street	Northampton	7	Colombia Gas	6136	6136	1564	54168	3324	0.54
226	166	2913	NHM - Cahill Apartments	Fruit Street - Apartment C	Northampton	8	Colombia Gas	4550	4550	550	69829	3177	0.70
227	167	3499	NHM - Cahill Apartments	Fruit Street - Apartment D	Northampton	8	Colombia Gas	4550	4550	550	78614	3577	0.79
228	168	2912	NHM - Cahill Apartments	Fruit Street - Apartment B	Northampton	8	Colombia Gas	4550	4550	550	78909	3590	0.79
229	169	3502	NHM - Cahill Apartments	Fruit Street - Apartment G	Northampton	8	Colombia Gas	4550	4550	550	81748	3720	0.82
230	170	2862	NHM - Cahill Apartments	Fruit Street - Apartment A	Northampton	8	Colombia Gas	4550	4550	550	90336	4110	0.90
231	171	3500	NHM - Cahill Apartments	Fruit Street - Apartment E	Northampton	8	Colombia Gas	4550	4550	550	92136	4192	0.92
232	172	3503	NHM - Cahill Apartments	Fruit Street - Apartment H	Northampton	8	Colombia Gas	4550	4550	550	94739	4311	0.95
233	173	3501	NHM - Cahill Apartments	Fruit Street - Apartment F	Northampton	8	Colombia Gas	4550	4550	550	94975	4321	0.95
234	174	3504	NHM - Cahill Apartments	Fruit Street Community Building	Northampton	1	Colombia Gas	1500	1500	N/A	111837	1678	1.12
235	175	3531	NHM - Forsander Apartments	Forsander Community	Northampton	1	Colombia Gas	2400	2400	N/A	104449	2507	1.04
236	176	3447	RAN - Walter Lyon	ELDERLY DRIVE - Community	Randolph	1	Colombia Gas	5824	5824	1824	37069	2159	0.37
237	177	3476	RAN - Welch	14-17 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	62788	1513	0.63
238	178	3477	RAN - Welch	18-21 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	62788	1513	0.63
239	179	3479	RAN - Welch	22-25 SUNSHINE AVENUE	Randolph	4	Colombia Gas	2410	2410	410	62788	1513	0.63
240	180	3480	RAN - Welch	26-29 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	62788	1513	0.63
241	181	3489	RAN - Welch	62-65 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	76131	1835	0.76
242	182	3490	RAN - Welch	66-69 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	76131	1835	0.76
243	183	3491	RAN - Welch	70-73 SUNSHINE AVENUE	Randolph	4	Colombia Gas	2410	2410	410	76131	1835	0.76
244	184	3492	RAN - Welch	74-77 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	76131	1835	0.76
245	185	3481	RAN - Welch	30-33 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	77223	1861	0.77
246	186	3482	RAN - Welch	34-37 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	77223	1861	0.77
247	187	3483	RAN - Welch	38-41 SUNSHINE AVENUE	Randolph	4	Colombia Gas	2410	2410	410	77223	1861	0.77
248	188	3484	RAN - Welch	42-45 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	77223	1861	0.77
249	189	3485	RAN - Welch	46-49 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	77288	1863	0.77
250	190	3486	RAN - Welch	50-53 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	77288	1863	0.77
251	191	3487	RAN - Welch	54-57 SUNSHINE AVENUE	Randolph	4	Colombia Gas	2410	2410	410	77288	1863	0.77
252	192	3488	RAN - Welch	58-61 SUNSHINE AVE	Randolph	4	Colombia Gas	2410	2410	410	77288	1863	0.77
253	193	3463	AGA - Brady Village	775 Springfield Street - 9	Agawam	2	Colombia Gas	2704	1352	1352	68261	923	0.68
254	194	3787	FRN - Central Park Terrace - 1	CPT1: Community Hall	Franklin	1	Colombia Gas	868	868	N/A	97080	843	0.97
255	195	3783	FRN - Central Park Terrace - 1	CPT1: East Park Street - 4	Franklin	4	Colombia Gas	1920	1920	N/A	97080	1864	0.97
256	196	3784	FRN - Central Park Terrace - 1	CPT1: East Park Street - 5	Franklin	4	Colombia Gas	1920	1920	N/A	97080	1864	0.97
257	197	3785	FRN - Central Park Terrace - 1	CPT1: East Park Street - 6	Franklin	4	Colombia Gas	1920	1920	N/A	97080	1864	0.97
258	198	3781	FRN - Central Park Terrace - 1	CPT1: West Park Street - 2	Franklin	4	Colombia Gas	1920	1920	N/A	97080	1864	0.97
259	199	3333	Governor George Robinson	35-40 GROCKI DRIVE	Chicopee	6	Colombia Gas	3270	3270	270	94689	3096	0.95
260	200	3337	Governor George Robinson	14-20 Peloquin Dr	Chicopee	4	Colombia Gas	2240	2240	240	96288	2157	0.96
261	201	3334	Governor George Robinson	156-166 Meetinghouse Road	Chicopee	6	Colombia Gas	3424	3424	424	96289	3297	0.96
262	202	3335	Governor George Robinson	2-12 Perloquin Dr	Chicopee	6	Colombia Gas	3424	3424	424	96289	3297	0.96
263	203	3336	Governor George Robinson	22-32 Peloquin Dr	Chicopee	6	Colombia Gas	3424	3424	424	96289	3297	0.96
264	204	3339	Governor George Robinson	54-68 Peloquin Dr	Chicopee	8	Colombia Gas	4464	4464	464	96289	4298	0.96
265	205	3636	Kilcommons	5 KILCOMMONS DRIVE	Pembroke	12	Colombia Gas	7996	7996	1996	35364	2828	0.35
266	206	3635	Kilcommons	4 KILCOMMONS DRIVE	Pembroke	12	Colombia Gas	7996	7996	1996	39117	3128	0.39
267	207	3632	Kilcommons	1 KILCOMMONS DRIVE	Pembroke	12	Colombia Gas	7996	7996	1996	43168	3452	0.43
268	208	3633	Kilcommons	2 KILCOMMONS DRIVE	Pembroke	12	Colombia Gas	7996	7996	1996	50370	4028	0.50
269	209	3634	Kilcommons	3 KILCOMMONS DRIVE	Pembroke	12	Colombia Gas	7996	7996	1996	53950	4314	0.54
270	210	3637	Kilcommons	6 KILCOMMONS DRIVE - community	Pembroke	1	Colombia Gas	2767	2767	N/A	74941	2074	0.75
271	211	3779	LAW - Hancock Courts	1 - 25 BERNARD AVENUE - 11	Lawrence	12	Colombia Gas	10530	10530	4530	123969	13054	1.24
272	212	3780	LAW - Hancock Courts	Administration Building	Lawrence	1	Colombia Gas	1200	1200	N/A	123969	1488	1.24
273	213	3891	LAW - Stadium Courts	202 - 212 PHILLIPS STREET - 2	Lawrence	6	Colombia Gas	5300	5300	1640	491439100	4914	0.93
274	214	3887	LAW - Stadium Courts	186 - 200 OSGOOD ST - 17	Lawrence	8	Colombia Gas	7204	7204	2234	667986300	6680	0.93
275	215	3888	LAW - Stadium Courts	202 - 216 OSGOOD ST - 18	Lawrence	8	Colombia Gas	7204	7204	2234	667986300	6680	0.93
276	216	3889	LAW - Stadium Courts	218 - 232 OSGOOD ST - 19	Lawrence	8	Colombia Gas	7204	7204	2234	667986300	6680	0.93
277	217	3777	LAW - Hancock Courts	1 - 19 SAVOIE & 29 - 45 HANCOCK - 9	Lawrence	18	Colombia Gas	15936	15936	6936	125867	20058	1.26
278	218	3776	LAW - Hancock Courts	26 - 42 BERNARD AVE & 21 - 37 SAVO	Lawrence	18	Colombia Gas	15936	15936	6936	125867	20058	1.26
279	219	3775	LAW - Hancock Courts	47 - 63 HANCOCK & 2 - 18 SAVOIE AV	Lawrence	18	Colombia Gas	15936	15936	6936	125867	20058	1.26
280	220	3770	LAW - Hancock Courts	92 - 162 BERNARD AVE - 2	Lawrence	36	Colombia Gas	35190	35190	17190	125867	44292	1.26
281	221	3900	LAW - Stadium Courts	10 - 20 WEST DALTON - 27	Lawrence	6	Colombia Gas	5304	5304	1644	93239	4945	0.93
282	222	3912	LAW - Stadium Courts	15-29 WEST LAUREL - 6	Lawrence	8	Colombia Gas	7800	7800	2420	93239	7273	0.93

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
283	223	4118	LAW - Stadium Courts	179 OSGOOD STREET - Admin Building	Lawrence	1	Colombia Gas	6720	6720	0	93239	6266	0.93
284	224	3914	LAW - Stadium Courts	18-28 EXETER ST - 8	Lawrence	6	Colombia Gas	5300	5300	1640	93239	4942	0.93
285	225	3909	LAW - Stadium Courts	183 - 193 CRAWFORD ST - 35	Lawrence	6	Colombia Gas	5304	5304	1644	93239	4945	0.93
286	226	3908	LAW - Stadium Courts	195 - 205 CRAWFORD ST - 34	Lawrence	6	Colombia Gas	5304	5304	1644	93239	4945	0.93
287	227	3899	LAW - Stadium Courts	2 - 16 EXETER ST - 26	Lawrence	8	Colombia Gas	6664	6664	2064	93239	6213	0.93
288	228	3907	LAW - Stadium Courts	207 - 221 CRAWFORD ST - 33	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
289	229	3902	LAW - Stadium Courts	21 - 35 EAST DALTON ST - 29	Lawrence	8	Colombia Gas	6664	6664	2064	93239	6213	0.93
290	230	3903	LAW - Stadium Courts	214 THRU 228 PHILLIPS ST - 3	Lawrence	8	Colombia Gas	7800	7800	2420	93239	7273	0.93
291	231	3897	LAW - Stadium Courts	22 - 36 WEST DALTON ST - 24	Lawrence	8	Colombia Gas	6664	6664	2064	93239	6213	0.93
292	232	3892	LAW - Stadium Courts	27 - 41 NORTH PARISH RD - 20	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
293	233	3913	LAW - Stadium Courts	3 - 13 WEST LAUREL ST - 7	Lawrence	6	Colombia Gas	5300	5300	1640	93239	4942	0.93
294	234	3911	LAW - Stadium Courts	31 - 45 WEST LAUREL ST - 5	Lawrence	8	Colombia Gas	7800	7800	2420	93239	7273	0.93
295	235	3904	LAW - Stadium Courts	37 - 51 EAST DALTON ST - 30	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
296	236	3896	LAW - Stadium Courts	38 - 52 WEST DALTON ST - 23	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
297	237	3915	LAW - Stadium Courts	4 - 14 EAST LAUREL - 9	Lawrence	6	Colombia Gas	5300	5300	1640	93239	4942	0.93
298	238	3894	LAW - Stadium Courts	43 - 49 NORTH PARISH ROAD - 21	Lawrence	4	Colombia Gas	3624	3624	1124	93239	3379	0.93
299	239	3910	LAW - Stadium Courts	47 THRU 61 WEST LAUREL - 4	Lawrence	8	Colombia Gas	7800	7800	2420	93239	7273	0.93
300	240	3898	LAW - Stadium Courts	5 - 19 WEST DALTON - 25	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
301	241	3906	LAW - Stadium Courts	51 - 65 NORTH PARISH ROAD - 32	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
302	242	3905	LAW - Stadium Courts	53 - 67 EAST DALTON ST - 31	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
303	243	3895	LAW - Stadium Courts	54 - 68 WEST DALTON - 22	Lawrence	8	Colombia Gas	7204	7204	2234	93239	6717	0.93
304	244	3901	LAW - Stadium Courts	9 - 19 EAST DALTON ST - 28	Lawrence	6	Colombia Gas	5304	5304	1644	93239	4945	0.93
305	245	1947	Prence Grant Apartments	780 Webster Street Bldg A	Marshfield	4	Colombia Gas	2675	2675	0	66678	1784	0.67
306	246	1948	Prence Grant Apartments	780 Webster Street Bldg B	Marshfield	4	Colombia Gas	2600	2600	0	49087	1276	0.49
307	247	1949	Prence Grant Apartments	780 Webster Street Bldg C	Marshfield	2	Colombia Gas	1300	1300	0	71813	934	0.72
308	248	4632	WLP - Diamond Pond Terrace	1 DIAMOND POND TERRACE	Walpole	4	Colombia Gas	2642	2642	642	59882	1582	0.60
309	249	4633	WLP - Diamond Pond Terrace	2 DIAMOND POND TERRACE	Walpole	4	Colombia Gas	2642	2642	642	55274	1460	0.55
310	250	4635	WLP - Diamond Pond Terrace	3 DIAMOND POND TERRACE	Walpole	12	Colombia Gas	8775	8775	2275	39130	3434	0.39
311	251	4636	WLP - Diamond Pond Terrace	4 DIAMOND POND TERRACE	Walpole	10	Colombia Gas	5990	5990	990	55079	3299	0.55
312	252	4637	WLP - Diamond Pond Terrace	5 DIAMOND POND TERRACE	Walpole	4	Colombia Gas	2754	2754	754	49052	1351	0.49
313	253	4638	WLP - Diamond Pond Terrace	6 DIAMOND POND TERRACE	Walpole	12	Colombia Gas	9026	9026	2026	46759	4220	0.47
314	254	4639	WLP - Diamond Pond Terrace	7 DIAMOND POND TERRACE	Walpole	8	Colombia Gas	6224	6224	1224	49059	3053	0.49
315	255	4641	WLP - Diamond Pond Terrace	Diamond Pond Community Bldg	Walpole	1	Colombia Gas	1820	1820	0	67404	1227	0.67
316	256	4615	WLP - Neponset View	1 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	65929	2861	0.66
317	257	4617	WLP - Neponset View	2 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	59372	2577	0.59
318	258	4618	WLP - Neponset View	3 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	60644	2632	0.61
319	259	4622	WLP - Neponset View	4 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	68320	2965	0.68
320	260	4624	WLP - Neponset View	5 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	61181	2655	0.61
321	261	4626	WLP - Neponset View	6 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	63561	2759	0.64
322	262	4627	WLP - Neponset View	7 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	62948	2732	0.63
323	263	4629	WLP - Neponset View	8 NEPONSET VIEW TERRACE	Walpole	9	Colombia Gas	4340	4340	290	50384	2187	0.50
324	264	4630	WLP - Neponset View	9 NEPONSET VIEW TERRACE	Walpole	1	Colombia Gas	1440	1440	0	111277	1602	1.11
325	265	4659	DUX - Duxborough Village	59 Chestnut Street - 1	Duxbury	8	Colombia Gas	5760	5760	960	47639	2744	0.48
326	266	4660	DUX - Duxborough Village	59 Chestnut Street - 2	Duxbury	6	Colombia Gas	4712	4712	1112	57725	2720	0.58
327	267	4661	DUX - Duxborough Village	59 Chestnut Street - 3	Duxbury	8	Colombia Gas	5760	5760	960	54809	3157	0.55
328	268	4662	DUX - Duxborough Village	59 Chestnut Street - 4	Duxbury	6	Colombia Gas	4712	4712	1112	56919	2682	0.57
329	269	4663	DUX - Duxborough Village	59 Chestnut Street - 5	Duxbury	8	Colombia Gas	5760	5760	960	49219	2835	0.49
330	270	4664	DUX - Duxborough Village	59 Chestnut Street - 6	Duxbury	8	Colombia Gas	5760	5760	960	53889	3104	0.54
331	271	4327	BRAYTON CIRCLE	11-12 Brayton Circle	Canton	2	Colombia Gas	2025	2025	425	73111	1480	0.73
332	272	4324	BRAYTON CIRCLE	5-6 Brayton Circle	Canton	2	Colombia Gas	2034	2034	434	79006	1607	0.79
333	273	4326	BRAYTON CIRCLE	9-10 Brayton Circle	Canton	2	Colombia Gas	2034	2034	434	80596	1639	0.81
334	274	4323	BRAYTON CIRCLE	3-4 Brayton Circle	Canton	2	Colombia Gas	2025	2025	425	87944	1781	0.88
335	275	4708	Chestnut Park Apartments	10 Chestnut Street	Springfield	240	Colombia Gas	335105	335105	50225	65644	219978	0.66
336	276	4322	BRAYTON CIRCLE	1-2 Brayton Circle	Canton	2	Colombia Gas	2034	2034	434	118018	2400	1.18
337	277	4698	Chestnut Park Apartments	115 Dwight Street	Springfield	96	Colombia Gas	84420	84420	21195	61568	51976	0.62
338	278	4697	Chestnut Park Apartments	185 Dwight Street	Springfield	33	Colombia Gas	47993	47993	26543	77393	37143	0.77
339	279	4696	Chestnut Park Apartments	68 Harrison Avenue	Springfield	120	Colombia Gas	155803	155803	14687	64742	100871	0.65
340	280	4319	HEMEN WAY	660 WASHINGTON STREET - Main Bu	Canton	12	Colombia Gas	17270	17270	5270	37922	6549	0.38
341	281	4320	HEMEN WAY	660 WASHINGTON STREET - North W	Canton	23	Colombia Gas	16788	16788	5288	37922	6366	0.38
342	282	4321	HEMEN WAY	660 WASHINGTON STREET - South W	Canton	21	Colombia Gas	13744	13744	4244	37922	5212	0.38
343	283	4790	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 1	Hanson	4	Colombia Gas	3028	3028	628	65736	1990	0.66
344	284	4791	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 10	Hanson	4	Colombia Gas	2600	2600	400	77232	2008	0.77
345	285	4792	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 11	Hanson	4	Colombia Gas	2600	2600	400	79247	2060	0.79
346	286	4793	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 12	Hanson	4	Colombia Gas	2600	2600	400	80876	2103	0.81
347	287	4794	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 13	Hanson	4	Colombia Gas	2600	2600	400	78840	2050	0.79
348	288	4795	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 14	Hanson	4	Colombia Gas	3028	3028	628	60726	1839	0.61
349	289	4796	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 15	Hanson	4	Colombia Gas	2600	2600	400	77161	2006	0.77
350	290	4797	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 16	Hanson	4	Colombia Gas	2600	2600	400	89013	2314	0.89
351	291	4798	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 17	Hanson	4	Colombia Gas	3028	3028	628	77881	2358	0.78
352	292	4981	Leo P Senecal Apartments	108-112 Elmer Drive - 34	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
353	293	4800	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 2	Hanson	4	Colombia Gas	2600	2600	400	78658	2045	0.79
354	294	4983	Leo P Senecal Apartments	111-115 Elcon Drive - 4	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
355	295	4801	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 3	Hanson	4	Colombia Gas	2600	2600	400	72418	1883	0.72
356	296	4975	Leo P Senecal Apartments	206-210 MEETINGHOUSE ROAD - 1	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
357	297	4802	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 4	Hanson	4	Colombia Gas	2600	2600	400	87566	2277	0.88
358	298	4977	Leo P Senecal Apartments	206-210 MEETINGHOUSE ROAD - 13	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
359	299	4803	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 5	Hanson	4	Colombia Gas	3028	3028	628	82610	2501	0.83
360	300	4979	Leo P Senecal Apartments	206-210 MEETINGHOUSE ROAD - 19	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
361	301	4804	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 6	Hanson	4	Colombia Gas	2600	2600	400	85901	2233	0.86
362	302	4984	Leo P Senecal Apartments	54-58 Elmer Drive - 41	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
363	303	4805	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 7	Hanson	4	Colombia Gas	2600	2600	400	87265	2269	0.87
364	304	4976	Leo P Senecal Apartments	7-11 Elcon Drive - 11	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
365	305	4806	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 8	Hanson	4	Colombia Gas	2600	2600	400	78485	2041	0.78
366	306	4980	Leo P Senecal Apartments	72-76 Elcon Drive - 21	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
367	307	4807	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - 9	Hanson	4	Colombia Gas	2600	2600	400	86052	2237	0.86
368	308	4982	Leo P Senecal Apartments	78-82 Elmer Drive - 38	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
369	309	4799	HNS - Meetinghouse Lane	MEETINGHOUSE LANE - Community	Hanson	1	Colombia Gas	4312	4312	0	87150	3758	0.87
370	310	4978	Leo P Senecal Apartments	8-12 Elcon Drive - 14	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
371	311	4985	Leo P Senecal Apartments	48-52 Elmer Drive - 42	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
372	312	4928	MET - JFK Village	21-27 Larchwood Road	Methuen	4	Colombia Gas	4150	4150	0	124939	5185	1.25
373	313	4986	Leo P Senecal Apartments	32-36 Elmer Drive - 44	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
374	314	4929	MET - JFK Village	22-28 Kenwood Road	Methuen	4	Colombia Gas	3792	3792	0	114034	4324	1.14
375	315	4987	Leo P Senecal Apartments	327-331 Chicopee St - 48	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
376	316	4988	Leo P Senecal Apartments	321-325 Chicopee St - 49	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
377	317	4989	Leo P Senecal Apartments	31-35 Elmer Drive - 53	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
378	318	4990	Leo P Senecal Apartments	37-41 Elmer Drive - 54	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
379	319	4991	Leo P Senecal Apartments	48-52 Marshall Ave - 55	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
380	320	4992	Leo P Senecal Apartments	27-31 Elcon Drive - 9	Chicopee	3	Colombia Gas	2550	2550	790	104000	2652	1.04
381	321	4993	Leo P Senecal Apartments	15-21 ELCON DRIVE - 10	Chicopee	4	Colombia Gas	3800	3800	0	104000	2652	1.04
382	322	4994	Leo P Senecal Apartments	654-660 Meadow Street	Chicopee	4	Colombia Gas	3800	3800	0	104000	2652	1.04
383	323	4996	Leo P Senecal Apartments	198-204 MEETINGHOUSE ROAD - 2	Chicopee	4	Colombia Gas	3800	3800	0	104000	2652	1.04
384	324	4995	Leo P Senecal Apartments	46-52 ELCON DRIVE - 18	Chicopee	4	Colombia Gas	3800	3800	0	104000	2652	1.04
385	325	5024	Holbrook Drive	1 HOLBROOK DRIVE Admin/Communit	Holbrook	1	Colombia Gas	2660	2660	140662	8360	3742	1.41
386	326	5736	SPR - Duggan	45-51 LAYZON BROS RD	Springfield	4	Colombia Gas	2240	2240	0	114691	2569	1.15
387	327	5789	SPR - Duggan	11-17 LAYZON BROS RD	Springfield	4	Colombia Gas	3808	3808	0	118630	4517	1.19
388	328	5738	SPR - Duggan	20,22,24 ARTHUR PICARD CIRCLE	Springfield	3	Colombia Gas	2496	2496	0	119764	2989	1.20
389	329	5806	SPR - Robinson Gardens	67,69 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	1672	1672	0	120733	2019	1.21
390	330	5740	SPR - Duggan	27-31 LAYZON BROS RD	Springfield	3	Colombia Gas	2496	2496	0	126232	3151	1.26
391	331	5743	SPR - Duggan	60-66 LAYZON BROS RD	Springfield	4	Colombia Gas	3328	3328	0	127368	4239	1.27
392	332	5461	SPR - Duggan	55-59 LAYZON BROS RD	Springfield	3	Colombia Gas	2496	2496	0	134482	3357	1.34
393	333	5744	SPR - Duggan	113-119 LAYZON BROS RD	Springfield	4	Colombia Gas	3604	3604	0	141878	5113	1.42
394	334	5213	ATT - Scattered Site	67 and 69 Garden Street	Attleboro	2	Colombia Gas	2500	2500	0	25996	650	0.26
395	335	5390	Lincoln Park	Lincoln Park Community Building	Scituate	1	Colombia Gas	1544	1544	0	75105	1160	0.75
396	336	5026	Holbrook Court	1 HOLBROOK COURT	Holbrook	10	Colombia Gas	7200	7200	2200	20539	1479	0.21
397	337	4325	BRAYTON CIRCLE	7-8 Brayton Circle	Canton	2	Colombia Gas	2034	2034	434	85628	1742	0.86
398	338	5384	Lincoln Park	LINCOLN PARK DRIVE - A	Scituate	4	Colombia Gas	2500	2500	0	75105	1878	0.75
399	339	5385	Lincoln Park	LINCOLN PARK DRIVE - B	Scituate	4	Colombia Gas	2500	2500	0	75105	1878	0.75
400	340	5386	Lincoln Park	LINCOLN PARK DRIVE - C	Scituate	4	Colombia Gas	2500	2500	0	75105	1878	0.75
401	341	5217	MET - JFK Village	13-19 Larchwood Rd - 12	Methuen	4	Colombia Gas	3726	3726	0	65065	2424	0.65
402	342	5162	ATT - Hillcrest Oaks	CARLON STREET - 11	Attleboro	4	Colombia Gas	3344	3344	0	74117	2478	0.74
403	343	5440	WHEELER PARK I	WHEELER PARK DRIVE - 1	Scituate	6	Colombia Gas	2884	2884	N/A	72087	2079	0.72
404	344	5191	AND - Chestnut Court	D1 Memorial Circle	Andover	4	Colombia Gas	3264	3264	0	78567	2564	0.79
405	345	5444	WHEELER PARK I	WHEELER PARK DRIVE - 2	Scituate	8	Colombia Gas	4424	4424	N/A	72107	3190	0.72
406	346	5192	AND - Chestnut Court	D2 Memorial Circle	Andover	4	Colombia Gas	3264	3264	0	78567	2564	0.79
407	347	5456	WHEELER PARK I	WHEELER PARK DRIVE - 3	Scituate	8	Colombia Gas	5976	5976	N/A	34789	2079	0.35
408	348	5193	AND - Chestnut Court	D3 Memorial Circle	Andover	4	Colombia Gas	3264	3264	0	78567	2564	0.79
409	349	5442	WHEELER PARK I	WHEELER PARK DRIVE - 4	Scituate	6	Colombia Gas	2884	2884	N/A	72087	2079	0.72
410	350	5186	AND - Chestnut Court	C1 Memorial Circle	Andover	4	Colombia Gas	3456	3456	0	78567	2715	0.79
411	351	5445	WHEELER PARK I	WHEELER PARK DRIVE - 5	Scituate	8	Colombia Gas	4424	4424	N/A	72107	3190	0.72
412	352	5187	AND - Chestnut Court	C2 Memorial Circle	Andover	4	Colombia Gas	3456	3456	0	78567	2715	0.79
413	353	5443	WHEELER PARK I	WHEELER PARK DRIVE - 6	Scituate	6	Colombia Gas	2884	2884	N/A	72087	2079	0.72
414	354	5188	AND - Chestnut Court	C3 Memorial Circle	Andover	4	Colombia Gas	3456	3456	0	78567	2715	0.79
415	355	5446	WHEELER PARK I	Community Building	Scituate	1	Colombia Gas	1300	1300	N/A	72077	937	0.72
416	356	5189	AND - Chestnut Court	C4 Memorial Circle	Andover	4	Colombia Gas	3456	3456	0	78567	2715	0.79
417	357	5440	WHEELER PARK II	WHEELER PARK DRIVE - 1	Scituate	8	Colombia Gas	5976	5976	N/A	72105	4309	0.72
418	358	5190	AND - Chestnut Court	C5 Memorial Circle	Andover	4	Colombia Gas	3456	3456	0	78567	2715	0.79
419	359	5454	WHEELER PARK II	WHEELER PARK DRIVE - 10	Scituate	8	Colombia Gas	5976	5976	N/A	72105	4309	0.72
420	360	5165	ATT - Hillcrest Oaks	HANISCH ROAD - 14	Attleboro	4	Colombia Gas	3680	3680	0	74117	2728	0.74
421	361	5447	WHEELER PARK II	WHEELER PARK DRIVE - 11	Scituate	6	Colombia Gas	5016	5016	N/A	72109	3617	0.72
422	362	5387	Lincoln Park	LINCOLN PARK DRIVE - D	Scituate	4	Colombia Gas	3750	3750	0	75105	2816	0.75
423	363	5455	WHEELER PARK II	WHEELER PARK DRIVE - 2	Scituate	8	Colombia Gas	5976	5976	N/A	72105	4309	0.72
424	364	5388	Lincoln Park	LINCOLN PARK DRIVE - E	Scituate	4	Colombia Gas	3750	3750	0	75105	2816	0.75
425	365	5456	WHEELER PARK II	WHEELER PARK DRIVE - 3	Scituate	8	Colombia Gas	5976	5976	N/A	72105	4309	0.72
426	366	5167	ATT - Hillcrest Oaks	CARLON STREET - 13	Attleboro	5	Colombia Gas	4932	4932	0	74117	3655	0.74
427	367	5442	WHEELER PARK II	WHEELER PARK DRIVE - 4	Scituate	6	Colombia Gas	5016	5016	N/A	72109	3617	0.72
428	368	5168	ATT - Hillcrest Oaks	SNELL STREET - 12	Attleboro	6	Colombia Gas	5140	5140	0	74117	3810	0.74
429	369	5449	WHEELER PARK II	WHEELER PARK DRIVE - 5	Scituate	6	Colombia Gas	5016	5016	N/A	72109	3617	0.72
430	370	5169	ATT - Hillcrest Oaks	CARLON ST. - 10	Attleboro	6	Colombia Gas	5544	5544	0	74117	4109	0.74
431	371	5450	WHEELER PARK II	WHEELER PARK DRIVE - 6	Scituate	6	Colombia Gas	5016	5016	N/A	72109	3617	0.72
432	372	5170	ATT - Hillcrest Oaks	SOUTH AVE. - 9	Attleboro	6	Colombia Gas	5544	5544	0	74117	4109	0.74
433	373	5171	ATT - Hillcrest Oaks	SOUTH AVE. - 6	Attleboro	8	Colombia Gas	5670	5670	0	74117	4202	0.74
434	374	5172	ATT - Hillcrest Oaks	CARLON ST - 1	Attleboro	6	Colombia Gas	6300	6300	0	74117	4669	0.74
435	375	5175	ATT - Hillcrest Oaks	CARLON ST - 4	Attleboro	6	Colombia Gas	6300	6300	0	74117	4669	0.74
436	376	5174	ATT - Hillcrest Oaks	HILLCREST DR - 3	Attleboro	6	Colombia Gas	6300	6300	0	74117	4669	0.74
437	377	5173	ATT - Hillcrest Oaks	SNELL ST - 2	Attleboro	6	Colombia Gas	6300	6300	0	74117	4669	0.74
438	378	5053	11 Bradford	11 Bradford St	Lawrence	5	Colombia Gas	5167	3618	1549	146351	5295	1.46
439	379	5054	41 Berkeley	41 Berkleley	Lawrence	39	Colombia Gas	32600	32600	1700	53145	17325	0.53
440	380	5195	AND - Chestnut Court	F1 Memorial Court	Andover	6	Colombia Gas	8036	8036	0	78470	6306	0.78
441	381	5196	AND - Chestnut Court	F2 Memorial Circle	Andover	6	Colombia Gas	8036	8036	0	78470	6306	0.78
442	382	5197	AND - Chestnut Court	G1 Memorial Circle	Andover	6	Colombia Gas	9910	9910	0	78470	7776	0.78
443	383	5185	ATT - Hillcrest Oaks	CARLON ST - 5	Attleboro	3	Colombia Gas	9622	9622	6622	74340	7153	0.74
444	384	5184	ATT - Hillcrest Oaks	CARLON STREET - 8	Attleboro	8	Colombia Gas	7402	7402	0	74340	5503	0.74
445	385	5182	ATT - Hillcrest Oaks	HILLCREST DRIVE - 15	Attleboro	8	Colombia Gas	7204	7204	0	74340	5355	0.74
446	386	5183	ATT - Hillcrest Oaks	SOUTH AVE. - 7	Attleboro	8	Colombia Gas	7402	7402	0	74340	5503	0.74
447	387	2679	FRN - Theron Metcalf School	Winter Street	Franklin	26	Colombia Gas	21141	21141	8141	47811	10108	0.48
448	388	5113	Ramblewood Apts	189 Longmeadow Drive	Holbrook	31	Colombia Gas	20567	20567	2000	73212	15057	0.73
449	389	5849	Reed Village	100-104 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	87202	2485	0.87
450	390	5844	Reed Village	110-112 LIONEL BENOIT RD	Springfield	2	Colombia Gas	1269	1269	0	557280	7072	5.57
451	391	5850	Reed Village	13-15-17 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	107660	3068	1.08
452	392	5852	Reed Village	30 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	109532	3122	1.10
453	393	5853	Reed Village	32 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	113142	3225	1.13
454	394	5857	Reed Village	36 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	97430	2777	0.97
455	395	5858	Reed Village	38 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	102882	2932	1.03
456	396	5862	Reed Village	42 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	101019	2879	1.01
457	397	5863	Reed Village	46-48-50 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	96250	2743	0.96
458	398	5864	Reed Village	49 ASTER ST	Springfield	3	Colombia Gas	2850	2850	0	211025	6014	2.11
459	399	5882	Reed Village	50-54 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2950	2950	0	85035	2509	0.85
460	400	5867	Reed Village	54 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	91252	2601	0.91
461	401	5869	Reed Village	569-571-573 BAY ST	Springfield	3	Colombia Gas	2850	2850	0	115334	3287	1.15
462	402	5872	Reed Village	609-611-613 BAY ST	Springfield	3	Colombia Gas	2850	2850	0	88864	2533	0.89
463	403	5873	Reed Village	62-64-66-68 EDMUND WYNNE CIRCL	Springfield	3	Colombia Gas	2850	2850	0	128147	3652	1.28
464	404	5874	Reed Village	66-70 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	108008	3078	1.08
465	405	5885	Reed Village	76-82 EDMUND WYNNE CIRCLE	Springfield	4	Colombia Gas	3850	3850	0	107095	4123	1.07
466	406	5879	Reed Village	86 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	90302	2574	0.90
467	407	5890	Reed Village	9 & 17 ASTER ST/615-617 BAY ST	Springfield	10	Colombia Gas	8550	8550	0	85268	7290	0.85
468	408	5846	Reed Village	92-94 LIONEL BENOIT RD	Springfield	2	Colombia Gas	1269	1269	0	484547	6149	4.85
469	409	5389	SCI - Lincoln Park	LINCOLN PARK DRIVE - F	Scituate	10	Colombia Gas	10200	10200	3200	75737	7725	0.76

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total Cond ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
470	410	5457	SCI - Wheeler Park	Wheeler Park II - 7	Scituate	8	Colombia Gas	5976	5976	0	72174	4313	0.72
471	411	5451	SCI - Wheeler Park	Wheeler Park II - 8	Scituate	6	Colombia Gas	5016	5016	0	72174	3620	0.72
472	412	5458	SCI - Wheeler Park	Wheeler Park II - 9	Scituate	8	Colombia Gas	5976	5976	0	72174	4313	0.72
473	413	5459	SCI - Wheeler Park	Wheeler Park II - Community	Scituate	1	Colombia Gas	1800	1800	0	72174	1299	0.72
474	414	5812	SPR - Robinson Gardens	10-16 WILLIAM SANDS JR	Springfield	4	Colombia Gas	3022	3022	0	126497	3823	1.26
475	415	5813	SPR - Robinson Gardens	102-108 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	138491	4185	1.38
476	416	5804	SPR - Robinson Gardens	107-109 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	1672	1672	0	138478	2315	1.38
477	417	5823	SPR - Robinson Gardens	119-128 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3304	3304	0	102598	3390	1.03
478	418	5808	SPR - Robinson Gardens	134-138 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	2546	2546	0	80083	2039	0.80
479	419	5826	SPR - Robinson Gardens	1454-1460 BAY	Springfield	4	Colombia Gas	3344	3344	0	104306	3488	1.04
480	420	5814	SPR - Robinson Gardens	17-23 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	129932	3927	1.30
481	421	5827	SPR - Robinson Gardens	27-33 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3344	3344	0	83190	2782	0.83
482	422	5815	SPR - Robinson Gardens	27-33 WILLIAM SANDS JR	Springfield	4	Colombia Gas	3022	3022	0	131009	3959	1.31
483	423	5809	SPR - Robinson Gardens	28-32 WILLIAM SANDS JR	Springfield	2	Colombia Gas	2546	2546	0	75198	1915	0.75
484	424	5833	SPR - Robinson Gardens	28-34 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	114390	3457	1.14
485	425	5816	SPR - Robinson Gardens	322-328 Berkshire Ave	Springfield	4	Colombia Gas	3022	3022	0	58901	1780	0.59
486	426	5810	SPR - Robinson Gardens	334-338 BERKSHIRE AVE	Springfield	2	Colombia Gas	2546	2546	0	112456	2863	1.12
487	427	5818	SPR - Robinson Gardens	372-378 BERKSHIRE AVE	Springfield	4	Colombia Gas	3022	3022	0	132615	4008	1.33
488	428	5824	SPR - Robinson Gardens	40-46 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	2546	2546	0	143496	3653	1.43
489	429	5811	SPR - Robinson Gardens	41-45 WILLIAM SAND JR	Springfield	2	Colombia Gas	2546	2546	0	84800	2159	0.85
490	430	5819	SPR - Robinson Gardens	51-57 WILLIAM SANDS JR	Springfield	4	Colombia Gas	3022	3022	0	159863	4831	1.60
491	431	5820	SPR - Robinson Gardens	57-63 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	108980	3293	1.09
492	432	5829	SPR - Robinson Gardens	7-13 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3344	3344	0	122871	4109	1.23
493	433	5825	SPR - Robinson Gardens	71-77 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3304	3304	0	107787	3561	1.08
494	434	5807	SPR - Robinson Gardens	79-81 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	1672	1672	0	117146	1959	1.17
495	435	5821	SPR - Robinson Gardens	9-15 WILLIAM SANDS JR	Springfield	4	Colombia Gas	3022	3022	0	124881	3774	1.25
496	436	5822	SPR - Robinson Gardens	99-105 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	119760	3619	1.20
497	437	6192	SPR - Barrier Free	176 Keddy St	Springfield	1	Colombia Gas	1081	1081	0	85598	925	0.86
498	438	6187	SPR - Barrier Free	19 Emerald Road	Springfield	1	Colombia Gas	1081	1081	0	79078	855	0.79
499	439	6193	SPR - Barrier Free	24 Bog Hollow	Springfield	1	Colombia Gas	1081	1081	0	76854	831	0.77
500	440	6188	SPR - Barrier Free	40 Leatherleaf Drive	Springfield	1	Colombia Gas	1081	1081	0	87819	949	0.88
501	441	6189	SPR - Barrier Free	44 Leatherleaf Circle	Springfield	1	Colombia Gas	1081	1081	0	120231	1300	1.20
502	442	6190	SPR - Barrier Free	51 Leatherleaf Circle	Springfield	1	Colombia Gas	1081	1081	0	73016	789	0.73
503	443	6186	SPR - Barrier Free	662 Bradley Road	Springfield	1	Colombia Gas	1081	1081	0	127373	1377	1.27
504	444	6191	SPR - Barrier Free	95 Leatherleaf Drive	Springfield	1	Colombia Gas	1081	1081	0	93217	1008	0.93
505	445	6163	SPR - Carpe Diem	110-118 SHAINE CIRCLE	Springfield	5	Colombia Gas	2567	2567	0	92008	2362	0.92
506	446	6170	SPR - Carpe Diem	119-131 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
507	447	6165	SPR - Carpe Diem	1228-1240 CAREW STREET	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
508	448	6166	SPR - Carpe Diem	15-27 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
509	449	6171	SPR - Carpe Diem	31-43 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
510	450	6167	SPR - Carpe Diem	47-59 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
511	451	6172	SPR - Carpe Diem	56-68 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
512	452	6168	SPR - Carpe Diem	73-85 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
513	453	6173	SPR - Carpe Diem	74-86 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
514	454	6164	SPR - Carpe Diem	92-104 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
515	455	6169	SPR - Carpe Diem	99-111 SHAINE CIRCLE	Springfield	7	Colombia Gas	2990	2990	0	92008	2751	0.92
516	456	6162	SPR - Carpe Diem	SHAINE CIRCLE - Community	Springfield	1	Colombia Gas	1200	1200	0	92008	1104	0.92
517	457	6149	SPR - Duggan	11-17 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	3808	3808	0	121461	4625	1.21
518	458	5745	SPR - Duggan	121-127 LAYZON BROS RD	Springfield	4	Colombia Gas	3604	3604	0	116553	4201	1.17
519	459	5732	SPR - Duggan	134-136 LAYZON BROS RD	Springfield	2	Colombia Gas	1870	1870	0	130897	2448	1.31
520	460	5742	SPR - Duggan	137-143 LAYZON BROS RD	Springfield	3	Colombia Gas	3300	3300	0	112998	3729	1.13
521	461	5790	SPR - Duggan	14-20 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	3808	3808	0	116033	4419	1.16
522	462	5749	SPR - Duggan	1-7 ARTHUR PICARD CIRCLE	Springfield	4	Colombia Gas	3604	3604	0	116564	4201	1.17
523	463	5906	SPR - Duggan	19-25 LAYZON BROS RD	Springfield	4	Colombia Gas	3808	3808	0	100626	3832	1.01
524	464	5908	SPR - Duggan	21-27 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	3808	3808	0	124665	4747	1.25
525	465	6150	SPR - Duggan	30-36 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	4400	4400	0	94288	4149	0.94
526	466	6151	SPR - Duggan	31-37 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	3808	3808	0	107893	4109	1.08
527	467	5460	SPR - Duggan	399-401 GOODWIN ST	Springfield	2	Colombia Gas	1904	1904	0	99501	1894	1.00
528	468	5731	SPR - Duggan	409-411 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	107183	1784	1.07
529	469	5788	SPR - Duggan	419-425 GOODWIN ST	Springfield	4	Colombia Gas	3808	3808	0	117821	4487	1.18
530	470	5787	SPR - Duggan	435-441 GOODWIN ST	Springfield	4	Colombia Gas	3808	3808	0	133250	5074	1.33
531	471	5730	SPR - Duggan	451-453 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	113043	1881	1.13
532	472	5729	SPR - Duggan	455-457 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	569114	9470	5.69
533	473	5728	SPR - Duggan	467-469 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	96447	1605	0.96
534	474	5727	SPR - Duggan	471-473 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	70710	1177	0.71
535	475	5726	SPR - Duggan	483-485 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	107968	1797	1.08
536	476	5750	SPR - Duggan	48-54 LAYZON BROS RD	Springfield	4	Colombia Gas	3604	3604	0	120906	4357	1.21
537	477	5725	SPR - Duggan	487-489 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	117565	1956	1.18
538	478	6152	SPR - Duggan	49-55 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	3808	3808	0	122969	4683	1.23
539	479	5724	SPR - Duggan	499-501 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	103083	1715	1.03
540	480	5722	SPR - Duggan	503-505 GOODWIN ST	Springfield	2	Colombia Gas	1664	1664	0	124236	2067	1.24
541	481	5733	SPR - Duggan	6-8 RODNEY SMITH CIRCLE	Springfield	2	Colombia Gas	1870	1870	0	101528	1899	1.02
542	482	5907	SPR - Duggan	86-92 LAYZON BROS RD	Springfield	4	Colombia Gas	3808	3808	0	102003	3884	1.02
543	483	6180	SPR - Harry Hogan	138 ST JAMES AVE	Springfield	8	Colombia Gas	6720	6720	2020	65390	4394	0.65
544	484	6183	SPR - Harry Hogan	142 ST JAMES AVE	Springfield	8	Colombia Gas	4480	4480	1380	65390	2929	0.65
545	485	6182	SPR - Harry Hogan	63 FLORIDA ST	Springfield	8	Colombia Gas	4480	4480	1380	65390	2929	0.65
546	486	6181	SPR - Harry Hogan	71 FLORIDA ST	Springfield	8	Colombia Gas	4480	4480	1380	65390	2929	0.65
547	487	6157	SPR - Robinson Gardens	139-141 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	1672	1672	0	152203	2545	1.52
548	488	6153	SPR - Robinson Gardens	19-23 WILLIAM SANDS JR	Springfield	2	Colombia Gas	2546	2546	0	105920	2697	1.06
549	489	6158	SPR - Robinson Gardens	344-350 BERKSHIRE AVE	Springfield	4	Colombia Gas	3022	3022	0	166784	5040	1.67
550	490	6154	SPR - Robinson Gardens	38-40 WILLIAM SANDS JR	Springfield	2	Colombia Gas	1672	1672	0	111791	1869	1.12
551	491	6156	SPR - Robinson Gardens	8-14 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	138434	4183	1.38
552	492	6155	SPR - Robinson Gardens	85-91 ROBERT DYER CIRCLE	Springfield	4	Colombia Gas	3022	3022	0	110869	3350	1.11
553	493	6265	MET - JFK Village	106 - 112 Oakside Avenue	Methuen	4	Colombia Gas	3726	3726	0	67264	2506	0.67
554	494	6268	MET - JFK Village	11 - 17 Tudor Street - 4	Methuen	4	Colombia Gas	3792	3792	0	62789	2381	0.63
555	495	6271	MET - JFK Village	114 - 120 Oakside Avenue	Methuen	4	Colombia Gas	4150	4150	0	64130	2661	0.64
556	496	6274	MET - JFK Village	14 - 20 Kenwood Road	Methuen	4	Colombia Gas	4738	4738	0	58713	2782	0.59
557	497	6270	MET - JFK Village	19 - 25 Tudor Street	Methuen	4	Colombia Gas	4150	4150	0	47383	1966	0.47
558	498	6264	MET - JFK Village	19 & 23 Pinewood Rd; 122 & 124 Oaksid	Methuen	4	Colombia Gas	3234	3234	0	65795	2128	0.66
559	499	6263	MET - JFK Village	26-30-34-38 Larchwood Rd	Methuen	4	Colombia Gas	3234	3234	0	60752	1965	0.61
560	500	6269	MET - JFK Village	29 - 35 Larchwood Road	Methuen	4	Colombia Gas	3792	3792	0	74003	2806	0.74
561	501	6272	MET - JFK Village	30 - 36 Kenwood Avenue	Methuen	4	Colombia Gas	4150	4150	0	51854	2152	0.52
562	502	6267	MET - JFK Village	6 - 12 Kenwood Road	Methuen	4	Colombia Gas	3792	3792	0	63158	2395	0.63
563	503	6176	SPR - Reed Village	106 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	11088	316	0.11

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
564	504	6178	SPR - Reed Village	108 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	11088	316	0.11
565	505	6211	SPR - Reed Village	39 ASTER ST	Springfield	3	Colombia Gas	2850	2850	0	100556	2866	1.01
566	506	5860	SPR - Reed Village	40 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	93332	2660	0.93
567	507	6174	SPR - Reed Village	49 LIONEL RD - COMMUNITY	Springfield	1	Colombia Gas	2000	2000	0	11088	222	0.11
568	508	5865	SPR - Reed Village	5 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	143602	4093	1.44
569	509	5866	SPR - Reed Village	52 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	121202	3454	1.21
570	510	5868	SPR - Reed Village	557 BAY ST	Springfield	3	Colombia Gas	2850	2850	0	189679	5406	1.90
571	511	5886	SPR - Reed Village	577-579 BAY ST	Springfield	4	Colombia Gas	5700	5700	0	95921	5467	0.96
572	512	5870	SPR - Reed Village	58 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	96940	2763	0.97
573	513	5871	SPR - Reed Village	581-583-585 BAY ST	Springfield	3	Colombia Gas	2850	2850	0	11088	316	0.11
574	514	5887	SPR - Reed Village	587-589 BAY ST	Springfield	4	Colombia Gas	5700	5700	0	101332	5776	1.01
575	515	5889	SPR - Reed Village	601-603-605-607 BAY ST	Springfield	10	Colombia Gas	8550	8550	0	76210	6516	0.76
576	516	6160	SPR - Reed Village	64 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	207689	5919	2.08
577	517	5876	SPR - Reed Village	70-74 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	108606	3095	1.09
578	518	6175	SPR - Reed Village	72 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	11088	316	0.11
579	519	5877	SPR - Reed Village	74 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	221110	6302	2.21
580	520	5845	SPR - Reed Village	82-84 LIONEL BENOIT RD	Springfield	2	Colombia Gas	1269	1269	0	107610	1366	1.08
581	521	6177	SPR - Reed Village	98 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	11088	316	0.11
582	522	5828	SPR - Robinson Gardens	42-48 WILLIAM SANDS JR	Springfield	4	Colombia Gas	3344	3344	0	99729	3335	1.00
583	523	6388	SPR - Scattered Site	122-124 CEDAR ST	Springfield	2	Colombia Gas	1632	1632	0	117969	1925	1.18
584	524	6386	SPR - Scattered Site	129-131 King St	Springfield	2	Colombia Gas	1632	1632	0	125535	2049	1.26
585	525	6390	SPR - Scattered Site	135-137 FLORENCE ST	Springfield	2	Colombia Gas	1632	1632	0	128199	2092	1.28
586	526	6387	SPR - Scattered Site	137-139 King St.	Springfield	2	Colombia Gas	1632	1632	0	168863	2756	1.69
587	527	6383	SPR - Scattered Site	223-225 HANCOCK	Springfield	2	Colombia Gas	1632	1632	0	98524	1608	0.99
588	528	6391	SPR - Scattered Site	36-38 GROSVENOR ST	Springfield	2	Colombia Gas	1632	1632	0	95623	1561	0.96
589	529	6196	SPR - Scattered Site	39 - 41 Orchard	Springfield	2	Colombia Gas	1800	1800	0	114959	2069	1.15
590	530	6392	SPR - Scattered Site	42-44 GROSVENOR ST	Springfield	2	Colombia Gas	1632	1632	0	86861	1418	0.87
591	531	6197	SPR - Scattered Site	46 - 48 Orchard	Springfield	2	Colombia Gas	1800	1800	0	100107	1802	1.00
592	532	6194	SPR - Scattered Site	49 - 51 Allendale	Springfield	2	Colombia Gas	1800	1800	0	116341	2094	1.16
593	533	6393	SPR - Scattered Site	51-53 GROSVENOR ST	Springfield	2	Colombia Gas	1632	1632	0	116750	1905	1.17
594	534	6394	SPR - Scattered Site	57-59 GROSVENOR ST	Springfield	2	Colombia Gas	1632	1632	0	121871	1989	1.22
595	535	6195	SPR - Scattered Site	58 - 60 Lowell	Springfield	2	Colombia Gas	1800	1800	0	94185	1695	0.94
596	536	6382	SPR - Scattered Site	59-61 JAMES ST	Springfield	2	Colombia Gas	1632	1632	0	140517	2293	1.41
597	537	6389	SPR - Scattered Site	60-62 Clifton	Springfield	2	Colombia Gas	1632	1632	0	108332	1768	1.08
598	538	6379	SPR - Scattered Site	67-69 JAMES ST	Springfield	2	Colombia Gas	1632	1632	0	102165	1667	1.02
599	539	6384	SPR - Scattered Site	75-77 King St	Springfield	2	Colombia Gas	1632	1632	0	121504	1983	1.22
600	540	6380	SPR - Scattered Site	80-82 PENDLETON AVE	Springfield	2	Colombia Gas	1632	1632	0	162600	2654	1.63
601	541	6385	SPR - Scattered Site	83-85 King St	Springfield	2	Colombia Gas	1632	1632	0	105180	1717	1.05
602	542		Manilla	72-74 Ralph	Springfield	2	Colombia Gas	899	899	N/A	191769	1724	1.92
603	543		Manilla	76-78 Ralph	Springfield	2	Colombia Gas	1085	1085	N/A	168387	1827	1.68
604	544		Manilla	13-15 Manilla	Springfield	2	Colombia Gas	1320	1320	N/A	192500	2541	1.93
605	545		Manilla	16-18 Manilla	Springfield	2	Colombia Gas	840	840	N/A	192500	1617	1.93
606	546		Manilla	17-19 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	193725	1976	1.94
607	547		Manilla	22 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	87647	894	0.88
608	548		Manilla	23-25 Manilla	Springfield	2	Colombia Gas	840	840	N/A	192262	1615	1.92
609	549		Manilla	26-28 Manilla	Springfield	2	Colombia Gas	1320	1320	N/A	171364	2262	1.71
610	550		Manilla	27-29 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	149314	1523	1.49
611	551		Manilla	32-34 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	117451	1198	1.17
612	552		Manilla	33-35 Manilla	Springfield	2	Colombia Gas	1320	1320	N/A	157045	2073	1.57
613	553		Manilla	36-38 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	152745	1558	1.53
614	554		Manilla	37-39 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	140686	1435	1.41
615	555		Manilla	42-44 Manilla	Springfield	2	Colombia Gas	1320	1320	N/A	122652	1619	1.23
616	556		Manilla	43-45 Manilla	Springfield	2	Colombia Gas	843	843	N/A	157651	1329	1.58
617	557		Manilla	47-49 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	216471	2208	2.16
618	558		Manilla	53-55 Manilla	Springfield	2	Colombia Gas	1020	1020	N/A	134608	1373	1.35
619	559	7018	CHI - Leo P. Senecal Apartments	Office/Maintenance Building	Chicopee	1	Colombia Gas	20000	20000	0	5159	1032	0.05
620	560	6720	RAY - Pinewood Terrace	75 MILL ST - 4	Raynham	12	Colombia Gas	15006	15006	4206	21804	3272	0.22
621	561	6743	RAY - Pinewood Terrace	75 MILL ST - 3	Raynham	6	Colombia Gas	6770	6770	1970	24247	1642	0.24
622	562	6745	RAY - Pinewood Terrace	75 MILL ST - 6	Raynham	6	Colombia Gas	6770	6770	1970	24812	1680	0.25
623	563	6744	RAY - Pinewood Terrace	75 MILL ST - 5	Raynham	6	Colombia Gas	6770	6770	1970	24838	1682	0.25
624	564	6746	RAY - Pinewood Terrace	75 MILL ST - 7	Raynham	6	Colombia Gas	6770	6770	1970	25316	1714	0.25
625	565	6748	RAY - Pinewood Terrace	75 MILL ST - 9	Raynham	6	Colombia Gas	6770	6770	1970	25577	1732	0.26
626	566	7072	MAN - Park Court	15 PARK ST	Mansfield	42	Colombia Gas	36565	36565	14400	25819	12393	0.34
627	567	6742	RAY - Pinewood Terrace	75 MILL ST - 2	Raynham	6	Colombia Gas	6770	6770	1970	25958	1757	0.26
628	568	6730	RAY - Pinewood Terrace	75 MILL ST - 1	Raynham	8	Colombia Gas	8775	8775	1575	29250	2567	0.29
629	569	3318	HRCA Senior Housing, Inc.	640 North Main Street	Randolph	160	Colombia Gas	126216	126216	25243	31168	54544	0.43
630	570	6747	RAY - Pinewood Terrace	75 MILL ST - 8	Raynham	6	Colombia Gas	6770	6770	1970	31899	2160	0.32
631	571	1950	Prence Grant Apartments	780 Webster Street Bldg D	Marshfield	5	Colombia Gas	3250	3250	0	45651	1484	0.46
632	572	1952	Prence Grant Apartments	40 Parsonage Street Bldg F	Marshfield	4	Colombia Gas	2600	2600	0	46978	1221	0.47
633	573	5101	Holbrook Apts	122 Longmeadow Drive	Holbrook	29	Colombia Gas	19267	19267	1800	51118	9849	0.51
634	574	6982	CHI - Leo P. Senecal Apartments	116-122 ELCON DRIVE - 25	Chicopee	4	Colombia Gas	3800	3800	0	55372	2104	0.55
635	575	7016	CHI - Leo P. Senecal Apartments	Boiler Room - 63	Chicopee	1	Colombia Gas	1836	1836	0	55372	1017	0.55
636	576	1953	Prence Grant Apartments	40 Parsonage Street Bldg G	Marshfield	4	Colombia Gas	2750	2750	150	56731	1560	0.57
637	577	5099	Holbrook Apts	100 Longmeadow Drive	Holbrook	29	Colombia Gas	19267	19267	1800	56900	10963	0.57
638	578	5102	Holbrook Apts	139 Longmeadow Drive	Holbrook	29	Colombia Gas	19267	19267	1800	57964	11168	0.58
639	579	1951	Prence Grant Apartments	780 Webster Street Bldg E	Marshfield	3	Colombia Gas	2025	2025	0	59844	1212	0.60
640	580	5103	Holbrook Apts	144 Longmeadow Drive	Holbrook	29	Colombia Gas	19267	19267	1800	60954	11744	0.61
641	581	7017	CHI - Leo P. Senecal Apartments	Community Building/Boys & Girls Club	Chicopee	1	Colombia Gas	3000	3000	0	61547	1846	0.62
642	582	5100	Holbrook Apts	121 Longmeadow Drive	Holbrook	29	Colombia Gas	19267	19267	1800	64557	12438	0.65
643	583	5106	Ramblewood Apts	166 Longmeadow Drive	Holbrook	31	Colombia Gas	20567	20567	2000	65487	13469	0.65
644	584	5108	Ramblewood Apts	176 Longmeadow Drive	Holbrook	31	Colombia Gas	20567	20567	2000	65602	13492	0.66
645	585	5105	Ramblewood Apts	156 Longmeadow Drive	Holbrook	31	Colombia Gas	20567	20567	2000	65861	13546	0.66
646	586	6731	RAY - Pinewood Terrace	75 MILL ST - Community	Raynham	1	Colombia Gas	2400	2400	0	73196	1757	0.73
647	587	3344	CHI - Edward J. Bury Apartments	355 - 359 EAST MAIN ST, 5 BENOIT CI	Chicopee	12	Colombia Gas	8220	8220	2220	78083	6418	0.78
648	588	5201	ATT - Scattered Site	9 and 11 Ellis St	Attleboro	2	Colombia Gas	2700	2700	0	80564	2175	0.81
649	589	7034	SPR - Duggan	27-33 Arthur Picard Circle	Springfield	4	Colombia Gas	4400	4400	0	82360	3624	0.82
650	590	5884	SPR - Reed Village	21,23,25,27 ASTER ST	Springfield	4	Colombia Gas	3850	3850	0	83193	3203	0.83
651	591	6159	SPR - Reed Village	593,595,597 BAY ST	Springfield	3	Colombia Gas	2850	2850	0	83384	2376	0.83
652	592	6208	SPR - Reed Village	5,9 EDGEWOOD ST/527 BAY ST	Springfield	3	Colombia Gas	2850	2850	0	88867	2533	0.89
653	593	3361	CHI - Valley View	VALLEY VIEW - Community	Chicopee	1	Colombia Gas	6400	6400	0	93940	6012	0.94
654	594	5851	SPR - Reed Village	14,16,18 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	94038	2680	0.94
655	595	5739	SPR - Duggan	10-14 LAYZON BROS RD	Springfield	3	Colombia Gas	2496	2496	0	94369	2355	0.94
656	596	7036	SPR - Duggan	48-54 RODNEY SMITH CIRCLE	Springfield	4	Colombia Gas	4400	4400	0	94516	4159	0.95
657	597	5737	SPR - Duggan	14,16,18 ARTHUR PICARD CIRCLE	Springfield	3	Colombia Gas	2496	2496	0	95840	2392	0.96

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
658	598	5856	SPR - Reed Village	34,36,38 LIONEL BENOIT RD	Springfield	3	Colombia Gas	2850	2850	0	95886	2733	0.96
659	599	6640	Kenwyn	413-415 Belmont Avenue and 6 Kenwoo	Springfield	27	Colombia Gas	28000	21604	7009	96951	20945	0.97
660	600	7029	SPR - Duggan	124-130 LAYZON BROS RD	Springfield	4	Colombia Gas	4400	4400	0	97749	4301	0.98
661	601	5741	SPR - Duggan	36-40 ARTHUR PICARD CIRCLE	Springfield	3	Colombia Gas	3300	3300	0	99656	3289	1.00
662	602	7030	SPR - Duggan	2-4,10,12 ARTHUR PICARD CIRCLE	Springfield	4	Colombia Gas	4400	4400	0	103876	4571	1.04
663	603	5747	SPR - Duggan	17-23 ARTHUR PICARD CIRCLE	Springfield	4	Colombia Gas	3604	3604	0	105197	3791	1.05
664	604	5861	SPR - Reed Village	40,42,44 EDMUND WYNNE CIRCLE	Springfield	3	Colombia Gas	2850	2850	0	105214	2999	1.05
665	605	6986	CHI - Leo P. Senecal Apartments	100-102 1/2 MEETINGHOUSE ROAD -	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
666	606	7007	CHI - Leo P. Senecal Apartments	107-113 ELMER DRIVE - 58	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
667	607	7008	CHI - Leo P. Senecal Apartments	115-117 ELMER DRIVE - 59	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
668	608	6987	CHI - Leo P. Senecal Apartments	117-123 ELCON DRIVE - 3	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
669	609	6984	CHI - Leo P. Senecal Apartments	132-138 ELCON DRIVE - 27	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
670	610	6977	CHI - Leo P. Senecal Apartments	14-20 ELCON DRIVE - 15	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
671	611	7003	CHI - Leo P. Senecal Apartments	15-21 ELMER DRIVE - 51	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
672	612	6999	CHI - Leo P. Senecal Apartments	16-22 ELMER DRIVE - 46	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
673	613	6975	CHI - Leo P. Senecal Apartments	22-28 ELCON DRIVE - 16	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
674	614	6976	CHI - Leo P. Senecal Apartments	32-38 ELCON DRIVE - 17	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
675	615	6997	CHI - Leo P. Senecal Apartments	40-46 ELMER DRIVE - 43	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
676	616	7005	CHI - Leo P. Senecal Apartments	43-49 MARSHALL AVENUE - 56	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
677	617	7006	CHI - Leo P. Senecal Apartments	51-57 MARSHALL AVENUE - 57	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
678	618	7010	CHI - Leo P. Senecal Apartments	54-60 MEETINGHOUSE ROAD - 60	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
679	619	7012	CHI - Leo P. Senecal Apartments	59-65 ELCON DRIVE - 7	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
680	620	6978	CHI - Leo P. Senecal Apartments	64-70 ELCON DRIVE - 20	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
681	621	6980	CHI - Leo P. Senecal Apartments	86-92 ELCON DRIVE - 23	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
682	622	6989	CHI - Leo P. Senecal Apartments	90-92 1/2 MEETINGHOUSE ROAD - 31	Chicopee	4	Colombia Gas	3400	3400	680	105658	3592	1.06
683	623	6992	CHI - Leo P. Senecal Apartments	100-106 ELMER DRIVE - 35	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
684	624	6985	CHI - Leo P. Senecal Apartments	104-108 MEETINGHOUSE ROAD - 28	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
685	625	6981	CHI - Leo P. Senecal Apartments	106-112 ELCON DRIVE - 24	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
686	626	6991	CHI - Leo P. Senecal Apartments	114-120 ELMER DRIVE - 33	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
687	627	6983	CHI - Leo P. Senecal Apartments	124-130 ELCON DRIVE - 26	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
688	628	7004	CHI - Leo P. Senecal Apartments	23-29 ELMER DRIVE - 52	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
689	629	6998	CHI - Leo P. Senecal Apartments	24-30 ELMER DRIVE - 45	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
690	630	7014	CHI - Leo P. Senecal Apartments	33-39 ELCON DRIVE - 8	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
691	631	7011	CHI - Leo P. Senecal Apartments	44-50 MEETNGHOUSE ROAD - 61	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
692	632	6996	CHI - Leo P. Senecal Apartments	60-66 ELMER DRIVE - 40	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
693	633	7001	CHI - Leo P. Senecal Apartments	7-13 ELMER DRIVE - 50	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
694	634	6995	CHI - Leo P. Senecal Apartments	70-76 ELMER DRIVE - 39	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
695	635	7009	CHI - Leo P. Senecal Apartments	77-83 ELCON DRIVE - 6	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
696	636	6979	CHI - Leo P. Senecal Apartments	78-84 ELCON DRIVE - 22	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
697	637	7000	CHI - Leo P. Senecal Apartments	8-14 ELMER DRIVE - 47	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
698	638	6990	CHI - Leo P. Senecal Apartments	80-86 MEETINGHOUSE ROAD - 32	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
699	639	6994	CHI - Leo P. Senecal Apartments	84-90 ELMER DRIVE - 37	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
700	640	7002	CHI - Leo P. Senecal Apartments	89-95 ELCON DRIVE - 5	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
701	641	6993	CHI - Leo P. Senecal Apartments	92-98 ELMER DRIVE - 36	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
702	642	6988	CHI - Leo P. Senecal Apartments	94-98 MEETINGHOUSE ROAD - 30	Chicopee	4	Colombia Gas	3800	3800	760	105658	4015	1.06
703	643	5734	SPR - Duggan	20-22 LAYZON BROS RD	Springfield	2	Colombia Gas	1904	1904	0	108036	2057	1.08
704	644	5791	SPR - Duggan	110-116 LAYZON BROS RD	Springfield	4	Colombia Gas	3808	3808	0	108271	4123	1.08
705	645	7027	SPR - Duggan	33-43 LAYZON BROS RD	Springfield	6	Colombia Gas	4780	4780	0	109218	5221	1.09
706	646	5786	SPR - Duggan	3-9 LAYZON BROS. RD	Springfield	4	Colombia Gas	3808	3808	0	109333	4163	1.09
707	647	5746	SPR - Duggan	129-135 LAYZON BROS RD	Springfield	4	Colombia Gas	3604	3604	0	109815	3958	1.10
708	648	5805	SPR - Robinson Gardens	142,144 ROBERT DYER CIRCLE	Springfield	2	Colombia Gas	1672	1672	0	109819	1836	1.10
709	1	2726	Tewksbury Street	27 Tewksbury Street	Lexington	4	National Grid	2357	2356	1781	64404	1517	0.64
710	2	1245	The Bowditch School	82 Green Street	Jamaica Plain	50	National Grid	18500	18500	9900	115997	21460	1.16
711	3	1378	The Stearns	10 Temple Place	Boston	140	National Grid	120700	120700	40505	48574	58629	0.49
712	4	1632	TILL	11 Congress Avenue	Boston	23	National Grid	43138	43138	22503	34603	14927	0.35
713	5	2122	UE - Academy House	8) 22-46 Slayton Way (even); 26-36 We	Roxbury	23	National Grid	30720	30720	6500	64791	19904	0.65
714	6	2117	UE - Academy House	3) 72-98 Academy Terrace(even);10A-1	Roxbury	15	National Grid	26504	26504	4598	64791	17172	0.65
715	7	1312	UE - Amory Residences	10 Amory Street	Quincy	8	National Grid	10090	10090	3210	2395	242	0.02
716	8	1313	UE - Amory Residences	20 Amory Street	Quincy	47	National Grid	57290	56848	16055	2413	1372	0.02
717	9	1311	UE - Amory Residences	89-97 Amory Street	Quincy	9	National Grid	11530	11530	3165	15624	1801	0.16
718	10	1178	UE - Bancroft Apartments	1- 11 Bancroft Street	Boston	18	National Grid	22680	22680	8100	104973	23808	1.05
719	11	1181	UE - Bancroft Apartments	1871 Columbus Ave	Boston	6	National Grid	8610	8610	2550	112868	9718	1.13
720	12	1182	UE - Bancroft Apartments	51- 55 Forest Hill Street	Boston	9	National Grid	8915	8915	1625	115506	10297	1.16
721	13	1102	UE - Cleaves Court	5-17 Cleaves St	Boston	18	National Grid	21840	15840	6000	9005	1426	0.09
722	14	1105	UE - Cleaves Court	6-16 Cleaves St	Boston	18	National Grid	21986	15986	6000	176511	28217	1.77
723	15	935	UE - Dixwell Park	1 & 2 Candor Place and 309 Chestnut A	Boston	9	National Grid	15180	11805	6780	59261	6996	0.59
724	16	934	UE - Dixwell Park	189 Boylston Street	Boston	3	National Grid	4320	3320	1461	62300	2068	0.62
725	17	939	UE - Dixwell Park	21 & 23 Dixwell Street	Boston	6	National Grid	7800	4700	2460	66475	3124	0.66
726	18	933	UE - Dixwell Park	2 Brookside Avenue	Boston	3	National Grid	4320	3320	1410	72655	2412	0.73
727	19	940	UE - Dixwell Park	12- 20 Dixwell Street	Boston	12	National Grid	12090	7990	4274	169499	13543	1.69
728	20	1567	UE - Egleston Crossing	3033/3037 Washington Street	Boston	44	National Grid	47711	47711	9683	37734	18003	0.38
729	21	1566	UE - Egleston Crossing	3089-3095 Washington Street & 3-7 Bel	Boston	20	National Grid	19868	19868	4197	40607	8068	0.41
730	22	1431	UE - Harvard Hill	60 Hazelton St	Roxbury	15	National Grid	21459	21459	10009	47291	10148	0.47
731	23	1430	UE - Harvard Hill	70 Hazelton Street	Roxbury	8	National Grid	9024	9024	3024	49147	4435	0.49
732	24	1429	UE - Harvard Hill	436 Harvard St	Roxbury	14	National Grid	21585	19164	11111	62192	11918	0.62
733	25	1220	UE - JP Apartments	78-84 Stoughton St/96 Sumner St	Jamaica Plain	17	National Grid	18912	14331	7428	89300	12798	0.89
734	26	1221	UE - JP Apartments	9-15 Walk Hill St	Jamaica Plain	9	National Grid	13916	11247	5536	97502	10966	0.98
735	27	1217	UE - JP Apartments	3 Morse St	Jamaica Plain	9	National Grid	10664	8034	4820	101253	8135	1.01
736	28	1218	UE - JP Apartments	7 Morse St	Jamaica Plain	6	National Grid	10292	7719	3953	101709	7851	1.02
737	29	1219	UE - JP Apartments	48-56 School St	Jamaica Plain	14	National Grid	20221	14994	8297	108318	16241	1.08
738	30	1227	UE - JP Apartments	5-7 Woodside Ave	Jamaica Plain	6	National Grid	10120	7590	4036	110404	8380	1.10
739	31	1226	UE - JP Apartments	3316-3322 Washington St	Jamaica Plain	12	National Grid	17584	13185	7209	110429	14560	1.10
740	32	1224	UE - JP Apartments	3298-3300 Washington St	Jamaica Plain	6	National Grid	8944	6711	3803	122811	8242	1.23
741	33	1222	UE - JP Apartments	3294-3296 Washington St	Jamaica Plain	6	National Grid	8888	6666	3851	122866	8190	1.23
742	34	1225	UE - JP Apartments	3302-3304 Washington St	Jamaica Plain	6	National Grid	8968	6726	3871	122866	8264	1.23
743	35	1216	UE - JP Apartments	337 Harvard St/4 Lorne St	Jamaica Plain	12	National Grid	18372	13779	6475	136984	18875	1.37
744	36	994	UE - Montebello Road	62 Montebello Road	Boston	7	National Grid	8400	6900	2636	74687	5153	0.75
745	37	1495	UE - Theroch Apartments	266 Seavers Street	Boston	14	National Grid	38000	30800	10200	36702	11304	0.37
746	38	1523	UE - Theroch Apartments	129, 131, 133, 135 Columbia Rd.	Boston	48	National Grid	66400	66400	23500	40780	27078	0.41
747	39	1525	UE - Theroch Apartments	47-49 Glenway Street	Boston	2	National Grid	3345	3345	951	56242	1881	0.56
748	40	1519	UE - Theroch Apartments	18-24 Sonoma St	Boston	16	National Grid	25782	22157	7632	59451	13173	0.59
749	41	1503	UE - Theroch Apartments	107-109 Elm Street	Boston	16	National Grid	29250	23334	12070	60570	14133	0.61
750	42	1500	UE - Theroch Apartments	108 Maple Street	Boston	6	National Grid	13500	10470	4350	61337	6422	0.61
751	43	1518	UE - Theroch Apartments	100-106 Maple Street	Boston	12	National Grid	25250	18400	9650	66721	12277	0.67

Total Gas Usage 2011

Attachment B

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
752	44	1494	UE - Theroch Apartments	47 Nazing Street	Boston	8	National Grid	13250	9900	3350	73999	7326	0.74
753	45	1521	UE - Theroch Apartments	193, 195, 197, 199, 203, 205 Columbia I	Boston	18	National Grid	32150	24800	9350	75380	18694	0.75
754	46	1524	UE - Theroch Apartments	32- 36 Ellington Street	Boston	12	National Grid	15504	12240	5264	78618	9623	0.79
755	47	1520	UE - Theroch Apartments	209, 211, 223, 225 Columbia Rd.	Boston	12	National Grid	18794	14224	7570	90355	12852	0.90
756	48	1501	UE - Theroch Apartments	17-21 Sonoma Street	Boston	27	National Grid	29000	21600	10400	140845	30422	1.41
757	49	348	UE - UELP	130 Day	Boston	3	National Grid	5852	4389	2671	69474	3049	0.69
758	50	405	UE - UELP	1901 Columbus	Boston	3	National Grid	3392	2544	1392	87667	2230	0.88
759	51	402	UE - UELP	2 Jess	Boston	3	National Grid	2844	2133	1116	88438	1886	0.88
760	52	407	UE - UELP	7-9 Dixwell	Boston	6	National Grid	7692	5769	3313	89963	5190	0.90
761	53	403	UE - UELP	4 Jess	Boston	3	National Grid	3264	2448	1321	96128	2353	0.96
762	54	404	UE - UELP	1899 Columbus	Boston	3	National Grid	5024	3768	1899	105823	3987	1.06
763	55	350	UE - UELP	60 Seaver	Boston	6	National Grid	6080	4560	2949	127822	5829	1.28
764	56	1060	UE - Walnut Washington	38 Walnut Park	Boston	12	National Grid	20160	16704	11792	51956	8679	0.52
765	57	1062	UE - Walnut Washington	361 & 363 Walnut Avenue	Boston	24	National Grid	27216	21196	8437	78722	16686	0.79
766	58	1061	UE - Walnut Washington	11 & 15 Waldren Road	Boston	11	National Grid	16704	11639	5070	115307	13421	1.15
767	59	1059	UE - Walnut Washington	3224 3226 3228 3230 3232 3234 Wash	Roxbury	18	National Grid	19845	13845	6000	123090	17042	1.23
768	60	1111	UE - Wardman Apartments	50 Walnut Park	Boston	6	National Grid	11146	7646	3500	21300	1629	0.21
769	61	1112	UE - Wardman Apartments	79 Walnut Park	Boston	14	National Grid	11970	10750	1220	109486	11770	1.09
770	62	1110	UE - Wardman Apartments	3, 7, 9, 11, 15, 17 & 19 Wardman Rd, 60 Walnut Park and 71 Westminster Ave.	Boston	54	National Grid	64030	45645	18385	110220	50310	1.10
771	63	1113	UE - Wardman Apartments	65 Westminster Avenue	Boston	14	National Grid	9699	8349	1350	126937	10598	1.27
772	64	1316	UE - Westminster Court	60 - 74 Westminster Court	Boston	16	National Grid	21415	19415	9995	53743	10434	0.54
773	65	1315	UE - Westminster Court	30 - 54 Westminster Court	Boston	29	National Grid	32700	31036	9108	54481	16909	0.54
774	66	1317	UE - Westminster Court	78 - 108 Westminster Court	Boston	25	National Grid	26554	20602	5952	80886	16664	0.81
775	67	1083	Ulin House	30 Wallingford Rd.	Brighton	242	National Grid	140889	140889	41635	75073	105770	0.75
776	68	947	Unquity House	30 Curtis Road	Malden	140	National Grid	103290	103290	28412	11888	12279	0.12
777	69	158	Uphams Corner	14 Magnolia St	Boston	2	National Grid	3467	3467	1156	70785	2454	0.71
778	70	157	Uphams Corner	3 Bird St/21 Hancock St	Boston	12	National Grid	15870	12516	5290	71441	8942	0.71
779	71	159	Uphams Corner	10-12 Bird St	Boston	6	National Grid	8220	5870	2740	113235	6647	1.13
780	72	156	Uphams Corner	481-485 Columbia Road	Boston	16	National Grid	20856	15642	5736	115396	18050	1.15
781	73	832	West Fenway Elderly Housing	110 Peterborough St.	Boston	48	National Grid	40752	40752	12574	52097	21231	0.52
782	74	959	Westland Ave Apts	72-78 Westland Ave	Boston	45	National Grid	56520	56520	14412	33509	18939	0.34
783	75	958	Westland Ave Apts	65-67 Westland Ave	Boston	16	National Grid	13372	13372	2410	38069	5091	0.38
784	76	957	Westland Ave Apts	66 Westland Ave	Boston	29	National Grid	33391	33391	8514	41796	13956	0.42
785	77	960	Westland Ave Apts	83 Westland Ave	Boston	5	National Grid	11666	11666	2975	41844	4882	0.42
786	78	154	Wilder Gardens	32 Bishop Joe L. Smith Way	Dorchester	12	National Grid	14136	14136	4136	56109	7932	0.56
787	79	152	Wilder Gardens	24 Bishop Joe L. Smith Way	Dorchester	12	National Grid	14032	10524	4032	74812	7873	0.75
788	80	151	Wilder Gardens	20 Bishop Joe L. Smith Way	Dorchester	12	National Grid	14160	10620	4160	74812	7945	0.75
789	81	155	Wilder Gardens	36 Bishop Joe L. Smith Way	Dorchester	13	National Grid	14160	10620	4160	74812	7945	0.75
790	82	153	Wilder Gardens	28 Bishop Joe L. Smith Way	Dorchester	12	National Grid	14268	10701	4268	74812	8006	0.75
791	83	1766	12 Summer St.	12 Summer Street	Manchester-by-the	21	National Grid	16187	16187	2698	63085	10079	0.62
792	84	2160	705-C	56 Fairbank Circle	Sudbury	1	National Grid	1340	1340	0	39636	531	0.40
793	85	2133	705-C	42 Fairbank Circle	Sudbury	1	National Grid	1108	1108	0	9265	103	0.09
794	86	2135	705-C	44 Fairbank Circle	Sudbury	1	National Grid	1108	1108	0	36570	405	0.37
795	87	2154	705-C	45 Old Meadow Road	Sudbury	1	National Grid	1108	1108	0	40087	444	0.40
796	88	2137	705-C	50 Fairbank Circle	Sudbury	1	National Grid	1340	1340	0	43490	583	0.44
797	89	2139	705-C	54 Fairbank Circle	Sudbury	1	National Grid	1108	1108	0	64207	711	0.64
798	90	2544	713 Dudley Apartments	3 Monadnock St.	Boston	43	National Grid	35000	30000	425	141809	42543	1.42
799	91	2545	713 Dudley Apartments	713 Dudley St.	Boston	28	National Grid	26000	23000	290	137405	31603	1.37
800	92	1365	Adams Templeton Apt	445 Adams Street	Dorchester	75	National Grid	46445	46345	200	7060	9872	0.21
801	93	2519	Amy Lowell House	65 Martha Rd.	Boston	151	National Grid	115000	115000	28024	54142	62275	0.54
802	94	1361	Anchor's Weigh	300 Commandant's Way	Chelsea	87	National Grid	124300	124300	44940	7432	10393	0.08
803	95	2673	Anderson Park	250 Cambridge St	Boston	64	National Grid	86006	86006	29219	60900	52378	0.61
804	96	2672	Anderson Place	1-20 Anderson	Boston	23	National Grid	21706	21080	6670	65080	13719	0.65
805	97	2633	Captain Eldredge House	30 Pine Avenue	Barnstable	18	National Grid	10000	10000	5485	61279	6128	0.61
806	98	2761	Cheriton Grove Apartments	20 Cheriton Road	West Roxbury	60	National Grid	45000	45000	19623	46701	21016	0.47
807	99	142	Columbia Road Apts	461 Columbia Road	Dorchester	4	National Grid	6120	4896	2465	134573	6589	1.35
808	100	1839	Coolidge School	The Apartments at 319 Arlington Street	Watertown	38	National Grid	51869	51869	51091	37180	19285	0.37
809	101	2675	Danube Apartments	34-40 Danube St	Dorcester	18	National Grid	26925	17999	10710	101142	18205	1.01
810	102	2725	Forest Street	45 Forest Street	Lexington	6	National Grid	4858	3058	1800	74449	2277	0.74
811	103	2723	Hill Street	87 Hill Steet	Lexington	4	National Grid	2357	2357	1781	42686	1006	0.43
812	104	2593	Julia Martin House	90 Bickford St.	Jamaica Plain	56	National Grid	44892	44892	14892	43936	19724	0.44
813	105	1278	Madison Park III	1-15 Kerr Way (odd numbers)	Boston	8	National Grid	12800	8600	4400	78981	6792	0.79
814	106	1517	Maris Center	197 Elm Street	Salisbury	19	National Grid	5948	5948	5804	163271	9711	1.63
815	107	2724	Mass Ave	561-563 Mass Ave	Lexington	2	National Grid	2863	2863	0	25363	726	0.25
816	108	2628	Monsignor Neagle Apartments	350 Charles St.	Malden	76	National Grid	75776	66304	35194	33840	20304	0.31
817	109	1148	Roxbury Development	395 Dudley	Roxbury	6	National Grid	14430	11544	7350	3766	435	0.04
818	110	1147	Roxbury Development	389 Dudley	Roxbury	6	National Grid	14430	11544	7620	89742	10360	0.90
819	111	1144	Roxbury Development	208 Hampden	Roxbury	2	National Grid	5000	3750	2730	108483	4068	1.08
820	112	1145	Roxbury Development	206 Hampden	Roxbury	3	National Grid	5000	3750	2020	108483	4068	1.08
821	113	1146	Roxbury Development	204 Hampden	Roxbury	3	National Grid	5000	3750	1550	108483	4068	1.08
822	114	1208	Salem Point Limited Partnership	57-59 Harbor Street	Salem	16	National Grid	23156	21061	6288	75847	15974	0.76
823	115	1072	Senior Living on Bellingham Hill	100 Bellingham Street	Chelsea	60	National Grid	45000	43200	21000	99829	43126	1.00
824	116	389	Spencer House	2053R Columbus Ave	Boston	46	National Grid	51897	51897	27057	45538	23633	0.46
825	117		St. Joes	511 Moody Street	Lowell	15	National Grid	19200	19200	7266	57366	11014	0.57
826	118	3737	Angela Westover House	49 Parley Avenue	Jamaica Plain	1	National Grid	8286	7386	2261	99712	7365	1.00
827	119	1838	Atlas Lofts	88 Gerrish Avenue	Chelsea	53	National Grid	51447	46447	4365	7702	3577	0.08
828	120	1957	Batavia Cooperative	29 31 33 Symphony Road	Boston	7	National Grid	6262	4696	0	56920	3564	0.76
829	121	1165	Boston Hope	219 -221 Harvard St	Dorchester	2	National Grid	4608	3072	1536	40642	1249	0.41
830	122	1168	Boston Hope	53 Nightingale	Dorchester	1	National Grid	3150	2100	1050	46167	970	0.46
831	123	1366	Bourne Mill	1 Mill Street	Tiverton	165	National Grid	214064	214064	34958	67979	17124	0.08
832	124	1594	Brian Honan Apts	65-71 Hano St. (F)	Allston	4	National Grid	4416	4416	1472	100902	4456	1.01
833	125	1592	Brian Honan Apts	31-41 Everett Sq. (D)	Allston	6	National Grid	6732	6732	2244	50344	3389	0.50
834	126	1400	Brian Honan Apts	43-55 Everett Sq (C)	Allston	7	National Grid	10800	10800	3600	50344	5437	0.50
835	127	1593	Brian Honan Apts	63 Hano St (J)	Allston	4	National Grid	3918	3918	0	60734	23795	6.07
836	128	1591	Brian Honan Apts	10-16 Clevemont (G)	Allston	4	National Grid	7020	7020	2340	58627	4116	0.59
837	129		Brian Honan Apts	Clevemont (G)	Allston	2	National Grid	5446	3698	2723	71548	26458	7.15
838	130	1486	Brian Honan Apts	57 Everett Street (B)	Allston	13	National Grid	21300	21300	7100	42855	9128	0.43
839	131	1593	Brian Honan Apts	61 Hano St. (E)	Allston	4	National Grid	2816	2816	0	80798	22753	8.08
840	132	1590	Brian Honan Apts	35-39 Blaine St. (H)	Allston	3	National Grid	4371	4371	1457	50968	2228	0.51
841	133	1933	Brigham House	341 Mount Auburn Street	Watertown	62	National Grid	100000	100000	25000	33374	33374	0.33

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
842	134	974	Brighton Allston Apartments	501 Washington St	Allston	11	National Grid	8504	6379	0	119324	7610	1.19
843	135	1435	Broadway Street	420 Broadway Street	Lowell	26	National Grid	29316	19052	0	106742	28916	1.52
844	136	836	Burbank Redevelopment	64-70 Burbank Street	Boston	36	National Grid	37136	37136	12332	52227	19395	0.52
845	137	150	Columbia Road Apts	455 & 457 Columbia Road	Dorchester	6	National Grid	9200	6900	648	76935	5308	0.77
846	138	141	Columbia Road Apts	422 Columbia Road	Dorchester	35	National Grid	32286	26905	8606	90131	24250	0.90
847	139	1945	Corcoran House	40 Walnut Street	Clinton	42	National Grid	29000	29000	9000	93106	27001	0.93
848	140	299	Dudley Village	(Bldg III) 600-610 Dudley St	Dorchester	10	National Grid	14444	13544	3482	28829	3905	0.29
849	141	1252	Dudley Village	(Bldg II) 580-590 Dudley	Dorchester	11	National Grid	15954	14870	4026	29003	4313	0.29
850	142	1966	East Canton Street	89 East Canton Street	Boston	20	National Grid	13984	13984	2331	6165	862	0.06
851	143	1967	East Canton Street	99 East Canton Street	Boston	20	National Grid	13984	13984	2331	6285	879	0.06
852	144	1968	East Canton Street	109 East Canton Street	Boston	20	National Grid	13984	13984	2331	7060	987	0.07
853	145	1965	East Canton Street	79 East Canton Street	Boston	20	National Grid	13984	13984	2331	7432	1039	0.07
854	146	2533	Ebenezer Homes	172 West Springfield St.	Boston	4	National Grid	3120	3120	850	100716	3142	1.01
855	147	2526	Ebenezer Homes	160 West Springfield St.	Boston	4	National Grid	3240	3240	850	102843	3332	1.03
856	148	2532	Ebenezer Homes	170 West Springfield St.	Boston	4	National Grid	3120	3120	850	105454	3290	1.05
857	149	2527	Ebenezer Homes	162 West Springfield St.	Boston	4	National Grid	3240	3240	850	109718	3555	1.10
858	150	2534	Ebenezer Homes	174 West Springfield St.	Boston	4	National Grid	3120	3120	850	111028	3464	1.11
859	151	2529	Ebenezer Homes	166 West Springfield St.	Boston	4	National Grid	3240	3240	850	122272	3962	1.22
860	152	2530	Ebenezer Homes	168 West Springfield St.	Boston	4	National Grid	3120	3120	850	129690	4046	1.30
861	153	2528	Ebenezer Homes	164 West Springfield St.	Boston	4	National Grid	3240	3240	850	131679	4266	1.32
862	154	1179	Emergency Shelter	312 Lafayette Street	Salem	2	National Grid	5446	3698	2723	71548	2646	0.72
863	155	1235	Haynes House	725-751 Shawmut Ave	Roxbury	131	National Grid	139608	139608	40008	59278	82757	0.59
864	156	2103	LP - Granite Lena Park	12 McLellan Street	Dorchester	15	National Grid	14049	11239	4281	64596	7260	0.65
865	157	2028	LP - Granite Lena Park	786 Blue-Hill Avenue	Dorchester	9	National Grid	8649	8649	2595	82484	7134	0.82
866	158	1998	LP - Olmsted Green I	11 - 19 Catbird Court	Mattapan	5	National Grid	4143	4143	0	29763	1233	0.30
867	159	1999	LP - Olmsted Green I	11 West Main - 29 West Main	Mattapan	10	National Grid	10752	10752	0	29763	3200	0.30
868	160	1996	LP - Olmsted Green I	3 West Main - 9 West Main	Mattapan	4	National Grid	3179	3179	0	29763	946	0.30
869	161	2000	LP - Olmsted Green I	51 - 55 Catbird Court	Mattapan	3	National Grid	3183	3183	0	60734	1933	0.61
870	162	2001	LP - Olmsted Green I	57 - 67 Catbird Court	Mattapan	6	National Grid	5696	5696	0	60734	3459	0.61
871	163	2002	LP - Olmsted Green I	69 - 75 Catbird Court	Mattapan	4	National Grid	3918	3918	0	60734	2380	0.61
872	164	1994	LP - Olmsted Green I	35 - 45 Catbird Court	Mattapan	6	National Grid	6064	6064	0	82162	4982	0.82
873	165	1997	LP - Olmsted Green I	1 West Main - 1 - 9 Catbird Court	Mattapan	6	National Grid	5902	5902	0	82162	4849	0.82
874	166	1995	LP - Olmsted Green I	21 - 33 Catbird Court	Mattapan	7	National Grid	6075	6075	0	82162	4991	0.82
875	167	1578	Lyman School Apartments	30 Gove Street	East Boston	45	National Grid	45000	45000	21086	46388	20875	0.46
876	168	2521	Neptune Towers Apartments	130 Neptune Blvd.	Lynn	334	National Grid	100000	100000	25000	102757	102757	1.03
877	169	2522	Neptune Towers Apartments	160 Neptune Blvd.	Lynn	334	National Grid	100000	100000	25000	108917	108917	1.09
878	170	362	New North Canal	281-287 Moody St	Lowell	4	National Grid	2816	2816	0	52115	1468	0.52
879	171	382	New North Canal	301-307 Moody St	Lowell	4	National Grid	2816	2816	0	52115	1468	0.52
880	172	383	New North Canal	323-329 Moody St	Lowell	4	National Grid	2816	2816	0	52115	1468	0.52
881	173	361	New North Canal	33 Race St.	Lowell	6	National Grid	3498	3498	0	52115	1823	0.52
882	174	373	New North Canal	309-313 Moody St	Lowell	15	National Grid	10978	10978	0	52115	5721	0.52
883	175	372	New North Canal	289-291 Moody St	Lowell	8	National Grid	11264	11264	0	52115	5870	0.52
884	176	375	New North Canal	572-574 Fr Morrissette Blvd	Lowell	8	National Grid	11264	11264	0	54643	6155	0.55
885	177	376	New North Canal	590-592 Fr Morrissette Blvd	Lowell	8	National Grid	11264	11264	0	54643	6155	0.55
886	178	377	New North Canal	600-602 Fr Morrissette Blvd	Lowell	8	National Grid	11264	11264	0	54643	6155	0.55
887	179	360	New North Canal	17-19 James St	Lowell	8	National Grid	5632	5632	0	54643	3077	0.55
888	180	365	New North Canal	175-177 Moody St	Lowell	8	National Grid	5632	5632	0	58472	3293	0.58
889	181	366	New North Canal	181-183 Moody St	Lowell	12	National Grid	6996	6996	0	58472	4091	0.58
890	182	369	New North Canal	199-201 Moody St	Lowell	12	National Grid	6996	6996	0	58472	4091	0.58
891	183	385	New North Canal	463-473 Moody St	Lowell	6	National Grid	4224	4224	0	64644	2731	0.65
892	184	359	New North Canal	130-146 Aiken St	Lowell	14	National Grid	10516	10516	0	64644	6798	0.65
893	185	384	New North Canal	475-481 Moody St	Lowell	4	National Grid	2816	2816	0	64644	1820	0.65
894	186	379	New North Canal	150-160 Fr Morrissette Blvd	Lowell	6	National Grid	4224	4224	0	78333	3309	0.78
895	187	378	New North Canal	86-92 Arcand Dr	Lowell	4	National Grid	2816	2816	0	78333	2206	0.78
896	188	381	New North Canal	239-249 Fr Morrissette Blvd	Lowell	6	National Grid	4224	4224	0	80798	3413	0.81
897	189	380	New North Canal	221-227 Moody St	Lowell	4	National Grid	2816	2816	0	80798	2275	0.81
898	190	2552	Progress House	39 High Street	Amesbury	26	National Grid	6964	5188	6864	108783	5644	1.09
899	191	1918	Prospect House	420 Reservior Ave	Revere	109	National Grid	70000	60000	20114	60418	36251	0.60
900	192	1203	Salem Point Limited Partnership	17-19 Ward Street	Salem	6	National Grid	5824	4802	2044	111482	5353	1.11
901	193	1204	Salem Point Limited Partnership	23-25 Ward Street	Salem	6	National Grid	5824	4802	2044	111482	5353	1.11
902	194	730	Saugus Commons	66 Newhall Ave	Saugus	6	National Grid	10075	10075	1003	51098	5148	0.51
903	195	719	Saugus Commons	10-12 Newhall Ave	Saugus	2	National Grid	2519	2519	251	55051	1387	0.55
904	196	718	Saugus Commons	9-11 Newhall Ave	Saugus	2	National Grid	2519	2519	251	67979	1712	0.68
905	197	727	Saugus Commons	48 Newhall Ave	Saugus	6	National Grid	7556	7556	752	80448	6079	0.80
906	198	2184	Smith House	757 Shawmut Avenue	Roxbury	132	National Grid	100224	100224	33432	39208	39295	0.39
907	199	1934	The Village at Brookline	Building 7 (99 Kent St.)	Brookline	116	National Grid	92628	92628	84628	57939	53668	0.58
908	200	1931	The Village at Brookline	Building 1 (70 Pearl St.)	Brookline	90	National Grid	84370	84370	77370	57939	48883	0.58
909	201	1932	The Village at Brookline	Building 2 (55 Village Way)	Brookline	70	National Grid	65352	65352	5352	57939	37864	0.58
910	202	2118	UE - Academy House	4) 1-19 Weaver Way (odd)	Roxbury	9	National Grid	8500	8500	700	64791	5507	0.65
911	203	1796	UE - Academy House	1) 2-20 Academy Court (even); 1-33 Sla	Roxbury	53	National Grid	78368	78368	21935	64791	50776	0.65
912	204	2120	UE - Academy House	6) 40-66 Weaver Court (even); 70-82 W	Roxbury	29	National Grid	37604	37604	6661	64791	24364	0.65
913	205	2558	West End Place	150 Staniford Street	Boston	187	National Grid	210232	210232	30238	42221	88763	0.42
914	206	1816	Woods at Wareham	36 Swifts Beach Road- Bldg 1	Wareham	8	National Grid	48384	48384	43352	5203	2517	0.05
915	207	1914	Woods at Wareham	36 Swifts Beach Road - Bldg 2	Wareham	6	National Grid	54144	54144	48524	6316	3419	0.06
916	208	1919	Woods at Wareham	36 Swifts Beach Road - Bldg 12	Wareham	6	National Grid	54144	54144	48524	6449	3492	0.06
917	209	1923	Woods at Wareham	36 Swifts Beach Road - Bldg 9	Wareham	6	National Grid	54144	54144	48524	6559	3551	0.07
918	210	1916	Woods at Wareham	36 Swifts Beach Road - Bldg 4	Wareham	6	National Grid	54144	54144	48524	6974	3776	0.07
919	211	1929	Woods at Wareham	36 Swifts Beach Road - Bldg 16	Wareham	6	National Grid	41472	41472	36192	7132	2958	0.07
920	212	1917	Woods at Wareham	36 Swifts Beach Road - Bldg 6	Wareham	6	National Grid	41472	41472	36192	7616	3158	0.08
921	213	1915	Woods at Wareham	36 Swifts Beach Road - Bldg 3	Wareham	6	National Grid	41472	41472	36192	7706	3196	0.08
922	214	1925	Woods at Wareham	36 Swifts Beach Road - Bldg 15	Wareham	6	National Grid	54144	54144	48524	7755	4199	0.08
923	215	1924	Woods at Wareham	36 Swifts Beach Road - Bldg 5	Wareham	6	National Grid	54144	54144	48524	8112	4392	0.08
924	216	1921	Woods at Wareham	36 Swifts Beach Road - Bldg 7	Wareham	8	National Grid	48384	48384	43352	8393	4061	0.08
925	217	1928	Woods at Wareham	36 Swifts Beach Road - Bldg 14	Wareham	6	National Grid	41472	41472	36192	8894	3689	0.09
926	218	1922	Woods at Wareham	36 Swifts Beach Road - Bldg 8	Wareham	6	National Grid	41472	41472	36192	9460	3923	0.09
927	219	1927	Woods at Wareham	36 Swifts Beach Road - Bldg 13	Wareham	6	National Grid	41472	41472	36192	9672	4011	0.10
928	220	1926	Woods at Wareham	36 Swifts Beach Road - Bldg 10	Wareham	6	National Grid	41472	41472	36192	10073	4178	0.10
929	221	1920	Woods at Wareham	36 Swifts Beach Road - Bldg 11	Wareham	6	National Grid	41472	41472	36192	10416	4320	0.10
930	222	3731	Boston Rehabilitation Assoc.	15 Royce Rd.	Allston	31	National Grid	29598	24665	4933	369	91	0.00
931	223	3716	Boston Rehabilitation Assoc.	66 The Fenway	Allston	33	National Grid	31296	26080	5216	72513	18911	0.73
932	224	3732	Boston Rehabilitation Assoc.	94-98 Chester St.	Allston	23	National Grid	43716	28711	15005	57213	16426	0.57
933	225	2874	Centre St	289 Centre St	Dorchester	12	National Grid	4000	2667	2200	49159	1311	0.33
934	226	3973	Charter Street	27 Charter Street	Salem	110	National Grid	109392	109392	54392	8476	9272	0.08
935	227	3084	Church St	8 Church St	Dorchester	13	National Grid	5856	3904	4361	114214	4459	0.76

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
936	228	147	Columbia Road Apts	435 Columbia Road	Dorchester	16	National Grid	18036	14440	5596	88603	12794	0.71
937	229	145	Columbia Road Apts	466 Columbia Road	Dorchester	12	National Grid	14876	11157	6608	67426	7523	0.51
938	230	144	Columbia Road Apts	468 Columbia Road	Dorchester	13	National Grid	14876	12100	6434	62238	7531	0.51
939	231	2897	Comm Ave	1202 Commonwealth Ave	Allston	61	National Grid	18000	18000	8850	685	123	0.01
940	232	3858	Creston	37-53 Creston D	Woburn	9	National Grid	8760	8760	2715	128134	11225	1.28
941	233	3494	Creston	89-96 Creston A	Woburn	8	National Grid	7920	7920	2455	128134	10148	1.28
942	234	3974	Dalton Residence	205 Bridge Street	Samel	35	National Grid	23385	23385	5885	48419	11323	0.48
943	235	2681	Danube Apartments	137 Columbia Road	Dorchester	14	National Grid	13602	13602	2850	88887	12090	0.89
944	236	2674	Danube Apartments	27-29 Montebello Road	Jamaica Plain	12	National Grid	10168	8824	2054	109818	9690	0.95
945	237	2685	Danube Apartments	825 Blue Hill Ave + 5 Calder	Dorchester	10	National Grid	11586	9788	2330	101378	9923	0.86
946	238	2686	Danube Apartments	829 Blue Hill Ave + 1-3 Calder	Dorchester	11	National Grid	10890	9587	1303	97286	9327	0.86
947	239	2833	Depot Crossing	125 Minot Ave	Wareham	32	National Grid	10000	10000	2000	189347	18935	1.89
948	240	3087	Dudley St	430 Dudley St	Roxbury	17	National Grid	5526	4145	2976	119147	4939	0.89
949	241	3088	Dudley St	432 Dudley St	Roxbury	17	National Grid	6426	4820	3876	79550	3834	0.60
950	242	3089	Dudley St	434 Dudley St	Roxbury	17	National Grid	6426	4820	3876	97469	4698	0.73
951	243	3090	Dudley St	436 Dudley St	Roxbury	17	National Grid	5526	3920	2976	140787	5519	1.00
952	244	1251	Dudley Village	(Bldg I) 564-570 Dudley	Dorchester	16	National Grid	28392	22872	9591	33601	7685	0.27
953	245	303	Dudley Village	(Bldg IV) 571 Dudley St	Dorchester	10	National Grid	13793	12875	3341	22572	2906	0.21
954	246	300	Dudley Village	(Bldg V) 630 Dudley St	Dorchester	8	National Grid	11211	10532	3038	33405	3518	0.31
955	247	3072	Eastern Ave	423 Eastern Ave	Chelsea	21	National Grid	4500	3000	1980	103490	3105	0.69
956	248	4117	EVE - Russel Street	9 - 11 Veterans	Everett	4	National Grid	3744	3744	0	73623	2756	0.74
957	249	4119	EVE - Russel Street	8 - 14 Veterans	Everett	4	National Grid	3456	3456	0	78715	2720	0.79
958	250	4121	EVE - Russel Street	130 Glenhill Avenue	Everett	2	National Grid	1920	1920	0	81450	1564	0.81
959	251	4124	EVE - Russel Street	106 - 108 Glenhill Avenue	Everett	2	National Grid	1728	1728	0	86721	1499	0.87
960	252	3930	Father Morrisette Manor	111 Hildreth Street	Lowell	57	National Grid	30180	30180	1680	91508	27617	0.92
961	253	2828	Fenno House	540 Hancock Street	Quincy	151	National Grid	82980	74100	16888	107182	79422	0.96
962	254	2877	Fessenden Rd	22 Fessenden Road	Arlington	15	National Grid	5000	3750	2750	4747	178	0.04
963	255	3982	Garfield and Eliot	106 - 122 Eliot Road	Revere	18	National Grid	13280	13280	4280	107394	14262	1.07
964	256	3983	Garfield and Eliot	186 - 194 Garfield Avenue	Revere	16	National Grid	8706	8706	706	107394	9350	1.07
965	257	2882	Hancock St	19 Hancock St	Everett	35	National Grid	8100	6075	2850	128006	7776	0.96
966	258	1294	Hano Homes	1-3 Hano	Brighton	2	National Grid	2968	2200	768	44689	983	0.33
967	259	2876	Holbrook Ave	15 Holbrook Ave	Braintree	21	National Grid	6000	4500	2850	27805	1251	0.21
968	260	1164	Hope in Boston	17 - 19 Browning	Dorchester	2	National Grid	4608	3072	1536	38611	1186	0.26
969	261	1169	Hope in Boston	71 Kingsdale St	Dorchester	18	National Grid	29280	21960	16704	38302	8411	0.29
970	262	1170	Hope in Boston	87 Wales St	Dorchester	1	National Grid	3150	2100	1050	30662	644	0.20
971	263	1171	Hope in Boston	88 Nightingale St	Dorchester	12	National Grid	21600	16200	12968	39251	6359	0.29
972	264	3998	Hyman Towers	50 Walnut Avenue	Revere	106	National Grid	94600	94600	41600	9705	9181	0.10
973	265	1242	Interfaith	282 Columbus Ave	Boston	28	National Grid	31230	31230	11674	55470	17323	0.55
974	266	1241	Interfaith	564 Mass Ave	Boston	5	National Grid	5074	5074	949	120926	6136	1.21
975	267	1236	Interfaith	68 West Concord St	Boston	31	National Grid	38493	32994	13635	59997	19795	0.51
976	268	1243	Interfaith	688 Mass Ave	Boston	5	National Grid	5424	5424	1014	100033	5426	1.00
977	269	3985	Kilmain	505 WASHINGTON STREET	Wellesley	8	National Grid	4022	4022	3522	236185	9499	2.36
978	270	3986	Kilmain	507 WASHINGTON STREET	Wellesley	8	National Grid	4022	4022	3522	236185	9499	2.36
979	271	3987	Kilmain	509 WASHINGTON STREET	Wellesley	8	National Grid	4022	4022	3522	236185	9499	2.36
980	272	3988	Kilmain	511 WASHINGTON STREET	Wellesley	8	National Grid	4022	4022	3522	236185	9499	2.36
981	273	3990	Kilmain	513 WASHINGTON STREET	Wellesley	8	National Grid	4022	4022	3522	236185	9499	2.36
982	274	2898	Lafayette St	117 Lafayette St	Salem	62	National Grid	24000	16000	14700	85724	13716	0.57
983	275	3438	LITTLE HOMESTEADS	836 ROUTE 28	HARWICH	8	National Grid	6076	6076	76	104812	6368	1.05
984	276	1151	Long Glen II	52 Glenville Ave	Allston	15	National Grid	17360	17360	5600	41141	7142	0.41
985	277	1276	Madison Park III	2-16 Raynor Cirlcle (even numbers)	Boston	8	National Grid	12150	8100	4050	79598	6447	0.53
986	278	2802	Mayflower	Choate Lane - A	Falmouth	4	National Grid	1400	1400	0	151474	2121	1.51
987	279	2814	Mayflower	Choate Lane - B	Falmouth	4	National Grid	1400	1400	0	151474	2121	1.51
988	280	2815	Mayflower	Choate Lane - C	Falmouth	10	National Grid	4200	4200	0	151474	6362	1.51
989	281	2816	Mayflower	Choate Lane - D	Falmouth	6	National Grid	2200	2200	0	151474	3332	1.51
990	282	2842	Mechanic St	8 Mechanic St.	Quincy	12	National Grid	3800	2850	2000	135884	3873	1.02
991	283	1265	Metropolitan	1 Nassau St	Boston	251	National Grid	257600	257600	7600	67523	173940	0.68
992	284	3975	Morency Manor	45 St. Peter Street	Salem	54	National Grid	24750	24750	3150	89241	22087	0.89
993	285	2883	Mt Pleasant Ave	28 Mt. Pleasant Ave.	Roxbury	20	National Grid	7635	5090	4635	81738	4160	0.54
994	286	363	New North Canal	104-118 Arcand St	Lowell	15	National Grid	10978	10978	0	78333	8599	0.78
995	287	364	New North Canal	166-170 Fr Morrissette Blvd	Lowell	14	National Grid	10516	10516	0	78333	8238	0.78
996	288	367	New North Canal	182-190 Moody St	Lowell	23	National Grid	16731	16731	0	78333	13106	0.78
997	289	368	New North Canal	185-207 Moody St	Lowell	18	National Grid	13420	13420	0	58472	7847	0.58
998	290	370	New North Canal	229-233 Moody St	Lowell	15	National Grid	11682	11682	0	80798	9439	0.81
999	291	371	New North Canal	255-259 Moody St	Lowell	14	National Grid	9130	9130	0	80798	7377	0.81
1,000	292	374	New North Canal	544-550 Fr Morrissette Blvd	Lowell	19	National Grid	13794	13794	0	64644	8917	0.65
1,001	293	3426	Newport Park	Cheever - Pine St.	Manchester	6	National Grid	5248	5248	2248	51710	2714	0.52
1,002	294	3427	Newport Park	Dana - Pine St.	Manchester	8	National Grid	6480	6480	2480	71777	4651	0.72
1,003	295	3428	Newport Park	Jeffery - Pine St.	Manchester	6	National Grid	5248	5248	2248	37442	1965	0.37
1,004	296	3430	Newport Park	Sargent - Pine St.	Manchester	6	National Grid	5248	5248	2248	89723	4709	0.90
1,005	297	3429	Newport Park	Tappan - Pine St.	Manchester	6	National Grid	5248	5248	2248	47346	2485	0.47
1,006	298	2878	Norwood St	76 Norwood St	Everett	29	National Grid	6000	4750	1650	126534	6010	1.00
1,007	299	3093	One Lenox	1 East Lenox St	Roxbury	26	National Grid	12500	12500	3660	27984	3498	0.28
1,008	300	4126	Russel Street	76 Glenhill Avenue	Everett	2	National Grid	1920	1920	N/A	69635	1337	0.70
1,009	301	4128	Russel Street	39-41 Veterans Ave	Everett	4	National Grid	3456	3456	N/A	72715	2513	0.73
1,010	302	4129	Russel Street	64-66 Veterans Ave	Everett	4	National Grid	3744	3744	N/A	89231	3341	0.89
1,011	303	2879	Russell Terrace	12 Russell Terrace	Arlington	21	National Grid	4092	3069	1572	107563	3301	0.81
1,012	304	3730	Saint Polycarp Apartments	460 Mystic Ave	Somerville	24	National Grid	29456	29456	7656	30984	9127	0.31
1,013	305	3866	Salem Heights	12 Pope Street	Salem	283	National Grid	120420	120420	2700	158344	190678	1.58
1,014	306	1211	Salem Point Limited Partnership	38 Peabody Street	Salem	6	National Grid	8997	7592	2811	63222	4800	0.53
1,015	307	1205	Salem Point Limited Partnership	41-43 Ward Street	Salem	6	National Grid	9896	8164	3463	66633	5440	0.55
1,016	308	2803	Salt Sea	Salt Sea Lane - 1	Falmouth	4	National Grid	2140	2140	340	75394	1613	0.75
1,017	309	3073	Salt Sea	Salt Sea Lane - 2	Falmouth	4	National Grid	2140	2140	340	75394	1613	0.75
1,018	310	3074	Salt Sea	Salt Sea Lane - 3	Falmouth	4	National Grid	2140	2140	340	75394	1613	0.75
1,019	311	3075	Salt Sea	Salt Sea Lane - 4	Falmouth	4	National Grid	2140	2140	340	75394	1613	0.75
1,020	312	3076	Salt Sea	Salt Sea Lane - 5	Falmouth	4	National Grid	2140	2140	340	75394	1613	0.75
1,021	313	3077	Salt Sea	Salt Sea Lane - 6	Falmouth	4	National Grid	2140	2140	340	75394	1613	0.75
1,022	314	3078	Salt Sea	Salt Sea Lane - 7	Falmouth	6	National Grid	4920	4920	2220	75394	3709	0.75
1,023	315	720	Saugus Commons	19 Newhall Ave	Saugus	26	National Grid	20359	20359	4345	62459	12716	0.62
1,024	316	723	Saugus Commons	35 Newhall Ave	Saugus	28	National Grid	21765	21765	4485	59794	13014	0.60
1,025	317	731	Saugus Commons	77 Newhall Ave	Saugus	26	National Grid	21559	21559	4465	59520	12832	0.60
1,026	318	732	Saugus Commons	82 Newhall Ave	Saugus	26	National Grid	19040	19040	4214	62632	11925	0.63
1,027	319	721	Saugus Commons	20 Newhall Ave	Saugus	24	National Grid	18304	18304	4141	51114	9356	0.51
1,028	320	722	Saugus Commons	21 Newhall Ave	Saugus	24	National Grid	18304	18304	4141	54790	10029	0.55
1,029	321	724	Saugus Commons	36 Newhall Ave	Saugus	24	National Grid	20359	20359	4345	44726	9106	0.45

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,030	322	725	Saugus Commons	41 Newhall Ave	Saugus	24	National Grid	20359	20359	4345	46211	9408	0.46
1,031	323	4080	Viking Gardens	107 Putnam St - B	Winthrop	10	National Grid	3000	3000	0	124220	3727	1.24
1,032	324	4082	Viking Gardens	107 Putnam - Community Bldg	Winthrop	1	National Grid	800	800	0	124220	994	1.24
1,033	325	4079	Viking Gardens	107 Putnam St - A	Winthrop	10	National Grid	6000	6000	0	124220	7453	1.24
1,034	326	4081	Viking Gardens	107 Putnam - C	Winthrop	10	National Grid	3000	3000	0	124220	3727	1.24
1,035	327	3893	Windmill Village	109 Upper County Road A	Dennis	20	National Grid	21600	21600	1600	28021	6052	0.28
1,036	328	3917	Windmill Village	109 Upper County Road B	Dennis	20	National Grid	25480	25480	5480	26141	6661	0.26
1,037	329	3918	Windmill Village	Community Building	Dennis	1	National Grid	2160	2160	0	64102	1385	0.64
1,038	330	3865	WOB - Creston	Creston J	Woburn	10	National Grid	10560	10560	3275	128134	13531	1.28
1,039	331	3498	WOB - Library Place	Library Place	Woburn	45	National Grid	27040	27040	4540	71966	19460	0.72
1,040	332	3868	WOB - Webster	B/45-54 webster ave	Woburn	10	National Grid	9410	9410	2920	126578	11911	1.27
1,041	333	3874	WOB - Webster	H/7-14 webster ave	Woburn	8	National Grid	7552	7552	2342	126578	9559	1.27
1,042	334	3931	50 STACKPOLE ST	50 STACKPOLE ST	Lowell	42	National Grid	14130	14130	270	219964	31081	2.20
1,043	335	3993	Adams Court	6 - 14 Adams Court	Revere	20	National Grid	21500	21500	11500	65486	14079	0.65
1,044	336	3994	Adams Court	9 - 15 Adams Court	Revere	16	National Grid	18000	18000	10000	65486	11787	0.65
1,045	337	3317	Aunt Sarah's (Fed)	93 Pleasant Street	Barnstable	8	National Grid	6944	6944	3126	33840	2350	0.34
1,046	338	2900	Beacon St	1876 Beacon St	Brookline	15	National Grid	5780	4335	3530	55593	2410	0.42
1,047	339	2841	Beale St.	27 Beale St.	Dorchester	11	National Grid	4000	3000	2350	19985	600	0.15
1,048	340	726	Saugus Commons	47 Newhall Ave	Saugus	24	National Grid	18304	18304	4141	50285	9204	0.50
1,049	341	728	Saugus Commons	59 Newhall Ave	Saugus	24	National Grid	20359	20359	4345	50012	10182	0.50
1,050	342	2875	147 Centre St	147 Centre St	Dorchester	11	National Grid	3700	2775	2050	46653	1295	0.35
1,051	343	3086	Alaska St	23-25 Alaska St	Roxbury	17	National Grid	7000	5250	2550	70705	3712	0.53
1,052	344	3927	129-151 Lakeview	129-151 Lakeview 1	Lowell	4	National Grid	1420	1420	N/A	175864	2497	1.76
1,053	345	3928	129-151 Lakeview	129-151 Lakeview 2	Lowell	4	National Grid	1420	1420	N/A	175864	2497	1.76
1,054	346	3929	129-151 Lakeview	129-151 Lakeview 3	Lowell	4	National Grid	1420	1420	N/A	175864	2497	1.76
1,055	347	2683	ACT - McCarthy Village	1 Sachem Way	Acton	11	National Grid	15252	15252	14252	21368	3259	0.21
1,056	348	3989	Adams Court	1 - 3 Adams Court	Revere	8	National Grid	8856	8856	856	65486	5799	0.65
1,057	349	3991	Adams Court	2 - 4 Adams Court	Revere	8	National Grid	8856	8856	856	65486	5799	0.65
1,058	350	3992	Adams Court	5 - 7 Adams Court	Revere	8	National Grid	8856	8856	856	65486	5799	0.65
1,059	351	3995	Adams Court	Community Room	Revere	1	National Grid	1664	1664	N/A	65485	1090	0.65
1,060	352	3571	Cass House/Roxbury Hills	117-121 Hutchings St.	Boston	3	National Grid	4329	4329	N/A	43966	1903	0.44
1,061	353	3579	Cass House/Roxbury Hills	118-132 Hutchings St.	Boston	8	National Grid	11544	11544	N/A	52752	6090	0.53
1,062	354	3576	Cass House/Roxbury Hills	125-135 Hutchings St.	Boston	6	National Grid	8658	8658	N/A	52643	4558	0.53
1,063	355	3566	Cass House/Roxbury Hills	230-234 Harold St.	Boston	3	National Grid	4329	4329	N/A	44558	1929	0.45
1,064	356	3567	Cass House/Roxbury Hills	236-240 Harold St.	Boston	3	National Grid	4329	4329	N/A	53436	2313	0.53
1,065	357	3572	Cass House/Roxbury Hills	239-249 Harold St.	Boston	6	National Grid	8658	8658	N/A	48996	4242	0.49
1,066	358	3573	Cass House/Roxbury Hills	242-252 Harold St.	Boston	6	National Grid	8658	8658	N/A	56022	4850	0.56
1,067	359	3577	Cass House/Roxbury Hills	251-263 Harold St.	Boston	7	National Grid	10101	10101	N/A	53936	5448	0.54
1,068	360	3568	Cass House/Roxbury Hills	39-43 Homestead St.	Boston	3	National Grid	4329	4329	N/A	56418	2442	0.56
1,069	361	3569	Cass House/Roxbury Hills	42-46 Homestead St.	Boston	3	National Grid	4329	4329	N/A	64962	2812	0.65
1,070	362	3574	Cass House/Roxbury Hills	45-55 Homestead St.	Boston	6	National Grid	8658	8658	N/A	49259	4265	0.49
1,071	363	3578	Cass House/Roxbury Hills	48-60 Homestead St.	Boston	7	National Grid	10101	10101	N/A	50067	5057	0.50
1,072	364	3575	Cass House/Roxbury Hills	57-67 Homestead St.	Boston	6	National Grid	8658	8658	N/A	46381	4016	0.46
1,073	365	3570	Cass House/Roxbury Hills	62-66 Homestead St.	Boston	3	National Grid	4329	4329	N/A	53751	2327	0.54
1,074	366	4023	Cushman Avenue	204 - 210 Cushman Avenue	Revere	4	National Grid	1586	1586	N/A	190135	3016	1.90
1,075	367	4024	Cushman Avenue	212 - 218 Cushman Avenue	Revere	4	National Grid	1586	1586	N/A	190135	3016	1.90
1,076	368	4025	Cushman Avenue	220 - 226 Cushman Avenue	Revere	4	National Grid	1586	1586	N/A	190135	3016	1.90
1,077	369	4026	Cushman Avenue	228 - 234 Cushman Avenue	Revere	4	National Grid	1586	1586	N/A	190135	3016	1.90
1,078	370	3893	Windmill Village	109 Upper County Road A	Dennis	20	National Grid	21600	21600	1600	28021	6052	0.28
1,079	371	3917	Windmill Village	109 Upper County Road B	Dennis	20	National Grid	25480	25480	5480	26141	6661	0.26
1,080	372	823	Dorchester	620-622 Dorchester Ave	South Boston	6	National Grid	5160	3870	3110	78787	3049	0.79
1,081	373	3984	Garfield and Eliot	126 - 134 Eliot Road	Revere	12	National Grid	6660	6660	660	107394	7152	1.07
1,082	374	3619	Jamaica Plain Scattered Sites Cooperati	106 Chestnut	Jamaica Plain	4	National Grid	4444	4444	N/A	84648	3762	0.85
1,083	375	3621	Jamaica Plain Scattered Sites Cooperati	108 Chestnut	Jamaica Plain	4	National Grid	4445	4445	N/A	84648	3763	0.85
1,084	376	3755	Lower Highlands	102 GRAND STREET	Lowell	1	National Grid	1850	1850	N/A	192378	3559	1.92
1,085	377	3758	Lower Highlands	125 GRAND STREET	Lowell	3	National Grid	2510	2510	1675	138695	3481	1.39
1,086	378	3761	Lower Highlands	22 Ware St.	Lowell	1	National Grid	2700	2700	N/A	146374	3952	1.46
1,087	379	3762	Lower Highlands	37 WARE STREET	Lowell	3	National Grid	3600	3600	2400	97896	3524	0.98
1,088	380	3763	Lower Highlands	71 HOWARD STREET	Lowell	2	National Grid	4875	4875	2475	61110	2979	0.61
1,089	381	3764	Lower Highlands	92 GRAND STREET	Lowell	2	National Grid	3900	3900	2700	104086	4059	1.04
1,090	382	3431	The Plains	Old Essex Rd. - 1	Manchester	8	National Grid	5304	5304	1304	97793	5187	0.98
1,091	383	3432	The Plains	Old Essex Rd. - 2	Manchester	8	National Grid	5304	5304	1304	90284	4789	0.90
1,092	384	3433	The Plains	Old Essex Rd. - 3	Manchester	8	National Grid	5304	5304	1304	90939	4823	0.91
1,093	385	3434	The Plains	Old Essex Rd. - 4	Manchester	8	National Grid	5304	5304	1304	79510	4217	0.80
1,094	386	3435	The Plains	Old Essex Rd. - 5	Manchester	8	National Grid	5584	5584	1584	92978	5192	0.93
1,095	387	3436	The Plains	Old Essex Rd. - 6	Manchester	8	National Grid	5584	5584	1584	101048	5643	1.01
1,096	388	3437	The Plains	Old Essex Rd. - Community	Manchester	1	National Grid	1488	1488	N/A	128438	1911	1.28
1,097	389	4018	Proctor Avenue	169 - 175 Proctor Avenue	Revere	4	National Grid	1586	1586	N/A	193712	3072	1.94
1,098	390	4021	Proctor Avenue	169A & 171A Proctor Avenue	Revere	2	National Grid	787	787	N/A	193712	1525	1.94
1,099	391	4022	Proctor Avenue	173A & 175A Proctor Avenue	Revere	2	National Grid	787	787	N/A	193712	1525	1.94
1,100	392	4019	Proctor Avenue	177 - 179 Proctor Avenue	Revere	2	National Grid	787	787	N/A	193712	1525	1.94
1,101	393	4020	Proctor Avenue	177A - 179A Proctor Avenue	Revere	2	National Grid	787	787	N/A	193712	1525	1.94
1,102	394	4016	Proctor Avenue	181 - 187 Proctor Avenue	Revere	4	National Grid	1586	1586	N/A	193712	3072	1.94
1,103	395	4017	Proctor Avenue	181A-187A Proctor Avenue	Revere	4	National Grid	1586	1586	N/A	193712	3072	1.94
1,104	396	1201	Salem Point Limited Partnership	20-22 Peabody Street	Salem	12	National Grid	12300	10500	3875	82045	8615	0.82
1,105	397	3970	Bertram Terrace	1-10 BERTRAM TERRACE	Salem	10	National Grid	7912	7912	2000	53823	4258	0.54
1,106	398	3971	Bertram Terrace	11-20 BERTRAM TERRACE	Salem	10	National Grid	7912	7912	2000	53823	4258	0.54
1,107	399	3969	Leefort Terrace	14 - 28 Even	Salem	8	National Grid	4250	4250	250	101539	4315	1.02
1,108	400	3979	Leefort Terrace	19 - 33 Odd	Salem	8	National Grid	4250	4250	250	101539	4315	1.02
1,109	401	3968	Leefort Terrace	2 - 12 Even	Salem	6	National Grid	2950	2950	N/A	101539	2995	1.02
1,110	402	3980	Leefort Terrace	3 - 17 Odd	Salem	8	National Grid	4250	4250	250	101539	4315	1.02
1,111	403	3976	Leefort Terrace	30 - 44 Even	Salem	8	National Grid	4250	4250	250	101539	4315	1.02
1,112	404	3978	Leefort Terrace	35 - 41 Odd	Salem	8	National Grid	4250	4250	250	101539	4315	1.02
1,113	405	3977	Leefort Terrace	46 - 60 Even	Salem	8	National Grid	4250	4250	250	101539	4315	1.02
1,114	406	3972	Ruane Building	3 Broad Street	Salem	14	National Grid	7374	7374	374	36546	2695	0.37
1,115	407	2901	Spear St	50-52 Spear St	Quincy	12	National Grid	2526	1263	1326	267662	3381	2.68
1,116	408	2903	Spear St	54-56 Spear St	Quincy	10	National Grid	3124	1562	2124	220862	3450	2.21
1,117	409	2871	Sydney St	179 Sydney St	Dorchester	12	National Grid	3700	2775	1900	97205	2697	0.97
1,118	410	2119	UE - Academy House	5) 45-77 Weaver Way (odd)	Roxbury	11	National Grid	12200	12200	2396	68845	8399	0.69
1,119	411	401	UE - UELP	132 Day	Jamaica Plain	3	National Grid	6496	4872	2835	32430	1580	0.32
1,120	412	2993	Vine St	24 Vine St	Melrose	14	National Grid	3400	1700	1720	137626	2340	1.38
1,121	413	4132	Duncan Rd	41-47 Duncan Rd	Everett	4	National Grid	3850	3850	N/A	83999.99	3234.00	0.84
1,122	414	4130	Duncan Rd	265-269 Elm St & 5 Duncan Rd	Everett	4	National Grid	3300	3300	N/A	74499	2458	0.74
1,123	415	3092	Westland Ave	85 Westland Ave	Boston	33	National Grid	7860	7860	2910	95824	7532	0.96

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,124	416	4131	Duncan Rd	42-48 Winthrop Rd	Everett	4	National Grid	3850	3850	N/A	55261	2128	0.55
1,125	417	2009	Westland Avenue Apartments	65-67 Westland Avenue	Boston	16	National Grid	20898	20898	4180	24817	5186	0.25
1,126	418	2012	Westland Avenue Apartments	83 Westland Avenue	Boston	5	National Grid	20898	20898	4180	18598	3887	0.19
1,127	419	3497	Campbell	59 Campbell St.	Woburn	100	National Grid	88060	88060	38060	10241	9018	0.10
1,128	420	3859	Creston	26-36 Creston E	Woburn	6	National Grid	5760	5760	1785	128134	7381	1.28
1,129	421	3857	Creston	55-63 Creston C	Woburn	5	National Grid	4920	4920	1525	128134	6304	1.28
1,130	422	3856	Creston	75-87 Creston B	Woburn	7	National Grid	6840	6840	2120	128135	8764	1.28
1,131	423	3860	Creston	Creston F	Woburn	7	National Grid	6840	6840	2120	128135	8764	1.28
1,132	424	3861	Creston	Creston G	Woburn	5	National Grid	4920	4920	1525	128134	6304	1.28
1,133	425	3863	Creston	Creston H	Woburn	6	National Grid	6000	6000	1860	128134	7688	1.28
1,134	426	3864	Creston	Creston I	Woburn	5	National Grid	4920	4920	1525	128134	6304	1.28
1,135	427	3997	Spring Ct	Spring Court Ext. - 1	Woburn	6	National Grid	5428	5428	1683	105359	5719	1.05
1,136	428	4008	Spring Ct	Spring Court Ext. - 10	Woburn	4	National Grid	3680	3680	1140	105359	3877	1.05
1,137	429	4003	Spring Ct	Spring Court Ext. - 11	Woburn	6	National Grid	5428	5428	1683	105359	5719	1.05
1,138	430	4009	Spring Ct	Spring Court Ext. - 12	Woburn	4	National Grid	3680	3680	1140	105359	3877	1.05
1,139	431	4010	Spring Ct	Spring Court Ext. - 13	Woburn	8	National Grid	7176	7176	2226	105359	7561	1.05
1,140	432	4011	Spring Ct	Spring Court Ext. - 14	Woburn	8	National Grid	7176	7176	2226	105359	7561	1.05
1,141	433	4012	Spring Ct	Spring Court Ext. - 15	Woburn	8	National Grid	7176	7176	2226	105359	7561	1.05
1,142	434	4013	Spring Ct	Spring Court Ext. - 16	Woburn	8	National Grid	7176	7176	2226	105359	7561	1.05
1,143	435	4014	Spring Ct	Spring Court Ext. - 17	Woburn	8	National Grid	7176	7176	2226	105359	7561	1.05
1,144	436	4004	Spring Ct	Spring Court Ext. - 2	Woburn	4	National Grid	3680	3680	1140	105359	3877	1.05
1,145	437	3999	Spring Ct	Spring Court Ext. - 3	Woburn	6	National Grid	5428	5428	1683	105359	5719	1.05
1,146	438	4005	Spring Ct	Spring Court Ext. - 4	Woburn	4	National Grid	3680	3680	1140	105359	3877	1.05
1,147	439	4000	Spring Ct	Spring Court Ext. - 5	Woburn	6	National Grid	5428	5428	1683	105359	5719	1.05
1,148	440	4006	Spring Ct	Spring Court Ext. - 6	Woburn	4	National Grid	3680	3680	1140	105359	3877	1.05
1,149	441	4001	Spring Ct	Spring Court Ext. - 7	Woburn	6	National Grid	5428	5428	1683	105359	5719	1.05
1,150	442	4007	Spring Ct	Spring Court Ext. - 8	Woburn	4	National Grid	3680	3680	1140	105359	3877	1.05
1,151	443	4002	Spring Ct	Spring Court Ext. - 9	Woburn	6	National Grid	5428	5428	1683	105359	5719	1.05
1,152	444	4015	Spring Ct	Spring Court Ext. - Community	Woburn	1	National Grid	4301	4301	864	105359	4531	1.05
1,153	445	3409	Warren Ave	70 WARREN AVENUE/BLDG A	Woburn	8	National Grid	4000	4000	N/A	74143	2966	0.74
1,154	446	3410	Warren Ave	70 WARREN AVENUE/BLDG B	Woburn	8	National Grid	4000	4000	N/A	74143	2966	0.74
1,155	447	3411	Warren Ave	70 WARREN AVENUE/BLDG C	Woburn	8	National Grid	4000	4000	N/A	74143	2966	0.74
1,156	448	3412	Warren Ave	70 WARREN AVENUE/BLDG D	Woburn	8	National Grid	4000	4000	N/A	74143	2966	0.74
1,157	449	3413	Warren Ave	70 WARREN AVENUE/BLDG E	Woburn	8	National Grid	4000	4000	N/A	74143	2966	0.74
1,158	450	3414	Warren Ave	70 WARREN AVENUE/BLDG F	Woburn	1	National Grid	1232	1232	N/A	74143	913	0.74
1,159	451	3867	Webster	A/55-60 webster ave	Woburn	6	National Grid	5376	5376	1666	126578	6805	1.27
1,160	452	3869	Webster	C/41-44 webster ave	Woburn	4	National Grid	3472	3472	1077	126578	4395	1.27
1,161	453	3870	Webster	D/33-40 webster ave	Woburn	8	National Grid	6720	6720	2085	126578	8506	1.27
1,162	454	3871	Webster	E/27-32 webster ave	Woburn	6	National Grid	5936	5936	1841	126578	7514	1.27
1,163	455	3872	Webster	F/19-26 Webster Avenue	Woburn	8	National Grid	7104	7104	2204	126578	8992	1.27
1,164	456	3873	Webster	G/15-18 webster ave	Woburn	4	National Grid	3472	3472	1077	126578	4395	1.27
1,165	457	3875	Webster	I/1-6 webster ave	Woburn	6	National Grid	5376	5376	1666	126578	6805	1.27
1,166	458	4332	Blue Ledge Co-op	15 Blue Ledge Drive	Roslindale	80	National Grid	72186	72186	24974	45777.99	33045	0.46
1,167	459	1589	Brian Honan Apts	59-61 Everett Sq.	Allston	3	National Grid	2480	2480	0	51718.25	1283	0.52
1,168	460	1595	Brian Honan Apts	63 Everett Sq.	Allston	3	National Grid	2480	2480	0	101004.28	2505	1.01
1,169	461	4283	Cass House/Roxbury Hills	140 Humbolt Ave	Boston	41	National Grid	40000	40000	0	62359.33	24944	0.62
1,170	462	4333	Castle Cove Co-op	225 West 2nd Street	South Boston	65	National Grid	95760	95760	34955	23694.76	22690	0.24
1,171	463	3620	Catherine Gallagher	191/193 Heath Street	Jamaica Plain	2	National Grid	3127	3127	501	42869.94	1341	0.43
1,172	464	3745	Catherine Gallagher	195/197 Heath Street	Jamaica Plain	2	National Grid	3127	3127	501	87825.37	2746	0.88
1,173	465	3746	Catherine Gallagher	199/201 Heath Street	Jamaica Plain	2	National Grid	3675	3675	551	48704.17	1790	0.49
1,174	466	3747	Catherine Gallagher	209 Heath Street	Jamaica Plain	20	National Grid	30176	30176	10121	48981.08	14781	0.49
1,175	467	3750	Catherine Gallagher	223 Heath Street	Jamaica Plain	3	National Grid	5648	5648	2174	40478.24	2286	0.40
1,176	468	4281	Catherine Gallagher	225 Heath Street	Jamaica Plain	3	National Grid	5648	5648	2174	31138.12	1759	0.31
1,177	469	4278	Chesnut Gardens	301 Essex Street	Lynn	65	National Grid	67558	67558	23176	38905.21	26284	0.39
1,178	470	2730	CHT - Congregate	3 Captain's Landing	Chatham	19	National Grid	12544	12544	0	29101.53	3650	0.29
1,179	471	4334	Constitution Co-op	42 Park Street	Charlestown	120	National Grid	58304	58304	21724	80340.90	46842	0.80
1,180	472	4192	Cusack Terrace	8 Summer Street	Arlington	67	National Grid	70000	56000	38175	87743.33	30710	0.55
1,181	473	4335	Everett Villa Co-op	66 Main Street	Everett	78	National Grid	64550	64550	22430	37653.09	24305	0.38
1,182	474	4336	Franklin Park Villa Co-op	131 Morton Street	Jamaica Plain	62	National Grid	52300	52300	18200	44254.81	23145	0.44
1,183	475	4337	Friendly Garden Co-op	235 Revere Street	Revere	107	National Grid	83618	83618	21000	44337.40	37074	0.44
1,184	476	4269	GLO - Lincoln Park	05-08 LINCOLN PARK	Gloucester	4	National Grid	1943	1943	143	105945.65	2059	1.06
1,185	477	4272	GLO - Lincoln Park	13-16 LINCOLN PARK	Gloucester	4	National Grid	1943	1943	143	105945.65	2059	1.06
1,186	478	4265	GLO - Lincoln Park	1-4 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,187	479	4273	GLO - Lincoln Park	17-20 LINCOLN PARK	Gloucester	4	National Grid	1943	1943	143	105945.65	2059	1.06
1,188	480	4274	GLO - Lincoln Park	21-24 LINCOLN PARK	Gloucester	4	National Grid	1943	1943	143	105945.65	2059	1.06
1,189	481	4275	GLO - Lincoln Park	25-28 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,190	482	4276	GLO - Lincoln Park	29-32 LINCOLN PARK	Gloucester	4	National Grid	2233	2233	233	105945.63	2366	1.06
1,191	483	4277	GLO - Lincoln Park	33-36 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,192	484	4266	GLO - Lincoln Park	37-40 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,193	485	4267	GLO - Lincoln Park	41-44 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,194	486	4268	GLO - Lincoln Park	45-48 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,195	487	4270	GLO - Lincoln Park	49-52 LINCOLN PARK	Gloucester	4	National Grid	1898	1898	98	105945.65	2011	1.06
1,196	488	4271	GLO - Lincoln Park	9-12 LINCOLN PARK	Gloucester	4	National Grid	1943	1943	143	105945.65	2059	1.06
1,197	489	4286	GLO - Poplar Park	13-18 POPLAR PARK	Gloucester	6	National Grid	2752	2752	52	115664.83	3183	1.16
1,198	490	4284	GLO - Poplar Park	1-4 POPLAR PARK	Gloucester	4	National Grid	1842	1842	42	115664.77	2131	1.16
1,199	491	4287	GLO - Poplar Park	19-26 POPLAR PARK	Gloucester	8	National Grid	4258	4258	258	115664.73	4925	1.16
1,200	492	4288	GLO - Poplar Park	27-34 POPLAR PARK	Gloucester	8	National Grid	4258	4258	258	115664.73	4925	1.16
1,201	493	4289	GLO - Poplar Park	35-40 POPLAR PARK	Gloucester	6	National Grid	2752	2752	52	115664.83	3183	1.16
1,202	494	4290	GLO - Poplar Park	41-50 POPLAR PARK	Gloucester	10	National Grid	5169	5169	169	115664.75	5979	1.16
1,203	495	4285	GLO - Poplar Park	5-12 POPLAR PARK	Gloucester	8	National Grid	4258	4258	258	115664.73	4925	1.16
1,204	496	4291	GLO - Poplar Park	51-54 POPLAR PARK	Gloucester	4	National Grid	1943	1943	143	115664.70	2247	1.16
1,205	497	4292	GLO - Poplar Park	55-58 POPLAR PARK	Gloucester	4	National Grid	1943	1943	143	115664.70	2247	1.16
1,206	498	4293	GLO - Poplar Park	59-62 POPLAR PARK	Gloucester	4	National Grid	1943	1943	143	115664.70	2247	1.16
1,207	499	4294	GLO - Poplar Park	63-66 POPLAR PARK	Gloucester	4	National Grid	1943	1943	143	115664.70	2247	1.16
1,208	500	4295	GLO - Poplar Park	67-70 POPLAR PARK	Gloucester	4	National Grid	1943	1943	143	115664.70	2247	1.16
1,209	501	4296	GLO - Poplar Park	71-76 POPLAR PARK	Gloucester	6	National Grid	2892	2892	192	115664.79	3345	1.16
1,210	502	4297	GLO - Poplar Park	Poplar Park - Community Bldg	Gloucester	1	National Grid	1200	1200	0	115664.75	1388	1.16
1,211	503	4193	Hauser Building	37 Drake Road	Arlington	144	National Grid	280000	280000	211600	4407.15	12340	0.04
1,212	504	4432	IPS - Agawam Village	AGAWAM VILLAGE - 1	Ipswich	16	National Grid	16146	16146	2146	66797.02	10785	0.67
1,213	505	4433	IPS - Agawam Village	AGAWAM VILLAGE - 2	Ipswich	12	National Grid	8534	8534	734	74996.93	6400	0.75
1,214	506	4434	IPS - Agawam Village	AGAWAM VILLAGE - 3	Ipswich	26	National Grid	18758	18758	1858	87924.78	16493	0.88
1,215	507	4435	IPS - Agawam Village	AGAWAM VILLAGE - 4	Ipswich	22	National Grid	14812	14812	1612	78793.70	11671	0.79
1,216	508	4436	IPS - Agawam Village	AGAWAM VILLAGE - Community Hall	Ipswich	1	National Grid	4110	4110	0	25247.39	1038	0.25
1,217	509	4417	IPS - Southern Manor	SOUTHERN MANOR - A	Ipswich	6	National Grid	2360	2360	0	199479.99	4708	1.99

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total Cond ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,218	510	4418	IPS - Southern Manor	SOUTHERN MANOR - B	Ipswich	7	National Grid	2525	2525	0	175962.21	4443	1.76
1,219	511	4419	IPS - Southern Manor	SOUTHERN MANOR - C	Ipswich	7	National Grid	2525	2525	0	182392.33	4605	1.82
1,220	512	4427	IPS - Whittier Park	11-13-15 Caroline Ave	Ipswich	9	National Grid	4756	4756	256	56497.69	2687	0.56
1,221	513	4429	IPS - Whittier Park	12-14 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	59762.54	2582	0.60
1,222	514	4426	IPS - Whittier Park	1-3-5 Caroline Ave	Ipswich	9	National Grid	4756	4756	256	65024.35	3093	0.65
1,223	515	4430	IPS - Whittier Park	16-18 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	60757.39	2625	0.61
1,224	516	4421	IPS - Whittier Park	17-19 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	57312.46	2476	0.57
1,225	517	4424	IPS - Whittier Park	21-23-25-27 Caroline Ave	Ipswich	10	National Grid	5200	5200	200	73214.44	3807	0.73
1,226	518	4420	IPS - Whittier Park	2-4 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	59495.50	2570	0.59
1,227	519	4422	IPS - Whittier Park	29-31 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	64184.97	2773	0.64
1,228	520	4423	IPS - Whittier Park	33-35 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	57401.87	2480	0.57
1,229	521	4425	IPS - Whittier Park	37-39 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	58579.25	2531	0.59
1,230	522	4428	IPS - Whittier Park	7-9 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	57586.18	2488	0.58
1,231	523	4431	IPS - Whittier Park	8-10 Caroline Ave	Ipswich	8	National Grid	4320	4320	320	57912.17	2502	0.58
1,232	524	4437	IPS - Whittier Park	Caroline Ave - Community Hall	Ipswich	1	National Grid	3024	3024	0	68866.03	2083	0.69
1,233	525	4351	McPherson Park	31 PROSPECT ST	Gloucester	96	National Grid	71286	71286	13686	16361.72	11664	0.16
1,234	526	4468	QUI - David J. Crowley	11 SNUG HARBOR CT	Quincy	4	National Grid	1249	1249	0	135216.07	1689	1.35
1,235	527	4469	QUI - David J. Crowley	2 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,236	528	4470	QUI - David J. Crowley	29 SHED ST	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,237	529	4471	QUI - David J. Crowley	3 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,238	530	4472	QUI - David J. Crowley	384 PALMER ST	Quincy	2	National Grid	1120	1120	0	135215.98	1514	1.35
1,239	531	4473	QUI - David J. Crowley	4 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,240	532	4474	QUI - David J. Crowley	5 SHED ST	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,241	533	4475	QUI - David J. Crowley	5 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,242	534	4476	QUI - David J. Crowley	6 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,243	535	4477	QUI - David J. Crowley	7 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,244	536	4478	QUI - David J. Crowley	8 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,245	537	4479	QUI - David J. Crowley	9 SNUG HARBOR CT	Quincy	4	National Grid	1658	1658	0	135215.94	2242	1.35
1,246	538	4491	QUI - Louie George	31 MARTENSEN STREET - 9	Quincy	4	National Grid	1276	1276	0	113316.77	1446	1.13
1,247	539	4482	QUI - Louie George	35 MARTENSEN STREET - 10	Quincy	4	National Grid	1702	1702	0	113316.69	1929	1.13
1,248	540	4483	QUI - Louie George	39 MARTENSEN STREET - 11	Quincy	4	National Grid	1702	1702	0	113316.69	1929	1.13
1,249	541	4490	QUI - Louie George	45-47 MARTENSEN STREET - 8	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,250	542	4481	QUI - Louie George	53-51 MARTENSEN STREET - 1	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,251	543	4484	QUI - Louie George	57-59 MERTENSEN STREET - 2	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,252	544	4485	QUI - Louie George	63-61 MARTENSEN STREET - 3	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,253	545	4486	QUI - Louie George	67-65 MARTENSEN STREET - 4	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,254	546	4487	QUI - Louie George	69-71 MARTENSEN STREET - 5	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,255	547	4488	QUI - Louie George	73-75 MARTENSEN STREET - 6	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,256	548	4489	QUI - Louie George	77-79 MARTENSEN STREET - 7	Quincy	8	National Grid	4152	4152	152	113316.74	4705	1.13
1,257	549	/881	Salem Fairweather	40R Highland Avenue	Salem	127	National Grid	76033	74833	24251	107301.89	80297	1.07
1,258	550	1202	Salem Point Limited Partnership	46 Peabody Street	Salem	6	National Grid	8017	6686	2663	76659.02	5125	0.77
1,259	551	3728	Sewall Street Apartments	10 Sewall Street	Somerville	14	National Grid	7326	7326	2050	55110.25	4037	0.55
1,260	552	4353	Sheedy Park	88 Pleasant St	Gloucester	81	National Grid	64860	64860	12210	61074.61	39613	0.61
1,261	553	3981	SLM - Leefort Terrace	Community Building	Salem	1	National Grid	1000	1000	0	102628.27	1026	1.03
1,262	554	3365	Spencer Carriage House	204 1/2 Main St	Spencer	3	National Grid	4750	3563	1728	358975.20	12790	3.59
1,263	555	/907	Spencer Green	2-22 Vernon St	Chelsea	9	National Grid	9280	9280	0	27106.35	2515	0.27
1,264	556	4216	TEW - Carnation Drive	Carnation Drive - 1	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,265	557	4225	TEW - Carnation Drive	Carnation Drive - 10	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,266	558	4226	TEW - Carnation Drive	Carnation Drive - 11	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,267	559	4227	TEW - Carnation Drive	Carnation Drive - 12	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,268	560	4228	TEW - Carnation Drive	Carnation Drive - 13	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,269	561	4229	TEW - Carnation Drive	Carnation Drive - 14	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,270	562	4230	TEW - Carnation Drive	Carnation Drive - 15	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,271	563	4231	TEW - Carnation Drive	Carnation Drive - 16	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,272	564	4232	TEW - Carnation Drive	Carnation Drive - 17	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,273	565	4233	TEW - Carnation Drive	Carnation Drive - 18	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,274	566	4240	TEW - Carnation Drive	Carnation Drive - 19	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,275	567	4217	TEW - Carnation Drive	Carnation Drive - 2	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,276	568	4241	TEW - Carnation Drive	Carnation Drive - 20	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,277	569	4218	TEW - Carnation Drive	Carnation Drive - 3	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,278	570	4219	TEW - Carnation Drive	Carnation Drive - 4	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,279	571	4220	TEW - Carnation Drive	Carnation Drive - 5	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,280	572	4221	TEW - Carnation Drive	Carnation Drive - 6	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,281	573	4222	TEW - Carnation Drive	Carnation Drive - 7	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,282	574	4223	TEW - Carnation Drive	Carnation Drive - 8	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,283	575	4224	TEW - Carnation Drive	Carnation Drive - 9	Tewksbury	4	National Grid	1896	1896	296	137937.49	2615	1.38
1,284	576	4815	ACT - McCarthy Village	2 Sachem Way	Acton	12	National Grid	6696	6696	696	34175	2288	0.34
1,285	577	4682	BEV - Balch Apartments	45 BALCH ST - B	Beverly	10	National Grid	4461	4461	461	163188	7280	1.63
1,286	578	4683	BEV - Balch Apartments	45 BALCH ST - C	Beverly	8	National Grid	3608	3608	408	163188	5888	1.63
1,287	579	4681	BEV - Balch Apartments	45 BALCH STREET - A	Beverly	8	National Grid	3608	3608	408	163188	5888	1.63
1,288	580	4672	BEV - Cedar St. Apartments	CEDAR ST - A	Beverly	14	National Grid	6278	6278	678	127792	8023	1.28
1,289	581	4673	BEV - Cedar St. Apartments	CEDAR ST - B	Beverly	12	National Grid	5447	5447	647	127792	6961	1.28
1,290	582	4674	BEV - Cedar St. Apartments	CEDAR ST - C	Beverly	12	National Grid	5447	5447	647	127792	6961	1.28
1,291	583	4675	BEV - Cedar St. Apartments	CEDAR ST - D	Beverly	12	National Grid	5513	5513	713	127792	7045	1.28
1,292	584	4699	BEV - Essex Apartments	ESSEX ST - A	Beverly	8	National Grid	3878	3878	678	96224	3732	0.96
1,293	585	4700	BEV - Essex Apartments	ESSEX ST - B	Beverly	8	National Grid	3878	3878	678	96224	3732	0.96
1,294	586	4701	BEV - Essex Apartments	ESSEX ST - C	Beverly	8	National Grid	3878	3878	678	96224	3732	0.96
1,295	587	4702	BEV - Essex Apartments	ESSEX ST - D	Beverly	8	National Grid	3878	3878	678	96224	3732	0.96
1,296	588	4703	BEV - Essex Apartments	ESSEX ST - E	Beverly	6	National Grid	3097	3097	697	96224	2980	0.96
1,297	589	4704	BEV - Essex Apartments	ESSEX ST - F	Beverly	4	National Grid	1939	1939	339	96224	1866	0.96
1,298	590	4705	BEV - Essex Apartments	ESSEX ST - G	Beverly	4	National Grid	1939	1939	339	96224	1866	0.96
1,299	591	4706	BEV - Essex Apartments	ESSEX ST - H	Beverly	4	National Grid	1939	1939	339	96224	1866	0.96
1,300	592	4932	BEV - Federal St. Apartments	Federal St. Apartments	Beverly	56	National Grid	74325	74325	20325	4113	3057	0.04
1,301	593	4930	BEV - Herrick St.	66 HERRICK ST	Beverly	12	National Grid	5280	5280	380	126075	6657	1.26
1,302	594	4684	BEV - Kelleher Road Apartments	A1 Kelleher Road	Beverly	8	National Grid	3599	3599	399	159024	5723	1.59
1,303	595	4685	BEV - Kelleher Road Apartments	A2 Kelleher Road	Beverly	8	National Grid	3599	3599	399	159024	5723	1.59
1,304	596	4686	BEV - Kelleher Road Apartments	B1 Kelleher Road	Beverly	6	National Grid	2701	2701	301	159023	4295	1.59
1,305	597	4687	BEV - Kelleher Road Apartments	B2 Kelleher Road	Beverly	6	National Grid	2701	2701	301	159023	4295	1.59
1,306	598	4688	BEV - Kelleher Road Apartments	B3 Kelleher Road	Beverly	6	National Grid	2701	2701	301	159023	4295	1.59
1,307	599	4689	BEV - Kelleher Road Apartments	B4 Kelleher Road	Beverly	6	National Grid	2701	2701	301	159023	4295	1.59
1,308	600	4690	BEV - Kelleher Road Apartments	C1 Kelleher Road	Beverly	4	National Grid	1800	1800	200	159023	2862	1.59
1,309	601	4691	BEV - Kelleher Road Apartments	C2 Kelleher Road	Beverly	4	National Grid	1800	1800	200	159023	2862	1.59
1,310	602	4693	BEV - Kelleher Road Apartments	D1 Kelleher Road	Beverly	2	National Grid	906	906	106	159023	1441	1.59
1,311	603	4694	BEV - Kelleher Road Apartments	D2 Kelleher Road	Beverly	2	National Grid	906	906	106	159023	1441	1.59

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,312	604	4695	BEV - Kelleher Road Apartments	D3 Kelleher Road	Beverly	2	National Grid	900	900	140	159023	1441	1.59
1,313	605	4692	BEV - Kelleher Road Apartments	Kelleher Road Community	Beverly	1	National Grid	2160	2160	0	159023	3435	1.59
1,314	606	4776	BIL - 33 Talbot Ave	33 Talbot Ave	Billerica	33	National Grid	22050	22050	2250	66003	14554	0.66
1,315	607	4762	BIL - River St	13 River - Community	Billerica	1	National Grid	1500	1500	0	64326	965	0.64
1,316	608	4754	BIL - River St	13 RIVER ST - 1	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,317	609	4755	BIL - River St	13 RIVER ST - 2	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,318	610	4756	BIL - River St	13 RIVER ST - 3	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,319	611	4757	BIL - River St	13 RIVER ST - 4	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,320	612	4758	BIL - River St	13 RIVER ST - 5	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,321	613	4759	BIL - River St	13 RIVER ST - 6	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,322	614	4760	BIL - River St	13 RIVER ST - 7	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,323	615	4761	BIL - River St	13 RIVER ST - 8	Billerica	8	National Grid	5370	5370	570	64326	3454	0.64
1,324	616	4769	BIL - River St	16 RIVER ST - 1	Billerica	16	National Grid	17072	17072	2672	49009	8367	0.49
1,325	617	/127	Blue Mountain	141 Homestead	Dorchester	10	National Grid	14692	11019	4775	79517	8762	0.80
1,326	618	4770	BIL - River St	16 RIVER ST - 2	Billerica	8	National Grid	6656	6656	1056	49009	3262	0.49
1,327	619	/126	Blue Mountain	135 Homestead	Dorchester	12	National Grid	14692	11019	4692	102435	11287	1.02
1,328	620	4771	BIL - River St	16 RIVER ST - 3	Billerica	16	National Grid	12262	12262	1862	49009	6009	0.49
1,329	621	4997	Bradford Terrace	69 - 75 South Webster Street	Haverhill	4	National Grid	2100	2100	0	131306	2757	1.31
1,330	622	4772	BIL - River St	16 RIVER ST - 4	Billerica	16	National Grid	12262	12262	1862	49009	6009	0.49
1,331	623	4998	Bradford Terrace	61 - 67 South Webster Street	Haverhill	4	National Grid	2100	2100	0	131306	2757	1.31
1,332	624	4773	BIL - River St	16 RIVER ST - 5	Billerica	16	National Grid	17072	17072	2672	49009	8367	0.49
1,333	625	4999	Bradford Terrace	49 - 55 South Webster Street	Haverhill	4	National Grid	2100	2100	0	131306	2757	1.31
1,334	626	4774	BIL - River St	16 RIVER ST - 6	Billerica	8	National Grid	6656	6656	1056	49009	3262	0.49
1,335	627	3748	Catherine Gallagher	219/221 Heath Street	Jamaica Plain	2	National Grid	3127	3127	501	78576	2457	0.79
1,336	628	4775	BIL - River St	16 River St. Community	Billerica	1	National Grid	2965	2965	0	49009	1453	0.49
1,337	629	4916	Gallivan Boulevard	55-57 Woodbole Avenue	Boston	2	National Grid	2064	2064	0	27616	570	0.28
1,338	630	4917	Gallivan Boulevard	56-58 Woodbole Avenue	Boston	2	National Grid	2064	2064	0	117648	2428	1.18
1,339	631	4826	HAM - Congregate	121 Railroad Avenue	Hamilton	12	National Grid	6270	6270	0	47139	2956	0.47
1,340	632	3091	Westland Ave	81 Westland Ave	Boston	32	National Grid	7460	7460	2660	74816	5581	0.75
1,341	633	4856	CLI - Presentation Apartments	309 CHURCH STREET - Highrise	Clinton	48	National Grid	37545	37545	11545	42857	16091	0.43
1,342	634	4821	HAM - Elderly	30 Rust Street	Hamilton	8	National Grid	5014	5014	0	76182	3820	0.76
1,343	635	4857	CLI - Presentation Apartments	309 CHURCH STREET - Victoria	Clinton	8	National Grid	12018	12018	3518	101289	12173	1.01
1,344	636	4825	HAM - Elderly	135 Railroad Avenue	Hamilton	8	National Grid	5014	5014	0	81997	4111	0.82
1,345	637	4850	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 1A	Clinton	8	National Grid	4462	4462	462	129658	5785	1.30
1,346	638	4824	HAM - Elderly	34 Rust Street	Hamilton	8	National Grid	5014	5014	0	84599	4242	0.85
1,347	639	4851	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 1B	Clinton	8	National Grid	4624	4624	624	129658	5995	1.30
1,348	640	4822	HAM - Elderly	125 Railroad Avenue	Hamilton	8	National Grid	5014	5014	0	87163	4370	0.87
1,349	641	4852	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 2A	Clinton	8	National Grid	4624	4624	624	129658	5995	1.30
1,350	642	4823	HAM - Elderly	24 Rust Street	Hamilton	8	National Grid	5014	5014	0	90939	4560	0.91
1,351	643	4853	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 2B	Clinton	8	National Grid	4624	4624	624	129658	5995	1.30
1,352	644	3743	Hyde Square	47 Walden Street	Jamaica Plain	3	National Grid	4023	3923	100	16943	665	0.17
1,353	645	4854	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - 3A	Clinton	8	National Grid	4624	4624	624	129658	5995	1.30
1,354	646	4039	LOW - 572-610 Lakeview	572-586 Lakeview - 1	Lowell	4	National Grid	1419	1419	0	14921	212	0.15
1,355	647	4855	CLI - Shaughnessy Apts.	271 CHESTNUT STREET - Community	Clinton	1	National Grid	1600	1600	0	129658	2075	1.30
1,356	648	4908	EVE - Russell Street	167-172 Russell Street	Everett	4	National Grid	3456	3456	0	56613	1957	0.57
1,357	649	4050	LOW - 572-610 Lakeview	572-586 Lakeview - 2	Lowell	4	National Grid	1419	1419	0	14921	212	0.15
1,358	650	4847	CLI - 367 Water St.	367 Water - 1	Clinton	4	National Grid	1935	1800	135	127011.00	2458	1.27
1,359	651	4895	EVE - Russell Street	115 - 119 Russell Street	Everett	4	National Grid	3456	3456	0	60124	2078	0.60
1,360	652	4052	LOW - 572-610 Lakeview	588-594 Lakeview - 3	Lowell	4	National Grid	1419	1419	0	14921	212	0.15
1,361	653	4839	CLI - 367 Water St.	367 Water - 2	Clinton	6	National Grid	2877	2400	477	127011.00	3654	1.27
1,362	654	4905	EVE - Russell Street	116-122 Russell	Everett	4	National Grid	3456	3456	0	62102	2146	0.62
1,363	655	4053	LOW - 572-610 Lakeview	596-610 Lakeview - 4	Lowell	4	National Grid	1419	1419	0	14921	212	0.15
1,364	656	4840	CLI - 367 Water St.	367 Water - 3	Clinton	6	National Grid	2877	2400	477	127011.00	3654	1.27
1,365	657	4892	EVE - Russell Street	99 - 105 Russell Street	Everett	4	National Grid	3456	3456	0	63339	2189	0.63
1,366	658	4056	LOW - 572-610 Lakeview	596-610 Lakeview - 5	Lowell	4	National Grid	1419	1419	0	14921	212	0.15
1,367	659	4841	CLI - 367 Water St.	367 Water - 4	Clinton	4	National Grid	1935	1800	135	127011.00	2458	1.27
1,368	660	4906	EVE - Russell Street	126-132 Russell	Everett	4	National Grid	3456	3456	0	65077	2249	0.65
1,369	661	/196	Morrant Bay Apartments	193 Magnolia	Dorchester	3	National Grid	3159	3159	359	146749	4636	1.47
1,370	662	4852	CLI - 367 Water St.	367 Water - 5	Clinton	6	National Grid	2877	2400	477	127011.00	3654	1.27
1,371	663	4899	EVE - Russell Street	93-97 Russell St.	Everett	4	National Grid	3456	3456	0	68143	2355	0.68
1,372	664	/197	Morrant Bay Apartments	193A Magnolia	Dorchester	3	National Grid	3159	3159		146749	4636	1.47
1,373	665	4843	CLI - 367 Water St.	367 Water - 6	Clinton	4	National Grid	1935	1800	135	127011.00	2458	1.27
1,374	666	4907	EVE - Russell Street	147-149 Russell	Everett	4	National Grid	3456	3456	0	71480	2470	0.71
1,375	667	/198	Morrant Bay Apartments	195 Magnolia	Dorchester	3	National Grid	3159	3159		146749	4636	1.47
1,376	668	4844	CLI - 367 Water St.	367 Water - 7	Clinton	6	National Grid	2877	2400	477	127011.00	3654	1.27
1,377	669	4893	EVE - Russell Street	90 - 92 Russel Street	Everett	4	National Grid	3744	3744	0	74160	2777	0.74
1,378	670	/199	Morrant Bay Apartments	195A Magnolia	Dorchester	3	National Grid	3159	3159		146749	4636	1.47
1,379	671	4845	CLI - 367 Water St.	367 Water - 8	Clinton	4	National Grid	1935	1800	135	127011.00	2458	1.27
1,380	672	4904	EVE - Russell Street	168-174 Russell Street	Everett	4	National Grid	3456	3456	0	75325	2603	0.75
1,381	673	/216	New Port Antonio	14 Irwin	Dorchester	6	National Grid	4896	3896	1896	162150	6317	1.62
1,382	674	4846	CLI - 367 Water St.	367 Water - Community Garden	Clinton	1	National Grid	1636	1636	0	127011.00	2078	1.27
1,383	675	4901	EVE - Russell Street	150-154 Russell Street	Everett	4	National Grid	3456	3456	0	75369	2605	0.75
1,384	676	4848	Pondview	560 Centre St	Jamaica Plain	60	National Grid	50297	50297	4255	103996	52307	1.04
1,385	677	4891	EVE - Russell Street	83-87 Russell St.	Everett	4	National Grid	3456	3456	0	76913	2658	0.77
1,386	678	2689	Ruggles Shawmut Housing	41 Ruggles Street	Roxbury	43	National Grid	40425	40425	0	40589	16408	0.41
1,387	679	4903	EVE - Russell Street	164-166 Russell Street	Everett	4	National Grid	3744	3744	0	77087	2886	0.77
1,388	680	4242	TEW - Carnation Drive	Carnation Drive - Community	Tewksbury	1	National Grid	1222	1222	0	137211	1677	1.37
1,389	681	4900	EVE - Russell Street	155-159 Russell Street	Everett	4	National Grid	3456	3456	0	78410	2710	0.78
1,390	682	2123	UE - Academy House	9) 2-16 Slayton Way (even)	Roxbury	10	National Grid	13658	13658	3605	69662	9514	0.70
1,391	683	4894	EVE - Russell Street	106 - 110 Russell Street	Everett	4	National Grid	3456	3456	0	79601	2751	0.80
1,392	684	2116	UE - Academy House	2) 36 Academy Court-60 Academy Terra	Roxbury	12	National Grid	16141	16141	3000	69662	11244	0.70
1,393	685	4909	EVE - Russell Street	178-180 Russell Street	Everett	4	National Grid	3456	3456	0	81469	2816	0.81
1,394	686	2121	UE - Academy House	7) 52-60 Slayton Way (even); 12-20 We	Roxbury	11	National Grid	14587	14587	4585	69662	10162	0.70
1,395	687	4951	FREDERICK COURT	29, 33 & 37 Frederick Court	Brewster	4	National Grid	9272	6000	3272	19957	1197	0.20
1,396	688	2125	UE - Academy House	11) 26-64 Slayton Way(even)	Roxbury	14	National Grid	18458	18458	6054	69662	12858	0.70
1,397	689	4950	FREDERICK COURT	10,14,18 FREDERICK COURT	Brewster	6	National Grid	9272	9272	7000	20694	1919	0.21
1,398	690	2124	UE - Academy House	10) 45-63 Slayton Way (odd)	Roxbury	15	National Grid	18687	18687	4500	69662	13018	0.70
1,399	691	4952	FREDERICK COURT	21&25 FREDERICK COURT	Brewster	4	National Grid	6080	6080	4000	30976	1883	0.31
1,400	692	/821	West Broadway	363-371 West Broadway	South Boston	7	National Grid	10747	8067	5560	55736	4496	0.56
1,401	693	4953	FREDERICK COURT	11 FREDERICK COURT	Brewster	2	National Grid	1792	1792	1792	60720	1088	0.61
1,402	694	5140	EVE - Whittier	3 Whittier Dr - 4	Everett	8	National Grid	4728	4728	1459	131766	6230	1.32
1,403	695	5131	EVE - Whittier	12 Whittier Dr & 15 Lynn St - 13	Everett	4	National Grid	1900	1900	0	131766	2504	1.32
1,404	696	5144	EVE - Whittier	253 Shute St & 35 Whittier Dr	Everett	4	National Grid	1900	1900	0	131766	2504	1.32
1,405	697	5143	EVE - Whittier	255 Shute St & 31 Whittier Dr	Everett	4	National Grid	1900	1900	0	131766	2504	1.32

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total Cond ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,406	698	5130	EVE - Whittier	32 Whittier Dr & 33 Lynn St - 12	Everett	4	National Grid	1906	1906	0	131766	2504	1.32
1,407	699	5142	EVE - Whittier	Community Building	Everett	1	National Grid	3150	3150	0	131766	4151	1.32
1,408	700	5141	EVE - Whittier	11 & 15 Whittier Dr - 5	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,409	701	5129	EVE - Whittier	16 Whittier Dr & 9 Proctor Rd - 11	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,410	702	5135	EVE - Whittier	17 Lynn St & 3 Proctor Rd - 16	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,411	703	5138	EVE - Whittier	23 & 27 Whittier Dr - 2	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,412	704	5133	EVE - Whittier	237 Shute St & 37 Lynn St - 15	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,413	705	5127	EVE - Whittier	28 Whittier Dr & 10 Proctor Rd - 10	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,414	706	5136	EVE - Whittier	29 Lynn St & 4 Proctor Rd - 17	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,415	707	5146	EVE - Whittier	36 Whittier Dr & 243 Schute St - 9	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,416	708	5132	EVE - Whittier	8 Whittier Dr & 10 McKinley St - 14	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,417	709	5137	EVE - Whittier	9 Lynn St & 4 McKinley St - 18	Everett	8	National Grid	3800	3800	0	131766	5007	1.32
1,418	710	5139	EVE - Whittier	17 & 19 Whittier Dr - 3	Everett	8	National Grid	4728	4728	1459	131766	6230	1.32
1,419	711	5126	EVE - Whittier	259 & 261 Shute St - 1	Everett	8	National Grid	4728	4728	1459	131766	6230	1.32
1,420	712	5291	Gallivan Boulevard	140-142 Woodbole Ave	Boston	2	National Grid	1800	1800	0	30130	542	0.30
1,421	713	5328	Gallivan Boulevard	41-43 Woodgate Street	Boston	2	National Grid	1932	1932	0	37873	732	0.38
1,422	714	5334	Gallivan Boulevard	107-109 Woodbole Ave	Boston	2	National Grid	2064	2064	0	53698	1108	0.54
1,423	715	5286	Gallivan Boulevard	16-18 Woodgate Street	Boston	2	National Grid	1800	1800	0	65195	1174	0.65
1,424	716	5272	Gallivan Boulevard	83-85 Woodbole Ave	Boston	2	National Grid	1800	1800	0	69872	1258	0.70
1,425	717	5293	Gallivan Boulevard	70-72 Woodruff Way	Boston	2	National Grid	1800	1800	0	70432	1268	0.70
1,426	718	5063	Gallivan Boulevard	1015 Morton Street - 129	Boston	1	National Grid	1092	1092	N/A	117216	1280	1.17
1,427	719	5278	Gallivan Boulevard	19-21 Woodbole Ave	Boston	2	National Grid	1800	1800	0	72664	1308	0.73
1,428	720	5319	Gallivan Boulevard	119-121 Woodbole Ave	Boston	2	National Grid	1800	1800	0	75166	1353	0.75
1,429	721	5066	Gallivan Boulevard	1037 Morton Street - 134	Boston	1	National Grid	1092	1092	N/A	129088	1410	1.29
1,430	722	5306	Gallivan Boulevard	144-146 Woodbole Ave	Boston	2	National Grid	1800	1800	0	78800	1418	0.79
1,431	723	5371	Gallivan Boulevard	78-80 Woodbole Ave	Boston	2	National Grid	2064	2064	0	69347	1431	0.69
1,432	724	5311	Gallivan Boulevard	116-118 Woodbole Ave	Boston	2	National Grid	1800	1800	0	80053	1441	0.80
1,433	725	5355	Gallivan Boulevard	6-8 Woodbole Ave	Boston	2	National Grid	2064	2064	0	70904	1463	0.71
1,434	726	5065	Gallivan Boulevard	1023 Morton Street - 131	Boston	1	National Grid	1092	1092	N/A	135285	1477	1.35
1,435	727	5367	Gallivan Boulevard	124-126 Standard Street	Boston	2	National Grid	2064	2064	0	72394	1494	0.72
1,436	728	5354	Gallivan Boulevard	14-16 Woodbole Ave	Boston	2	National Grid	2064	2064	0	72598	1498	0.73
1,437	729	5270	Gallivan Boulevard	95-97 Woodbole Ave	Boston	2	National Grid	1800	1800	0	84699	1525	0.85
1,438	730	5325	Gallivan Boulevard	8-10 Woodgate Street	Boston	2	National Grid	1932	1932	0	79605	1538	0.80
1,439	731	5373	Gallivan Boulevard	70-72 Woodbole Ave	Boston	2	National Grid	2064	2064	0	75023	1548	0.75
1,440	732	5062	Gallivan Boulevard	1009 Morton Street - 128	Boston	1	National Grid	1092	1092	N/A	142369	1555	1.42
1,441	733	5330	Gallivan Boulevard	2-4 Woodruff Way	Boston	2	National Grid	1932	1932	0	80631	1558	0.81
1,442	734	5069	Gallivan Boulevard	1033 Morton Street - 133	Boston	1	National Grid	1092	1092	N/A	143868	1571	1.44
1,443	735	5283	Gallivan Boulevard	44-46 Woodgate Street	Boston	2	National Grid	1800	1800	0	87841	1581	0.88
1,444	736	5071	Gallivan Boulevard	10-12 Woodruff Way - 55	Boston	2	National Grid	1800	1800	0	88722	1597	0.89
1,445	737	5274	Gallivan Boulevard	141-143 Woodbole Ave	Boston	2	National Grid	1800	1800	0	90367	1627	0.90
1,446	738	5314	Gallivan Boulevard	82-84 Woodbole AVe	Boston	2	National Grid	1800	1800	0	92969	1673	0.93
1,447	739	5312	Gallivan Boulevard	90-92 Woodbole Ave	Boston	2	National Grid	1800	1800	0	94650	1704	0.95
1,448	740	5383	Gallivan Boulevard	12-14 Woodgate Street	Boston	2	National Grid	2068	2068	0	82766	1712	0.83
1,449	741	5296	Gallivan Boulevard	14-16 Woodruff Way	Boston	2	National Grid	1800	1800	0	95328	1716	0.95
1,450	742	5310	Gallivan Boulevard	120-122 Woodbole Ave	Boston	2	National Grid	1800	1800	0	95342	1716	0.95
1,451	743	5068	Gallivan Boulevard	1027 Morton Street - 132	Boston	1	National Grid	1092	1092	N/A	157319	1718	1.57
1,452	744	5313	Gallivan Boulevard	86-88 Woodbole Ave	Boston	2	National Grid	1800	1800	0	98117	1766	0.98
1,453	745	5318	Gallivan Boulevard	123-125 Woodbole Ave	Boston	2	National Grid	1800	1800	0	99850	1797	1.00
1,454	746	5341	Gallivan Boulevard	5-7 Woodbole Ave	Boston	2	National Grid	2064	2064	0	87183	1799	0.87
1,455	747	5061	Gallivan Boulevard	1005 Morton Street - 127	Boston	1	National Grid	1092	1092	N/A	167075	1824	1.67
1,456	748	5342	Gallivan Boulevard	1-3 Woodbole Ave	Boston	2	National Grid	2064	2064	0	89374	1845	0.89
1,457	749	5280	Gallivan Boulevard	145-147 Woodbole Ave	Boston	2	National Grid	1800	1800	0	102685	1848	1.03
1,458	750	5275	Gallivan Boulevard	67-69 Woodbole Ave	Boston	2	National Grid	1800	1800	0	102950	1853	1.03
1,459	751	5285	Gallivan Boulevard	20-22 Woodgate Street	Boston	2	National Grid	1800	1800	0	103136	1856	1.03
1,460	752	5374	Gallivan Boulevard	19-21 Woodruff Way	Boston	2	National Grid	2064	2064	0	90295	1864	0.90
1,461	753	5064	Gallivan Boulevard	1019 Morton Street - 130	Boston	1	National Grid	1092	1092	N/A	172066	1879	1.72
1,462	754	5299	Gallivan Boulevard	34-36 Woodbole Ave	Boston	2	National Grid	1800	1800	0	105365	1897	1.05
1,463	755	5361	Gallivan Boulevard	48-50 Woodbole Ave	Boston	2	National Grid	2064	2064	0	95025	1961	0.95
1,464	756	5073	Gallivan Boulevard	103 - 105 Standard Street - 18	Boston	2	National Grid	1800	1800	0	109217	1966	1.09
1,465	757	5290	Gallivan Boulevard	33-35 Woodgate Street	Boston	2	National Grid	1800	1800	0	112067	2017	1.12
1,466	758	5060	Gallivan Boulevard	98-100 Standard Street	Boston	2	National Grid	1800	1800	0	112917	2033	1.13
1,467	759	5345	Gallivan Boulevard	52-54 Woodgate Street	Boston	2	National Grid	2064	2064	0	98508	2033	0.99
1,468	760	5369	Gallivan Boulevard	100-102 Woodbole Ave	Boston	2	National Grid	2064	2064	0	100075	2066	1.00
1,469	761	5362	Gallivan Boulevard	30-32 Woodbole Ave	Boston	2	National Grid	2064	2064	0	101559	2096	1.02
1,470	762	5284	Gallivan Boulevard	32-34 Woodgate Street	Boston	2	National Grid	1800	1800	0	116984	2106	1.17
1,471	763	5276	Gallivan Boulevard	51-53 Woodbole Ave	Boston	2	National Grid	1800	1800	0	117239	2110	1.17
1,472	764	5346	Gallivan Boulevard	40-42 Woodgate Street	Boston	2	National Grid	2064	2064	0	103378	2134	1.03
1,473	765	5072	Gallivan Boulevard	102 - 104 Standard Street - 15	Boston	2	National Grid	1800	1800	0	118994	2142	1.19
1,474	766	5282	Gallivan Boulevard	48-50 Woodgate Street	Boston	2	National Grid	1800	1800	0	120112	2162	1.20
1,475	767	5336	Gallivan Boulevard	87-89 Woodbole Ave	Boston	2	National Grid	2064	2064	0	105641	2180	1.06
1,476	768	5297	Gallivan Boulevard	52-54 Woodbole Ave	Boston	2	National Grid	1800	1800	0	124061	2233	1.24
1,477	769	5356	Gallivan Boulevard	21-23 Woodgate Street	Boston	2	National Grid	2064	2064	0	108561	2241	1.09
1,478	770	5380	Gallivan Boulevard	115-117 Woodbole Ave	Boston	2	National Grid	2064	2064	0	109199	2254	1.09
1,479	771	5279	Gallivan Boulevard	13-15 Woodbole Ave	Boston	2	National Grid	1800	1800	0	125328	2256	1.25
1,480	772	5321	Gallivan Boulevard	99-101 Woodbole Ave	Boston	2	National Grid	1932	1932	0	116774	2256	1.17
1,481	773	5273	Gallivan Boulevard	79-81 Woodbole Ave	Boston	2	National Grid	1800	1800	0	125983	2268	1.26
1,482	774	5070	Gallivan Boulevard	10-12 Woodbole Ave - 39	Boston	2	National Grid	1800	1800	0	127037	2287	1.27
1,483	775	5271	Gallivan Boulevard	91-93 Woodbole Ave	Boston	2	National Grid	1800	1800	0	129789	2336	1.30
1,484	776	5300	Gallivan Boulevard	26-28 Woodbole Ave	Boston	2	National Grid	1800	1800	0	130679	2352	1.31
1,485	777	5320	Gallivan Boulevard	25-27 Woodgate Street	Boston	2	National Grid	1920	1920	0	124333	2387	1.24
1,486	778	5277	Gallivan Boulevard	47-49 Woodbole Ave	Boston	2	National Grid	1800	1800	0	134506	2421	1.35
1,487	779	5315	Gallivan Boulevard	15-17 Woodruff Way	Boston	2	National Grid	1800	1800	0	135845	2445	1.36
1,488	780	5289	Gallivan Boulevard	29-31 Woodgate Street	Boston	2	National Grid	1800	1800	0	136922	2465	1.37
1,489	781	5349	Gallivan Boulevard	24-26 Woodgate Street	Boston	2	National Grid	2064	2064	0	119559	2468	1.20
1,490	782	5323	Gallivan Boulevard	59-61 Woodbole Ave	Boston	2	National Grid	1932	1932	0	127774	2469	1.28
1,491	783	5347	Gallivan Boulevard	36-38 Woodgate Street	Boston	2	National Grid	2064	2064	0	119966	2476	1.20
1,492	784	5359	Gallivan Boulevard	18-20 Woodruff Way	Boston	2	National Grid	2064	2064	0	121599	2510	1.22
1,493	785	5327	Gallivan Boulevard	74-76 Woodruff Way	Boston	2	National Grid	1932	1932	0	132750	2565	1.33
1,494	786	5339	Gallivan Boulevard	27-29 Woodbole Ave	Boston	2	National Grid	2064	2064	0	125148	2583	1.25
1,495	787	5337	Gallivan Boulevard	71-73 Woodbole Ave	Boston	2	National Grid	2064	2064	0	125298	2586	1.25
1,496	788	5322	Gallivan Boulevard	75-77 Woodbole Ave	Boston	2	National Grid	1932	1932	0	135384	2616	1.35
1,497	789	5338	Gallivan Boulevard	63-65 Woodbole Ave	Boston	2	National Grid	2064	2064	0	127800	2638	1.28
1,498	790	5331	Gallivan Boulevard	66-68 Woodbole Ave	Boston	2	National Grid	1932	1932	0	139012	2686	1.39
1,499	791	5343	Gallivan Boulevard	107-109 Standard Street	Boston	2	National Grid	2064	2064	0	130368	2691	1.30

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,500	792	5281	Gallivan Boulevard	9-11 Woodbole Ave	Boston	2	National Grid	1800	1800	0	151577	2728	1.52
1,501	793	5340	Gallivan Boulevard	23-25 Woodbole Ave	Boston	2	National Grid	2064	2064	0	133236	2750	1.33
1,502	794	5348	Gallivan Boulevard	28-30 Woodgate Street	Boston	2	National Grid	2064	2064	0	136439	2816	1.36
1,503	795	5357	Gallivan Boulevard	37-39 Woodgate Street	Boston	2	National Grid	2064	2064	0	136817	2824	1.37
1,504	796	5381	Gallivan Boulevard	111-113 Woodbole Ave	Boston	2	National Grid	2064	2064	0	139381	2877	1.39
1,505	797	5324	Gallivan Boulevard	106-108 Standard Street	Boston	2	National Grid	1932	1932	0	152285	2942	1.52
1,506	798	5372	Gallivan Boulevard	74-76 Woodbole Ave	Boston	2	National Grid	2064	2064	0	160195	3306	1.60
1,507	799	5097	HAM - Elderly	129 Railroad Avenue	Hamilton	1	National Grid	1240	1240	0	141654	1757	1.42
1,508	800	5005	HAV - Bradford Terrace	37-39 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	131516	6292	1.32
1,509	801	5004	HAV - Bradford Terrace	57-59 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	131516	6292	1.32
1,510	802	5003	HAV - Bradford Terrace	77-79 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	131516	6292	1.32
1,511	803	5002	HAV - Bradford Terrace	81-83 SOUTH WEBSTER STREET	Haverill	8	National Grid	4784	4784	784	131516	6292	1.32
1,512	804	5006	HAV - Bradford Terrace	Bradford Terrace - Community	Haverill	1	National Grid	1925	1925	0	131516	2532	1.32
1,513	805	5001	HAV - Bradford Terrace	29-35 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	131516	2762	1.32
1,514	806	5000	HAV - Bradford Terrace	41-47 SOUTH WEBSTER STREET	Haverill	4	National Grid	2100	2100	100	131516	2762	1.32
1,515	807	1512	Progress House	39 High Street	Amesbury	26	National Grid	11301	9525	1776	62123	5917	0.62
1,516	808	2011	SUD - 705-C	2 Beechwood Avenue	Sudbury	1	National Grid	2400	2400	N/A	35396	850	0.35
1,517	809	3727	Walnut Street Apartments	110 Walnut Street	Somerville	12	National Grid	12272	9228	3044	11151	1029	0.11
1,518	810	4643	DED - East Dedham Family	Lo - 106-112 Veterans Road	Dedham	4	National Grid	3456	3456	0	44289	1531	0.44
1,519	811	5148	EVE - Glendale Towers	Administration Building	Everett	1	National Grid	5320	5320	0	46019	2448	0.46
1,520	812	5888	48 Woodman St.	32 & 36 Woodman St.	Lynn	8	National Grid	4870	4870	0	115458	5623	1.15
1,521	813	5894	48 Woodman St.	38 & 42 Woodman St.	Lynn	8	National Grid	4876	4876	0	115458	5630	1.15
1,522	814	5891	48 Woodman St.	44 & 48 Woodman St.	Lynn	8	National Grid	4870	4870	0	115458	5623	1.15
1,523	815	5893	48 Woodman St.	50 & 54 Woodman St.	Lynn	8	National Grid	4876	4876	0	115458	5630	1.15
1,524	816	5892	48 Woodman St.	56 & 60 Woodman St.	Lynn	8	National Grid	4870	4870	0	115458	5623	1.15
1,525	817	5785	BRO - Benjamin A. Trustman Apts	337 - 347 St. Paul St	Brookline	16	National Grid	26751	26751	8293	19415	5194	0.19
1,526	818	5775	BRO - Egmont Street Veterans	209 - 221 Pleasant St	Brookline	24	National Grid	18081	18081	5606	105942	19155	1.06
1,527	819	609	BRO - Egmont Street Veterans	338-348 St. Paul St - C	Brookline	18	National Grid	16224	16224	5030	109304	17733	1.09
1,528	820	5781	BRO - Egmont Street Veterans	49 Egmont BF	Brookline	1	National Grid	1600	1600	0	90302	1445	0.90
1,529	821	5783	BRO - Egmont Street Veterans	51 - 55 Egmont St - B4	Brookline	18	National Grid	15726	15726	4876	102333	16093	1.02
1,530	822	5779	BRO - Egmont Street Veterans	57 - 59 Egmont St BF	Brookline	2	National Grid	2400	2400	0	107051	2569	1.07
1,531	823	5778	BRO - Egmont Street Veterans	61 - 65 Egmont St - B3	Brookline	18	National Grid	15726	15726	4876	93513	14706	0.94
1,532	824	5782	BRO - Egmont Street Veterans	69 Egmont BF	Brookline	1	National Grid	1600	1600	0	76921	1231	0.77
1,533	825	5780	BRO - Egmont Street Veterans	77 - 79 Egmont BF	Brookline	2	National Grid	2400	2400	0	82276	1975	0.82
1,534	826	5776	BRO - Egmont Street Veterans	81 - 85 Egmont St	Brookline	18	National Grid	15726	15726	4876	113304	17818	1.13
1,535	827	608	BRO - High Street Veterans	176 - 224 High St - A1	Brookline	28	National Grid	20391	20391	6322	114125	23271	1.14
1,536	828	5769	BRO - High Street Veterans	186 - 204 Chestnut Street - A2	Brookline	30	National Grid	25971	25971	8052	114125	29639	1.14
1,537	829	5770	BRO - High Street Veterans	210 - 212 High St - B1	Brookline	12	National Grid	11322	11322	3510	114125	12921	1.14
1,538	830	5773	BRO - High Street Veterans	210 - 218 Chestnut Street - E	Brookline	30	National Grid	27066	27066	8391	114125	30889	1.14
1,539	831	5772	BRO - High Street Veterans	220 - 214 High Street - D	Brookline	24	National Grid	19926	19926	6178	114125	22741	1.14
1,540	832	5771	BRO - High Street Veterans	222- 226 High Street - B2	Brookline	12	National Grid	11322	11322	3510	114125	12921	1.14
1,541	833	5774	BRO - High Street Veterans	6 - 30 New Terrace Rd - C	Brookline	45	National Grid	37533	37533	11636	114125	42834	1.14
1,542	834	5049	Cobble Hill Apts	50 Washington Street	Somerville	75	National Grid	64400	64400	16100	59036	33419	0.52
1,543	835	5050	Cobble Hill Apts	60 Washington Street	Somerville	37	National Grid	31162	31162	7790	59036	16171	0.52
1,544	836	5051	Cobble Hill Apts	74 Washington Street	Somerville	37	National Grid	31162	31162	7790	60508	18856	0.61
1,545	837	5031	Cobble Hill Apts	84 Washington Street	Somerville	75	National Grid	64400	64400	16100	44499	28658	0.45
1,546	838	5839	Essex and Tilton	10 - 16 Tilton	Lynn	16	National Grid	9752	9752	1752	104756	10216	1.05
1,547	839	2994	EVE - Golden Age Circle	2-30 Golden Age Circle	Everett	14	National Grid	9752	9752	1752	104756	10216	1.05
1,548	840	2996	EVE - Golden Age Circle	Golden Age Circle - 3	Everett	12	National Grid	6200	6200	1280	148323	9196	1.48
1,549	841	4896	EVE - Russell Street	100 - 102 Russell Street	Everett	4	National Grid	3744	3744	0	75141	2813	0.75
1,550	842	5793	EVE - Russell Street	131 - 137 Russel Street	Everett	4	National Grid	3456	3456	0	96925	3350	0.97
1,551	843	5794	EVE - Russell Street	134 - 138 Russel Street	Everett	4	National Grid	3456	3456	0	61156	2114	0.61
1,552	844	5795	EVE - Russell Street	146 - 148 Russel Street	Everett	4	National Grid	3456	3456	0	96880	3348	0.97
1,553	845	5830	EVE - Russell Street	184 - 186 Russel Street	Everett	4	National Grid	3744	3744	0	68064	2548	0.68
1,554	846	5832	EVE - Russell Street	187 - 191 Russel Street	Everett	4	National Grid	3744	3744	0	48480	1815	0.48
1,555	847	5834	EVE - Russell Street	193 - 195 Russel Street	Everett	4	National Grid	3744	3744	0	68724	2573	0.69
1,556	848	5799	EVE - Russell Street	194-196 Russell St.	Everett	4	National Grid	3456	3456	0	58008	2005	0.58
1,557	849	5801	EVE - Russell Street	202-208 Russell St.	Everett	4	National Grid	3456	3456	0	75404	2606	0.75
1,558	850	5802	EVE - Russell Street	205-209 Russell St.	Everett	4	National Grid	3456	3456	0	74108	2561	0.74
1,559	851	5803	EVE - Russell Street	210-212 Russelll St.	Everett	4	National Grid	3456	3456	0	66957	2314	0.67
1,560	852	5835	EVE - Russell Street	227 - 233 Russel Street	Everett	4	National Grid	3744	3744	0	53046	1986	0.53
1,561	853	5335	Gallivan Boulevard	103-105 Woodbole Ave	Boston	2	National Grid	2064	2064	0	135509	2797	1.36
1,562	854	5491	Gallivan Boulevard	110-112 Standard St.	Boston	2	National Grid	1800	1800	0	112747	2029	1.13
1,563	855	5368	Gallivan Boulevard	120-122 Standard Street	Boston	2	National Grid	2064	2064	0	69807	1441	0.70
1,564	856	5350	Gallivan Boulevard	127-129 Standard Street	Boston	2	National Grid	2064	2064	0	117796	2431	1.18
1,565	857	5366	Gallivan Boulevard	128-130 Standard Street	Boston	2	National Grid	2064	2064	0	85282	1760	0.85
1,566	858	5351	Gallivan Boulevard	131-133 Standard Street	Boston	2	National Grid	2064	2064	0	56610	1168	0.57
1,567	859	5305	Gallivan Boulevard	132-134 Standard Street	Boston	2	National Grid	1800	1800	0	78198	1408	0.78
1,568	860	5304	Gallivan Boulevard	136-138 Standard Street	Boston	2	National Grid	1800	1800	0	52481	945	0.52
1,569	861	5288	Gallivan Boulevard	137-139 Standard Street	Boston	2	National Grid	1800	1800	0	102203	1840	1.02
1,570	862	5353	Gallivan Boulevard	145-147 Standard Street	Boston	2	National Grid	2064	2064	0	28799	594	0.29
1,571	863	5363	Gallivan Boulevard	148-150 Standard Street	Boston	2	National Grid	2064	2064	0	89729	1852	0.90
1,572	864	5326	Gallivan Boulevard	151-153 Standard Street	Boston	2	National Grid	1932	1932	0	113304	2189	1.13
1,573	865	5302	Gallivan Boulevard	152-154 Standard Street	Boston	2	National Grid	1800	1800	0	144075	2593	1.44
1,574	866	5301	Gallivan Boulevard	156-158 Standard Street	Boston	2	National Grid	1800	1800	0	110155	1983	1.10
1,575	867	5329	Gallivan Boulevard	22-24 Woodruff Way	Boston	2	National Grid	1932	1932	0	142469	2753	1.42
1,576	868	5295	Gallivan Boulevard	26-28 Woodruff Way	Boston	2	National Grid	1800	1800	0	37675	678	0.38
1,577	869	5376	Gallivan Boulevard	27-29 Woodruff Way	Boston	2	National Grid	2064	2064	0	74734	1543	0.75
1,578	870	5294	Gallivan Boulevard	30-32 Woodruff Way	Boston	2	National Grid	1800	1800	0	147837	2661	1.48
1,579	871	5317	Gallivan Boulevard	31-33 Woodruff Way	Boston	2	National Grid	1800	1800	0	100667	1812	1.01
1,580	872	5292	Gallivan Boulevard	34-36 Woodruff Way	Boston	2	National Grid	1800	1800	0	105349	1896	1.05
1,581	873	5377	Gallivan Boulevard	35-37 Woodruff Way	Boston	2	National Grid	2064	2064	0	123280	2545	1.23
1,582	874	5358	Gallivan Boulevard	38-40 Woodruff Way	Boston	2	National Grid	2064	2064	0	136229	2812	1.36
1,583	875	5308	Gallivan Boulevard	39-41 Woodruff Way	Boston	2	National Grid	1800	1800	0	97533	1756	0.98
1,584	876	5379	Gallivan Boulevard	49-51 Woodruff Way	Boston	2	National Grid	2064	2064	0	132962	2744	1.33
1,585	877	5269	Gallivan Boulevard	50-52 Woodruff Way	Boston	2	National Grid	1800	1800	0	97313	1752	0.97
1,586	878	5378	Gallivan Boulevard	53-55 Woodruff Way	Boston	2	National Grid	2064	2064	0	130813	2700	1.31
1,587	879	5375	Gallivan Boulevard	54-56 Woodruff Way	Boston	2	National Grid	2064	2064	0	113314	2339	1.13
1,588	880	5332	Gallivan Boulevard	57-59 Woodruff Way	Boston	2	National Grid	1932	1932	0	119703	2313	1.20
1,589	881	5370	Gallivan Boulevard	58-60 Woodruff Way	Boston	2	National Grid	2064	2064	0	141161	2914	1.41
1,590	882	5365	Gallivan Boulevard	62-64 Woodruff Way	Boston	2	National Grid	2064	2064	0	146634	3027	1.47
1,591	883	5298	Gallivan Boulevard	66-68 Woodruff Way	Boston	2	National Grid	1800	1800	0	120802	2174	1.21
1,592	884	5287	Gallivan Boulevard	78-80 Woodruff Way	Boston	2	National Grid	1800	1800	0	94356	1698	0.94
1,593	885	5344	Gallivan Boulevard	82-84 Woodruff Way	Boston	2	National Grid	2064	2064	0	116264	2400	1.16

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,594	886	5067	Gallivan Boulevard	99 Standard Street - 17	Boston	1	National Grid	1092	1092		155567	1699	1.56
1,595	887	5399	Harbor Point	15 South Point Drive	Dorchester	225	National Grid	419015	419015	41902	39890	167146	0.40
1,596	888	5493	Harbor Point	16 Harbor Crest court	Dorchester	32	National Grid	77400	74388	7740	41505	30875	0.42
1,597	889	5495	Harbor Point	20 South Point Drive	Dorchester	54	National Grid	82800	79788	8280	41396	33029	0.41
1,598	890	5506	Harbor Point	4 TH Harbor Point	Dorchester	14	National Grid	23505	23505	0	87166	20488	0.87
1,599	891	5498	Harbor Point	40 Westwind Road	Dorchester	130	National Grid	355380	349990	35538	40505	141762	0.41
1,600	892	5499	Harbor Point	47 South Point Drive	Dorchester	232	National Grid	349570	349065	34957	39948	139444	0.40
1,601	893	5507	Harbor Point	5 TH Harbor Point	Dorchester	7	National Grid	12416	12416	0	104566	12983	1.05
1,602	894	5500	Harbor Point	55 Westwind Road	Dorchester	246	National Grid	349570	349570	34957	39890	139444	0.40
1,603	895	5508	Harbor Point	6 TH Harbor Point	Dorchester	4	National Grid	7892	7892	0	77693	6132	0.78
1,604	896	5501	Harbor Point	77 North Point Drive	Dorchester	90	National Grid	142470	139458	14247	40752	56832	0.41
1,605	897	5502	Harbor Point	96 Westwind	Dorchester	64	National Grid	101070	99568	10107	40492	40317	0.40
1,606	898	5215	Innis Apartments	170-180 Central Ave	Chelsea	36	National Grid	30240	30240	4536	136138	41168	1.36
1,607	899	5212	Innis Apartments	230 & 232 Central Ave	Chelsea	12	National Grid	10800	10800	1620	137734	14875	1.38
1,608	900	5211	Innis Apartments	234 & 236 Central Ave	Chelsea	12	National Grid	10800	10800	1620	137734	14875	1.38
1,609	901	5216	Innis Apartments	55 & 61 Watts	Chelsea	12	National Grid	10800	10800	2562	136138	14703	1.36
1,610	902	5214	Innis Apartments	72 & 76 Willow St/210 & 216 Central Ave	Chelsea	24	National Grid	10800	10800	1620	251166	27126	2.51
1,611	903	5570	Julian D. Steele	762 - 770 Washington Street	Haverhill	20	National Grid	14400	14400	4464	87122	12546	0.87
1,612	904	5572	Julian D. Steele	772 Washington Street	Haverhill	1	National Grid	2664	2664	0	87122	2321	0.87
1,613	905	5566	Julian D. Steele	774 - 778 Washington Street	Haverhill	12	National Grid	8800	8800	2728	87122	7667	0.87
1,614	906	5567	Julian D. Steele	780 - 784 Washington Street	Haverhill	12	National Grid	8800	8800	2728	87122	7667	0.87
1,615	907	5565	Julian D. Steele	786-790 Washington Street	Haverhill	12	National Grid	8800	8800	2728	87122	7667	0.87
1,616	908	5568	Julian D. Steele	792 - 796 Washington Street	Haverhill	12	National Grid	8800	8800	2728	87122	7667	0.87
1,617	909	5564	Julian D. Steele	798 - 802 Washington Street	Haverhill	12	National Grid	8800	8800	2728	87122	7667	0.87
1,618	910	5569	Julian D. Steele	804 - 808 Washington Street	Haverhill	12	National Grid	8800	8800	2728	87122	7667	0.87
1,619	911	5529	Kennedy Circle	1 - 5 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	113515	11088	1.14
1,620	912	5534	Kennedy Circle	17 - 25 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	113515	5401	1.14
1,621	913	5530	Kennedy Circle	18 - 22 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	113515	11088	1.14
1,622	914	5528	Kennedy Circle	2 - 6 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	113515	11088	1.14
1,623	915	5531	Kennedy Circle	24 - 28 Kennedy Circle	Haverhill	12	National Grid	9768	9768	3029	113515	11088	1.14
1,624	916	5535	Kennedy Circle	30 - 38 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	113515	5401	1.14
1,625	917	5536	Kennedy Circle	40 Kennedy Circle	Haverhill	1	National Grid	2400	2400	0	113515	2724	1.14
1,626	918	5533	Kennedy Circle	7 - 15 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	113515	5401	1.14
1,627	919	5532	Kennedy Circle	8 - 16 Kennedy Circle	Haverhill	8	National Grid	4758	4758	0	113515	5401	1.14
1,628	920	5052	Keystone	151 Hallet Street	Dorchester	223	National Grid	229500	229500	59795	55132	126529	0.55
1,629	921	5841	Meadow Court	1 & 3 Meadow Court	Lynn	8	National Grid	4700	4700	700	113722	5345	1.14
1,630	922	5875	Meadow Court	15 & 17 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,631	923	5847	Meadow Court	19 & 21 Meadow Court	Lynn	8	National Grid	4700	4700	700	113722	5345	1.14
1,632	924	5878	Meadow Court	28 & 30 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,633	925	5880	Meadow Court	32 & 34 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,634	926	5859	Meadow Court	40 & 42 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,635	927	5881	Meadow Court	44 & 46 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,636	928	5855	Meadow Court	48 & 50 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,637	929	5842	Meadow Court	5 & 7 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,638	930	5848	Meadow Court	54 & 56 Meadow Court	Lynn	8	National Grid	4400	4400	400	113722	5004	1.14
1,639	931	5843	Meadow Court	9 & 11 Meadow Court	Lynn	8	National Grid	4700	4700	700	113722	5345	1.14
1,640	932	5883	Meadow Court	Commons Building	Lynn	1	National Grid	2623	2623	0	113722	2983	1.14
1,641	933	5059	Millbrook Square	17 Mill Street	Arlington	146	National Grid	122541	122541	12951	32663	40026	0.33
1,642	934	4849	Nate Smith House	155 Lamartine St	Jamaica Plain	45	National Grid	36049	36049	9957	65035	23444	0.65
1,643	935	5480	NBR - 24 Grove Street	24 GROVE STREET	North Brookfield	14	National Grid	19200	19200	5200	2415	464	0.10
1,644	936	5477	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 10	North Brookfield	8	National Grid	4800	4800	0	92979	4463	0.93
1,645	937	5478	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 2	North Brookfield	8	National Grid	4800	4800	0	92979	4463	0.93
1,646	938	5471	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 3	North Brookfield	6	National Grid	2784	2784	0	92979	2589	0.93
1,647	939	5472	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 4	North Brookfield	6	National Grid	2784	2784	0	92979	2589	0.93
1,648	940	5473	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 5	North Brookfield	6	National Grid	2784	2784	0	92979	2589	0.93
1,649	941	5474	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 6	North Brookfield	6	National Grid	2784	2784	0	92979	2589	0.93
1,650	942	5475	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 7	North Brookfield	6	National Grid	2784	2784	0	92979	2589	0.93
1,651	943	5476	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 8	North Brookfield	6	National Grid	2784	2784	0	92979	2589	0.93
1,652	944	5479	NBR - Herald-Lane Estates	271 NORTH MAIN ST - 9	North Brookfield	12	National Grid	7200	7200	0	92979	6695	0.93
1,653	945	5470	NBR - Herald-Lane Estates	Herald-Lane Estates Community Building	North Brookfield	1	National Grid	3120	3120	0	92979	2901	0.93
1,654	946	222	New Port Antonio	181 Ruthven	Dorchester	10	National Grid	13824	9824	4920	116284	11424	1.16
1,655	947	223	New Port Antonio	185 Ruthven	Dorchester	6	National Grid	6534	6524	938	82763	5399	0.83
1,656	948	224	New Port Antonio	186 Ruthven	Dorchester	12	National Grid	11928	8928	4458	75309	6724	0.75
1,657	949	225	New Port Antonio	190 Ruthven	Dorchester	6	National Grid	15549	13549	9953	64689	8765	0.65
1,658	950	214	New Port Antonio	20 Deckard	Dorchester	7	National Grid	7452	6452	1732	89317	5763	0.89
1,659	951	217	New Port Antonio	20 Irwin	Dorchester	6	National Grid	5049	4049	1049	120954	4897	1.21
1,660	952	215	New Port Antonio	24 Deckard	Dorchester	9	National Grid	11016	8016	4051	106273	8519	1.06
1,661	953	218	New Port Antonio	26 Irwin	Dorchester	6	National Grid	4356	3356	1356	140838	4727	1.41
1,662	954	204	New Port Antonio	31 Brunswick	Dorchester	10	National Grid	11076	9076	2398	78598	7134	0.79
1,663	955	205	New Port Antonio	35 Brunswick	Dorchester	10	National Grid	11502	9502	4502	127350	12101	1.27
1,664	956	227	New Port Antonio	4 Wellington	Dorchester	4	National Grid	4104	4094	1614	128031	5242	1.28
1,665	957	228	New Port Antonio	5 Wellington	Dorchester	3	National Grid	3240	3230	216	128115	4138	1.28
1,666	958	226	New Port Antonio	515 Warren	Dorchester	3	National Grid	3264	3254	240	128112	4169	1.28
1,667	959	206	New Port Antonio	52-54-56 Brunswick	Dorchester	9	National Grid	10464	8464	3464	170656	14444	1.71
1,668	960	232	New Port Antonio	55 Elm Hill	Dorchester	7	National Grid	9711	6711	4968	81567	5474	0.82
1,669	961	208	New Port Antonio	58 Cheney	Dorchester	15	National Grid	15980	11980	4553	107831	12918	1.08
1,670	962	207	New Port Antonio	58-60 Brunswick	Dorchester	12	National Grid	10863	8863	3863	113339	10045	1.13
1,671	963	229	New Port Antonio	6 Wellington	Dorchester	3	National Grid	3240	3230	216	128115	4138	1.28
1,672	964	209	New Port Antonio	60 Cheney	Dorchester	14	National Grid	15980	10980	5630	117652	12918	1.18
1,673	965	210	New Port Antonio	62 Cheney	Dorchester	14	National Grid	16356	11356	6006	95624	10859	0.96
1,674	966	211	New Port Antonio	63 Cheney	Dorchester	9	National Grid	11880	9880	4097	96815	9565	0.97
1,675	967	212	New Port Antonio	67 Cheney	Dorchester	6	National Grid	11016	8016	4830	114789	9201	1.15
1,676	968	230	New Port Antonio	7 Wellington	Dorchester	3	National Grid	3240	3230	329	128115	4138	1.28
1,677	969	213	New Port Antonio	71 Cheney	Dorchester	3	National Grid	6048	4048	2817	124797	5052	1.25
1,678	970	219	New Port Antonio	8 Irwin	Dorchester	16	National Grid	12320	10320	2320	116490	12022	1.16
1,679	971	220	New Port Antonio	8 Montana	Dorchester	9	National Grid	12288	9288	3288	94381	8766	0.94
1,680	972	231	New Port Antonio	8 Wellington	Dorchester	3	National Grid	3240	3230	216	128115	4138	1.28
1,681	973	5836	Olive Street	2 Olive Street	Lynn	2	National Grid	1241	1241	0	52727	654	0.53
1,682	974	5837	Olive Street	6 Olive Street	Lynn	22	National Grid	23804	23804	12804	52727	12551	0.53
1,683	975	5204	Prattville Apartments	19 & 23 Guam Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,684	976	5205	Prattville Apartments	29 & 33 Guam Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,685	977	5207	Prattville Apartments	57 & 59 Burma Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,686	978	5206	Prattville Apartments	61 & 65 Exeter Street	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,687	979	5208	Prattville Apartments	71 & 73 Burma Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,688	980	5209	Prattville Apartments	77 & 79 Burma Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,689	981	5203	Prattville Apartments	9 & 13 Guam Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,690	982	5210	Prattville Apartments	91 & 93 Burma Road	Chelsea	16	National Grid	18000	18000	0	74434	13398	0.74
1,691	983	5655	Quaker Meadows	37-41 Memorial Park Ave.	Lynn	10	National Grid	9065	9065	0	96540	8751	0.97
1,692	984	5654	Quaker Meadows	43-53 Memorial Park Ave	Lynn	18	National Grid	15810	15810	0	96540	15263	0.97
1,693	985	5653	Quaker Meadows	55 Memorial Park Ave	Lynn	3	National Grid	3480	3480	0	96540	3360	0.97
1,694	986	5652	Quaker Meadows	57-63 Memorial Park Ave	Lynn	16	National Grid	13490	13490	0	96539	13023	0.97
1,695	987	5609	Quaker Meadows	71-79 Memorial Park Ave.	Lynn	14	National Grid	13705	13705	0	96540	13231	0.97
1,696	988	5656	Quaker Meadows	82-86 Green Street	Lynn	12	National Grid	9795	9795	0	97860	9585	0.98
1,697	989	5657	Quaker Meadows	88 Green Street	Lynn	8	National Grid	6300	6300	0	97860	6165	0.98
1,698	990	5658	Quaker Meadows	92 Green Street	Lynn	8	National Grid	6150	6150	0	97860	6018	0.98
1,699	991	5659	Quaker Meadows	94-98 Green Street	Lynn	15	National Grid	12495	12495	0	97860	12228	0.98
1,700	992	5202	Robert Fortes	541 Shawmut Ave.	Boston	44	National Grid	43425	43425	19423	46143	20038	0.46
1,701	993	5030	Savin Hill Apts	130 Aukland	Dorchester	132	National Grid	117715	91375	27085	74386	67970	0.74
1,702	994	1314	UE - Dimock-Bragdon	1841-1865 Columbus Ave.	Roxbury	54	National Grid	85134	66063	39734	52151	34453	0.52
1,703	995	5638	Union Park	230 - 232 Walnut Street	Chelsea	8	National Grid	5000	5000	1000	83826	4191	0.84
1,704	996	5643	Union Park	242 Walnut & 30 Sixth	Chelsea	8	National Grid	5000	5000	1000	83826	4191	0.84
1,705	997	5644	Union Park	309 Spruce St/54 Orange	Chelsea	8	National Grid	5000	5000	1000	88948	4447	0.89
1,706	998	5640	Union Park	32 & 34 Sixth Street	Chelsea	8	National Grid	5000	5000	1000	83826	4191	0.84
1,707	999	5642	Union Park	38 & 40 Sixth Street	Chelsea	8	National Grid	5000	5000	1000	83826	4191	0.84
1,708	1,000	5645	Union Park	44 - 46 Orange Street	Chelsea	8	National Grid	5000	5000	1000	88948	4447	0.89
1,709	1,001	5641	Union Park	44 & 46 Sixth Street	Chelsea	8	National Grid	5000	5000	1000	83826	4191	0.84
1,710	1,002	5646	Union Park	Community Building	Chelsea	1	National Grid	900	900	0	88947	801	0.89
1,711	1,003	5976	DAN - Maple/Charter	7 Charter Street	Danvers	23	National Grid	15000	15000	3500	55082	8262	0.55
1,712	1,004	5977	DAN - Maple/Charter	80 Maple Street	Danvers	15	National Grid	11520	11520	4020	55083	6346	0.55
1,713	1,005	5966	DAN - Perry Terrace	1 Perry Terrace	Danvers	6	National Grid	3024	3024	0	86102	2604	0.86
1,714	1,006	5967	DAN - Perry Terrace	2 Perry Terrace	Danvers	2	National Grid	1008	1008	0	86102	868	0.86
1,715	1,007	5969	DAN - Perry Terrace	3 Perry Terrace	Danvers	2	National Grid	1008	1008	0	86102	868	0.86
1,716	1,008	5970	DAN - Perry Terrace	4 Perry Terrace	Danvers	4	National Grid	2112	2112	0	86102	1818	0.86
1,717	1,009	5971	DAN - Perry Terrace	5 Perry Terrace	Danvers	4	National Grid	2112	2112	0	86102	1818	0.86
1,718	1,010	5972	DAN - Perry Terrace	6 Perry Terrace	Danvers	2	National Grid	1008	1008	0	86102	868	0.86
1,719	1,011	5973	DAN - Perry Terrace	7 Perry Terrace	Danvers	6	National Grid	3024	3024	0	86102	2604	0.86
1,720	1,012	5975	DAN - Tapley Manor	95 Holten Street	Danvers	40	National Grid	22000	22000	2000	105640	23241	1.06
1,721	1,013	5309	Gallivan Boulevard	124-126 Woodbole Ave	Boston	2	National Grid	1800	1800	0	81420	1466	0.81
1,722	1,014	5364	Gallivan Boulevard	140-142 Standard Street	Boston	2	National Grid	2064	2064	0	99437	2052	0.99
1,723	1,015	5352	Gallivan Boulevard	141-143 Standard Street	Boston	2	National Grid	2064	2064	0	55806	1152	0.56
1,724	1,016	5303	Gallivan Boulevard	144-146 Standard Street	Boston	2	National Grid	1800	1800	0	60168	1083	0.60
1,725	1,017	5316	Gallivan Boulevard	23-25 Woodruff Way	Boston	2	National Grid	1800	1800	0	101023	1818	1.01
1,726	1,018	5503	Harbor Point	2 TH Harbor Point	Dorchester	47	National Grid	51700	51700	4700	42040	21735	0.42
1,727	1,019	6089	Kennilworth Williams	37 Williams Street	Roxbury	21	National Grid	25630	25130	7081	52714	13247	0.53
1,728	1,020	6088	Kennilworth Williams	6 Kennilworth Street	Roxbury	17	National Grid	27320	27320	6320	59280	16195	0.59
1,729	1,021	6055	LYN - Gaggiano Plaza	170 SOUTH COMMON ST	Lynn	105	National Grid	95450	95450	27200	546	521	0.02
1,730	1,022	6066	LYN - McGee House	37 Green Street	Lynn	50	National Grid	54860	54860	14860	37693	20678	0.38
1,731	1,023	6081	LYN - Neptune	72 NEPTUNE ST	Lynn	6	National Grid	7020	7020	2220	63099	4430	0.63
1,732	1,024	6094	MHPI III	5 Grotto Glen Rd.	Jamaica Plain	12	National Grid	5600	5300	1600	105566	5595	1.06
1,733	1,025	6095	MHPI IV	3 Boylston Pl.	Jamaica Plain	10	National Grid	4425	3625	362	151779	5502	1.52
1,734	1,026	6096	MHPI IV	33 Bartlett St.	Roxbury	10	National Grid	4425	3625	362	151117	5478	1.51
1,735	1,027	6097	MHPI IV	65 Bailey St.	Dorchester	12	National Grid	5000	4700	470	165936	7799	1.66
1,736	1,028	6102	MHPI IX	12 School St.	Roxbury	12	National Grid	9568	8368	837	61747	5167	0.62
1,737	1,029	6099	MHPI V	38 Dickens St.	Dorchester	8	National Grid	4882	4882	182	92605	4521	0.93
1,738	1,030	6098	MHPI V	64 Bowdoin St.	Dorchester	8	National Grid	4882	4882	182	70012	3418	0.70
1,739	1,031	6100	MHPI VI	25 Virginia St.	Dorchester	15	National Grid	5900	4900	1490	75102	3680	0.75
1,740	1,032	6101	MHPI VII	333 Market St.	Brighton	18	National Grid	22500	22500	4000	45813	10308	0.46
1,741	1,033	5647	CHE - 14 Bloomingdale St	14 Bloomingdale Street	Chelsea	208	National Grid	87500	87500	81200	73	64	0.00
1,742	1,034	895	Chelsea Homes LP	133-139 Shawmut St	Chelsea	12	National Grid	10632	8485	2147	1018	86	0.01
1,743	1,035	886	Chelsea Homes LP	48-50 Chester Ave	Chelsea	6	National Grid	6315	5054	1261	1114	56	0.01
1,744	1,036	4338	351 - 353 Water Street	351 - 353 Water Street	Quincy	4	National Grid	5244	3496	1748	1131	40	0.01
1,745	1,037	894	Chelsea Homes LP	90 Shawmut St	Chelsea	3	National Grid	2900	2590	310	1467	38	0.01
1,746	1,038	891	Chelsea Homes LP	68-70 Shawmut St	Chelsea	6	National Grid	6506	5692	814	1745	99	0.02
1,747	1,039	890	Chelsea Homes LP	212-214 Poplar St/12-14 Sixth St	Chelsea	7	National Grid	6289	5396	893	1952	105	0.02
1,748	1,040	4331	355 Water Street	355 Water Street	Quincy	4	National Grid	5244	3496	1748	2100	73	0.02
1,749	1,041	885	Chelsea Homes LP	62 Blossom St.	Chelsea	3	National Grid	2223	1937	286	2107	41	0.02
1,750	1,042	911	NSI (CND)	98 Marlborough St.	Chelsea	3	National Grid	1972	1972	1	2715	54	0.03
1,751	1,043	910	NSI (CND)	102 Grove St	Chelsea	3	National Grid	1972	1971	1	2716	54	0.03
1,752	1,044	909	NSI (CND)	75 Essex St	Chelsea	3	National Grid	1972	1971	1	2716	54	0.03
1,753	1,045	896	Chelsea Homes LP	52-54 Shurtleff St.	Chelsea	6	National Grid	5336	3984	1352	5149	205	0.05
1,754	1,046	1846	Sallys place	56 sparhawk st.	Amesbury	11	National Grid	4900	4340	700	5897	256	0.06
1,755	1,047	892	Chelsea Homes LP	77 Shawmut St	Chelsea	3	National Grid	2612	2207	405	5979	132	0.06
1,756	1,048	899	Chelsea Homes LP	47 Washington Ave.	Chelsea	3	National Grid	2533	1981	552	6165	122	0.06
1,757	1,049	900	Chelsea Homes LP	18 Watts St	Chelsea	2	National Grid	2010	1675	335	7330	123	0.07
1,758	1,050	4810	Spencer Row	215 Spencer Ave	Chelsea	32	National Grid	35732	35332	8634	25220	8911	0.25
1,759	1,051	6256	K Landing	1200 State Street	Brewster	108	National Grid	128899	128899	20091	33556	43253	0.34
1,760	1,052	4348	38 Prout Street	38 Prout	Quincy	3	National Grid	1760	1600	160	36835	589	0.37
1,761	1,053	4707	20 Grossman Street	20 Grossman St.	Quincy	2	National Grid	2820	1910	910	38351	733	0.38
1,762	1,054	6321	St Mary Apartments	88 Lexington Street	Waltham	70	National Grid	77100	77100	30940	41868	32280	0.42
1,763	1,055	118	Blue Mountain	74 Elm Hill	Dorchester	9	National Grid	9888	9888	2781	44963	4446	0.45
1,764	1,056	117	Blue Mountain	72 Elm Hill	Dorchester	6	National Grid	11628	11628	4255	44963	5228	0.45
1,765	1,057	4711	58 Winter Street	58 Winter St	Quincy	2	National Grid	2696	2192	656	46965	1029	0.47
1,766	1,058	2997	EVE - Glendale Towers	381 Ferry Street	Everett	120	National Grid	111612	111612	51612	47762	53308	0.48
1,767	1,059	6344	St. Helena's House	89 Union Park Street	Boston	85	National Grid	71524	71524	20127	48078	34388	0.48
1,768	1,060	4329	356 Washington Street	356 Washington Street	Quincy	11	National Grid	5220	4420	1300	48633	2150	0.49
1,769	1,061	6226	RH Village	9 Main St	Orleans	100	National Grid	100780	100780	26580	50365	50758	0.50
1,770	1,062	5494	Harbor Point	270 Mt. Vernon Street	Dorchester	3	National Grid	53300	53300	50300	53057	28280	0.53
1,771	1,063	6077	WEY - Lakeview Manor	Community Building	Weymouth	1	National Grid	6496	6496	0	58646	3810	0.59
1,772	1,064	6058	WEY - Lakeview Manor	(No E) 7 Josie's Way	Weymouth	3	National Grid	4342	4342	246	58646	2546	0.59
1,773	1,065	6059	WEY - Lakeview Manor	15 Memorial Drive	Weymouth	3	National Grid	4342	4342	246	58646	2546	0.59
1,774	1,066	6061	WEY - Lakeview Manor	3 Josie's Way	Weymouth	3	National Grid	4342	4342	246	58646	2546	0.59
1,775	1,067	6060	WEY - Lakeview Manor	304 Lake Street	Weymouth	3	National Grid	4342	4342	246	58646	2546	0.59
1,776	1,068	6063	WEY - Lakeview Manor	124 - 140 Joseph Fern Court	Weymouth	5	National Grid	5890	5890	0	58646	3454	0.59
1,777	1,069	6067	WEY - Lakeview Manor	236 Lake Street	Weymouth	5	National Grid	5890	5890	0	58646	3454	0.59
1,778	1,070	6064	WEY - Lakeview Manor	245 Lake Street	Weymouth	5	National Grid	5890	5890	0	58646	3454	0.59
1,779	1,071	6062	WEY - Lakeview Manor	255 Lake Street	Weymouth	5	National Grid	5890	5890	0	58646	3454	0.59
1,780	1,072	6068	WEY - Lakeview Manor	268 Lake Street	Weymouth	5	National Grid	5890	5890	0	58646	3454	0.59
1,781	1,073	6065	WEY - Lakeview Manor	70 Memorial Drive	Weymouth	5	National Grid	5890	5890	0	58646	3454	0.59

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,782	1,074	6070	WEY - Lakeview Manor	1 Josie's Way	Weymouth	6	National Grid	6400	6400	0	58646	3753	0.59
1,783	1,075	6069	WEY - Lakeview Manor	110 - 112 Joseph Fern Ct	Weymouth	6	National Grid	6400	6400	0	58646	3753	0.59
1,784	1,076	6074	WEY - Lakeview Manor	220 Lake Street	Weymouth	6	National Grid	6400	6400	0	58646	3753	0.59
1,785	1,077	6075	WEY - Lakeview Manor	31 Memorial Drive	Weymouth	6	National Grid	6400	6400	0	58646	3753	0.59
1,786	1,078	6071	WEY - Lakeview Manor	54 - 66 Joseph Fern Ct	Weymouth	6	National Grid	6400	6400	0	58646	3753	0.59
1,787	1,079	6078	WEY - Lakeview Manor	97 - 111 Joseph Fern St	Weymouth	6	National Grid	6400	6400	0	58646	3753	0.59
1,788	1,080	6047	WEY - Lakeview Manor	21 - 27 Joseph Fern Ct	Weymouth	3	National Grid	3880	3880	0	58646	2275	0.59
1,789	1,081	6033	WEY - Lakeview Manor	80 - 86 Joseph Fern Ct	Weymouth	3	National Grid	3880	3880	0	58646	2275	0.59
1,790	1,082	6032	WEY - Lakeview Manor	81 - 87 Joseph Fern Ct	Weymouth	3	National Grid	3880	3880	0	58646	2275	0.59
1,791	1,083	6076	WEY - Lakeview Manor	(No E) 2 Josie's Way	Weymouth	6	National Grid	6880	6880	0	58646	4035	0.59
1,792	1,084	6030	WEY - Lakeview Manor	Day Care Building	Weymouth	1	National Grid	2405	2405	0	58646	1410	0.59
1,793	1,085	6031	WEY - Lakeview Manor	30 Memorial Drive - Bldg 7	Weymouth	4	National Grid	3400	3400	0	58646	1994	0.59
1,794	1,086	6053	WEY - Lakeview Manor	(No E) Lake St/Josie's Way	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,795	1,087	6043	WEY - Lakeview Manor	10 Memorial Dr - Lake St	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,796	1,088	6039	WEY - Lakeview Manor	108 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,797	1,089	6040	WEY - Lakeview Manor	109 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,798	1,090	6052	WEY - Lakeview Manor	19 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,799	1,091	6051	WEY - Lakeview Manor	21 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,800	1,092	6041	WEY - Lakeview Manor	214 Lake Street	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,801	1,093	6050	WEY - Lakeview Manor	25 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,802	1,094	6042	WEY - Lakeview Manor	252 Lake Street	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,803	1,095	6057	WEY - Lakeview Manor	290 Lake Street	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,804	1,096	6044	WEY - Lakeview Manor	296 Lake Street	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,805	1,097	6045	WEY - Lakeview Manor	32 - 38 Joseph Fern Ct	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,806	1,098	6054	WEY - Lakeview Manor	38 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,807	1,099	6080	WEY - Lakeview Manor	41 - 47 Joseph Fern Ct	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,808	1,100	6056	WEY - Lakeview Manor	42 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,809	1,101	6049	WEY - Lakeview Manor	43 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,810	1,102	6035	WEY - Lakeview Manor	50 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,811	1,103	6048	WEY - Lakeview Manor	53 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,812	1,104	6036	WEY - Lakeview Manor	56 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,813	1,105	6037	WEY - Lakeview Manor	60 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,814	1,106	6046	WEY - Lakeview Manor	61 - 67 Joseph Fern Ct	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,815	1,107	6038	WEY - Lakeview Manor	61 Memorial Drive	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,816	1,108	6034	WEY - Lakeview Manor	7 Memorial Dr - Bldg 1	Weymouth	4	National Grid	4096	4096	0	58646	2402	0.59
1,817	1,109	4342	712 Main Street	712 Main Street	Weymouth	4	National Grid	2750	1950	800	58962	1150	0.59
1,818	1,110	6410	EVE - Russell Street	232-236 Russell St.	Everett	4	National Grid	3456	3456	0	60101	2077	0.60
1,819	1,111	5584	HAV - 25 Washington Square	25 Washington Square	Haverhill	72	National Grid	70272	70272	66672	60661	42628	0.61
1,820	1,112	6375	EVE - Russell Street	245 - 251 Russel Street	Everett	4	National Grid	3456	3456	0	65402	2260	0.65
1,821	1,113	6318	Pine Oaks 1	Community Building	Harwich	1	National Grid	3926	3926	0	65517	2572	0.66
1,822	1,114	6412	EVE - Russell Street	239-241 Russell St.	Everett	4	National Grid	3744	3744	0	65783	2463	0.66
1,823	1,115	5360	BOS - Gallivan Boulevard	6-8 Woodruff Way	Boston	2	National Grid	2064	2064	0	67246	1388	0.67
1,824	1,116	6327	Walnut House	409 Walnut Avenue	Roxbury	34	National Grid	22217	22217	14285	67696	15040	0.68
1,825	1,117	660	BOS - Heath St Family Development	42 Horan Way (Building 15)	Boston	15	National Grid	20556	20556	1556	67792	13935	0.68
1,826	1,118	6406	EVE - Russell Street	68 - 70 Veterans	Everett	4	National Grid	3744	3744	0	67991	2546	0.68
1,827	1,119	6411	EVE - Russell Street	238-244 Russell St.	Everett	4	National Grid	3456	3456	0	74806	2585	0.75
1,828	1,120	6408	EVE - Russell Street	223-225 Russell St.	Everett	4	National Grid	3744	3744	0	75785	2837	0.76
1,829	1,121	5792	EVE - Russell Street	78 - 82 Gledhill Avenue	Everett	4	National Grid	3456	3456	0	77668	2684	0.78
1,830	1,122	6322	Carleton House	2055 Columbus Ave	Roxbury	44	National Grid	32569	32569	16140	79653	25942	0.80
1,831	1,123	4506	EVE - Russell Street	13 - 17 Veterans	Everett	4	National Grid	3456	3456	0	80693	2789	0.81
1,832	1,124	6258	Angel House	309 South Street - B	Hyannis	1	National Grid	1241	1241	0	82133	1019	0.82
1,833	1,125	105	Blue Mountain	40 Cheney	Dorchester	12	National Grid	15132	11349	7338	85001	9647	0.85
1,834	1,126	106	Blue Mountain	46 Cheney	Dorchester	12	National Grid	15424	11568	7630	85001	9833	0.85
1,835	1,127	103	Hope Bay	43 Normandy	Dorchester	3	National Grid	4620	4620	620	85393	3945	0.85
1,836	1,128	101	Hope Bay	113 Brunswick	Dorchester	3	National Grid	6045	6045	1045	86677	5240	0.87
1,837	1,129	6306	Pine Oaks 1	Pine Oaks 11 - 12	Harwich	2	National Grid	1300	1300	0	87390	1136	0.87
1,838	1,130	6403	9 Valentine	9 Valentine St	Roxbury	6	National Grid	3108	3108	2319	88693	2757	0.89
1,839	1,131	6307	Pine Oaks 1	Pine Oaks 13 - 20	Harwich	8	National Grid	5200	5200	0	89666	4663	0.90
1,840	1,132	661	BOS - Heath St Family Development	42 Horan Way (Building 16)	Boston	12	National Grid	20556	15556	20056	89742	13960	0.90
1,841	1,133	6407	EVE - Russell Street	215-221 Russell St.	Everett	4	National Grid	3456	3456	0	90524	3128	0.91
1,842	1,134	6313	Pine Oaks 1	Pine Oaks 41 - 48	Harwich	8	National Grid	5200	5200	0	91443	4755	0.91
1,843	1,135	4123	EVE - Russell Street	124 Glenhill Avenue	Everett	2	National Grid	1920	1920	0	92288	1772	0.92
1,844	1,136	6405	EVE - Russell Street	98 Gledhill Avenue	Everett	2	National Grid	1920	1920	0	92288	1772	0.92
1,845	1,137	128	Blue Mountain	32 Maple	Dorchester	12	National Grid	10381	10381	2587	92400	9592	0.92
1,846	1,138	129	Blue Mountain	36 Maple	Dorchester	12	National Grid	11139	11139	3721	92400	10292	0.92
1,847	1,139	123	Blue Mountain	89 Georgia	Dorchester	6	National Grid	9360	9360	4899	94491	8844	0.94
1,848	1,140	110	Blue Mountain	54 Elm Hill	Dorchester	12	National Grid	10140	10140	3474	94491	9581	0.94
1,849	1,141	124	Blue Mountain	91 Georgia	Dorchester	6	National Grid	5739	5739	1466	94491	5423	0.94
1,850	1,142	111	Blue Mountain	58 Elm Hill	Dorchester	6	National Grid	5718	5718	1821	94491	5403	0.94
1,851	1,143	113	Blue Mountain	62 Elm Hill	Dorchester	12	National Grid	10233	10233	3567	94491	9669	0.94
1,852	1,144	4349	40 Prout Street	40 Prout Street	Quincy	1	National Grid	1252	916		95546	875	0.96
1,853	1,145	6416	EVE - Russell Street	44 - 50 Veterans	Everett	4	National Grid	3456	3456	0	95876	3313	0.96
1,854	1,146	125	Blue Mountain	131 Homestead	Dorchester	12	National Grid	11019	11019	3225	95878	10565	0.96
1,855	1,147	4341	708 Main Street	708 Main Street	Weymouth	3	National Grid	2784	1856	928	96168	1785	0.96
1,856	1,148	171	Hope Bay	21 Norwell	Dorchester	2	National Grid	2709	2709	709	96737	2621	0.97
1,857	1,149	172	Hope Bay	23 Norwell	Dorchester	2	National Grid	2709	2709	709	96737	2621	0.97
1,858	1,150	173	Hope Bay	25 Norwell	Dorchester	2	National Grid	2709	2709	709	96808	2623	0.97
1,859	1,151	6314	Pine Oaks 1	Pine Oaks 49 - 52	Harwich	4	National Grid	2600	2600	0	97021	2523	0.97
1,860	1,152	4347	31 - 33 Winter Street	31 - 33 Winter Street	Quincy	18	National Grid	5300	3470	1830	100088	3473	1.00
1,861	1,153	6308	Pine Oaks 1	Pine Oaks 21 - 26	Harwich	6	National Grid	3900	3900	0	100413	3916	1.00
1,862	1,154	200	Morrant Bay Apartments	100-102 Woodledge	Dorchester	6	National Grid	9543	7197	2346	102520	7378	1.03
1,863	1,155	122	Blue Mountain	73 Georgia	Dorchester	9	National Grid	7899	7899	2335	102761	8117	1.03
1,864	1,156	121	Blue Mountain	71 Georgia	Dorchester	9	National Grid	8640	8640	3076	102761	8879	1.03
1,865	1,157	119	Blue Mountain	75 Elm Hill	Dorchester	6	National Grid	8821	8821	1623	103283	9111	1.03
1,866	1,158	5838	LYN - Essex and Tilton	2 - 8 Tilton	Lynn	16	National Grid	9752	9752	1752	104357	10177	1.04
1,867	1,159	5840	LYN - Essex and Tilton	326 Essex Street	Lynn	16	National Grid	8134	8134	134	104357	8488	1.04
1,868	1,160	4717	62 Winter Street	62 Winter St.	Quincy	3	National Grid	2973	2099	1225	105604	2217	1.06
1,869	1,161	6309	Pine Oaks 1	Pine Oaks 27 - 32	Harwich	6	National Grid	3900	3900	0	106230	4143	1.06
1,870	1,162	6316	Pine Oaks 1	Pine Oaks 55 - 58	Harwich	4	National Grid	2600	2600	0	106649	2773	1.07
1,871	1,163	6311	Pine Oaks 1	Pine Oaks 35 - 38	Harwich	4	National Grid	2600	2600	0	107046	2783	1.07
1,872	1,164	6317	Pine Oaks 1	Pine Oaks 59 - 60	Harwich	2	National Grid	1300	1300	0	108719	1413	1.09
1,873	1,165	6312	Pine Oaks 1	Pine Oaks 39 - 40	Harwich	2	National Grid	1300	1300	1299	109473	1423	1.09
1,874	1,166	185	Morrant Bay Apartments	229-237 Quincy	Dorchester	15	National Grid	20000	15000	5000	109496	16424	1.09
1,875	1,167	6257	Angel House	309 South Street	Hyannis	1	National Grid	3384	2538		109510	2779	1.10

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,876	1,168	201	Morrant Bay Apartments	104-106 Woodledge	Dorchester	6	National Grid	8544	6152	2392	109559	7069	1.10
1,877	1,169	109	Blue Mountain	38 Crawford	Dorchester	9	National Grid	8682	8682	2554	112563	9773	1.13
1,878	1,170	108	Blue Mountain	36 Crawford	Dorchester	6	National Grid	7125	7125	102	112563	8020	1.13
1,879	1,171	163	Hope Bay	6 Norwell	Dorchester	3	National Grid	2583	2583	583	113239	2925	1.13
1,880	1,172	165	Hope Bay	8 Norwell	Dorchester	3	National Grid	2583	2583	583	113239	2925	1.13
1,881	1,173	167	Hope Bay	11 Norwell	Dorchester	3	National Grid	2640	2640	640	114842	3032	1.15
1,882	1,174	160	Hope Bay	9 Norwell	Dorchester	3	National Grid	2760	2760	760	114842	3170	1.15
1,883	1,175	194	Morrant Bay Apartments	180 Howard/34-38 Cunningham	Dorchester	15	National Grid	17645	13218	4427	115032	15205	1.15
1,884	1,176	6103	MHPI XI	337 Elliott St.	Beverly	4	National Grid	2449	1599	1010	115353	1844	1.15
1,885	1,177	6315	Pine Oaks 1	Pine Oaks 53 - 54	Harwich	2	National Grid	1300	1300	0	117175	1523	1.17
1,886	1,178	6305	Pine Oaks 1	Pine Oaks 7 - 10	Harwich	4	National Grid	2304	2304	0	118031	2719	1.18
1,887	1,179	6304	Pine Oaks 1	Pine Oaks 5 - 6	Harwich	2	National Grid	1152	1152	0	119186	1373	1.19
1,888	1,180	2128	Pine Oaks 1	Pine Oaks 1 - 4	Harwich	4	National Grid	2304	2304	0	121881	2808	1.22
1,889	1,181	221	New Port Antonio	28 Wyoming	Dorchester	6	National Grid	11454	9454	3454	124743	11793	1.25
1,890	1,182	104	Hope Bay	10 Norwell	Dorchester	3	National Grid	2706	2706	706	125089	3385	1.25
1,891	1,183	168	Hope Bay	12 Norwell	Dorchester	3	National Grid	2583	2583	583	125089	3231	1.25
1,892	1,184	202	Morrant Bay Apartments	97-99 Woodledge	Dorchester	12	National Grid	17075	12889	4186	126485	16303	1.26
1,893	1,185	192	Morrant Bay Apartments	5-7 Dunkeld	Dorchester	12	National Grid	12325	9232	3093	128695	11881	1.29
1,894	1,186	191	Morrant Bay Apartments	8-10 Dunkeld	Dorchester	12	National Grid	12428	9309	3119	128831	11993	1.29
1,895	1,187	188	Morrant Bay Apartments	4-6 Dunkeld	Dorchester	12	National Grid	12558	9404	3154	131807	12395	1.32
1,896	1,188	193	Morrant Bay Apartments	89 Fayston	Dorchester	12	National Grid	12325	9232	3093	133702	12343	1.34
1,897	1,189	120	Blue Mountain	79 Elm Hill	Dorchester	4	National Grid	6596	4947	2611	137711	6813	1.38
1,898	1,190	6402	1 Wise	1 Wise St	Jamaica Plain	8	National Grid	2560	1920	1329	143059	2747	1.43
1,899	1,191	169	Hope Bay	15 Norwell	Dorchester	3	National Grid	2400	2400	400	145096	3482	1.45
1,900	1,192	170	Hope Bay	15A Norwell	Dorchester	3	National Grid	2520	2520	520	145096	3656	1.45
1,901	1,193	2995	EVE - Golden Age Circle	1-27 Golden Age Circle	Everett	14	National Grid	6300	6300	560	148187	9336	1.48
1,902	1,194	195	Morrant Bay Apartments	177-185 Magnolia	Dorchester	15	National Grid	15423	11423	4423	148509	16964	1.49
1,903	1,195	5333	BOS - Gallivan Boulevard	86-88 Woodruff Way	Boston	2	National Grid	2064	2064	0	167733	3462	1.68
1,904	1,196	4737	24 Claremont/Lawrence	24 Claremont/Lawrence	Quincy	12	National Grid	3192	2128	1064	172937	3680	1.73
1,905	1,197	100	Hope Bay	109 Brunswick	Dorchester	3	National Grid	2535	2035	585	227059	4621	2.27
1,906	1,198	6470	Heritage Tower	180 Main Street	Amesbury	102	National Grid	89900	89900	17980	12214	10981	0.12
1,907	1,199	6594	QUI - Snug Harbor	115 TAFFRAIL ROAD	Quincy	4	National Grid	4070	4070	0	33000	1346	0.33
1,908	1,200	6878	SAU - Sweetser's Corner	5 & 7 Baker	Saugus	2	National Grid	4158	4158	1248	24246	1008	0.24
1,909	1,201	6877	SAU - Sweetser's Corner	3 Baker St.	Saugus	22	National Grid	16802	16802	5041	24246	4074	0.24
1,910	1,202	1743	THANKFUL CHASES PATHWAY	7,9,11 Thankful Chases Pathway-Buildin	Harwich	3	National Grid	3290	3290	176	31790	1046	0.32
1,911	1,203	1744	THANKFUL CHASES PATHWAY	13,15,17 Thankful Chases Pathway-Buil	Harwich	3	National Grid	2990	2990	266	33443	1000	0.33
1,912	1,204	4208	SLM - Garden Terrace	Bldg 5 (Units 15, 17, 19, 21)	Salem	4	National Grid	3400	3400	680	34606	1177	0.35
1,913	1,205	4210	SLM - Garden Terrace	Bldg 7 (Units 24, 26, 28, 30)	Salem	4	National Grid	3400	3400	680	34606	1177	0.35
1,914	1,206	4152	SLM - Garden Terrace	Bldg 1 (194 North, 1, 3, and 5 Garden Te	Salem	4	National Grid	4128	4128	826	34606	1429	0.35
1,915	1,207	4205	SLM - Garden Terrace	Bldg 2 (Units 192 North 2, 4, 6)	Salem	4	National Grid	4128	4128	826	34606	1429	0.35
1,916	1,208	4206	SLM - Garden Terrace	Bldg 3 (Units 7, 9, 11, 13)	Salem	4	National Grid	4128	4128	826	34606	1429	0.35
1,917	1,209	4207	SLM - Garden Terrace	Bldg 4 (Units 8, 10, 12, 14)	Salem	4	National Grid	4128	4128	826	34606	1429	0.35
1,918	1,210	4209	SLM - Garden Terrace	Bldg 6 (Units 16, 18 , 20, 22)	Salem	4	National Grid	4128	4128	826	34606	1429	0.35
1,919	1,211	4211	SLM - Garden Terrace	Bldg 8 (Units 23, 25, 27, 29)	Salem	4	National Grid	4128	4128	826	34606	1429	0.35
1,920	1,212	1745	THANKFUL CHASES PATHWAY	19, 21, 23 Thankful Chases Pathway-Bu	Harwich	3	National Grid	3290	3290	176	35351	1163	0.35
1,921	1,213	1351	THANKFUL CHASES PATHWAY	1,3,5 Thankful Chase Pathway-Building A	Harwich	3	National Grid	2790	2790	176	36534	1019	0.37
1,922	1,214	2499	Mashpee Village	1 Wampanoag Drive, Bldg. G	Mashpee	8	National Grid	6600	6600	1676	40737	2689	0.41
1,923	1,215	2497	Mashpee Village	1 Wampanoag Drive, Bldg. E	Mashpee	6	National Grid	5300	5300	1284	40959	2171	0.41
1,924	1,216	6649	St. Joseph Hall	2 Rosary Drive	Watertown	25	National Grid	43087	43087	24816	42234	18197	0.42
1,925	1,217	2501	Mashpee Village	1 Wampanoag Drive, Bldg. I	Mashpee	8	National Grid	6600	6600	1608	42512	2806	0.43
1,926	1,218	2500	Mashpee Village	1 Wampanoag Drive, Bldg. H	Mashpee	8	National Grid	6600	6600	1608	42763	2822	0.43
1,927	1,219	2498	Mashpee Village	1 Wampanoag Drive, Bldg. F	Mashpee	8	National Grid	6600	6600	2108	44759	2954	0.45
1,928	1,220	2496	Mashpee Village	1 Wampanoag Drive, Bldg. D	Mashpee	8	National Grid	6600	6600	1064	45364	2994	0.45
1,929	1,221	2505	Mashpee Village	1 Wampanoag Drive, Bldg. M	Mashpee	8	National Grid	6600	6600	1064	45890	3029	0.46
1,930	1,222	2495	Mashpee Village	1 Wampanoag Drive, Bldg. C	Mashpee	8	National Grid	6600	6600	1064	49197	3247	0.49
1,931	1,223	2502	Mashpee Village	1 Wampanoag Drive, Bldg. J	Mashpee	8	National Grid	6600	6600	1064	50539	3336	0.51
1,932	1,224	2503	Mashpee Village	1 Wampanoag Drive, Bldg. K	Mashpee	8	National Grid	6600	6600	1064	50873	3358	0.51
1,933	1,225	2494	Mashpee Village	1 Wampanoag Drive, Bldg. B	Mashpee	8	National Grid	6600	6600	1132	52283	3451	0.52
1,934	1,226	2504	Mashpee Village	1 Wampanoag Drive, Bldg. L	Mashpee	8	National Grid	6600	6600	1132	52904	3492	0.53
1,935	1,227	2493	Mashpee Village	1 Wampanoag Drive, Bldg. A	Mashpee	8	National Grid	6600	6600	1064	53311	3519	0.53
1,936	1,228	2506	Mashpee Village	1 Wampanoag Drive, Bldg. N	Mashpee	8	National Grid	6600	6600	1064	55733	3678	0.56
1,937	1,229	6448	LYN - Shepard and Warren	35 SHEPARD & 4 WARREN ST	Lynn	8	National Grid	4730	4730	1470	57113	2701	0.57
1,938	1,230	6447	LYN - Shepard and Warren	39 SHEPARD ST	Lynn	8	National Grid	3790	3790	1175	57113	2165	0.57
1,939	1,231	7038	WAT - Willow Park	QUIMBY STREET - 4	Watertown	15	National Grid	15075	15075	3075	57458	8662	0.57
1,940	1,232	7035	WAT - Willow Park	67-71 MELENDY, 88-90 NICHOLS	Watertown	12	National Grid	12060	12060	2660	57458	6929	0.57
1,941	1,233	7032	WAT - Willow Park	72-76 MELENDY AVE	Watertown	6	National Grid	6030	6030	1030	57458	3465	0.57
1,942	1,234	7037	WAT - Willow Park	79-91 MELENDY AVE	Watertown	12	National Grid	12060	12060	2660	57458	6929	0.57
1,943	1,235	7031	WAT - Willow Park	8-12 QUIMBY	Watertown	6	National Grid	6030	6030	1030	57458	3465	0.57
1,944	1,236	7033	WAT - Willow Park	55-59 MELENDY, 89 NICHOLS	Watertown	9	National Grid	9045	9045	1545	57458	5197	0.57
1,945	1,237	7049	CHE - Fitzpatrick	12-22 NORMANDY ROAD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,946	1,238	7055	CHE - Fitzpatrick	13-23 BURMA RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,947	1,239	7050	CHE - Fitzpatrick	13-23 NORMANDY RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,948	1,240	7056	CHE - Fitzpatrick	14-24 BURMA RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,949	1,241	7054	CHE - Fitzpatrick	17-27 SAIPAN RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,950	1,242	7052	CHE - Fitzpatrick	3-13 SAIPAN RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,951	1,243	7057	CHE - Fitzpatrick	31-41 BURMA RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,952	1,244	7051	CHE - Fitzpatrick	35-45 NORMANDY RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,953	1,245	7048	CHE - Fitzpatrick	370-380 REVERE BEACH PARKWAY	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,954	1,246	7053	CHE - Fitzpatrick	4-14 SAIPAN RD	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,955	1,247	7058	CHE - Fitzpatrick	44-54 EXETER ST	Chelsea	4	National Grid	6600	6600	400	64883	4282	0.65
1,956	1,248	7047	CHE - Fitzpatrick	2-4-6-8 BURMA RD	Chelsea	4	National Grid	3200	3200	200	64883	2076	0.65
1,957	1,249	5585	HAV - Summer Street Veterans	17, 21, 25 Mount Vernon Street - A	Haverhill	18	National Grid	19110	19110	5925	69677	13315	0.70
1,958	1,250	6791	STH - Parker Chase	8,9,10 PARKER CHASE RD	Stoneham	8	National Grid	7786	7786	1786	74858	5828	0.75
1,959	1,251	6795	STH - Parker Chase	18,19,20,21 PARKER CHASE ROAD	Stoneham	16	National Grid	10246	10246	2246	75453	7731	0.75
1,960	1,252	6326	SLAM	7 St. Luke's St	Allston	7	National Grid	4400	3600	3140	75813	2729	0.76
1,961	1,253	6790	STH - Parker Chase	1,2,3 PARKER CHASE RD	Stoneham	8	National Grid	7786	7786	1786	79767	6211	0.80
1,962	1,254	6789	STH - Parker Chase	16,17 PARKER CHASE ROAD	Stoneham	8	National Grid	5122	5122	1122	85772	4393	0.86
1,963	1,255	6793	STH - Parker Chase	4,5,6,7 PARKER CHASE RD	Stoneham	16	National Grid	10246	10246	2246	86266	8839	0.86
1,964	1,256	6794	STH - Parker Chase	12,13,14,15 PARKER CHASE RD	Stoneham	16	National Grid	10246	10246	2246	89131	9132	0.89
1,965	1,257	6581	LEO - Notre Dame Apartments	10-18 NOTRE DAME	Leominster	20	National Grid	11502	11502	1502	90618	10423	0.91
1,966	1,258	6584	LEO - Notre Dame Apartments	28-36 NOTRE DAME	Leominster	20	National Grid	11502	11502	1502	90618	10423	0.91
1,967	1,259	6583	LEO - Notre Dame Apartments	22-24 NOTRE DAME	Leominster	2	National Grid	2848	2848	1848	90618	2581	0.91
1,968	1,260	6582	LEO - Notre Dame Apartments	214-216 ARLINGTON STREET	Leominster	8	National Grid	4590	4590	590	90618	4159	0.91
1,969	1,261	499	Hopeville	38 Della Forges	Dorchester	2	National Grid	2709	2709	2709	96808	2623	0.97

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
1,970	1,262	6788	STH - Parker Chase	11 PARKER CHASE RD - Common	Stoneham	1	National Grid	1792	1792	0	97846	1753	0.98
1,971	1,263	6534	LEO - Laurie Drive	33-39 LAURIE DRIVE	Leominster	16	National Grid	9210	9210	1210	103717	9552	1.04
1,972	1,264	6580	LEO - Laurie Drive	43-49 LAURIE DRIVE	Leominster	15	National Grid	9210	9210	1210	103717	9552	1.04
1,973	1,265	504	Hopeville	50 Eugene Route	Dorchester	3	National Grid	2583	2583	583	113239	2925	1.13
1,974	1,266	5586	HAV - Summer Street Veterans	134, 140, 146 Summer Street - B	Haverhill	18	National Grid	12740	12740	3950	114050	14530	1.14
1,975	1,267	6777	STH - Washington Elderly	44-56 WASHINGTON AVE	Stoneham	7	National Grid	3100	3100	300	119238	3696	1.19
1,976	1,268	6779	STH - Washington Elderly	58-79 WASHINGTON AVE	Stoneham	11	National Grid	4620	4620	220	119238	5509	1.19
1,977	1,269	6780	STH - Washington Elderly	60-80 WASHINGTON AVE	Stoneham	11	National Grid	4620	4620	220	119238	5509	1.19
1,978	1,270	4631	WAT - Lexington Gardens - Bricks	Lexington Street - 1	Watertown	4	National Grid	3584	3584	0	525028	18817	5.25
1,979	1,271	7026	WAT - Lexington Gardens - Bricks	Lexington Street - 6	Watertown	4	National Grid	3584	3584	0	525028	18817	5.25
1,980	1,272	4634	WAT - Lexington Gardens - Bricks	Philip Darch Road - 2	Watertown	4	National Grid	3584	3584	0	525028	18817	5.25
1,981	1,273	7023	WAT - Lexington Gardens - Bricks	Philip Darch Road - 3	Watertown	4	National Grid	3584	3584	0	525028	18817	5.25
1,982	1,274	7024	WAT - Lexington Gardens - Bricks	Philip Darch Road - 4	Watertown	4	National Grid	3584	3584	0	525028	18817	5.25
1,983	1,275	7025	WAT - Lexington Gardens - Bricks	Philip Darch Road - 5	Watertown	4	National Grid	3584	3584	0	525028	18817	5.25
1,984	1,276	89	Brunswick Holborn Apts	42 Holborn St	Roxbury	9	National Grid	7249	7249		103852	7528	1.04
1,985	1,277	90	Brunswick Holborn Apts	572 Warren St	Roxbury	20	National Grid	17144	17144		59394	10183	0.59
1,986	1,278	91	Brunswick Holborn Apts	538-544 Warren St	Roxbury	8	National Grid	9842	9842		73913	7275	0.74
1,987	1,279	92	Brunswick Holborn Apts	564-566 Warren St	Roxbury	12	National Grid	9572	9572		63235	6053	0.63
1,988	1,280	93	Columbia Wood Apts	90-92 Stanwood St	Roxbury	4	National Grid	5465	5465		70117	3832	0.70
1,989	1,281	94	Columbia Wood Apts	94-96 Stanwood St	Roxbury	4	National Grid	5465	5465		63865	3490	0.64
1,990	1,282	95	Columbia Wood Apts	94-96 Intervale St	Roxbury	6	National Grid	4960	4960		91912	4559	0.92
1,991	1,283	96	Columbia Wood Apts	36-38 Normandy St	Roxbury	12	National Grid	7437	7437		71977	5353	0.72
1,992	1,284	97	Columbia Wood Apts	200-204 Columbia Rd	Roxbury	14	National Grid	11931	11931		79045	9431	0.79
1,993	1,285	98	Columbia Wood Apts	229 Columbia Rd	Roxbury	9	National Grid	10341	10341		60462	6252	0.60
1,994	1,286	398	Codman Square Apts	7 Capen St	Dorchester	6	National Grid	4254	4254		21846	929	0.22
1,995	1,287	399	Codman Square Apts	710-726 Washington St	Dorchester	10	National Grid	21365	18365	3205	87463	16063	0.87
1,996	1,288	613	Erie Ellington Homes	31 Erie St. (Comm. Bdg.)	Dorchester	1	National Grid	1986	1986		53171	1056	0.53
1,997	1,289	614	Erie Ellington Homes	32 Erie St.	Dorchester	3	National Grid	3726	3726		60172	2242	0.60
1,998	1,290	615	Erie Ellington Homes	35 Michigan Ave.	Dorchester	2	National Grid	2998	2998		69147	2073	0.69
1,999	1,291	616	Erie Ellington Homes	38 Erie St.	Dorchester	2	National Grid	2070	2070		68298	1414	0.68
2,000	1,292	617	Erie Ellington Homes	42 Erie St.	Dorchester	2	National Grid	2998	2998		35086	1052	0.35
2,001	1,293	618	Erie Ellington Homes	44 Ellington St.	Dorchester	3	National Grid	3726	3726		54198	2019	0.54
2,002	1,294	619	Erie Ellington Homes	48 Ellington St.	Dorchester	2	National Grid	2070	2070		57994	1200	0.58
2,003	1,295	620	Erie Ellington Homes	62 Glenway St.	Dorchester	3	National Grid	3726	3726		49182	1833	0.49
2,004	1,296	621	Erie Ellington Homes	64 Glenway St.	Dorchester	3	National Grid	3726	3726		53753	2003	0.54
2,005	1,297	622	Erie Ellington Homes	70 Ellington St.	Dorchester	3	National Grid	3726	3726		58142	2166	0.58
2,006	1,298	623	Erie Ellington Homes	80 Ellington St.	Dorchester	2	National Grid	2998	2998		63409	1901	0.63
2,007	1,299	624	Erie Ellington Homes	82 Fowler St.	Dorchester	3	National Grid	3726	3726		55108	2053	0.55
2,008	1,300	625	Erie Ellington Homes	90 Fowler St.	Dorchester	3	National Grid	3726	3726		54895	2045	0.55
2,009	1,301	626	Erie Ellington Homes	94 Fowler St.	Dorchester	3	National Grid	3726	3726		44290	1650	0.44
2,010	1,302	627	Erie Ellington Homes	113 Ellington St.	Dorchester	3	National Grid	3726	3726		48872	1821	0.49
2,011	1,303	628	Erie Ellington Homes	117 Ellington St.	Dorchester	3	National Grid	3726	3726		48797	1818	0.49
2,012	1,304	629	Erie Ellington Homes	121 Ellington St.	Dorchester	2	National Grid	2998	2998		63340	1899	0.63
2,013	1,305	630	Erie Ellington Homes	125 Ellington St.	Dorchester	2	National Grid	2070	2070		64663	1339	0.65
2,014	1,306	631	Erie Ellington Homes	135 Ellington St.	Dorchester	3	National Grid	3726	3726		47979	1788	0.48
2,015	1,307	632	Erie Ellington Homes	150 Ellington St.	Dorchester	3	National Grid	3726	3726		51597	1923	0.52
2,016	1,308	659	BOS - Heath St Family Development	10-18 Plant Ct (Building 14)	Boston	24	National Grid	18906	18906		172018	32522	1.72
2,017	1,309		Scrivano Apartments	2 - 4 Webster Ave	Chelsea	24	National Grid	20698	20698	610	95000	3152	0.95
2,018	1,310		Pine Street	48 Pine Street	Waltham	120	National Grid	102886	102886	20577	271150	55795	2.71
2,019	1,311		Scrivano Apartments	1 - 3 Parkway Court	Chelsea	24	National Grid	20598	20598	510	95000	19606	0.95
2,020	1,312		Scrivano Apartments	2 - 4 Parkway Court	Chelsea	24	National Grid	20723	20723	635	95000	18461	0.95
2,021	1,313		Scrivano Apartments	1-3-5 Webster Ave	Chelsea	36	National Grid	30654	30654	615	95000	46792	0.95
2,022	1,314		Mace Apartments	461 Crescent Ave	Chelsea	24	National Grid	28184	26934	7902	76000	21420	0.76
2,023	1,315		Mace Apartments	112 Clinton St	Chelsea	24	National Grid	25684	25684	6652	76000	19520	0.76
2,024	1,316		Mace Apartments	112 Clinton St	Chelsea	24	National Grid	27742	27742	7100	76000	21084	0.76
2,025	1,317		Mace Apartments	112 Clinton St	Chelsea	24	National Grid	26124	26124	6652	76000	19854	0.76
2,026	1,318		Pleasantville	44 GAROFALO DR - Comm Bldg	Weymouth	1	National Grid	1,964	1964	1964	78000	1527	0.78
2,027	1,319		Pleasantville	44 GAROFALO DR - Bldg 1	Weymouth	4	National Grid	4,480	4480	0	78000	3509	0.78
2,028	1,320		Pleasantville	44 GAROFALO DR - Bldg 2	Weymouth	6	National Grid	6,496	6496	0	83000	5392	0.83
2,029	1,321		Pleasantville	44 GAROFALO DR - Bldg 3	Weymouth	4	National Grid	4,480	4480	0	123000	5496	1.23
2,030	1,322		Pleasantville	44 GAROFALO DR - Bldg 4	Weymouth	4	National Grid	4,480	4480	0	95000	4255	0.95
2,031	1,323		Pleasantville	44 GAROFALO DR - Bldg 5	Weymouth	4	National Grid	4,480	4480	0	80000	3605	0.80
2,032	1,324		Pleasantville	44 GAROFALO DR - Bldg 8	Weymouth	6	National Grid	6,496	6496	0	60000	3912	0.60
2,033	1,325	7013	CHL - Arms	1 SMITH ST - A	Chelmsford	32	National Grid	33292	33292	6658	14226	4736	0.14
2,034	1,326	7019	CHL - Arms	1 SMITH STREET - B	Chelmsford	32	National Grid	33292	33292	6658	14226	4736	0.14
2,035	1,327	7020	CHL - Arms	1 Smith St- Community Bldg	Chelmsford	1	National Grid	1628	1628	0	14226	232	0.14
2,036	1,328	7021	CHL - McFarlin Manor	10 WILSON ST	Chelmsford	50	National Grid	45148	45148	9030	50290	22705	0.50
2,037	1,329	7022	CHL - Delaney Terrace	8 SHEILA AVE	Chelmsford	50	National Grid	37332	37332	12332	44943	16778	0.45
2,038	1,330	6518	Powow Villa 1	1-6 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	119413	4597	1.19
2,039	1,331	6519	Powow Villa 1	7-12 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	99365	3826	0.99
2,040	1,332	6520	Powow Villa 1	13-18 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	115248	4437	1.15
2,041	1,333	6521	Powow Villa 1	19-24 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	115693	4454	1.16
2,042	1,334	6522	Powow Villa 1	25-31 POWOW VILLA	Amesbury	6	National Grid	3850	3850	1150	113963	4388	1.14
2,043	1,335	7092	AME - Macy Terrace	28 / 30 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	94496	2060	0.94
2,044	1,336	7093	AME - Macy Terrace	31-33 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	99244	2164	0.99
2,045	1,337	7094	AME - Macy Terrace	32-34 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	66713	1454	0.67
2,046	1,338	7095	AME - Macy Terrace	35-37 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	69998	1526	0.70
2,047	1,339	7096	AME - Macy Terrace	36-38 MACY TERRACE	Amesbury	2	National Grid	2180	2180	0	94761	2066	0.95
2,048	1,340		North Common Village		Lowell	11	National Grid	8500	8500	0	80069	6806	0.80
2,049	1,341		North Common Village		Lowell	11	National Grid	8500	8500	0	80069	6806	0.80
2,050	1,342		North Common Village		Lowell	11	National Grid	8500	8500	0	80069	6806	0.80
2,051	1,343		North Common Village		Lowell	11	National Grid	8500	8500	0	80069	6806	0.80
2,052	1,344		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,053	1,345		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,054	1,346		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,055	1,347		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,056	1,348		North Common Village		Lowell	30	National Grid	23400	23400	4680	80069	18736	0.80
2,057	1,349		North Common Village		Lowell	25	National Grid	19800	19800	3960	80069	15854	0.80
2,058	1,350		North Common Village		Lowell	25	National Grid	19800	19800	3960	80069	15854	0.80
2,059	1,351		North Common Village		Lowell	11	National Grid	9000	9000	1800	80069	7206	0.80
2,060	1,352		North Common Village		Lowell	19	National Grid	14850	14850	2970	80069	11890	0.80
2,061	1,353		North Common Village		Lowell	27	National Grid	21150	21150	4230	80069	16935	0.80
2,062	1,354		North Common Village		Lowell	27	National Grid	21150	21150	4230	80069	16935	0.80
2,063	1,355		North Common Village		Lowell	25	National Grid	19350	19350	3870	80069	15493	0.80

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,064	1,356		North Common Village		Lowell	25	National Grid	19800	19800	3462	80069	15854	0.80
2,065	1,357		North Common Village		Lowell	30	National Grid	23400	23400	4680	80069	18736	0.80
2,066	1,358		North Common Village		Lowell	30	National Grid	23400	23400	4680	80069	18736	0.80
2,067	1,359		North Common Village		Lowell	30	National Grid	23400	23400	4680	80069	18736	0.80
2,068	1,360		North Common Village		Lowell	19	National Grid	14850	14850	2970	80069	11890	0.80
2,069	1,361		North Common Village		Lowell	10	National Grid	8250	8250	0	80069	6606	0.80
2,070	1,362		North Common Village		Lowell	19	National Grid	14850	14850	2970	80069	11890	0.80
2,071	1,363		North Common Village		Lowell	10	National Grid	8250	8250	0	80069	6606	0.80
2,072	1,364		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,073	1,365		North Common Village		Lowell	4	National Grid	3250	3250	0	80069	2602	0.80
2,074	1,366		North Common Village		Lowell	13	National Grid	9900	9900	0	80069	7927	0.80
2,075	1,367		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,076	1,368		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,077	1,369		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,078	1,370		North Common Village		Lowell	4	National Grid	3250	3250	0	80069	2602	0.80
2,079	1,371		North Common Village		Lowell	8	National Grid	6500	6500	0	80069	5204	0.80
2,080	1,372		North Common Village		Lowell	13	National Grid	9900	9900	0	80069	7927	0.80
2,081	1,373		North Common Village		Lowell	13	National Grid	9900	9900	0	80069	7927	0.80
2,082	1,374		Pond St	56 Pond Street	Waltham	36	National Grid	14848	14848	2970	480000	71270	4.80
2,083	1,375		Pond St	58 Pond Street	Waltham	8	National Grid	2624	2624	525	480000	12595	4.80
2,084	1,376	6817	WAL - Beaver Brook Apartments	312 GROVE ST	Waltham	6	National Grid	3744	3744	0	73451	2750	0.73
2,085	1,377	6818	WAL - Beaver Brook Apartments	314 GROVE ST	Waltham	6	National Grid	3744	3744	0	73451	2750	0.73
2,086	1,378	6819	WAL - Beaver Brook Apartments	318 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,087	1,379	6820	WAL - Beaver Brook Apartments	320 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,088	1,380	6821	WAL - Beaver Brook Apartments	322 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,089	1,381	6822	WAL - Beaver Brook Apartments	324 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,090	1,382	6823	WAL - Beaver Brook Apartments	298 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,091	1,383	6824	WAL - Beaver Brook Apartments	300 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,092	1,384	6825	WAL - Beaver Brook Apartments	302 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,093	1,385	6826	WAL - Beaver Brook Apartments	304 GROVE ST	Waltham	4	National Grid	2400	2400	0	73451	1763	0.73
2,094	1,386	6827	WAL - Beaver Brook Apartments	306 GROVE ST	Waltham	6	National Grid	3744	3744	0	73451	2750	0.73
2,095	1,387	6828	WAL - Beaver Brook Apartments	308 GROVE ST	Waltham	6	National Grid	3744	3744	0	73451	2750	0.73
2,096	1,388	6829	WAL - Beaver Brook Apartments	310 GROVE ST	Waltham	2	National Grid	983	983	0	73451	722	0.73
2,097	1,389	6830	WAL - Beaver Brook Apartments	316 GROVE ST	Waltham	2	National Grid	983	983	0	73451	722	0.73
2,098	1,390	6831	WAL - Beaver Brook Apartments	292 GROVE ST - Community Bldg	Waltham	1	National Grid	3315	3315	0	73451	2435	0.73
2,099	1,391	6832	WAL - Myrtle	75-77 MYRTLE ST	Waltham	12	National Grid	6628	6628	628	73043	4841	0.73
2,100	1,392	6833	WAL - Myrtle	83-85 MYRTLE ST	Waltham	12	National Grid	6628	6628	628	73043	4841	0.73
2,101	1,393	6834	WAL - Myrtle	79 MYRTLE ST	Waltham	1	National Grid	528	528	0	73043	386	0.73
2,102	1,394	6839	WAL - Winchester - Crane	101 PROSPECT STREET	Waltham	59	National Grid	71650	71650	14330	44130	31619	0.44
2,103	1,395	7099	WAL - Dana Court	20-24 LOWELL ST	Waltham	12	National Grid	12498	12498	2500	76696	9585	0.77
2,104	1,396	7100	WAL - Dana Court	7-11 GARDNER ST	Waltham	12	National Grid	10750	10750	2150	76696	8245	0.77
2,105	1,397	7101	WAL - Dana Court	13-15 GARDNER ST	Waltham	8	National Grid	7192	7192	1438	76696	5516	0.77
2,106	1,398	7102	WAL - Bright Side	113-119 BRIGHT ST	Waltham	4	National Grid	1700	1700	340	23886	406	0.24
2,107	1,399	7104	WAL - New Grove St	326-328 GROVE ST	Waltham	2	National Grid	1356	1356	271	47681	647	0.48
2,108	1,400	7106	WAL - New Grove St	340-338 GROVE ST	Waltham	2	National Grid	1356	1356	271	45359	615	0.45
2,109	1,401		School Street	237 School St	Waltham	8	National Grid	5184	5184	1036.8	180000	9331.2	1.80
2,110	1,402		Lawrence & Faulkner	Lawrence & Faulkner 1	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,111	1,403		Lawrence & Faulkner	Lawrence & Faulkner 2	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,112	1,404		Lawrence & Faulkner	Lawrence & Faulkner 3	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,113	1,405		Lawrence & Faulkner	Lawrence & Faulkner 4	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,114	1,406		Lawrence & Faulkner	Lawrence & Faulkner 5	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,115	1,407		Lawrence & Faulkner	Lawrence & Faulkner 6	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,116	1,408		Lawrence & Faulkner	Lawrence & Faulkner 7	Lowell	4	National Grid	2750	2750	0	67340.26	1851.857	0.67
2,117	1,409		Bishop Markham	Bishop Markham 1	Lowell	50.32	National Grid	47600	47600	13328	64067.503	30496.13	0.64
2,118	1,410		Bishop Markham	Bishop Markham 2	Lowell	50.32	National Grid	47600	47600	13328	64067.503	30496.13	0.64
2,119	1,411		Bishop Markham	Bishop Markham 3	Lowell	50.32	National Grid	47600	47600	13328	64067.503	30496.13	0.64
2,120	1,412		Bishop Markham	Bishop Markham 4	Lowell	50.32	National Grid	47600	47600	13328	64067.503	30496.13	0.64
2,121	1,413		Bishop Markham	Bishop Markham 5	Lowell	50.32	National Grid	47600	47600	13328	64067.503	30496.13	0.64
2,122	1,414		Bishop Markham	Bishop Markham 6	Lowell	50.32	National Grid	47600	47600	13328	64067.503	30496.13	0.64
2,123	1,415		Bishop Markham	Bishop Markham 7	Lowell	25.69	National Grid	24300	24300	6804	64067.503	15568.4	0.64
2,124	1,416		Bishop Markham	Bishop Markham 8	Lowell	25.69	National Grid	24300	24300	6804	64067.503	15568.4	0.64
2,125	1	3451	FRV - Barresi Heights	1863 Pleasant Street	Fall River	149	New England Gas	93740	93740	19240	26436	24781	0.26
2,126	2	7089	FRV - Bates and Tower	57 Bates St	Fall River	61	New England Gas	60110	60110	29610	34836	20940	0.35
2,127	3	2857	FRV - Bishop Joseph Eid	33 Quequechan Street	Fall River	54	New England Gas	49464	49464	22464	39563	19569	0.40
2,128	4	3736	Tecumseh Mill Apartments	164 Hartwell St.	Fall River	125	New England Gas	111722	111722	0	43728	48854	0.44
2,129	5		Mitchell Apartments	2100 South Main St	Fall River	140	New England Gas	75588	75588	15118	52226	39476	0.52
2,130	6	3265	FRV - Pleasant View	23 Pleasant View	Fall River	4	New England Gas	3150	3150	0	58000	1827	0.58
2,131	7	3277	FRV - Pleasant View	25 Pleasant View	Fall River	4	New England Gas	3752	3752	0	58000	2176	0.58
2,132	8	3278	FRV - Pleasant View	26 Pleasant View	Fall River	4	New England Gas	3752	3752	0	58000	2176	0.58
2,133	9	3279	FRV - Pleasant View	27 Pleasant View	Fall River	4	New England Gas	3752	3752	0	58000	2176	0.58
2,134	10	3284	FRV - Pleasant View	28 Pleasant View	Fall River	4	New England Gas	3952	3952	200	58000	2292	0.58
2,135	11	3264	FRV - Pleasant View	22 Pleasant View	Fall River	4	New England Gas	3150	3150	0	58000	1827	0.58
2,136	12		Holmes Apartments	140 Essex St	Fall River	100	New England Gas	64235	64235	12847	65255	41916	0.65
2,137	13		Oak Village Apartments	1178 Locust St (Bldg 3)	Fall River	6	New England Gas	4144	4144	829	67245	2787	0.67
2,138	14	3272	FRV - Pleasant View	12 Pleasant View	Fall River	4	New England Gas	3752	3752	0	77000	2889	0.77
2,139	15	3273	FRV - Pleasant View	13 Pleasant View	Fall River	4	New England Gas	3752	3752	0	77000	2889	0.77
2,140	16	3274	FRV - Pleasant View	14 Pleasant View	Fall River	4	New England Gas	3752	3752	0	77000	2889	0.77
2,141	17	3282	FRV - Pleasant View	15 Pleasant View	Fall River	4	New England Gas	3952	3952	200	77000	3043	0.77
2,142	18	3267	FRV - Pleasant View	5 Pleasant View	Fall River	4	New England Gas	3150	3150	0	77000	2426	0.77
2,143	19	3271	FRV - Pleasant View	1 Pleasant View	Fall River	4	New England Gas	3752	3752	0	77000	2889	0.77
2,144	20	3275	FRV - Pleasant View	2 Pleasant View	Fall River	4	New England Gas	3752	3752	0	77000	2889	0.77
2,145	21	3292	FRV - Pleasant View	3 Pleasant View	Fall River	4	New England Gas	3652	3652	0	77000	2812	0.77
2,146	22	1172	FRV - Pleasant View	4 Pleasant View	Fall River	4	New England Gas	3752	3752	0	77000	2889	0.77
2,147	23	3287	FRV - Pleasant View	20 Pleasant View	Fall River	3	New England Gas	2906	2906	0	86285	2507	0.86
2,148	24	3261	FRV - Pleasant View	17 Pleasant View	Fall River	4	New England Gas	3150	3150	0	86285	2718	0.86
2,149	25	3262	FRV - Pleasant View	19 Pleasant View	Fall River	4	New England Gas	3150	3150	0	86285	2718	0.86
2,150	26	3263	FRV - Pleasant View	21 Pleasant View	Fall River	4	New England Gas	3150	3150	0	86285	2718	0.86
2,151	27	3286	FRV - Pleasant View	18 Pleasant View	Fall River	4	New England Gas	2504	2504	0	86286	2161	0.86
2,152	28	3285	FRV - Pleasant View	29 Pleasant View	Fall River	4	New England Gas	3952	3952	200	86286	3410	0.86
2,153	29	3288	FRV - Pleasant View	32 Pleasant View	Fall River	3	New England Gas	2906	2906	0	88418	2569	0.88
2,154	30	3289	FRV - Pleasant View	33 Pleasant Street	Fall River	3	New England Gas	2906	2906	0	88418	2569	0.88
2,155	31	3290	FRV - Pleasant View	34 Pleasant Street	Fall River	3	New England Gas	2906	2906	0	88418	2569	0.88
2,156	32	3291	FRV - Pleasant View	35 Pleasant View	Fall River	3	New England Gas	2906	2906	0	88418	2569	0.88
2,157	33	3266	FRV - Pleasant View	31 Pleasant Street	Fall River	4	New England Gas	3150	3150	0	88418	2785	0.88

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,158	34	3276	FRV - Pleasant View	24 Pleasant View	Fall River	4	New England Gas	3752	3752	0	88418	3317	0.88
2,159	35	3280	FRV - Pleasant View	30 Pleasant View	Fall River	4	New England Gas	3752	3752	0	88418	3317	0.88
2,160	36	3283	FRV - Pleasant View	16 Pleasant View	Fall River	4	New England Gas	3952	3952	200	90690	3584	0.91
2,161	37	3259	FRV - Pleasant View	10 Pleasant View	Fall River	4	New England Gas	3150	3150	0	90690	2857	0.91
2,162	38	3268	FRV - Pleasant View	6 Pleasant View	Fall River	4	New England Gas	3150	3150	0	90690	2857	0.91
2,163	39	3269	FRV - Pleasant View	7 Pleasant View	Fall River	4	New England Gas	3150	3150	0	90690	2857	0.91
2,164	40	3270	FRV - Pleasant View	8 Pleasant View	Fall River	4	New England Gas	3150	3150	0	90690	2857	0.91
2,165	41	3293	FRV - Pleasant View	9 Pleasant View	Fall River	4	New England Gas	3150	3150	0	90690	2857	0.91
2,166	42		Oak Village Apartments	1181 Locust St (Bldg 6)	Fall River	6	New England Gas	4144	4144	829	91271	3782	0.91
2,167	43		Oak Village Apartments	1177 Locust St (Bldg 2)	Fall River	6	New England Gas	4144	4144	829	92519	3834	0.93
2,168	44		Oak Village Apartments	1177 Locust St (Bldg 1)	Fall River	6	New England Gas	4144	4144	829	98085	4065	0.98
2,169	45		Oak Village Apartments	1180 Locust St (Bldg 5)	Fall River	6	New England Gas	4144	4144	829	98193	4069	0.98
2,170	46		Oak Village Apartments	1179 Locust St (Bldg 4)	Fall River	6	New England Gas	4144	4144	829	100989	4185	1.01
2,171	47	3150	FRV - Maple Gardens	47 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107724	4014	1.08
2,172	48	3151	FRV - Maple Gardens	50 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107724	4014	1.08
2,173	49	3169	FRV - Maple Gardens	49 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	107724	3393	1.08
2,174	50	3170	FRV - Maple Gardens	46 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	107724	3393	1.08
2,175	51	3171	FRV - Maple Gardens	48 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	107724	3393	1.08
2,176	52	3177	FRV - Maple Gardens	45 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	107724	3393	1.08
2,177	53	3067	FRV - Maple Gardens	39 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107870	4019	1.08
2,178	54	3068	FRV - Maple Gardens	40 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107870	4019	1.08
2,179	55	3069	FRV - Maple Gardens	41 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107870	4019	1.08
2,180	56	3147	FRV - Maple Gardens	42 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107870	4019	1.08
2,181	57	3148	FRV - Maple Gardens	43 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107870	4019	1.08
2,182	58	3149	FRV - Maple Gardens	44 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	107870	4019	1.08
2,183	59	3172	FRV - Maple Gardens	38 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	107870	3398	1.08
2,184	60	3176	FRV - Maple Gardens	37 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	107870	3398	1.08
2,185	61	3154	FRV - Maple Gardens	14 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	112790	3553	1.13
2,186	62	3058	FRV - Maple Gardens	10 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	112790	4203	1.13
2,187	63	3059	FRV - Maple Gardens	11 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	112790	4203	1.13
2,188	64	3060	FRV - Maple Gardens	12 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	112790	4203	1.13
2,189	65	3061	FRV - Maple Gardens	13 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	112790	4203	1.13
2,190	66	3153	FRV - Maple Gardens	9 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	112790	4203	1.13
2,191	67	2846	FRV - Maple Gardens	1 Maple Gardens	Fall River	4	New England Gas	1170	1170	0	115928	1356	1.16
2,192	68	3066	FRV - Maple Gardens	3 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	115928	4319	1.16
2,193	69	3152	FRV - Maple Gardens	7 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	115928	4319	1.16
2,194	70	3155	FRV - Maple Gardens	2 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	115928	3652	1.16
2,195	71	3166	FRV - Maple Gardens	8 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	115928	3652	1.16
2,196	72	3167	FRV - Maple Gardens	6 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	115928	3652	1.16
2,197	73	3168	FRV - Maple Gardens	5 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	115928	3652	1.16
2,198	74	3173	FRV - Maple Gardens	4 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	115928	3652	1.16
2,199	75	3062	FRV - Maple Gardens	19 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	119620	4457	1.20
2,200	76	3063	FRV - Maple Gardens	22 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	119620	4457	1.20
2,201	77	3156	FRV - Maple Gardens	20 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	119620	3768	1.20
2,202	78	3157	FRV - Maple Gardens	21 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	119620	3768	1.20
2,203	79	3158	FRV - Maple Gardens	23 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	119620	3768	1.20
2,204	80	3159	FRV - Maple Gardens	24 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	119620	3768	1.20
2,205	81	3160	FRV - Maple Gardens	26 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	127658	4021	1.28
2,206	82	3161	FRV - Maple Gardens	27 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	127658	4021	1.28
2,207	83	3162	FRV - Maple Gardens	29 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	127658	4021	1.28
2,208	84	3163	FRV - Maple Gardens	30 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	127658	4021	1.28
2,209	85	3064	FRV - Maple Gardens	25 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	127658	4757	1.28
2,210	86	3065	FRV - Maple Gardens	28 Maple Gardens	Fall River	4	New England Gas	3726	3726	0	127658	4757	1.28
2,211	87	3178	FRV - Maple Gardens	15 Maple Gardens	Fall River	3	New England Gas	2906	2906	0	134293	3903	1.34
2,212	88	3179	FRV - Maple Gardens	17 Maple Gardens	Fall River	3	New England Gas	2906	2906	0	134293	3903	1.34
2,213	89	3180	FRV - Maple Gardens	16 Maple Gardens	Fall River	3	New England Gas	2906	2906	0	134293	3903	1.34
2,214	90	3181	FRV - Maple Gardens	18 Maple Gardens	Fall River	3	New England Gas	2906	2906	0	134293	3903	1.34
2,215	91	3182	FRV - Maple Gardens	31 Maple Gardens	Fall River	4	New England Gas	2504	2504	0	164508	4119	1.65
2,216	92	3183	FRV - Maple Gardens	32 Maple Gardens	Fall River	4	New England Gas	2504	2504	0	164508	4119	1.65
2,217	93	3164	FRV - Maple Gardens	33 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	164508	5182	1.65
2,218	94	3165	FRV - Maple Gardens	34 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	164508	5182	1.65
2,219	95	3174	FRV - Maple Gardens	35 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	164508	5182	1.65
2,220	96	3175	FRV - Maple Gardens	36 Maple Gardens	Fall River	4	New England Gas	3150	3150	350	164508	5182	1.65
2,221	1	2235	Curtis Apartments	BOYLSTON ST - A	Worcester	30	NSTAR	22725	22725	6818	110408	25090	1.10
2,222	2	2236	Curtis Apartments	BOYLSTON ST - B	Worcester	24	NSTAR	15726	15726	4718	110408	17363	1.10
2,223	3	2237	Curtis Apartments	GREAT BROOK VALLEY AVE - C	Worcester	30	NSTAR	23010	23010	6903	110408	25405	1.10
2,224	4	2238	Curtis Apartments	GREAT BROOK VALLEY AVE - D	Worcester	48	NSTAR	42600	42600	12780	110408	47034	1.10
2,225	5	2239	Curtis Apartments	GREAT BROOK VALLEY - M	Worcester	36	NSTAR	15150	15150	4545	110408	16727	1.10
2,226	6	2245	Curtis Apartments	GREAT BROOK VALLEY AVE - F	Worcester	48	NSTAR	45402	45402	13621	110408	50127	1.10
2,227	7	2240	Curtis Apartments	GREAT BROOK VALLEY AVE - G	Worcester	36	NSTAR	43260	43260	12978	110408	47763	1.10
2,228	8	2241	Curtis Apartments	GREAT BROOK VALLEY AVE - H	Worcester	30	NSTAR	17724	17724	5318	110408	19569	1.10
2,229	9	2242	Curtis Apartments	GREAT BROOK VALLEY AVE - J	Worcester	24	NSTAR	23100	23100	6930	110408	25504	1.10
2,230	10	2243	Curtis Apartments	GREAT BROOK VALLEY AVE - K	Worcester	48	NSTAR	45558	45558	13668	110408	50300	1.10
2,231	11	2244	Curtis Apartments	TACOMA ST - L	Worcester	0	NSTAR	15150	15150	4545	110408	16727	1.10
2,232	12	2338	Lakeside Apartments	2 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,233	13	2339	Lakeside Apartments	4 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,234	14	2340	Lakeside Apartments	6 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,235	15	2341	Lakeside Apartments	8 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,236	16	2342	Lakeside Apartments	10 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,237	17	2343	Lakeside Apartments	12 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,238	18	2344	Lakeside Apartments	14 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,239	19	2345	Lakeside Apartments	16 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,240	20	2346	Lakeside Apartments	18 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,241	21	2347	Lakeside Apartments	20 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,242	22	2348	Lakeside Apartments	22 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,243	23	2349	Lakeside Apartments	24 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,244	24	2350	Lakeside Apartments	26 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,245	25	2351	Lakeside Apartments	28 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,246	26	2352	Lakeside Apartments	30 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,247	27	2354	Lakeside Apartments	32 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,248	28	2353	Lakeside Apartments	34 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,249	29	2355	Lakeside Apartments	36 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,250	30	2357	Lakeside Apartments	38 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,251	31	2356	Lakeside Apartments	40 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,252	32	2358	Lakeside Apartments	42 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,253	33	2359	Lakeside Apartments	44 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,254	34	2360	Lakeside Apartments	46 Lakeside	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,255	35	2361	Lakeside Apartments	15 Lovell	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,256	36	2362	Lakeside Apartments	1 Veterans	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,257	37	2364	Lakeside Apartments	2 Veterans	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,258	38	2365	Lakeside Apartments	4 Veterans	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,259	39	2366	Lakeside Apartments	17 Garland	Worcester	4	NSTAR	6318	5346	972	98395	5260	0.98
2,260	40	2367	Lakeside Apartments	18 Garland	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,261	41	2368	Lakeside Apartments	19 Garland	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,262	42	2369	Lakeside Apartments	20 Garland	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,263	43	2370	Lakeside Apartments	52 South Circuit	Worcester	7	NSTAR	7385	6413	972	98395	6310	0.98
2,264	44	2371	Lakeside Apartments	54 South Circuit	Worcester	7	NSTAR	7385	6413	972	98395	6310	0.98
2,265	45	2372	Lakeside Apartments	3 Veterans	Worcester	6	NSTAR	6330	5358	972	98395	5272	0.98
2,266	46	2708	George F. Booth Apartments	16 Haven Lane 10	Worcester	4	NSTAR	3762	3762	N/A	91856	3456	0.92
2,267	47	2709	George F. Booth Apartments	16 Haven Lane 11 (community bldg)	Worcester	0	NSTAR	2160	2160	N/A	91856	1984	0.92
2,268	48	2394	George F. Booth Apartments	16 Haven Lane 1	Worcester	5	NSTAR	2628	2628	N/A	91856	2414	0.92
2,269	49	2395	George F. Booth Apartments	16 Haven Lane 2	Worcester	4	NSTAR	3762	3762	N/A	91856	3456	0.92
2,270	50	2444	121 Jackson Street	121 Jackson Bldg 1-4	Cambridge	4	NSTAR	3126	3126	0	115438	3609	1.15
2,271	51	2445	121 Jackson Street	121 Jackson Bldg 5-10	Cambridge	6	NSTAR	4689	4689	0	115438	5413	1.15
2,272	52	2447	125-127 Whittemore Avenue	125-127 Whittemore	Cambridge	2	NSTAR	4152	3170	1948	71665	2272	0.72
2,273	53	2450	226 Norfolk Street	226 Norfolk Street	Cambridge	3	NSTAR	3542	2673	869	86531	2313	0.87
2,274	54	1983	402 Rindge Apartments	402 Rindge Avenue	Cambridge	273	NSTAR	255200	255200	81845	73542	187678	0.74
2,275	55	2630	5 Rhodes St	5 Rhodes St.	Millbury	18	NSTAR	8510	5822	5270	81404	4739	0.81
2,276	56	2617	57 Mechanic St	57 Mechanic St	Marlborough	9	NSTAR	4331	3158	3035	159096	5024	1.59
2,277	57	2218	6-8 Fairmont Street (Mass 3-3)	6 Fairmont Street	Cambridge	5	NSTAR	4422	4422	113	112649	4981	1.13
2,278	58	2219	6-8 Fairmont Street (Mass 3-3)	8 Fairmont Street	Cambridge	5	NSTAR	4422	4422	113	112649	4981	1.13
2,279	59	2448	8-10 Columbus Avenue	8-10 Columbus Ave	Cambridge	3	NSTAR	4688	3516	1172	84786	2981	0.85
2,280	60	2425	Burns Apartments	30 Churchill Avenue	Cambridge	60	NSTAR	42545	27545	15134	97418	26834	0.97
2,281	61	2426	Burns Apartments	50 Churchill Avenue	Cambridge	138	NSTAR	85091	54822	30269	97895	53668	0.98
2,282	62	2269	Calumet Court	Calumet Court A	Uxbridge	4	NSTAR	1800	1800	0	137090	2468	1.37
2,283	63	2270	Calumet Court	Calumet Court B	Uxbridge	4	NSTAR	2050	1600	450	175647	2810	1.76
2,284	64	2271	Calumet Court	Calumet Court C	Uxbridge	4	NSTAR	1800	1800	0	137090	2468	1.37
2,285	65	2272	Calumet Court	Calumet Court D	Uxbridge	6	NSTAR	2740	2290	490	164029	3756	1.64
2,286	66	2273	Calumet Court	Calumet Court E	Uxbridge	4	NSTAR	2050	1600	450	175647	2810	1.76
2,287	67	2274	Calumet Court	Calumet Court F	Uxbridge	4	NSTAR	1800	1800	0	137090	2468	1.37
2,288	68	2275	Calumet Court	Calumet Court G	Uxbridge	4	NSTAR	1800	1800	0	137090	2468	1.37
2,289	69	2276	Calumet Court	Calumet Court H	Uxbridge	4	NSTAR	1800	1800	0	137090	2468	1.37
2,290	70	635	CCHDI	184-188 Harvard St.	Cambridge	17	NSTAR	22000	22000	2000	27775	6111	0.28
2,291	71	1959	Coffin Lofts	516 Pleasant St.	New Bedford	18	NSTAR	66024	60974	42782	5302	3233	0.05
2,292	72	2508	Corcoran Park	10 May Street	Cambridge	8	NSTAR	6269	6269	333	107991	6770	1.08
2,293	73	2512	Corcoran Park	11 Corcoran Lane	Cambridge	8	NSTAR	6258	6258	330	123768	7745	1.24
2,294	74	2515	Corcoran Park	12 May Street	Cambridge	8	NSTAR	6257	6257	323	107271	6712	1.07
2,295	75	2546	Corcoran Park	14 Corcoran Lane	Cambridge	6	NSTAR	11300	11300	420	53394	6033	0.53
2,296	76	2806	126 Union Ave	126 Union Ave	Framingham	15	NSTAR	6027	4257	1770	118278	5035	1.18
2,297	77	2807	132 Union Ave	132 Union Ave	Framingham	17	NSTAR	5190	2853	2337	178448	5091	1.78
2,298	78	2961	Castle Hill	Castle Court Community Building	Plymouth	1	NSTAR	1008	1008	N/A	71692	723	0.72
2,299	79	2513	Corcoran Park	6 Corcoran Lane	Cambridge	6	NSTAR	11304	11304	420	49817	5631	0.50
2,300	80	2510	Corcoran Park	15 Corcoran Lane	Cambridge	6	NSTAR	11298	11298	420	49997	5649	0.50
2,301	81	2511	Corcoran Park	55 Thingvalla	Cambridge	6	NSTAR	11208	11208	330	52432	5877	0.52
2,302	82	2542	Corcoran Park	67 Thingvalla Avenue	Cambridge	6	NSTAR	11282	11282	402	53460	6031	0.53
2,303	83	2543	Corcoran Park	59 Thingvalla Avenue	Cambridge	6	NSTAR	11300	11300	420	55177	6235	0.55
2,304	84	2535	Corcoran Park	60 Lawn Street	Cambridge	6	NSTAR	11283	11283	403	56568	6383	0.57
2,305	85	2539	Corcoran Park	23 Corcoran Lane	Cambridge	6	NSTAR	11300	11300	420	57346	6480	0.57
2,306	86	2541	Corcoran Park	63 Thingvalla Ave	Cambridge	6	NSTAR	11282	11282	402	60856	6866	0.61
2,307	87	2509	Corcoran Park	8 May Street	Cambridge	6	NSTAR	11300	11300	420	67059	7578	0.67
2,308	88	2551	Corcoran Park	20 Saint Sauveur Court	Cambridge	8	NSTAR	6088	6088	1967	74207	4518	0.74
2,309	89	2548	Corcoran Park	40 St. Sauveur Court	Cambridge	8	NSTAR	6258	6258	330	93224	5834	0.93
2,310	90	2538	Corcoran Park	50 Lawn Street	Cambridge	8	NSTAR	6256	6256	322	97471	6098	0.97
2,311	91	2516	Corcoran Park	53 Lawn Street	Cambridge	7	NSTAR	6257	6257	323	101416	6346	1.01
2,312	92	2531	Corcoran Park	64 Lawn Street	Cambridge	8	NSTAR	8901	5934	2967	103848	6162	1.04
2,313	93	2547	Corcoran Park	19 Corcoran Lane (2) Building 19	Cambridge	4	NSTAR	3943	3943	391	105990	4179	1.06
2,314	94	2540	Corcoran Park	19 Corcoran Lane	Cambridge	4	NSTAR	3943	3943	391	109098	4302	1.09
2,315	95	2536	Corcoran Park	56 Lawn Street	Cambridge	4	NSTAR	3943	3943	391	119063	4695	1.19
2,316	96	2537	Corcoran Park	52 Lawn Street	Cambridge	4	NSTAR	3943	3943	391	123921	4886	1.24
2,317	97	2514	Corcoran Park	4 Corcoran Lane	Cambridge	4	NSTAR	3943	3943	391	128179	5054	1.28
2,318	98	2449	Garfield Street	1713 Massachusetts Avenue	Cambridge	8	NSTAR	7485	7485	284	87023	6514	0.87
2,319	99	2442	Jefferson Park Fed	1000 Jackson	Cambridge	53	NSTAR	54888	48908	12519	82282	40243	0.82
2,320	100	1960	Lawton's Corner	749 Purchase St.	New Bedford	17	NSTAR	66800	62050	43345	9760	6056	0.10
2,321	101	2429	LBJ Apartments	150 Erie Street	Cambridge	180	NSTAR	113634	100178	38324	18902	18935	0.19
2,322	102	2377	Main South Gardens	31A & 31B Benefit Street	Worcester	2	NSTAR	2960	2960	2959	47902	1418	0.48
2,323	103	2381	Main South Gardens	202 Beacon st	Worcester	2	NSTAR	2960	2960	2959	48131	1425	0.48
2,324	104	2382	Main South Gardens	6 Cheney Street	Worcester	2	NSTAR	2960	2960	2959	59715	1768	0.60
2,325	105	2380	Main South Gardens	6 Kilby Street	Worcester	2	NSTAR	2960	2960	2959	67505	1998	0.68
2,326	106	2385	Main South Gardens	18 Kilby Street	Worcester	2	NSTAR	2960	2960	2959	69253	2050	0.69
2,327	107	2384	Main South Gardens	14 Kilby Street	Worcester	2	NSTAR	2960	2960	2959	70091	2075	0.70
2,328	108	2378	Main South Gardens	25 Benefit Street	Worcester	2	NSTAR	2960	2960	2959	75147	2224	0.75
2,329	109	2386	Main South Gardens	204 Beacon Street	Worcester	2	NSTAR	2960	2960	2959	75409	2232	0.75
2,330	110	2376	Main South Gardens	30A & 30B Gardner Street	Worcester	2	NSTAR	2960	2960	2959	77313	2288	0.77
2,331	111	2375	Main South Gardens	4 Cheney Street	Worcester	2	NSTAR	2960	2960	2959	80903	2395	0.81
2,332	112	2379	Main South Gardens	32 A & 32B Ripley St	Worcester	2	NSTAR	2400	2400	2399	88362	2121	0.88
2,333	113	2383	Main South Gardens	27 Benefit Street	Worcester	2	NSTAR	2960	2960	2959	90626	2683	0.91
2,334	114	2657	Munroe Terrace	Anderson Way - Community Building	Dartmouth	1	NSTAR	2536	2536	N/A	51565	1308	0.52
2,335	115	2652	Munroe Terrace	Anderson Way - 3	Dartmouth	8	NSTAR	5820	5820	N/A	51565	3001	0.52
2,336	116	2653	Munroe Terrace	Anderson Way - 4	Dartmouth	8	NSTAR	5820	5820	N/A	51565	3001	0.52
2,337	117	2654	Munroe Terrace	Anderson Way - 6	Dartmouth	8	NSTAR	5820	5820	N/A	51565	3001	0.52
2,338	118	2655	Munroe Terrace	Anderson Way - 8	Dartmouth	8	NSTAR	5820	5820	N/A	51565	3001	0.52
2,339	119	2656	Munroe Terrace	Anderson Way - 9	Dartmouth	8	NSTAR	5820	5820	N/A	51565	3001	0.52
2,340	120	2648	Munroe Terrace	Anderson Way - 1	Dartmouth	10	NSTAR	7920	7920	N/A	51565	4084	0.52
2,341	121	2651	Munroe Terrace	Anderson Way - 10	Dartmouth	10	NSTAR	7920	7920	N/A	51565	4084	0.52
2,342	122	2649	Munroe Terrace	Anderson Way - 5	Dartmouth	10	NSTAR	7920	7920	N/A	51565	4084	0.52
2,343	123	2650	Munroe Terrace	Anderson Way - 7	Dartmouth	10	NSTAR	7920	7920	N/A	51565	4084	0.52
2,344	124	2226	Newtowne Court	Doors 33-35	Cambridge	15	NSTAR	15259	10674	4586	123344	13166	1.23
2,345	125	2225	Newtowne Court	Doors 34-36	Cambridge	15	NSTAR	15259	10674	4586	123344	13166	1.23

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,346	126	2221	Newtowne Court	Door 1-9	Cambridge	37	NSTAR	38148	26685	11483	123345	32915	1.23
2,347	127	2222	Newtowne Court	Door 2-10	Cambridge	37	NSTAR	38148	26685	11483	123345	32915	1.23
2,348	128	2227	Newtowne Court	Doors 11-19	Cambridge	37	NSTAR	38148	26685	11483	123345	32915	1.23
2,349	129	2229	Newtowne Court	Doors 12-20	Cambridge	37	NSTAR	38148	26685	11483	123345	32915	1.23
2,350	130	2228	Newtowne Court	Doors 21-31	Cambridge	37	NSTAR	38148	26685	11483	123345	32915	1.23
2,351	131	2230	Newtowne Court	Doors 22-32	Cambridge	37	NSTAR	38148	26685	11483	123345	32915	1.23
2,352	132	2575	Pine Street	95-97 Pine St.	Cambridge	12	NSTAR	15436	10880	5121	30677	3338	0.31
2,353	133	2214	River Howard Homes	Building A	Cambridge	5	NSTAR	11011	11011	1487	35503	3909	0.36
2,354	134	2217	River Howard Homes	Building D	Cambridge	4	NSTAR	11011	11011	1487	39168	4313	0.39
2,355	135	2215	River Howard Homes	Building B	Cambridge	9	NSTAR	11011	11011	1487	65516	7214	0.66
2,356	136	2216	River Howard Homes	Building C	Cambridge	7	NSTAR	11011	11011	1487	76079	8377	0.76
2,357	137	2459	Roosevelt Towers	RT Mid-Rise	Cambridge	75	NSTAR	98056	85919	27454	86962	74717	0.87
2,358	138	2454	Roosevelt Towers	190-200 Willow Street	Cambridge	6	NSTAR	7020	5265	2883	101598	5349	1.02
2,359	139	2453	Roosevelt Towers	560-570 Windsor Street	Cambridge	6	NSTAR	7020	5265	1755	101598	5349	1.02
2,360	140	2456	Roosevelt Towers	Cambridge and Willow	Cambridge	27	NSTAR	36552	27414	9138	101598	27852	1.02
2,361	141	2455	Roosevelt Towers	Cambridge and Windsor	Cambridge	27	NSTAR	36552	27414	9138	101598	27852	1.02
2,362	142	2458	Roosevelt Towers	Willow Street	Cambridge	27	NSTAR	36552	27414	9138	101598	27852	1.02
2,363	143	2457	Roosevelt Towers	Windsor Street	Cambridge	27	NSTAR	36552	27414	9138	101598	27852	1.02
2,364	144	2463	Russell Apartments	2050 Massachusetts Avenue	Cambridge	51	NSTAR	38969	38969	10694	33899	13210	0.34
2,365	145	2446	Serenity 44 Wilson St.	44 Wilson St	Hopkinton	1	NSTAR	8066	8066	N/A	96867	7813	0.97
2,366	146	2231	Truman Apartments	25 Eighth Street	Cambridge	60	NSTAR	40114	30258	9856	9690	2932	0.10
2,367	147	2466	Woodrow Wilson Court	WWC Building 1	Cambridge	13	NSTAR	15185	12851	3298	81899	10525	0.82
2,368	148	2518	Woodrow Wilson Court	WWC Building 3	Cambridge	28	NSTAR	26920	21536	7960	86638	18658	0.87
2,369	149	2517	Woodrow Wilson Court	WWC Building 2	Cambridge	28	NSTAR	30865	24692	8885	86638	21393	0.87
2,370	150	2131	Worcester Housing Connection	701 Main St	Worcester MA	1	NSTAR	33088	25013	25013	65480	16378	0.65
2,371	151	3674	NEE - High Rock	14 Memorial Circle	Needham	1	NSTAR	870	870	N/A	158941.11	1383	1.59
2,372	152	3544	Brampton Circle	10-13 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	107237.48	1887	1.07
2,373	153	3003	Northfield Senior Housing (Fed)	84 Nicks Rock Road	Plymouth	30	NSTAR	28800	28800	11790	34696.93	9993	0.35
2,374	154	3545	Brampton Circle	14-17 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	98654.38	1736	0.99
2,375	155	3553	Brampton Circle	46-49 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	107709.28	1896	1.08
2,376	156	3185	Pelham II	1-3-5-7 Beaver Terrace Circle (Bldg 2)	Framingham	8	NSTAR	7600	7600	N/A	54631.33	4152	0.55
2,377	157	3550	Brampton Circle	34-37 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	98759.82	1738	0.99
2,378	158	3546	Brampton Circle	18-21 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	101685.84	1790	1.02
2,379	159	3542	Brampton Circle	2-5 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	109651.22	1930	1.10
2,380	160	3506	Pelham II	17-19-21-23 Beaver Terrace Circle (Bld	Framingham	8	NSTAR	7600	7600	N/A	54663.57	4154	0.55
2,381	161	3549	Brampton Circle	30-33 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	101692.22	1790	1.02
2,382	162	1496	Green Meadows	5-9 McGann Terrace	Fairhaven	4	NSTAR	2520	2520	2020	75335.61	1898	0.75
2,383	163	3188	Pelham II	9-11-13-15 Beaver Terrace Circle (Bldg	Framingham	8	NSTAR	7600	7600	N/A	55910.87	4249	0.56
2,384	164	3552	Brampton Circle	42-45 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	102376.30	1802	1.02
2,385	165	3325	Inman/CAST II	1221 Cambridge St.	Cambridge	116	NSTAR	102610	100704	20910	44770.26	45085	0.45
2,386	166	3521	Pelham II	81-83 Beaver Terrace Circle (Bldg 22)	Framingham	8	NSTAR	5520	5520	N/A	56486.64	3118	0.56
2,387	167	3547	Brampton Circle	22-25 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	102704.40	1808	1.03
2,388	168	3327	Inman/CAST II	49-53 Columbia St.	Cambridge	9	NSTAR	11931	8668	5202	94941.22	8230	0.95
2,389	169	3516	Pelham II	28-30-32-34 Beaver Terrace Circle	Framingham	12	NSTAR	8920	8920	N/A	59361.03	5295	0.59
2,390	170	3554	Brampton Circle	50-53 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	103514.54	1822	1.04
2,391	171	3192	Pelham II	89-91-93 Beaver Terrace Circle (Bldg 1	Framingham	10	NSTAR	7220	7220	N/A	59712.34	4311	0.60
2,392	172	3555	Brampton Circle	54-57 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	104852.38	1845	1.05
2,393	173	3522	Pelham II	85-87 Beaver Terrace Circle (Bldg 23)	Framingham	8	NSTAR	5520	5520	N/A	61347.19	3386	0.61
2,394	174	3551	Brampton Circle	38-41 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	105274.62	1853	1.05
2,395	175	3520	Pelham II	48-74 Second Street and Beaver Terrac	Framingham	20	NSTAR	17960	17960	N/A	61824.71	11104	0.62
2,396	176	3193	Pelham II	73-75 Beaver Terrace Circle (Bldg 20)	Framingham	8	NSTAR	5520	5520	N/A	62154.18	3431	0.62
2,397	177	3189	Pelham II	26-28-30-32 Second Street (Bldg 1)	Framingham	8	NSTAR	7600	7600	N/A	63093.92	4795	0.63
2,398	178	3513	Pelham II	4-6-8-10 Beaver Terrace Circle	Framingham	8	NSTAR	7600	7600	N/A	64808.01	4925	0.65
2,399	179	3518	Pelham II	103-105-107 Beaver Terrace Circle (Bu	Framingham	6	NSTAR	5900	5900	N/A	65204.36	3847	0.65
2,400	180	3510	Pelham II	49-51-53-55 Beaver Terrace Circle	Framingham	8	NSTAR	7600	7600	N/A	65565.95	4983	0.66
2,401	181	3509	Pelham II	41-43-45-47 Beaver Terrace Circle	Framingham	8	NSTAR	7600	7600	N/A	66726.53	5071	0.67
2,402	182	3511	Pelham II	57-59-61-63 Beaver Terrace Circle	Framingham	8	NSTAR	7600	7600	N/A	66730.07	5071	0.67
2,403	183	3194	Pelham II	46-62 Second Street (Bldg 24)	Framingham	20	NSTAR	17960	17960	N/A	66794.98	11996	0.67
2,404	184	3515	Pelham II	20-22-24-26 Beaver Terrace Circle	Framingham	12	NSTAR	8920	8920	N/A	66872.68	5965	0.67
2,405	185	3519	Pelham II	77-79 Beaver Terrace Circle (Bldg 20)	Framingham	8	NSTAR	5520	5520	N/A	67797.95	3742	0.68
2,406	186	3512	Pelham II	36-38-40-42 Beaver Terrace Circle (Bld	Framingham	8	NSTAR	7600	7600	N/A	67825.63	5155	0.68
2,407	187	3517	Pelham II	65-67-69-71 Beaver Terrace Circle	Framingham	12	NSTAR	8920	8920	N/A	68353.71	6097	0.68
2,408	188	3514	Pelham II	38-40-42-44 Second Street (Bldg 12)	Framingham	8	NSTAR	7600	7600	N/A	69963.38	5317	0.70
2,409	189	3195	Pelham II	95-97-99-101 Beaver Terrace Circle (Bl	Framingham	8	NSTAR	7600	7600	N/A	69984.24	5319	0.70
2,410	190	3196	Pelham II	76-78-109-111 Beaver Terr & Second S	Framingham	8	NSTAR	7600	7600	N/A	70714.45	5374	0.71
2,411	191	3191	Pelham II	2-34-36 Beaver Terr & Second St (Bldg	Framingham	6	NSTAR	5900	5900	N/A	70825.73	4179	0.71
2,412	192	3190	Pelham II	12-14-16-18 Beaver Terrace Circle (Bld	Framingham	12	NSTAR	8920	8920	N/A	71001.94	6333	0.71
2,413	193	3507	Pelham II	25-27-29-31 Beaver Terrace Circle (Bld	Framingham	8	NSTAR	7600	7600	N/A	72820.20	5534	0.73
2,414	194	3508	Pelham II	33-35-37-39 Beaver Terrace Circle	Framingham	8	NSTAR	7600	7600	N/A	80092.20	6087	0.80
2,415	195	2956	PLY - Castle Hill	Castle Court - 2	Plymouth	8	NSTAR	5876	5876	2596	71691.49	4213	0.72
2,416	196	2958	PLY - Castle Hill	Castle Court - 4	Plymouth	8	NSTAR	5876	5876	2596	71691.49	4213	0.72
2,417	197	2959	PLY - Castle Hill	Castle Court - 5	Plymouth	8	NSTAR	5876	5876	2596	71691.49	4213	0.72
2,418	198	2960	PLY - Castle Hill	Castle Court - 6	Plymouth	8	NSTAR	5876	5876	2596	71691.49	4213	0.72
2,419	199	2955	PLY - Castle Hill	Castle Court - 1	Plymouth	9	NSTAR	7124	7124	3434	71691.51	5107	0.72
2,420	200	2957	PLY - Castle Hill	Castle Court - 3	Plymouth	9	NSTAR	7124	7124	3434	71691.51	5107	0.72
2,421	201	2970	PLY - Cherry Hill	128 Court Street	Plymouth	81	NSTAR	87980	87980	51530	44768.07	39387	0.45
2,422	202	2952	PLY - Scattered Site Development	12 Worral Road	Plymouth	1	NSTAR	1066	1066	N/A	74363.89	793	0.74
2,423	203	2953	PLY - Scattered Site Development	20 Hughes Street	Plymouth	1	NSTAR	1066	1066	N/A	80857.82	862	0.81
2,424	204	2938	PLY - Scattered Site Development	25 Montgomery Drive	Plymouth	1	NSTAR	1066	1066	N/A	100340.29	1070	1.00
2,425	205	2951	PLY - Scattered Site Development	12 Hughes Street	Plymouth	1	NSTAR	1066	1066	N/A	109417.12	1166	1.09
2,426	206	2969	PLY - South Pond	32 South Pond	Plymouth	8	NSTAR	5130	5130	N/A	27556.24	1414	0.28
2,427	207	2971	PLY - Southfield	105 South Street	Plymouth	60	NSTAR	59502	59502	32502	57239.03	34058	0.57
2,428	208	3097	Sean Brooke House	116 Lindsey St	North Attleboro	19	NSTAR	15534	15534	5086	28901.21	4490	0.29
2,429	209	1055	St Patrick's Place	30 York Street	Cambridge	6	NSTAR	10932	8094	2886	3099.43	251	0.03
2,430	210	2946	St. Lo Road	18-20 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	163865.36	1449	1.64
2,431	211	2944	St. Lo Road	45-47 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	165021.33	1459	1.65
2,432	212	2945	St. Lo Road	55-57 St. Lo Road	Framingham	2	NSTAR	884	884	N/A	188003.02	1662	1.88
2,433	213	2966	Willow Street Homes	50-54 Willow Street	Cambridge	3	NSTAR	5478	5478	N/A	39938.86	2188	0.40
2,434	214	2964	Willow Street Homes	56-58 Willow Street	Cambridge	8	NSTAR	8382	8382	110	39938.86	3348	0.40
2,435	215	2965	Willow Street Homes	42-28 Willow	Cambridge	4	NSTAR	6696	6696	144	39938.86	2674	0.40
2,436	216	2625	WST - Cedar Estates	2 Rogers Road	Westborough	36	NSTAR	22700	22700	4700	40482.27	9189	0.40
2,437	217	2434	17-23 A St	17-23 A St	Whitinsville	4	NSTAR	3250	2844	2438	53198.29	1513	0.53
2,438	218	58	Auburn Court	41 Pilgrim Street	Cambridge	6	NSTAR	6350	6350	595	67376.49	4278	0.67
2,439	219	61	Auburn Court	46 Pilgrim Street	Cambridge	12	NSTAR	12240	12240	1475	68535.66	8389	0.69

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,440	220	63	Auburn Court	117 Pacific Street	Cambridge	3	NSTAR	3449	3449	1292	68535.71	2364	0.69
2,441	221	60	Auburn Court	42 Pilgrim Street	Cambridge	6	NSTAR	5750	5750	1655	68535.72	3941	0.69
2,442	222	65	Auburn Park	1 Brookline Place	Cambridge	34	NSTAR	34000	34000	9000	33891.10	11523	0.34
2,443	223	3543	Brampton Circle	6-9 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	93879.97	1652	0.94
2,444	224	3548	Brampton Circle	26-29 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	96163.09	1692	0.96
2,445	225	3556	Brampton Circle	58-61 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	98175.94	1728	0.98
2,446	226	3629	MAT - Homestead Court	Homestead Court - 8	Mattapoisett	1	NSTAR	947	947	N/A	43684	414	0.44
2,447	227	3622	MAT - Homestead Court	Homestead Court - 1	Mattapoisett	1	NSTAR	947	947	N/A	46248	438	0.46
2,448	228	3626	MAT - Homestead Court	Homestead Court - 5	Mattapoisett	1	NSTAR	783	783	N/A	61574	482	0.62
2,449	229	3698	NEE - High Rock	18 YURICK ROAD	Needham	1	NSTAR	784	784	N/A	62003	486	0.62
2,450	230	3669	NEE - High Rock	282 LINDEN STREET	Needham	1	NSTAR	1076	1076	N/A	45519	490	0.46
2,451	231	3656	NEE - High Rock	99 FAIRVIEW ROAD	Needham	1	NSTAR	756	756	N/A	65086	492	0.65
2,452	232	3665	NEE - High Rock	247 Linden Street	Needham	1	NSTAR	784	784	N/A	63792	500	0.64
2,453	233	3625	MAT - Homestead Court	Homestead Court - 4	Mattapoisett	1	NSTAR	947	947	N/A	55465	525	0.55
2,454	234	3644	NEE - High Rock	100 Fairview Road	Needham	1	NSTAR	756	756	N/A	72056	545	0.72
2,455	235	3660	NEE - High Rock	223 LINDEN STREET	Needham	1	NSTAR	906	906	N/A	60425	547	0.60
2,456	236	3623	MAT - Homestead Court	Homestead Court - 2	Mattapoisett	1	NSTAR	783	783	N/A	70625	553	0.71
2,457	237	3628	MAT - Homestead Court	Homestead Court - 7	Mattapoisett	1	NSTAR	947	947	N/A	58394	553	0.58
2,458	238	3624	MAT - Homestead Court	Homestead Court - 3	Mattapoisett	1	NSTAR	783	783	N/A	72390	567	0.72
2,459	239	3690	NEE - High Rock	22 Summit Road	Needham	1	NSTAR	756	756	N/A	76132	576	0.76
2,460	240	3658	NEE - High Rock	213 Linden Street	Needham	1	NSTAR	784	784	N/A	74960	588	0.75
2,461	241	3650	NEE - High Rock	80 Fairview Road	Needham	1	NSTAR	756	756	N/A	78585	594	0.79
2,462	242	3691	NEE - High Rock	26 Summit Road	Needham	1	NSTAR	756	756	N/A	78826	596	0.79
2,463	243	3645	NEE - High Rock	105 Fairview Road	Needham	1	NSTAR	756	756	N/A	80355	607	0.80
2,464	244	3631	MAT - Homestead Court	Homestead Court - 10	Mattapoisett	1	NSTAR	783	783	N/A	78093	611	0.78
2,465	245	3678	NEE - High Rock	4 Memorial Circle	Needham	1	NSTAR	756	756	N/A	81730	618	0.82
2,466	246	3651	NEE - High Rock	83 FAIRVIEW ROAD	Needham	1	NSTAR	756	756	N/A	82536	624	0.83
2,467	247	3627	MAT - Homestead Court	Homestead Court - 6	Mattapoisett	1	NSTAR	783	783	N/A	79953	626	0.80
2,468	248	3685	NEE - High Rock	39 Murphy Road	Needham	1	NSTAR	756	756	N/A	85020	643	0.85
2,469	249	3666	NEE - High Rock	253 LINDEN STREET	Needham	1	NSTAR	756	756	N/A	85051	643	0.85
2,470	250	3701	NEE - High Rock	3 Yurick Road	Needham	1	NSTAR	756	756	N/A	87442	661	0.87
2,471	251	3654	NEE - High Rock	93 FAIRVIEW ROAD	Needham	1	NSTAR	931	931	N/A	74724	696	0.75
2,472	252	3683	NEE - High Rock	51 Murphy Road	Needham	1	NSTAR	756	756	N/A	93238	705	0.93
2,473	253	3712	NEE - High Rock	59 YURICK ROAD	Needham	1	NSTAR	931	931	N/A	76329	711	0.76
2,474	254	3675	NEE - High Rock	17 Memorial Circle	Needham	1	NSTAR	870	870	N/A	83537	727	0.84
2,475	255	3682	NEE - High Rock	45 Murphy Road	Needham	1	NSTAR	784	784	N/A	94314	739	0.94
2,476	256	3655	NEE - High Rock	94 Fairview Road	Needham	1	NSTAR	756	756	N/A	98104	742	0.98
2,477	257	3664	NEE - High Rock	243 LINDEN STREET	Needham	1	NSTAR	756	756	N/A	100119	757	1.00
2,478	258	3684	NEE - High Rock	59 MURPHY ROAD	Needham	1	NSTAR	784	784	N/A	97157	762	0.97
2,479	259	3709	NEE - High Rock	50 Yurick Road	Needham	1	NSTAR	756	756	N/A	101275	766	1.01
2,480	260	3646	NEE - High Rock	106 Fairview Road	Needham	1	NSTAR	931	931	N/A	83220	775	0.83
2,481	261	3696	NEE - High Rock	11 Yurick Road	Needham	1	NSTAR	931	931	N/A	83220	775	0.83
2,482	262	3648	NEE - High Rock	114 FAIRVIEW ROAD	Needham	1	NSTAR	931	931	N/A	83220	775	0.83
2,483	263	3697	NEE - High Rock	17 YURICK ROAD	Needham	1	NSTAR	906	906	N/A	85516	775	0.86
2,484	264	3661	NEE - High Rock	229 LINDEN STREET	Needham	1	NSTAR	756	756	N/A	102483	775	1.02
2,485	265	3662	NEE - High Rock	232 LINDEN STREET	Needham	1	NSTAR	756	756	N/A	102483	775	1.02
2,486	266	3699	NEE - High Rock	24 YURICK ROAD	Needham	1	NSTAR	931	931	N/A	83220	775	0.83
2,487	267	3667	NEE - High Rock	261 Linden Street	Needham	1	NSTAR	784	784	N/A	98823	775	0.99
2,488	268	3692	NEE - High Rock	29 SUMMIT ROAD	Needham	1	NSTAR	931	931	N/A	83220	775	0.83
2,489	269	3677	NEE - High Rock	3 Memorial Circle	Needham	1	NSTAR	756	756	N/A	102483	775	1.02
2,490	270	3702	NEE - High Rock	30 YURICK ROAD	Needham	1	NSTAR	784	784	N/A	98823	775	0.99
2,491	271	3703	NEE - High Rock	33 YURICK ROAD	Needham	1	NSTAR	784	784	N/A	98823	775	0.99
2,492	272	3706	NEE - High Rock	40 Yurick Road	Needham	1	NSTAR	906	906	N/A	85516	775	0.86
2,493	273	3710	NEE - High Rock	51 YURICK ROAD	Needham	1	NSTAR	906	906	N/A	85516	775	0.86
2,494	274	3713	NEE - High Rock	62 YURICK ROAD	Needham	1	NSTAR	931	931	N/A	83220	775	0.83
2,495	275	3653	NEE - High Rock	88 Fairview Road	Needham	1	NSTAR	756	756	N/A	102483	775	1.02
2,496	276	3652	NEE - High Rock	87 Fairview Road	Needham	1	NSTAR	931	931	N/A	83815	780	0.84
2,497	277	3663	NEE - High Rock	237 LINDEN STREET	Needham	1	NSTAR	906	906	N/A	88654	803	0.89
2,498	278	3700	NEE - High Rock	25 Yurick Road	Needham	1	NSTAR	870	870	N/A	94969	826	0.95
2,499	279	3681	NEE - High Rock	30 Murphy Road	Needham	1	NSTAR	870	870	N/A	95841	834	0.96
2,500	280	3680	NEE - High Rock	24 Murphy Road	Needham	1	NSTAR	906	906	N/A	93414	846	0.93
2,501	281	3630	MAT - Homestead Court	Homestead Court - 9	Mattapoisett	1	NSTAR	783	783	N/A	110824	868	1.11
2,502	282	3689	NEE - High Rock	16 SUMMIT ROAD	Needham	1	NSTAR	931	931	N/A	93321	869	0.93
2,503	283	3647	NEE - High Rock	111 Fairview Road	Needham	1	NSTAR	756	756	N/A	115793	875	1.16
2,504	284	3679	NEE - High Rock	16 MURPHY ROAD	Needham	1	NSTAR	931	931	N/A	94092	876	0.94
2,505	285	3673	NEE - High Rock	10 Memorial Circle	Needham	1	NSTAR	784	784	N/A	112380	881	1.12
2,506	286	3711	NEE - High Rock	56 YURICK ROAD	Needham	1	NSTAR	784	784	N/A	114379	897	1.14
2,507	287	3649	NEE - High Rock	75 Fairview Road	Needham	1	NSTAR	756	756	N/A	122629	927	1.23
2,508	288	3668	NEE - High Rock	265 LINDEN STREET	Needham	1	NSTAR	784	784	N/A	123844	971	1.24
2,509	289	3707	NEE - High Rock	43 Yurick Road	Needham	1	NSTAR	870	870	N/A	112865	982	1.13
2,510	290	3659	NEE - High Rock	214 LINDEN STREET	Needham	1	NSTAR	870	870	N/A	113929	991	1.14
2,511	291	3708	NEE - High Rock	46 Yurick Road	Needham	1	NSTAR	870	870	N/A	114427	996	1.14
2,512	292	3704	NEE - High Rock	36 Yurick Road	Needham	1	NSTAR	870	870	N/A	115817	1008	1.16
2,513	293	3657	NEE - High Rock	208 LINDEN STREET	Needham	1	NSTAR	870	870	N/A	115883	1008	1.16
2,514	294	3676	NEE - High Rock	18 Memorial Circle	Needham	1	NSTAR	906	906	N/A	123289	1117	1.23
2,515	295	2943	FRM - St. Lo Road	41-43 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	176971	1274	1.77
2,516	296	2940	FRM - St. Lo Road	22-24 St. Lo Road (2)	Framingham	2	NSTAR	884	884	N/A	145896	1290	1.46
2,517	297	3582	ACU - Presidential Terrace	Presidential Terrace - 11 thru 14	Acushnet	4	NSTAR	2232	2232	N/A	58091	1297	0.58
2,518	298	3589	ACU - Presidential Terrace	Presidential Terrace - Community Buildir	Acushnet	1	NSTAR	2250	2250	N/A	58091	1307	0.58
2,519	299	2939	FRM - St. Lo Road	3-5 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	182206	1312	1.82
2,520	300	3671	FRM - St. Lo Road	51-53 St. Lo Road (1)	Framingham	2	NSTAR	720	720	N/A	189412	1364	1.89
2,521	301	4203	10 12 Pine St	10-12 Pine St	Framingham	15	NSTAR	3661	2223	1438	141696	3150	1.42
2,522	302	3368	154 Union	154 Union Ave	Framingham	18	NSTAR	4913	4913	593	5090	250	0.05
2,523	303	3581	ACU - Presidential Terrace	Presidential Terrace - 1 & 2	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,524	304	3583	ACU - Presidential Terrace	Presidential Terrace - 15 & 16	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,525	305	3584	ACU - Presidential Terrace	Presidential Terrace - 17 & 18	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,526	306	3585	ACU - Presidential Terrace	Presidential Terrace - 3 & 4	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,527	307	3586	ACU - Presidential Terrace	Presidential Terrace - 5 & 6	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,528	308	3587	ACU - Presidential Terrace	Presidential Terrace - 7 & 8	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,529	309	3588	ACU - Presidential Terrace	Presidential Terrace - 9 & 10	Acushnet	8	NSTAR	4660	4660	0	58518	2727	0.59
2,530	310	2428	CAM - Millers River	15 Lambert Street	Cambridge	298	NSTAR	182387	126462	55925	133142	168374	1.33
2,531	311	2947	FRM - St. Lo Road	1 Corregidor Road	Framingham	2	NSTAR	884	884	0	156746	1386	1.57
2,532	312	4400	FRM - St. Lo Road	13 St. Lo Rd	Framingham	1	NSTAR	884	884	0	58976	521	0.59
2,533	313	2963	FRM - St. Lo Road	14 - 16 St. Lo Road	Framingham	2	NSTAR	720	720	0	211539	1523	2.12

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,534	314	4401	FRM - St. Lo Road	15 St. Lo Rd	Framingham	1	NSTAR	884	884	0	74797	661	0.75
2,535	315	4402	FRM - St. Lo Road	17 Corregidor Rd	Framingham	1	NSTAR	884	884	0	137563	1216	1.38
2,536	316	4439	FRM - St. Lo Road	17 St. Lo Road	Framingham	1	NSTAR	884	884	0	101812	900	1.02
2,537	317	4404	FRM - St. Lo Road	23 St. Lo Rd	Framingham	1	NSTAR	884	884	0	83197	735	0.83
2,538	318	3687	FRM - St. Lo Road	27 -29 St. Lo Road	Framingham	2	NSTAR	884	884	0	161169	1425	1.61
2,539	319	3688	FRM - St. Lo Road	28 - 30 St. Lo Road	Framingham	2	NSTAR	884	884	0	161169	1425	1.61
2,540	320	2948	FRM - St. Lo Road	31 - 33 St. Lo Road	Framingham	2	NSTAR	720	720	0	192210	1384	1.92
2,541	321	4407	FRM - St. Lo Road	32 St. Lo Rd	Framingham	1	NSTAR	884	884	0	98674	872	0.99
2,542	322	2941	FRM - St. Lo Road	34 - 36 St. Lo Road	Framingham	2	NSTAR	720	720	0	191122	1376	1.91
2,543	323	3693	FRM - St. Lo Road	36 - 38 Guadal Canal	Framingham	2	NSTAR	884	884	0	149143	1318	1.49
2,544	324	2942	FRM - St. Lo Road	37 - 39 St. Lo Road	Framingham	2	NSTAR	884	884	0	161822	1431	1.62
2,545	325	3694	FRM - St. Lo Road	39 - 41 Guadal Canal	Framingham	2	NSTAR	884	884	0	161169	1425	1.61
2,546	326	3695	FRM - St. Lo Road	40 - 42 St. Lo Road	Framingham	2	NSTAR	884	884	0	190455	1684	1.90
2,547	327	4412	FRM - St. Lo Road	40 Guadal Canal Rd	Framingham	1	NSTAR	884	884	0	121821	1077	1.22
2,548	328	4413	FRM - St. Lo Road	43 Guadal Canal Rd.	Framingham	1	NSTAR	884	884	0	121710	1076	1.22
2,549	329	3670	FRM - St. Lo Road	46 - 48 Guadal Canal	Framingham	2	NSTAR	720	720	0	206673	1488	2.07
2,550	330	4441	FRM - St. Lo Road	46 - 48 St. Lo Rd	Framingham	2	NSTAR	884	884	0	143471	1268	1.43
2,551	331	3705	FRM - St. Lo Road	47 - 49 Guadal Canal	Framingham	2	NSTAR	884	884	0	178686	1580	1.79
2,552	332	4416	FRM - St. Lo Road	49 St. Lo Rd.	Framingham	1	NSTAR	884	884	0	108771	962	1.09
2,553	333	3672	FRM - St. Lo Road	6 - 8 St. Lo Road	Framingham	2	NSTAR	720	720	0	229225	1650	2.29
2,554	334	4445	FRM - St. Lo Road	7 St. Lo Rd	Framingham	1	NSTAR	884	884	0	70226	621	0.70
2,555	335	4446	FRM - St. Lo Road	9 St. Lo Rd	Framingham	1	NSTAR	884	884	0	91479	809	0.91
2,556	336	3449	FRM - The Musterfield at Concord Place	19-35 Normandy Road	Framingham	9	NSTAR	8112	8112	0	91203	7398	0.91
2,557	337	3002	High Cliff Senior Hsg (Fed)	23 Prince Street	Plymouth	82	NSTAR	66630	66130	18742	30016	19850	0.30
2,558	338	3557	HOP - Brampton Circle	62-65 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	102640	1806	1.03
2,559	339	3558	HOP - Brampton Circle	66-69 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	95376	1679	0.95
2,560	340	3559	HOP - Brampton Circle	70-73 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	119148	2097	1.19
2,561	341	3560	HOP - Brampton Circle	74-77 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	97440	1715	0.97
2,562	342	3561	HOP - Brampton Circle	78-81 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	97143	1710	0.97
2,563	343	3562	HOP - Brampton Circle	82-85 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	104930	1847	1.05
2,564	344	3563	HOP - Brampton Circle	86-89 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	126028	2218	1.26
2,565	345	3564	HOP - Brampton Circle	90-93 DAVIS RD	Hopkinton	4	NSTAR	1760	1760	160	120654	2124	1.21
2,566	346	2440	Jefferson Park Fed	109-124 Jackson Place Blidg 11	Cambridge	16	NSTAR	20101	20101	198	73317	14738	0.73
2,567	347	2443	Jefferson Park Fed	21-44 Jackson Place	Cambridge	24	NSTAR	27352	27352	755	73318	20054	0.73
2,568	348	2435	Jefferson Park Fed	2-19 Jackson Place Building 6	Cambridge	18	NSTAR	21358	21358	358	73317	15659	0.73
2,569	349	2436	Jefferson Park Fed	45-60 Jackson Circle Bldg 7	Cambridge	16	NSTAR	20101	20101	198	73317	14738	0.73
2,570	350	2437	Jefferson Park Fed	61-76 Jackson Circle Bldg 8	Cambridge	16	NSTAR	20101	20101	198	73317	14738	0.73
2,571	351	2438	Jefferson Park Fed	77-92 Jackson Circle Bldg 9	Cambridge	16	NSTAR	20101	20101	198	73317	14738	0.73
2,572	352	2439	Jefferson Park Fed	93-108 Jackson Circle Bldg 10	Cambridge	16	NSTAR	20101	20101	198	73317	14738	0.73
2,573	353	3629	MAT - Homestead Court	Homestead Court - 8	Mattapoisett	1	NSTAR	947	947	0	43684	414	0.44
2,574	354	2614	Meadowbrook (Carver Elderly Housing)	1 Meadowbrook Way	Carver	40	NSTAR	10000	10000	2000	140351	14035	1.40
2,575	355	3797	NEE - Linden/Chambers	138 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,576	356	3798	NEE - Linden/Chambers	140 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,577	357	3801	NEE - Linden/Chambers	144 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,578	358	3799	NEE - Linden/Chambers	146 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,579	359	3828	NEE - Linden/Chambers	15 - 17 CHAMBERS STREET	Needham	16	NSTAR	9344	9344	1344	87096	8138	0.87
2,580	360	3800	NEE - Linden/Chambers	150 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,581	361	3802	NEE - Linden/Chambers	152 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,582	362	3803	NEE - Linden/Chambers	156 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,583	363	3804	NEE - Linden/Chambers	158 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,584	364	3805	NEE - Linden/Chambers	166 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87097	2156	0.87
2,585	365	3806	NEE - Linden/Chambers	168 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,586	366	3807	NEE - Linden/Chambers	170 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,587	367	3808	NEE - Linden/Chambers	172 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,588	368	3809	NEE - Linden/Chambers	174 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,589	369	3810	NEE - Linden/Chambers	180 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,590	370	3811	NEE - Linden/Chambers	182 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,591	371	3812	NEE - Linden/Chambers	184 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,592	372	3813	NEE - Linden/Chambers	186 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,593	373	3814	NEE - Linden/Chambers	188 LINDEN STREET	Needham	4	NSTAR	2475	2475	475	87096.51	2156	0.87
2,594	374	3823	NEE - Linden/Chambers	25 - 27 CHAMBERS STREET	Needham	16	NSTAR	9344	9344	1344	87096.49	8138	0.87
2,595	375	3601	DED - Parkway Court	Parkway Court - 1	Dedham	3	NSTAR	1375	1375	0	110036	1513	1.10
2,596	376	3602	DED - Parkway Court	Parkway Court - 2	Dedham	6	NSTAR	3175	3175	0	110035	3494	1.10
2,597	377	3603	DED - Parkway Court	Parkway Court - 3	Dedham	8	NSTAR	3925	3925	0	110035	4319	1.10
2,598	378	3604	DED - Parkway Court	Parkway Court - 4	Dedham	7	NSTAR	3925	3925	0	110035	4319	1.10
2,599	379	3605	DED - Parkway Court	Parkway Court Office	Dedham	1	NSTAR	2194	2194	0	110035	2414	1.10
2,600	380	4926	FRM - Rose Kennedy	Rose Kennedy Community	Framingham	1	NSTAR	2749	2749	0	98030	2695	0.98
2,601	381	2949	FRM - St. Lo Road	42 - 44 Guadal Canal	Framingham	2	NSTAR	720	720	0	215320	1550	2.15
2,602	382	3642	FRM - The Musterfield at Concord Place	2-42 Anzio Road	Framingham	21	NSTAR	9256	9256	0	49879	4617	0.50
2,603	383	3641	FRM - The Musterfield at Concord Place	554-596 Concord Street	Framingham	22	NSTAR	9568	9568	0	60085	5749	0.60
2,604	384	4834	Meadowbrook North (705)	Building 16/17	Carver	4	NSTAR	2880	2880	0	99106	2854	0.99
2,605	385	2700	MLF - Birmingham	Birmingham Court - A	Milford	20	NSTAR	12232	12232	3792	87137	10659	0.87
2,606	386	4914	MLF - Birmingham	Birmingham Court - B	Milford	20	NSTAR	12056	12056	3616	87137	10505	0.87
2,607	387	4915	MLF - Birmingham	New Birmingham	Milford	20	NSTAR	64200	64200	19904	87137	55942	0.87
2,608	388	2698	MLF - Fairfield Court	Fairfield Court - A	Milford	10	NSTAR	5382	5382	1669	160310	8628	1.60
2,609	389	4910	MLF - Fairfield Court	Fairfield Court - B	Milford	20	NSTAR	11968	11968	3711	160310	19186	1.60
2,610	390	2699	MLF - Greenleaf Terrace	Greenleaf Terrace - A	Milford	6	NSTAR	3243	3243	0	111531	3617	1.12
2,611	391	4912	MLF - Greenleaf Terrace	Greenleaf Terrace - B	Milford	20	NSTAR	21868	21868	6780	111531	24390	1.12
2,612	392	4913	MLF - Greenleaf Terrace	Greenleaf Terrace - C	Milford	4	NSTAR	2562	2562	0	111532	2857	1.12
2,613	393	4927	MLF - Redwood Drive	132 Highland Street	Milford	1	NSTAR	1196	1196		103646	1240	1.04
2,614	394	3824	NEE - Linden/Chambers	28 - 30 CHAMBERS STREET	Needham	16	NSTAR	9344	9344	1344	87586	8184	0.88
2,615	395	3825	NEE - Linden/Chambers	39 - 41 CHAMBERS STREET	Needham	16	NSTAR	9344	9344	1344	87586	8184	0.88
2,616	396	3826	NEE - Linden/Chambers	40 - 42 CHAMBERS STREET	Needham	16	NSTAR	9344	9344	1344	87586	8184	0.88
2,617	397	3827	NEE - Linden/Chambers	Chambers St. - Community	Needham	1	NSTAR	3216	3216	0	87586	2817	0.88
2,618	398	4866	NTI - Cedar Gardens 1	CEDAR AVE - A	Natick	12	NSTAR	9306	9306	2106	83754	7794	0.84
2,619	399	4867	NTI - Cedar Gardens 1	CEDAR AVE - B	Natick	12	NSTAR	9306	9306	2106	83754	7794	0.84
2,620	400	4868	NTI - Cedar Gardens 1	CEDAR AVE - C	Natick	12	NSTAR	9306	9306	2106	110067	10243	1.10
2,621	401	4869	NTI - Cedar Gardens 1	CEDAR AVE - D	Natick	4	NSTAR	1825	1825	225	110067	2009	1.10
2,622	402	4870	NTI - Cedar Gardens 1	CEDAR AVE - E	Natick	8	NSTAR	5808	5808	608	35758	2077	0.36
2,623	403	4871	NTI - Cedar Gardens 1	CEDAR AVE - F - Community	Natick	1	NSTAR	2164	2164	0	35758	774	0.36
2,624	404	4872	NTI - Cedar Gardens 2	CEDAR AVE - G	Natick	12	NSTAR	9306	9306	2106	39984	3721	0.40
2,625	405	4873	NTI - Cedar Gardens 2	CEDAR AVE - H	Natick	12	NSTAR	9306	9306	2106	39984	3721	0.40
2,626	406	4875	NTI - Cedar Gardens 2	CEDAR AVE - I	Natick	8	NSTAR	6468	6468	1468	12875	833	0.13
2,627	407	4874	NTI - Cedar Gardens 2	CEDAR AVE - K	Natick	12	NSTAR	9306	9306	2106	12875	1198	0.13

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,628	408	4876	NTI - Cedar Gardens 3	CEDAR AVE - L	Natick	12	NSTAR	10362	10362	1962	79526	8241	0.80
2,629	409	4877	NTI - Cedar Gardens 3	CEDAR AVE - M	Natick	12	NSTAR	10362	10362	1962	59506	6166	0.60
2,630	410	4878	NTI - Cedar Gardens 3	CEDAR AVE - N	Natick	12	NSTAR	10362	10362	1962	64745	6709	0.65
2,631	411	4879	NTI - Cedar Gardens 3	CEDAR AVE - O	Natick	12	NSTAR	10362	10362	1962	66016	6841	0.66
2,632	412	4880	NTI - Cedar Gardens 3	CEDAR AVE - P	Natick	12	NSTAR	10362	10362	1962	81230	8417	0.81
2,633	413	4881	NTI - Cedar Gardens 3	CEDAR AVE - Q	Natick	12	NSTAR	10362	10362	1962	78755	8161	0.79
2,634	414	4883	NTI - Cedar Gardens 4	CEDAR AVE - R	Natick	12	NSTAR	12800	12800	3800	59110	7566	0.59
2,635	415	4884	NTI - Cedar Gardens 4	CEDAR AVE - S	Natick	12	NSTAR	12800	12800	3800	53097	6796	0.53
2,636	416	4885	NTI - Cedar Gardens 4	CEDAR TERRACE - T	Natick	12	NSTAR	12800	12800	3800	41816	5352	0.42
2,637	417	4886	NTI - Cedar Gardens 4	CEDAR TERRACE - U	Natick	12	NSTAR	12800	12800	3800	47361	6062	0.47
2,638	418	4888	NTI - Cedar Gardens 4	CEDAR TERRACE - V	Natick	12	NSTAR	10676	10676	2676	57448	6133	0.57
2,639	419	4889	NTI - Cedar Gardens 4	CEDAR TERRACE - W	Natick	12	NSTAR	10676	10676	2676	60203	6427	0.60
2,640	420	4890	NTI - Cedar Gardens 4	CEDAR TERRACE - X	Natick	12	NSTAR	10676	10676	2676	65554	6999	0.66
2,641	421	4887	NTI - Cedar Gardens 4	CEDAR TERRACE - Y	Natick	12	NSTAR	12800	12800	3800	47834	6123	0.48
2,642	422	2984	PLY - Veterans	1-18 Olmstead Terrace (Type C)	Plymouth	2	NSTAR	2232	2232	0	68769	1535	0.69
2,643	423	2992	PLY - Veterans	13-15 Standish Court (Type C)	Plymouth	2	NSTAR	2232	2232	0	66974	1495	0.67
2,644	424	2975	PLY - Veterans	16-18 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	60731	991	0.61
2,645	425	2980	PLY - Veterans	17-19 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	75184	1227	0.75
2,646	426	2985	PLY - Veterans	20-22 Olmstead Terrace (Type B)	Plymouth	2	NSTAR	1632	1632	0	61752	1008	0.62
2,647	427	2974	PLY - Veterans	20-22 Standish Court	Plymouth	2	NSTAR	2250	2250	0	67230	1513	0.67
2,648	428	2977	PLY - Veterans	21-23-25-27 Standish Court (Type D)	Plymouth	4	NSTAR	4030	4030	0	78669	3170	0.79
2,649	429	2986	PLY - Veterans	24-26 Olmstead Terrace (Type C)	Plymouth	2	NSTAR	2232	2232	0	55311	1235	0.55
2,650	430	2981	PLY - Veterans	24-26-28-30 Standish Court (Type D)	Plymouth	4	NSTAR	4030	4030	0	21327	859	0.21
2,651	431	2987	PLY - Veterans	28-30 Olmstead Terrace (Type A)	Plymouth	2	NSTAR	2250	2250	0	50819	1143	0.51
2,652	432	2982	PLY - Veterans	29-31 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	60450	987	0.60
2,653	433	2983	PLY - Veterans	32-34 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	65615	1071	0.66
2,654	434	2976	PLY - Veterans	33-35 Standish Court (Type C)	Plymouth	2	NSTAR	2232	2232	0	52763	1178	0.53
2,655	435	2988	PLY - Veterans	3-5 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	47449	774	0.47
2,656	436	2989	PLY - Veterans	4-6 Standish Court (Type A)	Plymouth	2	NSTAR	2250	2250	0	58830	1324	0.59
2,657	437	2991	PLY - Veterans	9-11 Standish Court (Type B)	Plymouth	2	NSTAR	1632	1632	0	66317	1082	0.66
2,658	438	2258	UXB - Veterans Parkway	Veterans Parkway 1	Uxbridge	2	NSTAR	1736	1136	736	1056	12	0.01
2,659	439	2267	UXB - Veterans Parkway	Veterans Parkway 10	Uxbridge	2	NSTAR	2016	2016	16	23332	470	0.23
2,660	440	2268	UXB - Veterans Parkway	Veterans Parkway 11	Uxbridge	2	NSTAR	1736	1000	736	29676	297	0.30
2,661	441	2259	UXB - Veterans Parkway	Veterans Parkway 2	Uxbridge	2	NSTAR	2016	2016	16	16313	329	0.16
2,662	442	2260	UXB - Veterans Parkway	Veterans Parkway 3	Uxbridge	2	NSTAR	2016	2016	16	16968	342	0.17
2,663	443	2261	UXB - Veterans Parkway	Veterans Parkway 4	Uxbridge	2	NSTAR	2016	2016	16	20483	413	0.20
2,664	444	2262	UXB - Veterans Parkway	Veterans Parkway 5	Uxbridge	2	NSTAR	2016	2016	16	21683	437	0.22
2,665	445	2263	UXB - Veterans Parkway	Veterans Parkway 6	Uxbridge	2	NSTAR	2016	2016	16	18122	365	0.18
2,666	446	2264	UXB - Veterans Parkway	Veterans Parkway 7	Uxbridge	2	NSTAR	1736	1136	736	52104	592	0.52
2,667	447	2265	UXB - Veterans Parkway	Veterans Parkway 8	Uxbridge	2	NSTAR	2016	2016	16	11070	223	0.11
2,668	448	2266	UXB - Veterans Parkway	Veterans Parkway 9	Uxbridge	2	NSTAR	2016	2016	16	10338	208	0.10
2,669	449	4443	FRM - St. Lo Road	61 St. Lo Rd	Framingham	1	NSTAR	884	884	0	80874	715	0.81
2,670	450	5048	MAY - Concord Street Circle	Concord Street Circle - Community	Maynard	1	NSTAR	3700	3700	0	8510	315	0.09
2,671	451	5412	Church St 1	711/715 CHURCH STREET	New Bedford	2	NSTAR	3600	3600	0	13886	500	0.14
2,672	452	5047	MAY - Concord Street Circle	Concord Street Circle - D	Maynard	8	NSTAR	5400	5400	1400	49189	2656	0.49
2,673	453	5413	Church St 1	717/719 CHURCH STREET	New Bedford	2	NSTAR	3600	3600	0	13886	500	0.14
2,674	454	5043	MAY - Concord Street Circle	Concord Street Circle - A	Maynard	12	NSTAR	10000	10000	2000	49189	4919	0.49
2,675	455	5414	Church St 1	721/723 CHURCH STREET	New Bedford	2	NSTAR	3600	3600	0	14037	505	0.14
2,676	456	5044	MAY - Concord Street Circle	Concord Street Circle - B	Maynard	12	NSTAR	10000	10000	2000	49189	4919	0.49
2,677	457	5415	Church St 1	725/727 CHURCH STREET	New Bedford	2	NSTAR	3600	3600	0	14037	505	0.14
2,678	458	5045	MAY - Concord Street Circle	Concord Street Circle - C	Maynard	12	NSTAR	10000	10000	2000	49189	4919	0.49
2,679	459	4648	DED - East Dedham Family	Lo - 60-64 Veterans Road	Dedham	3	NSTAR	2846	2846	0	38259	1089	0.38
2,680	460	5046	MAY - Concord Street Circle	Concord Street Circle - E	Maynard	12	NSTAR	10000	10000	2000	49189	4919	0.49
2,681	461	4649	DED - East Dedham Family	Lo - 50-56 Veterans Road	Dedham	2	NSTAR	3456	3456	1152	31656	1094	0.32
2,682	462	5042	MAY - Powdermill Circle	Powdermill Community	Maynard	1	NSTAR	1585	1585	0	84429	1338	0.84
2,683	463	4658	DED - East Dedham Family	61-65 Veterans Road	Dedham	3	NSTAR	2826	2826	0	42088	1189	0.42
2,684	464	5035	MAY - Powdermill Circle	POWDERMILL CIRCLE - 1	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,685	465	4645	DED - East Dedham Family	98-104 Veterans Road	Dedham	3	NSTAR	3456	3456	864	37020	1279	0.37
2,686	466	5036	MAY - Powdermill Circle	POWDERMILL CIRCLE - 2	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,687	467	4642	DED - East Dedham Family	82-88 Veterans Road	Dedham	4	NSTAR	3456	3456	0	40089	1385	0.40
2,688	468	5037	MAY - Powdermill Circle	POWDERMILL CIRCLE - 3	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,689	469	3760	DED - East Dedham Family	53-59 Veterans Road	Dedham	4	NSTAR	3840	3840	0	37562	1442	0.38
2,690	470	5038	MAY - Powdermill Circle	POWDERMILL CIRCLE - 4	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,691	471	4654	DED - East Dedham Family	Lo - 21-25 Veterans Road	Dedham	3	NSTAR	2846	2846	0	51812	1475	0.52
2,692	472	5039	MAY - Powdermill Circle	POWDERMILL CIRCLE - 5	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,693	473	4643	DED - East Dedham Family	Lo - 106-112 Veterans Road	Dedham	4	NSTAR	3456	3456	0	44289	1531	0.44
2,694	474	5040	MAY - Powdermill Circle	POWDERMILL CIRCLE - 6	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,695	475	4653	DED - East Dedham Family	28-32 Veterans Road	Dedham	3	NSTAR	2846	2846	0	57334	1632	0.57
2,696	476	5041	MAY - Powdermill Circle	POWDERMILL CIRCLE - 7	Maynard	8	NSTAR	4426	4426	426	84429	3737	0.84
2,697	477	4655	DED - East Dedham Family	27-33 Veterans Road	Dedham	4	NSTAR	3456	3456	0	47812	1652	0.48
2,698	478	4911	MLF - Fairfield Court	Community Building	Milford	1	NSTAR	900	900	0	160310	1443	1.60
2,699	479	4650	DED - East Dedham Family	14-20 Veterans Road	Dedham	4	NSTAR	3456	3456	0	51986	1797	0.52
2,700	480	5221	Parker Staples Road	5/7 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	35936	737	0.36
2,701	481	4646	DED - East Dedham Family	34-40 Veterans Road	Dedham	4	NSTAR	3456	3456	0	52716	1822	0.53
2,702	482	5225	Parker Staples Road	13/15 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	42525	872	0.43
2,703	483	3757	DED - East Dedham Family	13-19 Veterans Road	Dedham	4	NSTAR	3840	3840	0	50504	1939	0.51
2,704	484	5226	Parker Staples Road	14/16 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	47248	969	0.47
2,705	485	4644	DED - East Dedham Family	114-120 Veterans Road	Dedham	4	NSTAR	3456	3456	0	61824	2137	0.62
2,706	486	5229	Parker Staples Road	21/23 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	50153	1028	0.50
2,707	487	4647	DED - East Dedham Family	42-48 Veterans Road	Dedham	4	NSTAR	3456	3456	0	62194	2149	0.62
2,708	488	5230	Parker Staples Road	22/24 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	50879	1043	0.51
2,709	489	4652	DED - East Dedham Family	Lo - 90-96 Veterans Road	Dedham	4	NSTAR	3456	3456	0	63834	2206	0.64
2,710	490	4835	Parker Staples Road	1/3 Parker Staples Road	Dedham	2	NSTAR	2050	2050	0	56387	1156	0.56
2,711	491	3759	DED - East Dedham Family	37-43 Veterans Road	Dedham	4	NSTAR	3840	3840	0	58838	2259	0.59
2,712	492	5222	Parker Staples Road	6/8 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	57213	1173	0.57
2,713	493	4656	DED - East Dedham Family	45-51 Veterans Road	Dedham	4	NSTAR	3456	3456	0	67526	2334	0.68
2,714	494	5228	Parker Staples Road	18/20 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	57595	1181	0.58
2,715	495	4657	DED - East Dedham Family	67-73 Veterans Road	Dedham	4	NSTAR	3456	3456	0	70229	2427	0.70
2,716	496	5227	Parker Staples Road	Parker Staples Rd - 9	Dedham	2	NSTAR	2050	2050	0	60415	1239	0.60
2,717	497	4640	DED - East Dedham Family	75-81 Veterans Road	Dedham	4	NSTAR	3456	3456	0	70345	2431	0.70
2,718	498	5231	Parker Staples Road	25/27 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	66145	1356	0.66
2,719	499	3756	DED - East Dedham Family	5-11 Veterans Road	Dedham	4	NSTAR	3840	3840	0	64851	2490	0.65
2,720	500	5219	Parker Staples Road	2/4 Parker Staples Rd	Dedham	2	NSTAR	2050	2050	0	70712	1450	0.71
2,721	501	4414	FRM - St. Lo Road	44 St. Lo Rd.	Framingham	1	NSTAR	884	884	0	70910	627	0.71

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,722	502	2990	PLY - Veterans	8-10-12-14 Standish Court (Type D)	Plymouth	4	NSTAR	1632	1632	0	160494	2619	1.60
2,723	503	4396	FRM - St. Lo Road	13 Corrigidor Road	Framingham	1	NSTAR	884	884	N/A	71851	635	0.72
2,724	504	4918	Rose Kennedy	1,3,5 ROSE KENNEDY LANE	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,725	505	4410	FRM - St. Lo Road	38 St. Lo Rd	Framingham	1	NSTAR	884	884	0	75026	663	0.75
2,726	506	5393	Rose Kennedy	14,16,18 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,727	507	4442	FRM - St. Lo Road	59 St. Lo Rd	Framingham	1	NSTAR	884	884	0	96719	855	0.97
2,728	508	4919	Rose Kennedy	17,19,21 ROSE KENNEDY LANE	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,729	509	5406	Griffin	116 HOPEDALE STREET - Community	Hopedale	1	NSTAR	2025	2025	0	75749	1534	0.76
2,730	510	5394	Rose Kennedy	2,4,6 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,731	511	5407	Griffin	110 HOPEDALE ST	Hopedale	8	NSTAR	5400	5400	900	75749	4090	0.76
2,732	512	5395	Rose Kennedy	20,22,24 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,733	513	5408	Griffin	112 HOPEDALE ST	Hopedale	8	NSTAR	5400	5400	900	75749	4090	0.76
2,734	514	5396	Rose Kennedy	26,28,30 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,735	515	5409	Griffin	114 HOPEDALE ST	Hopedale	8	NSTAR	5400	5400	900	75749	4090	0.76
2,736	516	4920	Rose Kennedy	27,29,31 ROSE KENNEDY LANE	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,737	517	5410	Griffin	118 HOPEDALE ST	Hopedale	8	NSTAR	5400	5400	900	75749	4090	0.76
2,738	518	5397	Rose Kennedy	32,34,36 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,739	519	5411	Griffin	120 HOPEDALE ST	Hopedale	8	NSTAR	5400	5400	900	75749	4090	0.76
2,740	520	4921	Rose Kennedy	37,39,41 ROSE KENNEDY LANE	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,741	521	5398	Rose Kennedy	38,40,42 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,742	522	5400	Rose Kennedy	44,46,48 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,743	523	5401	Rose Kennedy	50,52,54 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,744	524	5402	Rose Kennedy	56,58,60 ROSE KENNEDY LN	Framingham	12	NSTAR	6832	6832	832	47450	2847	0.47
2,745	525	5676	Forest Green	55/57 Bennett Street	Natick	2	NSTAR	2352	2352	0	66412	1562	0.66
2,746	526	5677	Forest Green	58/60 Bennett Street	Natick	2	NSTAR	2352	2352	0	22942	540	0.23
2,747	527	5678	Forest Green	60/62 Bennett Street	Natick	2	NSTAR	2352	2352	0	46305	1089	0.46
2,748	528	5679	Forest Green	64/66 Bennett Street	Natick	2	NSTAR	2352	2352	0	44151	1038	0.44
2,749	529	3717	Linden Street Apartments	10 Charlestown Street	Somerville	6	NSTAR	6474	5412	1062	58851	3185	0.59
2,750	530	3718	Linden Street Apartments	20 Charlestown Street	Somerville	6	NSTAR	6474	5412	1062	48446	2622	0.48
2,751	531	3720	Linden Street Apartments	20 Merriam Street	Somerville	6	NSTAR	6474	5412	1062	53656	2904	0.54
2,752	532	3719	Linden Street Apartments	24 Charlestown Street	Somerville	6	NSTAR	8800	6592	2300	54064	3564	0.54
2,753	533	3721	Linden Street Apartments	26 Merriam Street	Somerville	6	NSTAR	6474	5412	1062	53656	2904	0.54
2,754	534	3723	Linden Street Apartments	30 Linden Street	Somerville	6	NSTAR	4160	3666	494	50835	1864	0.51
2,755	535	3722	Linden Street Apartments	32 Merriam Street	Somerville	6	NSTAR	4160	3666	494	45606	1672	0.46
2,756	536	3725	Linden Street Apartments	34 Linden Street	Somerville	6	NSTAR	4160	3666	494	73172	2682	0.73
2,757	537	3724	Linden Street Apartments	36 Linden Street	Somerville	6	NSTAR	4160	3666	494	44845	1644	0.45
2,758	538	5625	Pakachoag Village	PACACHOAG VILLAGE - 6 - Communit	Auburn	4	NSTAR	4592	4592	2592	47361	2175	0.47
2,759	539	5628	Pakachoag Village	PACACHOAG VILLAGE - 7	Auburn	9	NSTAR	6450	6450	950	47361	3055	0.47
2,760	540	5629	Pakachoag Village	PACACHOAG VILLAGE - 8	Auburn	10	NSTAR	7700	7700	1200	47361	3647	0.47
2,761	541	5627	Pakachoag Village	PACACHOAG VILLAGE - 9	Auburn	8	NSTAR	5200	5200	700	47361	2463	0.47
2,762	542		Potter Street Fed: 50 - 7103	Potter Street - 1	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,763	543		Potter Street Fed: 50 - 7103	Potter Street - 10	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,764	544		Potter Street Fed: 50 - 7103	Potter Street - 11	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,765	545		Potter Street Fed: 50 - 7103	Potter Street - 12	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,766	546		Potter Street Fed: 50 - 7103	Potter Street - 13	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,767	547		Potter Street Fed: 50 - 7103	Potter Street - 14	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,768	548		Potter Street Fed: 50 - 7103	Potter Street - 15	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,769	549		Potter Street Fed: 50 - 7103	Potter Street - 16	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,770	550		Potter Street Fed: 50 - 7103	Potter Street - 17	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,771	551		Potter Street Fed: 50 - 7103	Potter Street - 18	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,772	552		Potter Street Fed: 50 - 7103	Potter Street - 19	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,773	553		Potter Street Fed: 50 - 7103	Potter Street - 2	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,774	554		Potter Street Fed: 50 - 7103	Potter Street - 20	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,775	555		Potter Street Fed: 50 - 7103	Potter Street - 21	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,776	556		Potter Street Fed: 50 - 7103	Potter Street - 22	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,777	557		Potter Street Fed: 50 - 7103	Potter Street - 23	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,778	558		Potter Street Fed: 50 - 7103	Potter Street - 24	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,779	559		Potter Street Fed: 50 - 7103	Potter Street - 25	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,780	560		Potter Street Fed: 50 - 7103	Potter Street - 26	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,781	561		Potter Street Fed: 50 - 7103	Potter Street - 27	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,782	562		Potter Street Fed: 50 - 7103	Potter Street - 28	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,783	563		Potter Street Fed: 50 - 7103	Potter Street - 29	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,784	564		Potter Street Fed: 50 - 7103	Potter Street - 3	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,785	565		Potter Street Fed: 50 - 7103	Potter Street - 30	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,786	566		Potter Street Fed: 50 - 7103	Potter Street - 31	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,787	567		Potter Street Fed: 50 - 7103	Potter Street - 32	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,788	568		Potter Street Fed: 50 - 7103	Potter Street - 33	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,789	569		Potter Street Fed: 50 - 7103	Potter Street - 34	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,790	570		Potter Street Fed: 50 - 7103	Potter Street - 35	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,791	571		Potter Street Fed: 50 - 7103	Potter Street - 36	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,792	572		Potter Street Fed: 50 - 7103	Potter Street - 37	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,793	573		Potter Street Fed: 50 - 7103	Potter Street - 38	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,794	574		Potter Street Fed: 50 - 7103	Potter Street - 39	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,795	575		Potter Street Fed: 50 - 7103	Potter Street - 4	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,796	576		Potter Street Fed: 50 - 7103	Potter Street - 40	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,797	577		Potter Street Fed: 50 - 7103	Potter Street - 41	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,798	578		Potter Street Fed: 50 - 7103	Potter Street - 42	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,799	579		Potter Street Fed: 50 - 7103	Potter Street - 43	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,800	580		Potter Street Fed: 50 - 7103	Potter Street - 44	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,801	581		Potter Street Fed: 50 - 7103	Potter Street - 45	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,802	582		Potter Street Fed: 50 - 7103	Potter Street - 46	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,803	583		Potter Street Fed: 50 - 7103	Potter Street - 47	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,804	584		Potter Street Fed: 50 - 7103	Potter Street - 48	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,805	585		Potter Street Fed: 50 - 7103	Potter Street - 49	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,806	586		Potter Street Fed: 50 - 7103	Potter Street - 5	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,807	587		Potter Street Fed: 50 - 7103	Potter Street - 50	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,808	588		Potter Street Fed: 50 - 7103	Potter Street - 51	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,809	589		Potter Street Fed: 50 - 7103	Potter Street - 52	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,810	590		Potter Street Fed: 50 - 7103	Potter Street - 53	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,811	591		Potter Street Fed: 50 - 7103	Potter Street - 54	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,812	592		Potter Street Fed: 50 - 7103	Potter Street - 55	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,813	593		Potter Street Fed: 50 - 7103	Potter Street - 56	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,814	594		Potter Street Fed: 50 - 7103	Potter Street - 57	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,815	595		Potter Street Fed: 50 - 7103	Potter Street - 58	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,816	596		Potter Street Fed: 50 - 7103	Potter Street - 59	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,817	597		Potter Street Fed: 50 - 7103	Potter Street - 6	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,818	598		Potter Street Fed: 50 - 7103	Potter Street - 60	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,819	599		Potter Street Fed: 50 - 7103	Potter Street - 61	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,820	600		Potter Street Fed: 50 - 7103	Potter Street - 62	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,821	601		Potter Street Fed: 50 - 7103	Potter Street - 63	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,822	602		Potter Street Fed: 50 - 7103	Potter Street - 64	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,823	603		Potter Street Fed: 50 - 7103	Potter Street - 65	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,824	604		Potter Street Fed: 50 - 7103	Potter Street - 66	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,825	605		Potter Street Fed: 50 - 7103	Potter Street - 67	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,826	606		Potter Street Fed: 50 - 7103	Potter Street - 68	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,827	607		Potter Street Fed: 50 - 7103	Potter Street - 69	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,828	608		Potter Street Fed: 50 - 7103	Potter Street - 7	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,829	609		Potter Street Fed: 50 - 7103	Potter Street - 70	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,830	610		Potter Street Fed: 50 - 7103	Potter Street - 71	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,831	611		Potter Street Fed: 50 - 7103	Potter Street - 72	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,832	612		Potter Street Fed: 50 - 7103	Potter Street - 73	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,833	613		Potter Street Fed: 50 - 7103	Potter Street - 74	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,834	614		Potter Street Fed: 50 - 7103	Potter Street - 75	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,835	615		Potter Street Fed: 50 - 7103	Potter Street - 76	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,836	616		Potter Street Fed: 50 - 7103	Potter Street - 77	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,837	617		Potter Street Fed: 50 - 7103	Potter Street - 78	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,838	618		Potter Street Fed: 50 - 7103	Potter Street - 79	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,839	619		Potter Street Fed: 50 - 7103	Potter Street - 8	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,840	620		Potter Street Fed: 50 - 7103	Potter Street - 80	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,841	621		Potter Street Fed: 50 - 7103	Potter Street - 81	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,842	622		Potter Street Fed: 50 - 7103	Potter Street - 82	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,843	623		Potter Street Fed: 50 - 7103	Potter Street - 83	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,844	624		Potter Street Fed: 50 - 7103	Potter Street - 84	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,845	625		Potter Street Fed: 50 - 7103	Potter Street - 85	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,846	626		Potter Street Fed: 50 - 7103	Potter Street - 9	New Bedford	2	NSTAR	2010	2010	0	108557	2182	1.09
2,847	627	5612	Rutland Road	10 - 12 Rutland Road	Northboro	2	NSTAR	1484	1484	0	68522	1017	0.69
2,848	628	5613	Rutland Road	14 - 16 Rutland Road	Northboro	2	NSTAR	1696	1696	0	69906	1186	0.70
2,849	629	5610	Rutland Road	2 - 4 Rutland Road	Northboro	2	NSTAR	1300	1300	0	64132	834	0.64
2,850	630	5615	Rutland Road	22 - 24 Rutland Road	Northboro	2	NSTAR	1696	1696	0	53626	909	0.54
2,851	631	5405	Westborough Country Village	12 Beach Street Bldg A	Westborough	55	NSTAR	51825	51825	13358	56692	29381	0.57
2,852	632	5431	Westborough Country Village	12 Beach Street Bldg B	Westborough	22	NSTAR	18810	18810	5614	56692	10664	0.57
2,853	633	6114	Parkdale	950 ROCKDALE AVENUE	New Bedford	3	NSTAR	2860	2860	0	161687	4624	1.62
2,854	634	6115	Parkdale	976 ROCKDALE AVENUE	New Bedford	3	NSTAR	2860	2860	0	161687	4624	1.62
2,855	635	6116	Parkdale	942 ROCKDALE AVE	New Bedford	3	NSTAR	2860	2860	0	161687	4624	1.62
2,856	636	6117	Parkdale	994 ROCKDALE AVENUE	New Bedford	3	NSTAR	2860	2860	0	161687	4624	1.62
2,857	637	6118	Parkdale	932 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,858	638	6119	Parkdale	151 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,859	639	6120	Parkdale	143 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,860	640	6121	Parkdale	140 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,861	641	6122	Parkdale	83 HATHAWAY BLVD	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,862	642	6123	Parkdale	95 HATHAWAY BLVD	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,863	643	6124	Parkdale	942 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,864	644	6125	Parkdale	968 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,865	645	6126	Parkdale	171 SUMMIT STREET	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,866	646	6127	Parkdale	123 SUMMIT STREET	New Bedford	5	NSTAR	3594	3594	0	161687	5811	1.62
2,867	647	6128	Parkdale	163 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	161687	8408	1.62
2,868	648	6129	Parkdale	135 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	161687	8408	1.62
2,869	649	6130	Parkdale	164 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	161687	8408	1.62
2,870	650	6131	Parkdale	152 SUMMIT STREET	New Bedford	6	NSTAR	5200	5200	0	161687	8408	1.62
2,871	651	6132	Parkdale	107 HATHAWAY BLVD	New Bedford	6	NSTAR	5200	5200	0	161687	8408	1.62
2,872	652	6133	Parkdale	119 HATHAWAY BLVD	New Bedford	6	NSTAR	5200	5200	0	161687	8408	1.62
2,873	653	6134	Parkdale	960 ROCKDALE AVENUE	New Bedford	4	NSTAR	3300	3300	0	161687	5336	1.62
2,874	654		Fairfield/Chaffee	959-961 Fairfield St	New Bedford	2	NSTAR	988	988	N/A	162551	1606	1.63
2,875	655		Fairfield/Chaffee	951-953 Fairfield St	New Bedford	2	NSTAR	988	988	N/A	152126	1503	1.52
2,876	656		Fairfield/Chaffee	967-969 Fairfield St	New Bedford	2	NSTAR	988	988	N/A	106883	1056	1.07
2,877	657		Fairfield/Chaffee	975-977 Fairfield St	New Bedford	2	NSTAR	988	988	N/A	198178	1958	1.98
2,878	658		Fairfield/Chaffee	946-948 Chaffee St	New Bedford	2	NSTAR	988	988	N/A	134615	1330	1.35
2,879	659		Fairfield/Chaffee	954-956 Chaffee St	New Bedford	2	NSTAR	988	988	N/A	187146	1849	1.87
2,880	660		Fairfield/Chaffee	962-964 Chaffee St	New Bedford	2	NSTAR	988	988	N/A	142915	1412	1.43
2,881	661		Fairfield/Chaffee	970-972 Chaffee St	New Bedford	2	NSTAR	988	988	N/A	171964	1699	1.72
2,882	662		Plainville	9 New Plainville Rd Dup	New Bedford	2	NSTAR	1345	1345	N/A	89888	1209	0.90
2,883	663		Plainville	13 New Plainville Rd Dup	New Bedford	2	NSTAR	1140	1140	N/A	108684	1239	1.09
2,884	664		Plainville	37 New Plainville Rd Dup	New Bedford	2	NSTAR	1140	1140	N/A	121140	1381	1.21
2,885	665		Plainville	17 New Plainville Rd Dup	New Bedford	2	NSTAR	1299	1299	N/A	158045	2053	1.58
2,886	666		Plainville	21 New Plainville Rd Dup	New Bedford	2	NSTAR	1333	1333	N/A	132258	1763	1.32
2,887	667		Plainville	25 New Plainville Rd Dup	New Bedford	2	NSTAR	1140	1140	N/A	116140	1324	1.16
2,888	668		Plainville	29 New Plainvile Rd Dup	New Bedford	2	NSTAR	1140	1140	N/A	103860	1184	1.04
2,889	669		Plainville	33 New Plainville Rd Dup	New Bedford	2	NSTAR	1140	1140	N/A	109912	1253	1.10
2,890	670		Plainville	86 Sylvia St Dup	New Bedford	2	NSTAR	1221	1221	N/A	95332	1164	0.95
2,891	671		Plainville	59 Howard Ave Dup	New Bedford	2	NSTAR	1270	1270	N/A	126142	1602	1.26
2,892	672		North/Cottage	191 North St A	New Bedford	2	NSTAR	1211	1211	N/A	164162	1988	1.64
2,893	673		North/Cottage	195 North St A	New Bedford	2	NSTAR	1140	1140	N/A	151491	1727	1.51
2,894	674		North/Cottage	197 North St A	New Bedford	2	NSTAR	1140	1140	N/A	162807	1856	1.63
2,895	675		North/Cottage	201 North St A	New Bedford	2	NSTAR	1648	1648	N/A	126881	2091	1.27
2,896	676		North/Cottage	420 Cottage St	New Bedford	2	NSTAR	1140	1140	N/A	137544	1568	1.38
2,897	677		Mill St	172 Mill St	New Bedford	1	NSTAR	1008	1008	N/A	34325	346	0.34
2,898	678		Mill St	174 Mill St	New Bedford	1	NSTAR	1008	1008	N/A	38393	387	0.38
2,899	679		Mill St	164 Mill St	New Bedford	1	NSTAR	1176	1176	N/A	37585	442	0.38
2,900	680		Mill St	162 Mill St	New Bedford	1	NSTAR	1176	1176	N/A	31973	376	0.32
2,901	681		Mill St	179 Mill St	New Bedford	1	NSTAR	1008	1008	N/A	37698	380	0.38
2,902	682		Mill St	183 Mill St	New Bedford	1	NSTAR	1008	1008	N/A	42163	425	0.42
2,903	683		Caroline St	12-22 Caroline St	New Bedford	3	NSTAR	2838	2838	N/A	99041	2811	0.99
2,904	684		Caroline St	32-42 Caroline St	New Bedford	3	NSTAR	2838	2838	N/A	99041	2811	0.99
2,905	685		Caroline St	24-30 Tilton St	New Bedford	3	NSTAR	2110	2110	N/A	99041	2090	0.99
2,906	686		Caroline St	41-51 Park St Ct	New Bedford	3	NSTAR	2838	2838	N/A	99041	2811	0.99
2,907	687		Caroline St	33-39 Park St Ct	New Bedford	3	NSTAR	2368	2368	N/A	99041	2345	0.99
2,908	688		Caroline St	11-21 Park St Ct	New Bedford	3	NSTAR	2580	2580	N/A	99041	2555	0.99
2,909	689		Caroline St	26 Caroline St	New Bedford	3	NSTAR	4561	4561	N/A	99041	4517	0.99

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
2,910	690		Amanda Ave	8 Amanda Ave	New Bedford	3	NSTAR	5893	5893	N/A	166423	9807	1.66
2,911	691		Amanda Ave	11-15 Amanda Ave	New Bedford	3	NSTAR	1774	1774	N/A	166423	1776	1.66
2,912	692		Amanda Ave	19-37 Amanda Ave	New Bedford	3	NSTAR	1774	1774	N/A	166423	1776	1.66
2,913	693		Amanda Ave	34 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,914	694		Amanda Ave	44-68 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,915	695		Amanda Ave	45-61 Amanda Ave	New Bedford	3	NSTAR	1774	1774	N/A	166423	1776	1.66
2,916	696		Amanda Ave	72-82 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,917	697		Amanda Ave	92-100 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,918	698		Amanda Ave	104-122 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,919	699		Amanda Ave	113-119 Amanda Ave	New Bedford	3	NSTAR	1774	1774	N/A	166423	1776	1.66
2,920	700		Amanda Ave	126-132 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,921	701		Amanda Ave	144-154 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,922	702		Amanda Ave	156-170 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,923	703		Amanda Ave	159-169 Amanda Ave	New Bedford	3	NSTAR	1774	1774	N/A	166423	1776	1.66
2,924	704		Amanda Ave	174-184 Amanda Ave	New Bedford	3	NSTAR	2072	2072	N/A	166423	3448	1.66
2,925	705		Amanda Ave	188-198 Amanda Ave	New Bedford	3	NSTAR	3562	3562	N/A	166423	5928	1.66
2,926	706		Amanda Ave	191-205 Amanda Ave	New Bedford	3	NSTAR	1774	1774	N/A	166423	1776	1.66
2,927	707		Great Brook Valley	Great Brook Valley 1	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,928	708		Great Brook Valley	Great Brook Valley 2	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,929	709		Great Brook Valley	Great Brook Valley 3	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,930	710		Great Brook Valley	Great Brook Valley 4	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,931	711		Great Brook Valley	Great Brook Valley 5	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,932	712		Great Brook Valley	Great Brook Valley 6	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,933	713		Great Brook Valley	Great Brook Valley 7	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,934	714		Great Brook Valley	Great Brook Valley 8	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,935	715		Great Brook Valley	Great Brook Valley 9	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,936	716		Great Brook Valley	Great Brook Valley 10	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,937	717		Great Brook Valley	Great Brook Valley 11	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,938	718		Great Brook Valley	Great Brook Valley 12	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,939	719		Great Brook Valley	Great Brook Valley 13	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,940	720		Great Brook Valley	Great Brook Valley 14	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,941	721		Great Brook Valley	Great Brook Valley 15	Worcester	4	NSTAR	3639	3639	0	133000	4840	1.33
2,942	722		Great Brook Valley	Great Brook Valley 16	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,943	723		Great Brook Valley	Great Brook Valley 17	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,944	724		Great Brook Valley	Great Brook Valley 18	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,945	725		Great Brook Valley	Great Brook Valley 19	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,946	726		Great Brook Valley	Great Brook Valley 20	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,947	727		Great Brook Valley	Great Brook Valley 21	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,948	728		Great Brook Valley	Great Brook Valley 22	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,949	729		Great Brook Valley	Great Brook Valley 23	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,950	730		Great Brook Valley	Great Brook Valley 24	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,951	731		Great Brook Valley	Great Brook Valley 25	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,952	732		Great Brook Valley	Great Brook Valley 26	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,953	733		Great Brook Valley	Great Brook Valley 27	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,954	734		Great Brook Valley	Great Brook Valley 28	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,955	735		Great Brook Valley	Great Brook Valley 29	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,956	736		Great Brook Valley	Great Brook Valley 30	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,957	737		Great Brook Valley	Great Brook Valley 31	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,958	738		Great Brook Valley	Great Brook Valley 32	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,959	739		Great Brook Valley	Great Brook Valley 33	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,960	740		Great Brook Valley	Great Brook Valley 34	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,961	741		Great Brook Valley	Great Brook Valley 35	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,962	742		Great Brook Valley	Great Brook Valley 36	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,963	743		Great Brook Valley	Great Brook Valley 37	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,964	744		Great Brook Valley	Great Brook Valley 38	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,965	745		Great Brook Valley	Great Brook Valley 39	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,966	746		Great Brook Valley	Great Brook Valley 40	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,967	747		Great Brook Valley	Great Brook Valley 41	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,968	748		Great Brook Valley	Great Brook Valley 42	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,969	749		Great Brook Valley	Great Brook Valley 43	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,970	750		Great Brook Valley	Great Brook Valley 44	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,971	751		Great Brook Valley	Great Brook Valley 45	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,972	752		Great Brook Valley	Great Brook Valley 46	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,973	753		Great Brook Valley	Great Brook Valley 47	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,974	754		Great Brook Valley	Great Brook Valley 48	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,975	755		Great Brook Valley	Great Brook Valley 49	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,976	756		Great Brook Valley	Great Brook Valley 50	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,977	757		Great Brook Valley	Great Brook Valley 51	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,978	758		Great Brook Valley	Great Brook Valley 52	Worcester	6	NSTAR	4928	4928	0	133000	6554	1.33
2,979	759		Great Brook Valley	Great Brook Valley 53	Worcester	6	NSTAR	5932	5932	0	133000	7890	1.33
2,980	760		Great Brook Valley	Great Brook Valley 54	Worcester	6	NSTAR	5932	5932	0	133000	7890	1.33
2,981	761		Great Brook Valley	Great Brook Valley 55	Worcester	6	NSTAR	5932	5932	0	133000	7890	1.33
2,982	762		Great Brook Valley	Great Brook Valley 56	Worcester	8	NSTAR	6998	6998	0	133000	9307	1.33
2,983	763		Great Brook Valley	Great Brook Valley 57	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,984	764		Great Brook Valley	Great Brook Valley 58	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,985	765		Great Brook Valley	Great Brook Valley 59	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,986	766		Great Brook Valley	Great Brook Valley 60	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,987	767		Great Brook Valley	Great Brook Valley 61	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,988	768		Great Brook Valley	Great Brook Valley 62	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,989	769		Great Brook Valley	Great Brook Valley 63	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,990	770		Great Brook Valley	Great Brook Valley 64	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,991	771		Great Brook Valley	Great Brook Valley 65	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,992	772		Great Brook Valley	Great Brook Valley 66	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,993	773		Great Brook Valley	Great Brook Valley 67	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,994	774		Great Brook Valley	Great Brook Valley 68	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,995	775		Great Brook Valley	Great Brook Valley 69	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,996	776		Great Brook Valley	Great Brook Valley 70	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,997	777		Great Brook Valley	Great Brook Valley 71	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,998	778		Great Brook Valley	Great Brook Valley 72	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
2,999	779		Great Brook Valley	Great Brook Valley 73	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,000	780		Great Brook Valley	Great Brook Valley 74	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,001	781		Great Brook Valley	Great Brook Valley 75	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,002	782		Great Brook Valley	Great Brook Valley 76	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,003	783		Great Brook Valley	Great Brook Valley 77	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
3,004	784		Great Brook Valley	Great Brook Valley 78	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,005	785		Great Brook Valley	Great Brook Valley 79	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,006	786		Great Brook Valley	Great Brook Valley 80	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,007	787		Great Brook Valley	Great Brook Valley 81	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,008	788		Great Brook Valley	Great Brook Valley 82	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,009	789		Great Brook Valley	Great Brook Valley 83	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,010	790		Great Brook Valley	Great Brook Valley 84	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,011	791		Great Brook Valley	Great Brook Valley 85	Worcester	8	NSTAR	6998.4	6998.4	0	133000	9308	1.33
3,012	792		Great Brook Valley	Great Brook Valley 86	Worcester	10	NSTAR	7952	7952	0	133000	10576	1.33
3,013	793		Great Brook Valley	Great Brook Valley 87	Worcester	10	NSTAR	7952	7952	0	133000	10576	1.33
3,014	794		Great Brook Valley	Great Brook Valley 88	Worcester	10	NSTAR	7952	7952	0	133000	10576	1.33
3,015	795		Great Brook Valley	Great Brook Valley 89	Worcester	10	NSTAR	7952	7952	0	133000	10576	1.33
3,016	796		Great Brook Valley	Great Brook Valley 90	Worcester	10	NSTAR	7952	7952	0	133000	10576	1.33
3,017	797		Great Brook Valley	Great Brook Valley 91	Worcester	10	NSTAR	7952	7952	0	133000	10576	1.33
3,018	798	5674	Forest Green	48/50 Bennett Street	Natick	2	NSTAR	1960	1960	0	45063	883	0.45
3,019	799	5661	Forest Green	16/18 Bennett Street	Natick	2	NSTAR	1960	1960	0	49747	975	0.50
3,020	800	5663	Forest Green	24/26 Bennett Street	Natick	2	NSTAR	1960	1960	0	53372	1046	0.53
3,021	801	5681	Forest Green	40/42 Bennett Street	Natick	2	NSTAR	2352	2352	0	44719	1052	0.45
3,022	802	5665	Forest Green	28/30 Curve Street	Natick	2	NSTAR	1960	1960	0	54048	1059	0.54
3,023	803	5672	Forest Green	40/42 Curve Street	Natick	2	NSTAR	1960	1960	0	55205	1082	0.55
3,024	804	5671	Forest Green	36/34 Bennett Street	Natick	2	NSTAR	1960	1960	0	59214	1161	0.59
3,025	805	5664	Forest Green	28/30 Bennett Street	Natick	2	NSTAR	1960	1960	0	59586	1168	0.60
3,026	806	5675	Forest Green	49/51 Bennett Street	Natick	2	NSTAR	1960	1960	0	61425	1204	0.61
3,027	807	6310	Pine Oaks 1	Pine Oaks 33 - 34	Harwich	2	NSTAR	1300	1300	1299	95230	1238	0.95
3,028	808	5673	Forest Green	44/46 Bennett Street	Natick	2	NSTAR	1960	1960	0	63631	1247	0.64
3,029	809	5670	Forest Green	32/34 Bennett Street	Natick	2	NSTAR	1960	1960	0	63663	1248	0.64
3,030	810	5662	Forest Green	20/22 Bennett Street	Natick	2	NSTAR	1960	1960	0	67653	1326	0.68
3,031	811	6375	EVE - Russell Street	245 - 251 Russel Street	Everett	4	NSTAR	3456	3456	0	65402	2260	0.65
3,032	812	5800	360 Union	360 Union Ave	Framingham	10	NSTAR	6538	4150	2595	61374	2547	0.61
3,033	813	6250	NBD - Ben Rose	35 Delano Street - Community	New Bedford	4	NSTAR	5625	5625	0	67399	3791	0.67
3,034	814	3726	Bow Street Apartments	33 Bow Street	Somerville	18	NSTAR	32083	25748	6605	50336	12961	0.50
3,035	815	6343	Riley House	39 Maple Avenue	Hyde Park	41	NSTAR	46834	46834	11136	44754	20960	0.45
3,036	816		16 Cottage St	16 Cottage St	Worcester	15	NSTAR	5717	3965	2343	132867	5268	1.33
3,037	817		CAM - Putnam Gardens	Bldg 3- Doors 9,10,11,12,13	Cambridge	40	NSTAR	41146	32918	8740	137199	45163	1.37
3,038	818		CAM - Putnam Gardens	Doors 1,2, and 3	Cambridge	33	NSTAR	29077	22905	9634	139341	31916	1.39
3,039	819		CCHI	151-157 Allston	Cambridge	6	NSTAR	10364	10364	2706	44916	4655	0.45
3,040	820		Chapman Arms	122 Mt. Auburn St.	Cambridge	50	NSTAR	35505	35505	8390	66648	23664	0.67
3,041	821		FRM - Rose Kennedy	23,25 ROSE KENNEDY LANE	Framingham	8	NSTAR	4572	4572	572	39533	1807	0.40
3,042	822		FRM - Rose Kennedy	33,35 ROSE KENNEDY LANE	Framingham	8	NSTAR	4572	4572	572	39533	1807	0.40
3,043	823		FRM - Rose Kennedy	43,45 ROSE KENNEDY LANE	Framingham	8	NSTAR	4572	4572	572	39533	1807	0.40
3,044	824		FRM - Rose Kennedy	8,10,12 ROSE KENNEDY LANE	Framingham	12	NSTAR	6832	6832	832	39533	2701	0.40
3,045	825		FRM - Rose Kennedy	9,11,15 ROSE KENNEDY LANE	Framingham	12	NSTAR	6832	6832	832	39533	2701	0.40
3,046	826		Heritage Village	1,3,5 Centre Drive / Common	Northboro	2	NSTAR	5952	5952	1190	38249	2277	0.38
3,047	827		Heritage Village	14,18 Centre Drive	Northboro	8	NSTAR	7056	7056	2056	32104	2265	0.32
3,048	828		Heritage Village	15,17,19 Centre Drive	Northboro	9	NSTAR	7936	7936	2236	32074	2545	0.32
3,049	829		Heritage Village	7,11 Centre Drive	Northboro	5	NSTAR	4960	4960	960	29166	1447	0.29
3,050	830		Heritage Village	6,10 Centre Drive	Northboro	8	NSTAR	7056	7056	2056	33754	2382	0.34
3,051	831		Maxfield/Liberty	197 LIBERTY ST	New Bedford	4	NSTAR	975	975	0	76781	749	0.77
3,052	832		Maxfield/Liberty	318 320 TREMONT ST	New Bedford	8	NSTAR	2556	2556	0	76781	1963	0.77
3,053	833		Maxfield/Liberty	290 296 HILLMAN ST	New Bedford	8	NSTAR	2556	2556	0	76781	1963	0.77
3,054	834		Maxfield/Liberty	123 131 LIBERTY ST	New Bedford	8	NSTAR	2790	2790	0	76781	2142	0.77
3,055	835		Maxfield/Liberty	259 265 NORTH ST	New Bedford	8	NSTAR	2862	2862	0	76781	2197	0.77
3,056	836		Maxfield/Liberty	191 195 LIBERTY ST	New Bedford	4	NSTAR	2928	2928	0	76781	2248	0.77
3,057	837		Maxfield/Liberty	165 169 LIBERTY ST	New Bedford	4	NSTAR	2928	2928	0	76781	2248	0.77
3,058	838		Maxfield/Liberty	458 458B MAXFIELD ST	New Bedford	4	NSTAR	2928	2928	0	76781	2248	0.77
3,059	839		Maxfield/Liberty	464 464B MAXFIELD ST	New Bedford	4	NSTAR	2928	2928	0	76781	2248	0.77
3,060	840		Maxfield/Liberty	492 492B MAXFIELD ST	New Bedford	4	NSTAR	2928	2928	0	76781	2248	0.77
3,061	841		Maxfield/Liberty	490 490C MAXFIELD ST	New Bedford	4	NSTAR	2928	2928	0	76781	2248	0.77
3,062	842		Maxfield/Liberty	207 213 LIBERTY ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,063	843		Maxfield/Liberty	199 205 LIBERTY ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,064	844		Maxfield/Liberty	439 445 MAXFIELD ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,065	845		Maxfield/Liberty	320 320C SMITH ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,066	846		Maxfield/Liberty	461 461C MAXFIELD ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,067	847		Maxfield/Liberty	471 471C MAXFIELD ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,068	848		Maxfield/Liberty	330 330C SMITH ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,069	849		Maxfield/Liberty	440 446 MAXFIELD ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,070	850		Maxfield/Liberty	456 456C MAXFIELD ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,071	851		Maxfield/Liberty	462 462C MAXFIELD ST	New Bedford	4	NSTAR	3240	3240	0	76781	2488	0.77
3,072	852		Maxfield/Liberty	501 MAXFIELD ST	New Bedford	4	NSTAR	3372	3372	0	76781	2589	0.77
3,073	853		Maxfield/Liberty	217 223 LIBERTY ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,074	854		Maxfield/Liberty	302 306 SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,075	855		Maxfield/Liberty	308 308C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,076	856		Maxfield/Liberty	447 447C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,077	857		Maxfield/Liberty	451 451C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,078	858		Maxfield/Liberty	455 455C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,079	859		Maxfield/Liberty	318 318C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,080	860		Maxfield/Liberty	316 316C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,081	861		Maxfield/Liberty	322 322C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,082	862		Maxfield/Liberty	463 463C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,083	863		Maxfield/Liberty	473 473C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,084	864		Maxfield/Liberty	332 332C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,085	865		Maxfield/Liberty	450 450C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,086	866		Maxfield/Liberty	293 299 HILLMAN ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,087	867		Maxfield/Liberty	305 311 HILLMAN ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,088	868		Maxfield/Liberty	340 340C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,089	869		Maxfield/Liberty	342 342C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,090	870		Maxfield/Liberty	483 483C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,091	871		Maxfield/Liberty	481 481C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,092	872		Maxfield/Liberty	352 352C SMITH ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,093	873		Maxfield/Liberty	493 493C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,094	874		Maxfield/Liberty	220 226 LINDSEY ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,095	875		Maxfield/Liberty	317 323 HILLMAN ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,096	876		Maxfield/Liberty	470 470C MAXFIELD ST	New Bedford	4	NSTAR	3632	3632	0	76781	2789	0.77
3,097	877		Maxfield/Liberty	157 163 LIBERTY ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77

Total Gas Usage 2011

Total Count	Utility Count	Code	Project Name	Address	City	# Units	Gas Utility	Total Cond ft2	Cond ft2	Common area ft2	Btu/ Cond ft2	Annual Therms	Therms/ Cond ft2
3,098	878		Maxfield/Liberty	283 289 HILLMAN ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,099	879		Maxfield/Liberty	448 448C MAXFIELD ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,100	880		Maxfield/Liberty	452 452B MAXFIELD ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,101	881		Maxfield/Liberty	350 350C SMITH ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,102	882		Maxfield/Liberty	491 491C MAXFIELD ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,103	883		Maxfield/Liberty	228 232 LINDSEY ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,104	884		Maxfield/Liberty	482 482C MAXFIELD ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,105	885		Maxfield/Liberty	480 480C MAXFIELD ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,106	886		Maxfield/Liberty	472 472B MAXFIELD ST	New Bedford	4	NSTAR	3922	3922	0	76781	3011	0.77
3,107	887		NBD - Ben Rose I	134/132,128/126 BLACKMER STREET	New Bedford	4	NSTAR	4800	4800	0	65975	3167	0.66
3,108	888		NBD - Ben Rose I	49/47,45/43 DELANO STREET	New Bedford	4	NSTAR	4800	4800	0	65975	3167	0.66
3,109	889		NBD - Ben Rose I	640/642,646/648 FIRST STREET	New Bedford	4	NSTAR	4900	4900	0	65975	3233	0.66
3,110	890		NBD - Ben Rose I	662/664,668/670,674/676 FIRST STRE	New Bedford	6	NSTAR	7200	7200	0	65975	4750	0.66
3,111	891		NBD - Ben Rose I	688/690,694/696,700/702 FIRST STRE	New Bedford	6	NSTAR	7200	7200	0	65975	4750	0.66
3,112	892		NBD - Ben Rose I	899/901,905/907 WATER STREET	New Bedford	4	NSTAR	4900	4900	0	65975	3233	0.66
3,113	893		NBD - Ben Rose I	20/18,14/12,8/6 DIVISION STREET	New Bedford	6	NSTAR	7200	7200	0	65975	4750	0.66
3,114	894		NBD - Ben Rose I	23/21,17/15 DIVISION STREET	New Bedford	4	NSTAR	4800	4800	0	65975	3167	0.66
3,115	895		NBD - Ben Rose I	32/30,26/24 DELANO STREET	New Bedford	4	NSTAR	4800	4800	0	65975	3167	0.66
3,116	896		NBD - Ben Rose I	679/681,683/685 FIRST STREET	New Bedford	4	NSTAR	4800	4800	0	65975	3167	0.66
3,117	897		NBD - Ben Rose I	865/867,871/873,877/879 WATER STR	New Bedford	6	NSTAR	7200	7200	0	65975	4750	0.66
3,118	898		NBD - Ben Rose I	941/943,947/949,953/955 WATER STR	New Bedford	6	NSTAR	7300	7300	0	65975	4816	0.66
3,119	899		NBD - Blue Meadows	102,104,106,112,114,122 BLUEFIELD	New Bedford	6	NSTAR	5150	5150	0	93464	4813	0.93
3,120	900		NBD - Blue Meadows	107,115,117,123,125,129 BLUEFIELD	New Bedford	6	NSTAR	5150	5150	0	93464	4813	0.93
3,121	1	3378	FIT - Daniel Heights	Daniel Community	Fitchburg	1	Unitil	1152	1152	N/A	158717	1828	1.59
3,122	2	3379	FIT - Daniel Heights	14-16-18-20 DANIELS STREET	Fitchburg	4	Unitil	1880	1880	80	158717	2984	1.59
3,123	3	3380	FIT - Daniel Heights	28-30-32-34 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	158717	2984	1.59
3,124	4	3381	FIT - Daniel Heights	27-29-31-33 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	158717	2984	1.59
3,125	5	3382	FIT - Daniel Heights	13-15-17-19 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	158717	2984	1.59
3,126	6	3383	FIT - Daniel Heights	6 & 10 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	158717	6984	1.59
3,127	7	3384	FIT - Daniel Heights	22 & 26 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	158717	6984	1.59
3,128	8	3386	FIT - Daniel Heights	5 & 9 DANIELS ST	Fitchburg	4	Unitil	1880	1880	80	158717	2984	1.59
3,129	9	3387	FIT - Daniel Heights	21 & 25 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	158717	6984	1.59
3,130	10	3388	FIT - Daniel Heights	36 & 40 DANIELS ST	Fitchburg	8	Unitil	4400	4400	400	158717	6984	1.59
3,131	11	3389	FIT - Canton Valley	Canton Valley Community	Fitchburg	1	Unitil	1620	1620	N/A	233696	3786	2.34
3,132	12	3390	FIT - Canton Valley	431-441 Canton Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,133	13	3391	FIT - Wallace Tower	54 WALLACE AVE	Fitchburg	130	Unitil	129024	129024	64024	7179	9262	0.07
3,134	14	3392	FIT - Pleasant	132 Pleasant	Fitchburg	6	Unitil	4550	4550	1550	29047	1322	0.29
3,135	15	3393	FIT - CJ Durkin Tower	50 Days St	Fitchburg	121	Unitil	83168	83168	22668	11029	9173	0.11
3,136	16	3399	FIT - Taft	28 Taft st	Fitchburg	1	Unitil	995	995	N/A	17666	176	0.18
3,137	17	3402	FIT - Ashburnham	238 Ashburnham	Fitchburg	1	Unitil	1355	1355	N/A	160418	2174	1.60
3,138	18	3403	FIT - Congress	15 Congress St	Fitchburg	2	Unitil	1053	1053	53	118760	1251	1.19
3,139	19	3405	FIT - Sheridan	7 Sheridan St	Fitchburg	1	Unitil	688	688	N/A	427326	2940	4.27
3,140	20	6716	Green Acres	13 Normandy Rd	Fitchburg	1	Unitil	1000	1000	N/A	126348	1263	1.26
3,141	21	6721	FIT - Canton Valley	19-29 Valley Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,142	22	6722	FIT - Canton Valley	31-41 Valley Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,143	23	6723	FIT - Canton Valley	26-38 Valley Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,144	24	6724	FIT - Canton Valley	379-389 Canton Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,145	25	6725	FIT - Canton Valley	393-403 Canton Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,146	26	6726	FIT - Canton Valley	407-417 Canton Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,147	27	6727	FIT - Canton Valley	1-11 Valley Street	Fitchburg	6	Unitil	1760	1760	0	233696	4113	2.34
3,148	28	6606	GAR - 116 Church St/Congregate	116 CHURCH ST/CONGREGATE	Gardner	108	Unitil	76575	76575	22575	9662	7399	0.10
3,149	29	6607	GAR - 104 Church St	104 CHURCH ST	Gardner	69	Unitil	55000	55000	20500	54125	29769	0.54
3,150	30	6671	FIT - Green Acres	36 - 42 Normandy Road	Fitchburg	4	Unitil	3408	3408	1057	61160	2084	0.61
3,151	31	6706	FIT - Green Acres	117- 119 Normandy Road	Fitchburg	2	Unitil	2240	2240	695	58860	1318	0.59
3,152	32	6709	FIT - Green Acres	123 & 125 Normandy Road	Fitchburg	2	Unitil	1960	1960	607	58738	1151	0.59
3,153	33	6701	FIT - Green Acres	31 - 37 Normandy Road	Fitchburg	4	Unitil	3976	3976	1232	58600	2330	0.59
3,154	34	6673	FIT - Green Acres	1 - 7 Leyte Road	Fitchburg	4	Unitil	3408	3408	1057	52473	1788	0.52
3,155	35	6674	FIT - Green Acres	107 - 113 Normandy Road	Fitchburg	4	Unitil	3408	3408	1057	52406	1786	0.52
3,156	36	6699	FIT - Green Acres	108 - 114 Normandy Road	Fitchburg	4	Unitil	3976	3976	1232	64095	2548	0.64
3,157	37	6708	FIT - Green Acres	5 & 7 Normandy Rd	Fitchburg	2	Unitil	2240	2240	695	42541	953	0.43
3,158	38	6712	FIT - Green Acres	60 & 62 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	43513	853	0.44
3,159	39	6703	FIT - Green Acres	66-72 Leyte Rd	Fitchburg	4	Unitil	3976	3976	1232	49058	1951	0.49
3,160	40	6707	FIT - Green Acres	139 & 141 Normandy Rd	Fitchburg	2	Unitil	2240	2240	695	49875	1117	0.50
3,161	41	6702	FIT - Green Acres	35-41 Wanoosnock Rd	Fitchburg	4	Unitil	3976	3976	1232	52876	2102	0.53
3,162	42	6683	FIT - Green Acres	67-73 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	57658	1965	0.58
3,163	43	6715	FIT - Green Acres	917 & 919 Water St	Fitchburg	2	Unitil	1960	1960	607	58209	1141	0.58
3,164	44	6687	FIT - Green Acres	98-104 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	58254	1985	0.58
3,165	45	6686	FIT - Green Acres	87-93 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	58477	1993	0.58
3,166	46	6679	FIT - Green Acres	47-53 Wanoosnock Rd	Fitchburg	4	Unitil	3408	3408	1057	58747	2002	0.59
3,167	47	6675	FIT - Green Acres	14-20 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	59853	2040	0.60
3,168	48	7124	FIT - Green Acres	87-93 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	59955	2043	0.60
3,169	49	6704	FIT - Green Acres	873-879 Water St	Fitchburg	4	Unitil	3976	3976	1232	60762	2416	0.61
3,170	50	6684	FIT - Green Acres	76-82 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	61207	2086	0.61
3,171	51	6710	FIT - Green Acres	39 & 41 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	61375	1203	0.61
3,172	52	6700	FIT - Green Acres	25-31 Leyte Rd	Fitchburg	4	Unitil	3976	3976	1232	61405	2441	0.61
3,173	53	6682	FIT - Green Acres	53-59 Normandy Rd	Fitchburg	4	Unitil	3408	3408	1057	62164	2119	0.62
3,174	54	6681	FIT - Green Acres	49-55 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	62237	2121	0.62
3,175	55	6694	FIT - Green Acres	73-79 Normandy Rd	Fitchburg	4	Unitil	3422	3422	1061	62384	2135	0.62
3,176	56	6680	FIT - Green Acres	48-54 Leyte Rd	Fitchburg	4	Unitil	3408	3408	1057	64533	2199	0.65
3,177	57	6690	FIT - Green Acres	34-40 Leyte Rd	Fitchburg	4	Unitil	3422	3422	1061	64693	2214	0.65
3,178	58	6688	FIT - Green Acres	17-23 Normandy Rd	Fitchburg	4	Unitil	3422	3422	1061	65384	2237	0.65
3,179	59	6692	FIT - Green Acres	59-65 Leyte Rd	Fitchburg	4	Unitil	3422	3422	1061	66530	2277	0.67
3,180	60	6713	FIT - Green Acres	65 & 67 Normandy Rd	Fitchburg	2	Unitil	1960	1960	607	66835	1310	0.67

3,180

Glossary of Terms

Total sqft	Includes all conditioned and unconditioned common areas, tenant units and basement
Conditioned sqft	Includes all conditioned common areas, tenant units and basements only if basement is finished AND heated
Common area sqft	Includes all conditioned and unconditioned common areas and basement and excludes only tenant unit square footage
Btu/Conditioned sqft	Total annual Btus divided by conditioned square footage
Annual Therms	Total annual therms
Therms/Conditioned sqft	Total annual therms divided by conditioned square footage
kwh/common area sqft	Total annual kwh divided by common area if building electric meter covers only common areas. Total annual kwh divided by common area if building electric meter covers only common areas. If a building's common area alectric meters include significant outdoor lighting this number can be artificially high.
kwh/bldg sqft	Total annual kwh divided by total building square footage if electricity is master metered and covers whole building or if all tenant meters are being tracked as well as common areas
N/A (in kwh/common area sqft field)	A usage value for common area only could not be calculated because the building is master metered
N/A (in kwh/bldg sqft field)	A usage value for the whole building could not be calculated because only common area meter information was available

Metric Number	Metric Language	New England Gas Company	New England Gas Company Final 2011 Production
C&I #1Retrofit -- Depth of savings	PA's must complete a minimum of 75% of projects that qualified for the 2010 metric by year end 2011 as a minimum criteria for being eligible for the 2011 metric. For 2011, PA's must perform assessments and obtain X * Y customer commitments to follow-through with savings of at least 20% building energy savings (gas or electric). To be eligible, buildings must have fossil fuel (e.g. natural gas, oil) and electric measures and a minimum of 5% of savings from fossil fuel or electric. ("Building" is defined as the whole space under management and control of the customer, which can include tenant space in a larger building.) Customer use is defined as the previous 12 months of billing data. A "commitment" is a signed application or Memorandum of Understanding. Note: It is the PA's and EEAC's intent to have 2012 performance metric dollars tied to the 2011 commitments becoming installed with savings in 2012.Baseline ("X") in the 2011 metric can not be less than 2010 metric THRESHOLD level.Standard rounding technique applies with minimum of one whole number increase.	Threshold: 9% Design: 10% Exemplary: 11%	**No Participants**
C&I #2New Construction -- Comprehensiveness and depth of savings	PA's must complete a minimum of 75% of projects that qualified for the 2010 metric by year end 2011 with an expected 2011 completion date as a minimum criteria for being eligible for the 2011 metric.Each PA must achieve in a minimum of X% of new construction or substantial/major renovation projects at least an estimated 20% whole building savings (gas and electric) compared to code. Projects with commitments in 2011 count toward this metric. Core Performance projects will qualify at the threshold level and can count at the Design Level if they do at least one Enhanced Strategy and Exemplary if they do at least two Enhanced Strategies. ("Building" is defined as the whole space under management and control of the customer, which can include tenant space in a larger building.) (If total number of new construction or substantial/major renovation projects for a specific PA is less than 4, the PA may meet the design or exemplary level with 1 project, or be exempt from this metric and allocate funds to other metrics proportionally). Baseline ("X") in the 2011 metric can not be less than 2010 metric THRESHOLD level.Standard rounding technique applies	Threshold:20% Design: 21% Exemplary:22%	**No Participants**
C&I #3Direct Install Electric and Gas Integration	PA's achieve an average of X% * Z% electric savings with Y%*Z% having at least one gas measure installed where gas is used. Savings based on the PAs project savings claims divided by the previous 12 months of electric consumption. This metric applies to all projects influenced by the Direct Install Program and completed in 2011.	Threshold: 9% Design: 10% Exemplary: 11%	**Threshold-9%**
C&I #4Combined Heat & Power	PA's must complete a minimum of 75% of projects that qualified for the 2010 metric by year end 2011 with an expected 2011 completion date as a minimum criteria for being eligible for the 2011 metric.Each PA will complete X * Y% Combined Heat & Power commitments in 2011. A commitment is either a signed application or a signed Memorandum of Understanding between the electric PA and customer. This metric applies to all gas and electric PAs except Berkshire Gas, FG&E Electric and FG&E Gas, however, it is not a requirement that gas PAs contribute any funds to TA studies or CHP rebates. Baseline ("X") in the 2011 metric can not be less than 2010 metric THRESHOLD level.Standard rounding technique applies with minimum of one whole number increase.	Threshold-N/A Design-1 Unit Exemplary- 2 Units	**Did not meet**

Commercial & Industrial Metric #3 Direct Install Electric and Gas Integration

New England Gas Company - C&I Metric #3

	Performance Metric Description			Threshold		Design		Exemplary	
			2010	Units		Units		Units	
C&I #3 Direct Install Electric and Gas Integration	PA's achieve an average of X% * Z% electric savings with Y%*Z% having at least one gas measure installed where gas is used. Savings based on the PAs project savings claims divided by the previous 12 months of electric consumption. This metric applies to all projects influenced by the Direct Install Program and completed in 2011.	Columbia Gas	Y%	Z=110%		Z=115%		Z=120%	
		Berkshire Gas	Y%	Z=110%		Z=115%		Z=120%	
		Fitchburg G&E - Gas	Y%	Z=110%		Z=115%		Z=120%	
		New England Gas	**8%**	**9%**		**10%**		**11%**	
		NGRID Gas	Y%	Z=110%		Z=115%		Z=120%	
		NSTAR Gas	Y%	Z=110%		Z=115%		Z=120%	
		Fitchburg G&E - Electric	X%	Z=110%		Z=115%		Z=120%	
		NGRID Electric	X%	Z=110%		Z=115%		Z=120%	
		NSTAR Electric	X%	Z=110%		Z=115%		Z=120%	
		WMECo	X%	Z=110%		Z=115%		Z=120%	

	New England Gas 2011 Baseline Calculation	**Value**	**Source**
(1)	New England Gas 2011 Direct Install Participants (numerator)	14	
(2)	2011Direct Install Electric Program Participants	6,208	PA file: STATEWIDE EEAC Q4 Report B - Electric.xls
(3)	New England Gas Allocation of Gas Customers	2.5%	Gas Network Allocation
(4)	2011 Direct Install Electric Participants in New England Gas Service Territory (denominator)	155	(2) X (3)
(5)	**2011 Baseline for New England Gas**	**9%**	(1) / (4)

All Sector Metric #2
Cost Efficiency of Program Expenditures

New England Gas Company

Metric Number	Metric Language
ALL SECTOR #2: Cost Efficiency of Program Expenditures {Electric and Gas} - Statewide	Design Level Performance: $ Value of Benefits in Plan/Adjusted PA Costs where Adjusted PA Costs = Program Planning & Administration + Marketing & Advertising + Participant Incentive +Sales, Technical Assistance and Training. Evaluation and Market Research, Performance Incentives, and Lost Base Revenue/Decoupling Revenue are excluded from these costs. In addition, expenditures related to funding for EEAC Consultants and for the DOER Assessment are also excluded. Exemplary Performance: Set at 125% of the $ Value of Benefits in Plan/Adjusted PA Costs. This performance metric is scaleable. Performance at the end of the program year will be assessed by calculating the above ratio using the actual $ Value of Benefits acquired in the year and actual adjusted PA costs defined consistently with adjusted PA costs from the Plan. This ratio will be divided by the Design Level performance target for the PA to determine the percentage of the design level incentive earned. If this ratio is not at least 75% of the Design level target for the PA, then the PA will not earn an incentive under this metric. The exemplary level of performance is achieved when this ratio is at least 125%.

	Plan	Evaluated/Actual
Total Benefits	$6,124,676	$4,794,306
Program Administrator Budget		
Program Planning and Administration	416,520	340,569
Marketing and Advertising	99,945	78,304
Participant Incentive	1,082,626	944,704
Sales, Technical Assistance & Training	297,869	188,633
Total Adjusted Program Administrator Budget	$1,896,960	$1,552,210
EEAC Consultants	5,532	6,693
DOER Assessment	12,102	17,995
Total Adjusted Program Administrator Budget less EEAC Consultants and DOER Assessment	$1,879,326	$1,527,522
Total Benefits / Total Adjusted Program Administrator Budget less EEAC Consultants and DOER Assessment	3.26	3.14
Design Level Target (Plan)		3.26
Percentage of the design level incentive earned		96.31%

APPENDIX E: Other Supporting Documentation

1. Competitive Procurement

The chart below summarizes competitive procurement activities in 2011. As shown in the chart, 5 statewide RFPs, and 1 Company-specific RFP were released for implementation in 2011.

RFP #	Category	Topic	Winner of Bid	Number of Vendors Receiving RFP	Number of Responses
1	Statewide	Rebate Processing	Helgeson	14	7
2	Statewide	Field Implementation Contractor Services for Energy Star and GasNetworks	Lockheed Martin	14	3
3	Statewide	Codes and Standards	Heschong Mahone Group	16	10
4	Statewide	Residential New Construction	ICF	16	11
5	Statewide	Avoided Energy Cost Study	Synapse Energy Economics	8	4
6	Company-Specific	Lead Vendor for Mass Save Home Energy Services Program	Honeywell Utility Solutions	13	3

For each RFP's scope of work, which described the proposal requested, please see Appendix E, Section 1.

For a sample of the Terms and Conditions of the Company, please see Appendix E, Section 1(b).

ATTACHEMENT 4.1
SCOPE OF WORK
REBATE PROCESSING, CALL CENTER AND CATALOG FULFILLMENT

As mentioned on the RFP this process covers three (3) main services: Rebate processing, Call center and Catalog fulfillment. Bidders have the opportunity to submit a technical and pricing proposal for each (or for all) of the scope of works in this section.

1 Scope 1: ENERGY STAR® Lighting and Consumer Products Initiatives (Rebate and Call Center)

Territories: MA
Companies: Unitil, National Grid, NSTAR Electric Company, Cape Light Compact, Western Massachusetts Electric Company, Northeast Utilities
Programs: ENERGY STAR® Lighting and Consumer Products Initiatives
Contracting structure: Independent contracts with each individual PA
Services: Rebate processing and call center
Invoicing: Invoice to each individual PA for its specific activity and shared cost. Each invoice will be issued with all related supporting documentation
For rebate volume please refer to attachment 4.14

The selected Supplier will be expected to work with the PAs and their field support and marketing contractors to support any consumer, retailer, or manufacturer redemption or reimbursement components of Lighting and Consumer Products programs.

Rebate payments may entail instant rebate coupons, mail-in coupons, appliance turn-in or bounty programs, sales staff incentives (SPIFF's), wholesale or retail markdowns and buy downs, and other approaches.

1.1 Supplier Responsibilities:

Rebate Processing:

- Coordinate activities with the other contractors to the regional programs: the field support and marketing contractors. For example, fulfillment contractor will work with the marketing contractor in the design of the coupons.
- Store and maintain all supporting documents for reimbursement for PAs for a period of time as directed by the PAs.
- Provide processing of payments to retailers for redeemed coupons, manufacturers and/or retailers for markdown and buy down reimbursements and to consumers for mail-in rebate requests. Payments to retailers and manufacturers will be made on a monthly basis and payments to consumers will be made within 15 days of receipt of the rebate form. The Supplier will remit payments to

consumers and retailers/manufacturers and then submit invoices to the appropriate PA(s) for reimbursement.
- Process and verify sales and shipping documents submitted by retailers and manufacturers as part of promotions with industry. These promotions may include, but not be limited to, instant rebate coupons, mail-in coupons, appliance turn-in or bounty programs, sales staff incentives (SPIFF's), and wholesale or retail markdowns or buy downs.

For negotiated cooperative and other promotions, the Supplier will need to collect and track product invoices, bills of lading, shipping invoices, and sales data to verify requests for reimbursement from manufacturers and retailers. Sales data will be tracked and reported by storefront and in aggregate and may include, but not be limited to, the number of customer transactions, product sales by product type and model number, and product price. Data for promotions may need to be collected not only for the promotion period, but also for some defined period prior to and following each promotion. Information on each promotion will be tracked and reported separately.

- Invoice manufacturers and retailers for their share of joint rebates and spiffs offered in conjunction with the PAs.
- Design and maintain an electronic database for program activity in a format approved by the PAs. The elements of the database shall include, for example, a listing of the retailer and customer participants, the volume of Program product sales for each of the products, by product category (clothes washers, torchiere, dimmable CFL, etc.) and/or by model number, the number of coupons and mail-in rebates redeemed, and specific information (e.g. name, address and utility company account number) for each participating customer. The Supplier will report on the number of unprocessed coupons and rebate forms and on the average and maximum number of days before a retailer, manufacturer, or consumer is reimbursed after submittal of the necessary rebate or incentive documentation. Printed copies of the reports from the database will be provided to each PA on a monthly basis and will contain both PA specific and aggregate reporting. The Supplier will electronically transfer data in a format specified by each PAs. In addition, the Supplier will have the ability to produce ad-hoc reports upon request of a PA.
- For the negotiated cooperative promotions, the contractor will develop and maintain a web-based tracking system on a secure site. The data will be in an Excel or database format of the PAs' choice. The database will allow easily manipulation of the data and have a user-friendly printing capability. The system will be able to track and report, at a minimum, the following promotion activity:
    - Overall promotion summary, by PA and in total
    - Product group summary – standard CFLs, specialty CFLs, indoor fixtures, outdoor fixtures, etc. – by PA and in total

  - Store/chain summary, by PA
  - Store/chain summary, aggregated PA totals
  - Manufacturer summary, by PA
  - Manufacturer summary, aggregated PA totals
  - Invoiced vs. sales summary – current and year to date product quantities and dollar amounts – by PA
  - MOU commitments vs. sales summary – current and year to date product quantities and dollar amounts – by PA

  The PAs will work with the selected Supplier to define the specific data to be collected and reported, and the final database formats.
- Provide on-going feedback to the PAs regarding progress, problem areas and possible enhancements to the Program. Attendance at regularly scheduled meetings (approximately 2 times per month) with the PAs may be required.
- Maintain a toll-free telephone line(s) for consumer inquiries

Other considerations:

- Maintain on-going communications with the PA, their marketing and communications contractor, and their field support contractors to insure that program needs are being met.
- Seek prior approval before undertaking any significant planning or development tasks.
- Provide monthly billing to each PA within 30 days of the close of the month. Each PA will be billed individually, and each bill will detail both joint and any PA specific charges.
- Occasionally work with PA Evaluation staff on ad hoc requests for information.

1.2 Program Administrator Responsibilities:

Each of the PAs will contract individually with the selected contractor in accordance with a cost-allocation schedule that will be established with the contractor prior to the start of work. The PA will coordinate and conduct advertising in support of the Lighting and Consumer Products programs. A common marketing theme will be developed that will form the strategic basis for the overall campaign. This effort may include a combination of the following: television advertising, newspaper advertising, direct mail campaigns, public relations activities, and radio ads. Note that the actual implementation of specific elements of the marketing campaign may vary among PAs.

2 Scope 2: ENERGY STAR® Lighting and Consumer Products Initiatives (Catalog)

Territories: MA
Companies: Unitil, National Grid, NSTAR Electric Company, Cape Light Compact, Western Massachusetts Electric Company, Northeast Utilities
Programs: ENERGY STAR® Lighting and Consumer Products Initiatives
Contracting structure: Independent contracts with each individual PA
Services: Catalog Fulfillment
Invoicing: Invoice to each individual PA for its specific activity and shared cost. Each invoice will be issued with all related supporting documentation
For spend volume please refer to attachment 4.14

The selected Supplier will be expected to work with the PAs to provide a service that will allow for consumers to purchase products via telephone, mail order, or website.

For internet/catalog sales, the PAs will subsidize the customer costs for some of the ENERGY STAR-qualified lighting and other products. Products will be shipped directly to the customers; however, some PAs may designate bulk "ship-to" locations. This should allow the PAs and their program contractors to:

- Provide a link between new/emerging lighting products and the retail market by offering a ready-made outlet for these products with significant volume potential.
- Provide customers with access to a wide variety of existing state-of-the-art products (especially ENERGY STAR qualified fixtures) at competitive prices.
- Provide customers with a solution to the problem of obtaining replacement lamps for existing compact fluorescent fixtures.
- Provide customers with information to educate on energy conservation benefits.
- Leverage co-investment and promotion from manufacturers to reduce PA costs.

2.1 Supplier Responsibilities:

Catalog Fulfillment:

- Successfully negotiate with industry in achieving PA goal of maximizing marketing and product promotional resources (and sales strategies) with the bidder and PA that allows competitive pricing and adequate product quantities to meet growing customer demand.
- Develop and maintain a website. Customers will be able to order products through the website, make inquiries via email and also learn about energy efficient lighting. The website should be eye-catching, informative, and easy to use.
- Customer Service/Support: Establish a toll-free customer service line staffed with a sufficient number of representatives to accommodate the expected volume of calls. This telephone number will be dedicated to the answering of inquiries from customers regarding offerings,

requests for additional information, the placement of orders and other customer service related activities. The base bid should assume operation of the customer service line Monday through Friday from 8 a.m. – 5 p.m., with optional pricing for Monday through Friday from 8 a.m. – 8 p.m. and Saturday 9 a.m. – noon.

- Ensure customer eligibility to participate in the Program. This will include collection of the customer name, address and utility account number prior to accepting an order.
- Accept and process orders from customers. Customer payment may be in the form of credit cards, personal checks and money orders.
- Collect all applicable sales and/or use taxes and submit payments to the appropriate state or federal collection agency.
- Handle returns of defective products and those damaged in transit and resolve any resulting customer complaints or requests for replacement. The contractor will track product returns by manufacturer, product type, and model number
- Product Inventory and Delivery: Purchase and stock quantities of lighting products sufficient to accommodate expected program demand. Package customer orders using environmentally prudent materials acceptable to the PA.
- Ship customer orders within 14 days of receipt of orders. Follow up with customers on partial order shipments. Provide customers with feedback on items on back order.
- Develop and maintain an electronic database to track program activity: The structure of the database will be approved by the PAs prior to the start of the program and will form the basis for reporting of monthly activity for each PA's service territory and in aggregate.

3 Scope 3: New York Energy Efficiency Programs

Territories: NY (Downstate and Upstate) – Excluding Long Island Power Authority (LIPA)
Companies: National Grid
Contracting structure: Contract with National Grid
For rebate volume please refer to attachment 4.14

Programs (Not limited to):
Upstate New York programs:

- High Efficiency Gas Heating Equipment program (residential)
- ENERGY STAR Products Program for Electric Heat Customers purchasing qualifying thermostats and windows (residential)
- ENERGY STAR Products Program for Gas Heat Customers purchasing qualifying thermostats and windows (residential)
- High Efficiency Commercial Gas Heating program (residential)
- Marketing or Conversion (to Gas Heat) program (residential and commercial)

Downstate New York programs:

- High Efficiency Gas Heating Equipment program (residential)
- ENERGY STAR Products Program for Gas Heat Customers
- Purchasing qualifying thermostats and windows (residential)
- High Efficiency Commercial Gas Heating program
- Gas weatherization rebates (residential)
- Custom Commercial Rebates (commercial)
- Prescriptive Commercial Rebates (commercial)
- Marketing or Conversion (to Gas Heat) program (residential and commercial).

National Grid offers a number of residential and commercial gas and electric energy efficiency programs in Upstate and Downstate New York for which the selected supplier will processes incentives.

3.1 Supplier Responsibilities:

Rebate Processing:

The steps involved in processing customer submitted rebate applications are:

- Received application by mail must be date stamped, sorted, logged into the system and opened as it is received, on a daily basis.
- If applications are completed correctly and all required information is supplied (e.g., receipts or invoices), the rebate applications will be entered into the supplier rebate processing system.
- The supplier will need to use National Grid CIS (Customer Information System), through a web portal interface, to do customer verification for each application, and capture certain required information such as account number, rate code, and service address. This will occur as a discrete preliminary step to be undertaking before reviewing applications to determine whether they have been completely filled out and the products purchased or work performed is eligible to be incented.
- The supplier will verify customer eligibility using. Supplier will have Read-Only access to the National Grid database in order to verify the account information
- The most critical guidelines that must be met for a rebate application to be processed and paid are:
    - The applicant must be verified as a customer of National Grid
    - The measure or product for which he or she wishes to receive a rebate must meet the eligibility requirements set forth by the program
    - The work must have been performed when the program was active
    - In addition, for at least some of the New York programs the Supplier will need to check to see that the applicant has not

already applied for and received a rebate for the same measure(s) from NYSERDA (http://www.nyserda.org/).

- Electronic and manual quality control routines and procedures will be used to review all pending rebates prior to their approval for payment. Upon completion of all quality control procedures, payment of rebates will be authorized, checks will be printed and mailed and invoices and supporting data will be submitted to the designated Program Manager.
- Approved rebates will need to be paid within the next 15 days of the approval process.

Processing BPI / contractor incentives & managing program participating contractor lists

From time to time National Grid has established requirements for contractors to participate in their energy efficiency programs in New York State, such as obtaining Building Performance Institute (BPI) certification, or documenting that they maintain certain levels of liability insurance and that their insurance policies are renewed annually. When contractors must have a certain accreditation or license or have specific types and levels of insurance to participate in a National Grid energy efficiency program, the Supplier will determine whether the contractors meet whatever the requirements are.

Processing non-compliant rebate applications:

From time to time the Supplier will receive from the customer non-compliant rebate applications. In those cases the Supplier needs to follow the process described below:

- If a customer submitting an application is not an eligible National Grid customer – whether because the customer is not served by National Grid, or is in a customer class not eligible for the incentives offered through the program – the application will be rejected and the Supplier will notify the customer through a written (typed) communication. Any letters which the Supplier sends to National Grid customers regarding non-compliant applications will need to be approved by National Grid.
- If a customer submits an application which is non-compliant because required information or supporting invoices/receipts have not been supplied, the following steps will be taken by the Supplier:
    - When the application is determined to be non-compliant, a letter/email will go out to the customer detailing all the information that must be submitted before the rebate can be approved. The standard explanation of why an application was rejected will be provided by National Grid and should be loaded into the Supplier system.
    - If the customer/contractor does not respond or still has not provided the required information ten (10) calendar days after

sending the letter/email, a CSR of the Supplier will call the customer/contractor. The CSR will discuss in detail with the customer/contractor what is needed for approval. A CSR will leave a message if his/her call is not answered. If the person being called has no voice message or an answering machine, three attempts will be made to contact the person.

- If within ten (10) days of the call contact to the customer/contractor, the customer/contractor still has not provided the appropriate information, a second letter/email will be sent to the customer/contractor explaining that his or her rebate application has been denied.

For some of the programs in this section of the scope, National Grid will require the Supplier to develop and implement a rebate reservation system for customers who want to participate in the program.

The rebate reservation system should function as a pre-authorization process where a customer can fill out a form to have funds held for the installation of their heating measure. (Rebate reservations system will see some differences between Residential and Commercial, and supplier will need to be able to capture those differences)

The system will need to be able to manage the following process (This process might change depending on regulatory requirements):

- Provide current level of funding available for rebates and automatically tally the amount.
- On line form which will be used by the customer to reserve the rebate. The form will include the following fields:
  - Customer name
  - Customer address
  - Customer email address
  - Customer account number
  - Measure(s) to be installed
  - Anticipated rebate amount
- Once the customer completes and submits the application, the system MUST be able to block the amount requested by the customer for a period of 60 days (For commercial customers the period of time might be 90 or 120 days).
- After 60 days the block on those funds needs to be removed and funds will be available to other customers
- Each request needs to generate an unique number and that number should tied back to the customer
- A letter or email will be sent to the customer after completing the reservation process within 5-7 days. If the customer provides an email address, an email should be sent immediately after the reservation (No need for the letter in this case.

- A reminder email should go out to customers as a remainder when they are in the middle of the reservation time.
- Customer should be able to log in back into the system to check the status of their rebates.

4 Scope 4: GasNetworks High Efficiency Equipment

Territories: MA, NH and RI
Companies: Berkshire Gas, Columbia Gas of Massachusetts, New England Gas Company, National Grid, NSTAR Gas Company, Unitil, Blackstone Gas
Programs: GasNetworks® programs
Contracting structure: Independent contracts with each individual PA
Invoicing: Invoice to each individual PA for its specific activity and shared cost. Each invoice will be issued with all related supporting documentation
For rebate volume please refer to attachment 4.14

GasNetworks is a collaborative consisting of local natural gas companies serving residential and commercial & industrial customers throughout New England. GasNetworks has been promoting energy efficiency and the use of high efficiency natural gas technologies since 1997. For more information about the GasNetworks and the programs please visit:
http://www.gasnetworks.com

The programs are designed to encourage residential, small commercial and large commercial & industrial customers to purchase high-efficiency natural gas heating equipment, domestic hot water, 7 day programmable thermostats and energy efficient natural gas kitchen equipment for commercial use.

The program provides customers with mail-in rebate applications towards the purchase of qualifying equipment through heating contractors and other appropriate sales/installation outlets. Rebate applications are distributed to customers primarily through heating contractors, the GasNetworks website and other appropriate channels of distribution including placement in retailer's promotional displays. In addition, various marketing opportunities, such as direct mail, bill inserts and others may be used to promote program participation. Mail-in rebate applications will allow customers to send in their complete rebate forms, together with a copy of the sales receipt and any other required documentation for processing. The selected Supplier is responsible to verify the equipment and terms of the rebate application and then process the rebate payment.

4.1 Supplier Responsibilities:

The selected Supplier will support all aspects of the Program as specified below by contracting separately with each individual PA and accordingly, will be required to invoice each PA with both PA specific and PA proportional or shared costs. The Supplier is required to track all program costs and

activities, by PA, submit management reports, and invoice each PA separately on a monthly basis. The Supplier is required to maintain a copy of all correspondence with the customer and make such correspondence available to the PA upon request.

GasNetworks together with investor owned electric providers in Massachusetts offer a joint rebate of for gas furnaces equipped with electronic commutated motors (ECM), or equivalent advanced furnace fan system. GasNetworks plans to continue this joint rebate program, the Supplier will be required to contract with the participating electric providers for payment of these rebates.

Rebate Processing:
The steps involved in processing customer submitted rebate applications are:

- Received application by mail must be date stamped, sorted, logged into the system and opened as it is received, on a daily basis.
- If applications are completed correctly and all required information is supplied (e.g., receipts or invoices), the rebate applications will be entered into the supplier rebate processing system.
- The Supplier is responsible in ensure that all the requirements of the rebate application are met.
- The two most critical guidelines that must be met for a rebate application to be processed and paid are a) the applicant must be verified as a customer of one of the PA, and b) the equipment or measure for which they wish to receive a rebate must be eligible to receive an incentive.
- Customer eligibility is to be verified through PA supplied customer files. The Supplier will verify the customer name, address, and account number(s). No rebate will be processed without a valid PA account number that matches the information provided by the customer.
- The Supplier will confirm that the equipment/measure on the application qualifies for the rebate listed on the application. The Supplier is responsible to maintain a list of qualifying equipment based on an industry acceptable source. In certain instances the PA may provide a list of qualified equipment.
- Once the Supplier has approved the rebate for processing checks will be printed and mailed within 4-6 of submitting a complete rebate application.

Non-compliant Rebate Applications:
The steps involved in processing non-compliant rebate applications are:

- The rebate application will be rejected and the Supplier will notify the customer through a written communication providing the customer with an explanation of why the rebate was rejected. Template non-compliant

letters need to be approved by the PAs. Customer files will be updated to reflect that a letter was sent and the date it was sent.

- If there is an opportunity to submit missing information so that the rebate can be processed, the vendor will give the customer an opportunity to re-submit the missing information and provide the customer 30 days in which to return the missing information. The Supplier shall provide the customer an explanation on what steps the customer needs to take to enable the application to be approved.
- Customers must be provided a toll free number they can call to discuss any problems they may have (such as determining the model number for an appliance they purchased, when the receipt fails to list the manufacturer model number).
- Electronic and manual quality control routines and procedures will be used to review all pending rebates prior to their approval for payment.
- Upon completion of all quality control procedures, payment of rebates will be authorized, checks will be printed and mailed and invoices and supporting data will be submitted to the designated PA.

Onsite inspections:

The selected Supplier will perform random onsite inspections of 10% of rebates in excess of $100 and 5% of rebates under $100 prior to processing the rebate. In addition to the randomly chosen rebates, the Supplier or PA may ask for inspections on questionable rebates.

- No rebate selected for onsite inspection shall be issued prior to performing the onsite inspection and verification of equipment.
- The Supplier will hire an independent QC contractor to provide onsite inspections.
- The Supplier will maintain a list of all rebates sent for onsite inspection and the date they were sent to the QC contractor.
- The Supplier will provide the QC contractor all the documentation provided on the rebate application and any other information relevant to the inspection i.e. conflicting dates from invoice backup material.
- The Supplier will review the list with the QC contractor at least monthly to ensure inspections are being performed timely.
- The Supplier will provide a copy of the QC report to the PAs monthly.
- The Supplier will report QC results semi annually on a statewide basis at higher level of inspection results. The report should summarize any trends or issues discovered by the QC contractor i.e. customers that do not allow the QC contractor to inspect, any issue with a particular installation contractor

The QC onsite inspections involve the following:

- The QC contractor will perform an onsite inspection of all the equipment listed on the rebate form.

- Verify customer name, address, unit(s) model #, manufacturer, and when possible capture the serial number of the unit(s)
- The QC contractor will provide a report that lists the following:
    - Date they received the rebate information to be inspected from the Supplier
    - Customer contact dates
    - Inspection date, name of inspector
    - All verified information with notes for any conflicting information
    - After 5 attempts to contact the customer, the independent contractor will provide a report to the Supplier showing the contact date information

The Supplier must establish and maintain toll-free telephone lines for customers and contractors inquiries. The line will be answered by the Supplier's team Monday through Friday during normal business hours (Eastern Standard Time) or as agreed between the Supplier and the PAs. During off hours, an automated customer service attendant (approved by the PAs) must be used. The call center will address all customers' inquiries and help customers to resolve issues with their rebate applications.

In addition to the activities described above, the supplier might be required to provide the following services:

- Attending the GasNetworks monthly meeting if requested by the PAs to discuss progress of programs
- Provide miscellaneous services related to GasNetworks activities such as:
    - Receiving registration and payments of participants for GasNetworks training events
    - Manning event tables registering participants

5 Scope 5: Cool Smart Residential HVAC Equipment Program

Territories: MA and RI
Companies: Cape Light Compact, National Grid, NSTAR Electric, Unitil, Western Massachusetts Electric Company
Programs: Cool Smart
Contracting structure: Independent contracts with each individual PA
Invoicing: Invoice to each individual PA for its specific activity and shared cost. Each invoice will be issued with all related supporting documentation
For rebate volume please refer to attachment 4.14

The Supplier will be expected to work with the PAs and their field implementation Suppliers to ensure the success of the Cool Smart program.

The Cool Smart Program is jointly sponsored by PAs in Massachusetts and Rhode Island. The Program is designed to encourage residential customers to purchase ENERGY STAR qualified high-efficiency HVAC Equipment and

to incentivize contractors who service and install residential central air conditioning equipment, and air source heat pumps to promote energy efficiency and best practices. For more information about the Cool Smart program please visit http://www.masssave.com/

The program will provide customers with mail-in rebate applications towards the purchase of ENERGY STAR qualified equipment. Rebate applications will be distributed to customers by HVAC contractors available on the Cool Smart website www.masssave.com, and other appropriate channels of distribution including placement in retailer's promotional displays. In addition, various marketing opportunities, such as direct mail, bill inserts and others may be used to promote program participation. Mail-in rebate applications will allow customers to send in their complete rebate forms, together with a copy of the sales receipt and any other required documentation for processing. The Supplier will then verify eligibility, process the applications and pay rebates.

Equipment rebate applications may also be submitted by contractor who have performed desired services and installed specific HVAC units which meet efficiency standards set by the program

5.1 Supplier Responsibilities:

The selected Supplier will support all aspects of the Program as specified below by contracting separately with each individual PA and accordingly, will be required to invoice each PA with both PA specific and PA proportional or shared costs. The Supplier is required to track all program costs and activities, by PA, submit management reports, and invoice each PA separately on a monthly basis. The Supplier is required to maintain a copy of all correspondence with the customer and make such correspondence available to the PA upon request.

Rebate Processing:
The steps involved in processing customer submitted rebate applications are:

- Received application by mail must be date stamped, sorted, logged into the system and opened as it is received, on a daily basis.
- If applications are completed correctly and all required information is supplied (e.g., receipts or invoices), the rebate applications will be entered into the supplier rebate processing system.
- The Supplier is responsible to ensure that all the requirements of the rebate application are met.
- The two most critical guidelines that must be met for a rebate application to be processed and paid are a) the applicant must be verified as a customer of one of the PA, and b) the equipment or measure for which they wish to receive a rebate must be eligible to receive an incentive.

- Customer eligibility is to be verified through PA supplied customer files. (The PA's will provide periodically updated customer files, listing customer names, addresses, and account numbers). Having the customer files of the PAs will allow the Supplier to link each incentive payment to a valid electric account. It will also reduce the frequency with which the Supplier has to delay processing rebates because a customer has neglected to provide a copy of his or her electric bill with his or her rebate request. No rebate application will be processed without a valid PA account number that matches the account information provided by the customer.
- Once customer eligibility has been determined, the Supplier will confirm the equipment information listed on the application qualifies for the rebate listed on the application. The Supplier will use the Air Conditioning, Heating, and Refrigeration Institute (AHRI) website www.ahridirectory.org, or the Consortium for Energy Efficiency (CEE) website www.ceehvacdirectory.org to verify the equipment qualifies for a rebate.
- Once customers and equipment information are confirmed as 'eligible,' payment of rebates will be authorized, and checks will be printed and mailed within 4-6 weeks of submitting a complete rebate application form (As long as they provide all the required documents)

From time to time the Supplier will receive from the customer non-compliant rebate applications. In those cases the Supplier needs to follow the process described below:

- If a customer submitting an application is not an eligible customer – whether because the customer is not served by the PA, or is in a customer class not eligible for the incentives offered through the program – the application will be rejected and the Supplier will notify the customer through a written communication providing the customer with an explanation of why the rebate application was rejected. Any letters which the Supplier sends to customers regarding non-compliant applications will need to be approved by the PAs. Customer files will be updated to reflect that a letter was sent and mail date. Monthly aging reports will be required.
- If a customer submits an application which is non-compliant because required information or supporting invoices/receipts have not been supplied, the following steps will be taken by the Supplier:
- When the application is determined to be non-compliant, a letter will go out to the customer detailing all the information that must be submitted before the rebate can be approved. The standard explanation of why an application was rejected will be provided by the supplier and approved by the PAs. This information should be loaded into the Supplier system. In that letter the Supplier must also explain what steps the customer needs to take to enable the application to be

approved and the rebate paid. Customers must be provided a toll free number they can call to discuss any problems they may have (such as determining the model number for the equipment they purchased, when the receipt fails to list the manufacturer model number). Customer files will be updated to reflect that a letter was sent and mail date. Monthly aging reports will be required.

- Electronic and manual quality control routines and procedures will be used to review all pending rebates prior to their approval for payment. Upon completion of all quality control procedures, payment of rebates will be authorized, checks will be printed and mailed and invoices and supporting data will be submitted to the designated PA.

The Supplier must establish and maintain toll-free telephone lines for customers and contractors inquiries. The line will be answered by the Supplier's team Monday through Friday during normal business hours (Eastern Standard Time) or as agreed between the Supplier and the PAs. During off hours, an automated customer service attendant (approved by the PAs) must be used. The call center will address all customers' inquiries and help customers to resolve issues with their rebate applications.

In addition to the activities described above, the supplier might be required to provide additional activities such as the following services:

- Attending Cool Smart Program meetings if requested by the PAs to discuss progress of programs, etc.
- Conduct on-site equipment installation verification (up to 5% of installations). The inspection consists of verifying that the equipment has been installed, and the model number(s), etc. match the information on the rebate application forms.

6 Reporting (Applicable to all scopes)

For all of the scopes presented above Bidders MUST to be able to produce a monthly pipe-delimited text file (And in Excel format as well) with a pre-agreed list of data fields, detailing what was done/reimbursed, and where and when - as part of the invoicing process. The specifics of what data fields are in the file, and which fields are validated against business rules, vary from program to program and state to state - and are constantly subject to change as the business/evaluation needs change.

Bidders will provide the PAs with monthly progress reports including the following (Not limited to):

- Number of rebates received
- Number of rebates processed
- Number of units (Products) rebated
- Number of rebates that are waiting to be processed (Because of missing information)

- Dollar amount of rebates issued by program and type of measure and by PA when applicable
- Administrative costs broken out by accounting, processing, marketing, education, and tracking
- Description of planning, partner recruitment, marketing, handling of consumer inquiries, rebate processing, fraud prevention, and verification activities
- Problems that should be brought to the attention of the PAs.
- Rebate checks that have never been cashed. (Please provide a process on how your company recommends to manage these cases)
- Monthly progress reports

Additional reports might be required by the PAs and will vary for each program.

Statement of Work
GasNetworks® Residential Rebate Program
And the Commercial Food Service Equipment Rebate Program
Field Implementation Contractor Services

August 3, 2011

PROPOSAL DUE DATE: August 31, 2011

1.0 Introduction

The Sponsors of the GasNetworks Program (see Attachment A) request proposals to provide field support for the operation of regional market transformation programs to increase the availability and adoption of the GasNetworks Rebates in the Northeast. The proposed contract period for services is January 2012 through the end of 2013, with an option to renew for a third year. The selected contractor will establish an individual contract with each Sponsor.[1]

2.0 Background

The Sponsors of GasNetworks have joined together to develop and implement a range of market transformation energy efficiency initiatives to promote energy efficient technologies in Massachusetts, New Hampshire, and Rhode Island (see Attachment B). These initiatives are geared to achieving permanent, measurable improvements in the energy efficiency of a variety of technologies and products offered for sale directly to consumers with the objective of increasing the market share and consumer demand for these products. The Sponsors have been successful over the last decade with their High Efficiency Gas Rebate Programs, and the field implementation contractor is expected to further enhance that success.

The GasNetworks Program promotes and provides rebates for various products. For the purpose of this RFP the products are ENERGY STAR labeled or 7 day programmable thermostats; High-Efficiency Indirect Water Heaters; High Efficiency Condensing Gas Water Heaters; High-Efficiency On-Demand Tankless Water Heaters; Energy Star qualified Storage Water Heaters; and the Commercial Food Service Equipment (including Fryers, Ovens, Spray Valves, Griddles and Steamers).

Field Support for the GasNetworks Program will be conducted in the service territories of the following Sponsors: National Grid (MA and RI), New England Gas Company, NSTAR, Unitil (MA and NH), Berkshire Gas, Blackstone Gas, and Columbia Gas of Massachusetts. The following list includes the retail chains that are to be visited as well as the required frequency of the visits. The vendor will visit these retailers in conjunction

[1] Sponsors of this Initiative include; Berkshire Gas Company, Blackstone Gas, Columbia Gas of Massachusetts, National Grid, New England Gas Company, NSTAR, and Unitil.

with visits to these same retailers under the Northeast Regional ENERGY STAR Consumer Products Initiative. Please note that many, but not all store locations for all chains listed are currently being visited as part of the Consumer Products Initiative.

Store Chain	Monthly Average	Frequency
The Home Depot	71	January through December
Lowe's Home Improvement	41	
Aubuchon Hardware	18	During the heating season, i.e., January through April & September through December
Rocky's Ace Hardware	26	
True Value Hardware	13	
BJ's Wholesale Clubs	10	
WalMart	9	
Benny's	5	
Others*[1]	36	

3.0 Scope of Work

The following section contains the core tasks for contractor services for the Program. Bidders are encouraged to propose additional tasks and/or services as a means of enhancing their proposals. Any alternate proposals should clearly indicate the respondent's justification for varying from the anticipated Program tasks, and describe the likely performance and cost implications of each change. RFP respondents should, at a minimum, indicate in detail how they would perform each of the tasks discussed in the subsections below, in consultation with, and subject to approval by, the Sponsors.

Task 1 – Retailer Outreach & Support

- Develop a retailer support implementation plan. Plans should include field visits to local independent stores and regional and national chains and include strategies and/or methods by which existing retailer/Sponsor relationships would be enhanced and maintained. Geographic proximity to other retailers should be considered when conducting field visits in order to maximize travel efficiency. Plans should define the level and frequency of retailer field visits to be provided and discuss whether these services will vary based on retailer size, product sales, or other factors. Respondents should also discuss how other communication and material distribution approaches (e-mail, fax, mail, etc.) will be used to cost-effectively supplement or reduce the frequency of these field visits.
- Develop and implement a sales training program to be used in conjunction with manufacturers' and retail chains. Provide input and creative ideas for training retail sales staff on new products.
- Conduct retailer field visits for products. During these visits, the contractor will respond to questions on program implementation, provide training to new sales

[1] The vendor will also perform the activities listed above with other retailers who sell the targeted products if they are already being visited on behalf of the Consumer Products Program; these may include independent hardware stores, electrical supply houses, commercial kitchen supply houses, etc.

staff, place new Point of Purchase "POP" materials and rebate forms, replace missing or damaged materials, assess how program POP and other marketing materials are displayed, verify delivery of products being sold through joint promotions with industry, and replenish program rebate coupons. Sponsors will require summary reports of visits to be received electronically within a specified time period.

- Support Sponsors at special events that may require partnering with retailers such as in-store events, grand openings, home shows, etc. Provide ideas for interactive displays and other educational tactics at such events.
- Develop and distribute a retailer support package, including materials that explain the regional Initiative, individual Sponsor programs, and dealer participation agreements, forms, and administrative procedures.
- Review rebate forms and POP materials, and provide comments to Sponsors and Marketing Contractor.
- The Contractor may be asked to work in support of other Sponsor programs for field services.

Task 2 - Inventory and Data Collection

- Inventories: Track and report once a year on retail prices and display of products, promoted by the programs by completing floor, shelf display, and pricing inventories.
- Develop and maintain a database on retailers including contact information; types of products they stock; types, model numbers and number of products they display; and product retail prices.

Task 3 - Reporting to Sponsors and Quality Assurance

- Prepare and distribute a monthly electronic report to Sponsors summarizing progress to date on:
    - Numbers of inquiries by retailers via telephone and internet
    - Number of field visits completed, by Sponsor territory, with summary notes of visits
    - Retailer, distributor, and manufacturer issues raised
    - Special promotional events
    - Market trends
    - On-going marketing, communications, and public relations issues
    - Other issues or observations; i.e., customer and manufacturer feedback

- Prepare an annual report with a draft due on January 30 of each year and a final report due on February 15.
- Based on Sponsor requests, attend GasNetworks meetings (by phone or in person), and allocate additional time for teleconferences to report on program progress and related issues.
- Attend selected conferences such as the GasNetworks Annual Conference as well as additional conferences as directed by Sponsors.

- Maintain regular communications with Sponsors to insure that program needs are being met and to identify potential promotional, marketing, and public relations opportunities.
- Develop and implement a quality assurance plan for staff working in support of the program. Incorporate spot-checking for compliance with program requirements and promotional guidelines.
- Immediately report quality control or customer service issues in real time to Sponsors' which might negatively impact programs.

Task 4 – Emerging Technologies and Services

- Monitor emerging technologies and efficiency programs across the country that may be useful for future promotions and report findings to Sponsors.

4.0 Other Contractor Responsibilities

In addition to completing the Tasks above, the selected contractor will need to address the following:

- Seek prior Sponsor approval before undertaking any significant planning or development tasks.
- Provide monthly billing to Sponsors within 15 days of the close of the month. Assist Sponsor program evaluation teams by providing specified program data periodically and on an ad-hoc basis.

Attachment A
GasNetworks Residential Rebate Program
And the Commercial Food Service Equipment Rebate Program
Field Implementation Contractor Services

Sponsor	Number of Commercial Customers	Number of Residential Customers
Berkshire Gas	4,962	33,387
Blackstone Gas	134	1,335
Columbia Gas of MA	24,700	264,334
National Grid (MA,RI)	95,000	990,000
New England Gas	4,112	47,675
NSTAR	23,289	241,273
Unitil/Fitchburg Gas and Electric (NH,MA)	8,003	35,775
Total Residential & Commercial Customers of Initiative Sponsors Participating in the Field Implementation RFP	**160,200**	**1,396,779**

Attachment B
2011 GasNetworks
Program Offerings

Residential Program

ENERGY STAR Labeled or 7-Day Programmable Thermostat
High-Efficiency Indirect Water Heaters
Condensing Gas Water Heaters
High-Efficiency On-Demand, Tankless Water Heaters
ENERGY STAR qualified Storage Water Heaters

Commercial Kitchen Program

Convection Oven
Fryer
Steamer
Combination Oven
Conveyer Oven
Rack Oven
Griddles
Spray Valves

Statement of Work
Mass Save and Rhode Island ENERGY STAR®
Lighting and Consumer Products Initiative
Field Implementation Contractor Services

August 3, 2011

PROPOSAL DUE DATE: August 31, 2011

1.0 Introduction

The Sponsors of the Massachusetts and Rhode Island ENERGY STAR® Lighting and Consumer Products Initiatives (see Attachment A) request proposals to provide field support for the operation of regional market transformation programs to increase the availability and adoption of ENERGY STAR qualified lighting and consumer products in the Northeast. The proposed contract period for services is January 2012 through the end of 2013, with an option to renew for a third year. The selected contractor will establish an individual contract with each Sponsor.

2.0 Background

The Sponsors of this Initiative, including Cape Light Compact, National Grid (MA, RI), NSTAR Electric, Unitil (MA) and Western Massachusetts Electric Company have joined together to develop and implement a range of market transformation energy efficiency activities to promote ENERGY STAR qualified lighting and consumer products in Massachusetts and Rhode Island (see Attachment B). These market transformation activities are oriented toward achieving permanent, measurable improvements in the energy efficiency of a variety of products offered for sale directly to consumers with the objective of increasing the market share and consumer demand for these products. The Sponsors have been successful over the last decade with their Lighting and Appliance Programs, and the field implementation contractor is expected to further that success.

The ENERGY STAR Lighting Program promotes ENERGY STAR qualified lighting, including CFL's, fixtures, ceiling fans with light kits and Solid State Lighting products (LED). The ENERGY STAR Products Program targets refrigerators, freezers, room air cleaners room air conditioners, televisions, computers, and monitors. Additionally, the program promotes energy efficient pool pumps and advanced power strips. General educational information is provided to customers on dishwashers, dehumidifiers and clothes washers. The Sponsors also currently offer a refrigerator and freezer recycling program through another vendor.

Field Support for the ENERGY STAR Lighting and Consumer Products Programs will be conducted in the service territories of the following Sponsors: Cape Light Compact, National Grid (MA and RI), NSTAR, Unitil (MA) and Western Massachusetts Electric

Company. Below are two tables indicating the numbers of lighting, appliance and electronics retailers currently participating in the program. Note that some retailers sell lighting, appliances and electronics. The Sponsors may potentially include Appliance activities that involve early retirement promotions, and may require contractor coordination with third party recyclers (beyond the current refrigerator recycling program).

Three sets of numbers are provided for each retailer category in Table 1:

- Number of unique lighting retailer locations participating in the program.
- Number of unique appliance and electronics retailer locations participating in the program.
- Number of retailers participating in lighting, appliance and electronics programs.

TABLE 1: Number of Participating Lighting, Appliance and Electronics Retailers by State*

State	Total # of Participating Lighting Retailers	Total # of Participating Appliance/Electronics Retailers	# of Retailers Participating in Both Lighting & Appliance Program Activities
Massachusetts	1,967	187	299
Rhode Island	110	31	23
TOTAL	2,077	218	322

*The numbers above do not include Pool Pump dealers which will also be part of the field implementation staff's route.

3.0 Scope of Work

The following section contains the core tasks for contractor services for the Program. Bidders are encouraged to propose additional tasks and/or services as a means of enhancing their proposals. Any alternate proposals should clearly indicate the respondent's reasons for varying from the anticipated Program, and describe the likely performance and cost implications of such a change. RFP respondents should, at a minimum, indicate in detail how they would perform each of the tasks discussed in the subsections below, in consultation with, and subject to approval by, the Sponsors.

Table 2: Scope of Work Tasks by Sponsor*

	NGRID RI	WMECO	NGRID MA	NSTAR	Cape Light Compact	Unitil
TASK 1: Retailer Outreach & Support						
Retailer Support Plan	X	X	X	X	X	
Training Program	X	X	X	X	X	

ENERGY STAR Field Outreach	X	X	X	X	X	X
Special Events	X		X	X		
Retailer Support Package	X	X	X	X	X	
Hotline	X	X	X	X	X	X
TASK 2: Cooperative Promotions						
Negotiated Cooperative Promotions for lighting and select products	X	X	X	X	X	X
TASK 3: Inventory & Data Collection						
Inventories	X	X	X	X	X	
Database	X	X	X	X	X	
TASK 4: Reporting & Quality Assurance						
Monthly Report	X	X	X	X	X	X
Staff Quality Assurance Plan	X	X	X	X	X	X
TASK 5: Emerging Technologies & Services						
Monitor technologies and other EE programs nationwide	X	X	X	X	X	X
Propose new implementation models	X	X	X	X	X	X

*Actual participation may vary depending on budget and program changes beyond the Sponsors' control in 2011 and beyond.

Task 1 – Retailer Outreach & Support

- Develop a retailer support implementation plan. Plans should include field visits to local independent stores and regional and national chains and include strategies and/or methods by which existing retailer/Sponsor relationships would be enhanced and maintained. Geographic proximity to other retailers should be considered when conducting field visits in order to maximize travel efficiency. Plans should define the level and frequency of retailer field visits to be provided and discuss whether these services will vary based on retailer size, product sales, or other factors. Respondents should also discuss how other communication and

material distribution approaches (e-mail, fax, mail, etc.) will be used to cost-effectively supplement or reduce the frequency of these field visits.

- Develop and implement an ENERGY STAR sales training program to be used in conjunction with manufacturers' and retail chains' current lighting, appliance and electronics training programs. Please provide input and any creative ideas for training retail sales staff on new products (for example, solid state lighting and halogen) and the EISA legislation.
- Conduct retailer field visits for ENERGY STAR products. During these visits, the contractor will respond to any questions on program implementation, provide training to new sales staff, place new POP materials and rebate forms, replace missing or damaged materials, assess how program POP and other marketing materials are displayed, verify delivery of products being sold through joint promotions with industry, and replenish program rebate coupons (National Grid RI). Verify all products being sold are in compliance with ENERGY STAR. Sponsors may require summary reports of visits to be received electronically within a specified time period.
- Support Sponsors at special events that may require partnering with retailers such as in-store events, grand openings, home shows, etc. Provide ideas for interactive displays and other educational tactics at such events.
- Develop and distribute a retailer support package, including materials that explain the regional Initiative, individual Sponsor programs, national ENERGY STAR campaigns, and dealer participation agreements, forms, and administrative procedures.
- Review rebate forms and POP materials, and provide comments to Sponsors and Marketing Contractor.
- Establish and maintain a toll-free telephone hotline (1-877- ESTAR – 4U) for customer and retailer inquiries.
    - Automated attendant should be available at all times to handle frequently asked questions from customers.
    - Live personnel will also be available for questions or information requests Monday through Friday (except holidays) 8:00 AM to 5:00 PM ET. Off-hour callers will have the capability to leave voice messages to which the contractor will respond by the next business day.
    - Capability for receiving calls from various Sponsor territories.
- The Contractor may be asked to work in support of other Sponsor programs for field services.

Task 2 – Retailer and Manufacturer Cooperative Promotions

- Sponsors anticipate releasing one or more Request for Proposals (RFPs) over the contract period. Historically, the lighting RFP process has been driven by lighting manufacturers, and the appliance RFP process driven by retailers, although there have been a few lighting submittals by retailers and a few manufacturer submittals for appliances. In this task the Contractor will initiate and manage competitive

solicitations with industry (manufacturers and retailers) to implement joint promotions with Sponsors.
    - Work with Sponsors to refine the current joint promotions RFP.
    - Distribute RFPs to appropriate industry contacts.
    - Receive the submittals and review industry proposals, make recommendations to Sponsors and develop a system to track submitted proposals and implemented promotions.
    - Negotiate final details with industry for selected promotions. Develop memorandums of understanding (MOUs) specifying the details of each promotion. Participating Sponsors and industry participants will all sign these MOUs.
    - Coordinate with the fulfillment contractor on implementation of the promotions to ensure the terms of the MOU are followed.
    - Ensure MOUs are being implemented and adhered to in the field (make sure proper pricing and product placement are occurring at store level, proper POP is displayed and MOU contracts are valid).
    - Provide Sponsors with regular updates on promotional status. Funds for underperforming promotions may be reallocated to more successful promotions.
- As directed by Sponsors, work with manufacturers, distributors and local retailers to develop additional joint promotions, monitor availability of products into the region for adequacy of supply and monitor and report to Sponsors on possible new product introductions into the region in a real-time manner. For national chains, work with the appropriate corporate, regional and local personnel to develop mutually acceptable promotional programs.
    - For local and regional distributors, work to assure the promotion addresses Sponsor needs as to product mix and area coverage
    - For manufacturers, work with the appropriate corporate personnel to develop mutually acceptable promotional programs.
    - Represent, support and advocate regional concerns and issues when dealing with national ENERGY STAR promotional programs
- As directed by Sponsors, work with local retailers on possible cooperative advertising by performing administrative functions, such as:
    - Accepting retailer requests for Co-op Ad funding
    - Previewing the ads and seeking Sponsor pre-approval
    - Notifying retailer of needed changes; obtaining Sponsor pre-approval
    - Accepting retailer-completed Co-op Ad Reimbursement Forms with required back-up documentation
    - Presenting final approval request to Sponsor for payment
    - Transmitting “Co-Op Advertising Check Request” to fulfillment contractor for payment to retailer.

Task 3 - Inventory and Data Collection

- Inventories: Track and report once a year on retail prices and display of lighting products, appliances and electronics promoted by the programs by completing

floor, shelf display, and pricing inventories (these are typically conducted separately).
- Develop and maintain a database on retailers including contact information; types of products they stock; types, model numbers and number of products they display; and product retail prices. Some Sponsors may require a target increase in the shelf space available for ENERGY STAR qualified lighting, appliances and electronics.

Task 4 - Reporting to Sponsors and Quality Assurance

- Prepare and distribute a monthly electronic report to Sponsors summarizing progress to date on:
    - Numbers of inquiries by retailers via telephone and internet
    - Number of field visits completed, by Sponsor territory, with summary notes of visits
    - Retailer, distributor, and manufacturer issues raised
    - Special promotional events
    - Market trends
    - On-going marketing, communications, and public relations issues
    - Other issues or observations; i.e., customer and manufacturer feedback

- Prepare an annual report with a draft due on January 30 of each year and a final report due on February 15.
- Based on Sponsor requests, regularly attend Mass Save ENERGY STAR meetings (by phone or in person), and allocate additional time for teleconferences to report on program progress and related issues.
- Attend selected conferences such as the ENERGY STAR Partner Meetings as well as additional conferences as directed by Sponsors.
- Maintain regular communications with Sponsors to insure that program needs are being met and to identify potential promotional, marketing, and public relations opportunities.
- Develop and implement a quality assurance plan for staff working in support of the program. Incorporate occasional spot-checking for compliance with program and various promotional guidelines. Some Sponsors may require a specified percent of retailers in compliance based on independent spot-checking
- Monitor and report in a real time manner to Sponsors' quality control or customer service issues which may negatively impact programs.

Task 5 – Emerging Technologies and Services

- Monitor emerging technologies and efficiency programs across the country that may be useful for future promotions.
- Propose new lighting and/or product program implementation models (ie: Market Lift Initiatives) where appropriate.

4.0 Other Contractor Responsibilities

In addition to completing the Tasks above, the selected contractor will need to address the following:

- Seek prior Sponsor approval before undertaking any significant planning or development tasks.
- Provide monthly billing to each Sponsor within 15 days of the close of the month. Each Sponsor will be billed individually and each bill will detail joint and any Sponsor-specific charges. End of year billing will vary based on individual Sponsor needs.
- Assist Sponsor program evaluation teams by providing already available program information or by collecting timely data from the field, on an ad-hoc basis.
- Assure program attribution is occurring on all field staff materials and at retail level.

Attachment A
Sponsors of the Mass Save and Rhode Island ENERGY STAR® Lighting and Products Initiative Participating in this Field Implementation RFP

State/Sponsor	Number of Households Served
Massachusetts	
Cape Light Compact	175,394
National Grid	1,119,563
Northeast Utilities (Western Massachusetts Electric)	185,856
NSTAR Electric	810,491
Unitil/Fitchburg Gas and Electric	24,520
Rhode Island	
National Grid	404,000
Total Residential Households of Initiative Sponsors Participating in the Field Implementation RFP	**2,719,824**

Attachment B
2011 Mass Save and Rhode Island
ENERGY STAR Program Offerings

Lighting					
Standard CFLs	Hard to Reach CFLs	Specialty CFLs	Interior Fixtures	Exterior Fixtures	LED Bulbs and Fixtures
Appliances					
Refrigerators	Freezers	Air Cleaners	Pool Pumps	Air Conditioners	Dehumidifiers (Cape only)
Electronics					
	Desktop Computers	Monitors	Advanced Power Strips	Televisions	

ONE NSTAR WAY, SE 250
WESTWOOD, MA 02090

CONSULTING SERVICES AGREEMENT

by and between

NSTAR ELECTRIC & GAS CORPORATION
(COMPANY)

and

_____
(SUPPLIER)

IN WITNESS WHEREOF, the Parties hereby agree the terms and conditions described in the attached Consulting Services Agreement are executed on the day and year last written below.

The Parties agree that the counterpart, facsimile or electronically reproduced signatures of the Parties are intended to authenticate this writing, and to have the same force and effect as manual signatures.

_____	NSTAR ELECTRIC & GAS CORPORATION
(SUPPLIER)	(COMPANY)
NAME _____	NAME _____
PRINTED NAME_____	PRINTED NAME _____
TITLE _____	TITLE_____
DATE _____	DATE _____

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Attachment #2	Contractor Background Check Exception Request Form

PREFACE

The CONSULTING SERVICES AGREEMENT, hereafter referred to as the Agreement, is the standard Terms and Conditions under which NSTAR Electric & Gas Corporation (Company) will contract for engineering, consulting or other technical or administrative services. It does not preclude a service provider (Supplier) from submitting more favorable or competitive terms in the future, which may be accepted by the Company.

1.0 SCOPE OF SERVICES

Supplier agrees to perform for the Company and those entities that directly or indirectly control or are controlled by, or are under common control or ownership with, the Company on or after the effective date of this Agreement ("Affiliates"), from time to time services as specified in a Contract or Contract Release (Contract) issued by the Company (referred to as the "Services" herein). "Contract" means the document issued by the Company awarding the work to the Contractor, describing generally the work to be performed by the Contractor, the time for commencement and completion of the work, and the amounts and manner of payment to the Contractor for the work. "Contract Release" means the document issued by the Company implementing a scope of work made under a blanket master Contract. Such Contract shall specifically refer to this Agreement and shall also indicate whether reimbursement is to be made on a Fixed Price (Section 2.1) or Recoverable Cost (Section 2.2) basis. Supplier shall indicate its acceptance by having each Contract signed by an authorized representative of the Supplier and returning it to the Company. No work is to be performed without a fully-executed Agreement and applicable Contract.

This Agreement is not exclusive, and nothing herein shall be deemed to prevent the Company from engaging other parties to perform such Services, or from performing such Services using its own employees.

2.0 COMPENSATION AND PAYMENT

The Contract shall specify whether Services are to be provided on a Fixed Price or Recoverable Cost basis.

2.1 Contracts on Fixed Price Basis

2.1.1 For performance of the Services described in each Contract, Company shall pay Supplier the Fixed Price set forth in such Contract in accordance with the payment schedule set forth in the Contract.

2.1.2 At any time, in accordance with procedure agreed upon by the parties, Company may request changes in writing, for additions or deletions to the Services in each Contract. In the event of any such change, Supplier shall promptly prepare and submit to Company a statement of the increase or decrease in cost, if any, to the Services and shall also inform Company as to whether such change may result in an alteration of the schedule to complete the Services. An amendment to such Contract describing the change, the effect, if any, on the schedule and cost of the Services shall be promptly agreed to and signed by Company and Supplier, and no change shall be binding in the absence of a fully-executed amendment.

2.2 Contracts on a Recoverable Cost Basis

Each Contract shall include an estimate of the charges to be paid to Supplier on a Recoverable Cost basis, and Supplier shall not incur costs exceeding such estimate without an executed amendment to the applicable Contract

2.2.1 Recoverable Costs

The Company shall reimburse Supplier for costs and expenses incurred by Supplier in the performance of the Services in accordance with rates established by Supplier and provided in Appendix A (attached) and the expense guidelines set forth herein. Recoverable costs and expenses include the following:

2.2.1.1 Payroll and Related Personnel Costs

The hourly rates in Appendix A shall be fully loaded rates, including, but not limited to salaries (including vacation and holiday allowances), social and retirement benefits, all payroll taxes and all premiums for liability and property damage insurance, Workers' Compensation and Employer's Insurance and all insurance premiums measured by payroll costs, other benefits and contributions or taxes imposed by any applicable law or regulations, all overhead costs.

2.2.1.2 Other Costs and Rates

All expenses must be reasonable and directly associated with the delivery of the services. The supplier shall provide with each proposal an estimate of the expenses anticipated to be necessary to accomplish the scope of work authorized by the Company. In no circumstance shall such expenses exceed 15% of the costs incurred pursuant to 2.2.1.1 above. Additionally, Supplier must comply with the recoverable expense guidelines attached as Appendix B.

NOTE: For local personnel, travel costs shall be limited to the difference in mileage from the Company required work location and the normal work location with no other allowances made.

2.2.1.2.1 The cost of all materials and supplies other than engineering supplies used or consumed in the performance of the Services. Engineering supplies used or consumed in the performance of the Services shall be included in Section 2.2.1.1.

2.2.1.2.2 All costs associated with models (including the cost of floor space occupied by models), reproduction of plans, specifications, reports and other data, at rates listed in Appendix A.

2.2.1.2.3 Use of Data Processing computers, including related operator time, and use of standard programs at rates listed in Appendix A.

2.2.2 Rate Stability

Rates are to be fixed for a period of one year or for the duration of the Contract or Contract Release, whichever is longer.

2.3 Invoicing

On or before the tenth (10^{th}) day of each month, the Supplier shall submit an invoice for the Services performed or payment milestones achieved during the preceding calendar month, supported by copies of payroll abstracts, vouchers and other supporting documentation required by the Company. For reimbursable expenses, copies of all invoices, receipts, etc. for amounts greater than $25 should be included, in accordance with Internal Revenue Service Guidelines. Final invoicing shall be rendered within 30 days of submitting the notice of completion, referred to in Section 10.0. The Company shall pay all undisputed invoices within thirty (30) days of receipt of such invoice, provided any applicable payment milestone has been achieved. All claims for monies due or to become due from the Company shall be subject to the right of the Company to deduct and set off any amounts due from Supplier, or on account of claims against the Supplier. A sample invoice is included as Appendix C showing minimum data required to process an invoice.

The Company may withhold payment of all or any portion of amounts due to the extent necessary to protect the Company from loss, including, without limitation, loss from any of the following circumstances: (a) defective Work not remedied; (b) claims filed against the Company or the Contractor, or reasonable evidence indicating probable filing of such claims, by any subcontractor or supplier of Contractor, or any third party, associated with the Work; (c) other failure of Contractor to make proper and timely payments to subcontractors or suppliers; or (d) damage to another contractor or third party caused by Contractor, its subcontractors or suppliers.

2.4 Examination of Accounts

The Supplier shall maintain, during the course of Services, and retain, for not less than six (6) years after completion thereof, complete and accurate records of all of the Supplier's costs which are chargeable to the Company. The Company shall have the right at its expense, and upon notice to Supplier, at any time during ordinary business hours, to inspect and audit such records. The records to be maintained and retained by the Supplier shall include (without limitation): (a) payroll records accounting for the total-time distribution of the Supplier's employees working full or part time on the Services (to permit tracing to payrolls and related tax returns) as well as canceled payroll checks or signed receipts for payroll payments in cash; (b) invoices and receipts for purchases, receiving and issuing documents, and all the other unit-inventory records for the Supplier's stores stock or capital items; and (c) paid invoices and canceled checks for materials purchased and for the subcontractors' and any other third parties' charges; (d) other documents and information relating to the achievement of performance or payment milestones, or deliverables.

The Supplier shall comply with any other audit and record-keeping requirements specified in the Contract.

3.0 CALCULATIONS, DRAWINGS, PLANS AND SPECIFICATIONS

All calculations, drawings, plans, specifications, reports and other deliverables shall be delivered to Company in accordance with the schedule in the applicable attachments hereto and the Contract. Further, all specifications, plans, drawings and data supplied by the Company shall remain the property of the Company, shall be treated as confidential and proprietary material and shall be

returned to the Company upon request. All specifications, plans, drawings and data supplied by the Supplier under this Contract shall become the property of the Company, free from any restriction or limitation on modification, reproduction, distribution and use, including, without limitation, use in subsequent solicitations of proposals from bidders. The Company shall also have access to drawings and other work in process.

4.0 PROFESSIONAL RESPONSIBILITIES

4.1 General Responsibility and Warranty

Supplier assumes professional and technical responsibility for the performance of its services in connection with work assignments under this Agreement in accordance with the terms of this Agreement and the best professional standards and practices, and any additional guarantee or warranty specified in the applicable Contract. If, during the performance of Services or within three (3) years following completion thereof, such Services fail to meet the aforesaid standards, the Supplier shall promptly furnish all remedial services and products necessary to correct such deficiencies at the Supplier's cost and expense, and Supplier shall further be responsible for reimbursement of the Company's costs or losses related to such deficiencies during the referenced three year period.

4.2 Independent Contractor

It is the intent of this Agreement that the relationship of the Company and the Supplier be that of 'contracting party for services and independent contractor,' respectively.

4.3 OSHA Hazard Communication Standard

Supplier, prior to bringing hazardous chemicals or substances onto a Company facility and/or arranging for transportation of such chemicals or substances to a Company facility, shall notify Company management and provide the required MSDS for those items. Supplier is hereby notified that the Company has in place a Hazardous Communication Program in accordance with 29 CFR 1910.1200. This document is available for review and inspection by the Supplier or its representative.

4.4 Protection of Company Property

Supplier shall protect all Company property in its possession or utilized in the performance of the Services from any damage or loss. Company property destroyed, damaged, lost or stolen, except by act or omission of the Company, shall be replaced or repaired to the Company's satisfaction at Supplier's expense. Supplier shall also protect Company customer information from disclosure or loss pursuant to Section 24.0 hereof.

4.5 Compliance with Laws and Company Corporate Policies

Supplier will comply with all applicable laws, ordinances, rules, regulations, codes, and orders of any public body having jurisdiction, and shall perform the Services using licensed (as applicable) and properly qualified personnel. In addition, Supplier shall comply with all applicable Company policies to the extent the Supplier is performing Services at the Company's premises or the premises of the Company's customers, or is otherwise representing the Company in interactions with any

third parties. Refer to Appendix D for a list of applicable Company Corporate Policies and as such may be revised by the Company from time to time.

4.6 Removal of Supplier's Employees

The Supplier agrees to use only experienced, responsible, and qualified personnel to perform the Services and further agrees to follow Company policies and procedures during the course of the same. The Company may require that the Supplier remove from the project persons who do not satisfy the aforementioned requirements or endanger persons or property, or whose continued work is inconsistent with the successful completion of the Services.

4.7 Periodic Reporting

Upon the request of the Company the Supplier shall promptly submit a report detailing the status of the Services including the progress toward achieving completion of any deliverables or performance milestones.

4.8 Schedule Commitment

The Supplier agrees to perform the Services in accordance with the schedule approved by the Company. The parties agree that time is of the essence hereof.

5.0 INDEMNIFICATION

5.1 Supplier shall indemnify, defend (with counsel acceptable to the Company) and save harmless the Company, its officers, employees and Affiliates from and against all actions, claims, costs, damages, expenses and liability whatsoever for injury (including death) to persons (including employees, agents or subcontractors of Supplier) or damage or loss to property, whether in contract or in tort, or based on strict liability, which relate to or arise from: the Services; the failure by Supplier to satisfy any term, condition or obligation under this Agreement, the Supplier's failure to pay any and all federal or state payroll taxes or contributions for unemployment insurance, health insurance, workmen's compensation, pensions and retirement benefits; the negligence, or willful or reckless misconduct of persons performing the Services; or, the misuse or prohibited disclosure of Confidential information or NPI (as referenced in section 24 hereof), including the economic loss suffered by the Company or the owner of the NPI as a result of the prohibited disclosure or use.

5.2 The Supplier shall be responsible for the proper execution and completion of the Services and shall take all necessary precautions for prevention of injury to persons or damage or loss to property in connection with the Services.

5.3 Supplier shall also indemnify, defend (with counsel acceptable to Company) and save harmless the Company, its officers, employees and Affiliates from all actions, claims, costs, damages, expenses and liability whatsoever arising or resulting from allegations that the Services or any products or deliverables provided by Supplier infringe on or violate any patent, trademark, copyright, trade secret or any other proprietary interest. If the Company is enjoined from the use of services on the basis of infringement, the Supplier shall, at its expense, and at the option of the Company, either (a) procure for the Company the right of continued use, (b) replace or modify the same to make them non-infringing, or (c) remove the same at no cost to the Company, and refund the purchase price and all associated costs.

6.0 INSURANCE

Without limiting any of the other obligations or liabilities of the Supplier, the Supplier shall provide and maintain at its own expense (including deductibles) the following minimum insurance coverages:

6.1 Worker's Compensation and Employer's Liability Insurance in statutory amounts, with a minimum coverage amount of $500,000, to provide for payment to Supplier's employees employed on or in connection with the Services covered by this Agreement and/or their dependents, of Workers' Compensation benefits including, when required, Occupational Disease benefits in accordance with applicable law (including, without limitations, the U. S. Longshoremen's and Harbor Workers' Compensation Act and the Jones Act).

6.2 Commercial General Liability Insurance including Premises-Operations, Owners' and Contractors' Protective Liability and Completed Operations Insurance with combined single limit of $1,000,000 each occurrence for bodily and/or personal injury, including death and property damage. This policy is to also include Broad Form Property Damage, Blanket Contractual Liability (including obligations assumed under the indemnity provisions of this contract) and XCU hazards. Underwriters shall waive all rights of recovery against the Company.

6.3 Primary Comprehensive Automobile Public Liability (including owned, nonowned and hired automotive equipment), used in connection with the Supplier's Services; with a combined single limit for bodily injury or death and property damage of $1,000,000 per accident. This policy will also provide coverage for Automobile Comprehensive Fire and Theft, and Collision insurance. Underwriters shall waive all rights of recovery against the Company.

6.4 Professional Liability (Errors and Omissions) Insurance with limits of not less than $2,000,000 unless otherwise specified by the Company.

6.5 Excess Liability Insurance with a combined single limit for bodily injury and/or personal injury including death and property damage of $1,000,000 each occurrence excess of the above Primary Workers' Compensation/Employer's Liability, Commercial General Liability and Primary Automobile Public Liability Insurance. Underwriters shall waive all rights of recovery against the Company.

6.6 Except as to Item 6.1, the Company and its Affiliates shall be included as an additional insured on all policies specified herein. The naming of the Company as an additional insured shall not obligate the Company to pay any premium on the policies. Such insurance shall be primary insurance and shall contain a Severability of Interest clause with respect to each insured. The "Other Insurance" clause of such policies shall be modified, if necessary, to specify that any separate insurance maintained in force by the Company shall be considered excess insurance and shall not contribute with insurance extended by Supplier's and/or subcontractor's insurer(s) under this requirement.

6.7 Supplier shall, ten (l0) days before commencing Services under this Agreement and prior to expiration of any policy of insurance, deliver to NSTAR Electric & Gas Corporation, One NSTAR Way, Westwood, MA 02090 Attention: Procurement Director, three (3) copies of the Certificate(s) of Insurance completed by his insurance carrier or agent certifying that minimum insurance coverages as required above are in effect and will not be canceled or changed until thirty (30) days after written notice is given to the Company. The Supplier further agrees to deliver within ten (l0) days of requests two copies of each of the above policies to the NSTAR Electric & Gas

Corporation, One NSTAR Way, Westwood, MA 02090 Attention: Procurement Director, if so requested by the Company.

7.0 ASSIGNMENT

The Supplier shall not assign this Agreement, the services, or any monies due or to become due hereunder without the advance written consent of the Company, which may be withheld at the Company's discretion.

8.0 SUBCONTRACTORS

Unless otherwise provided, Contractor may engage subcontractors for portions of the Work, provided, however that the Company shall have the right to review the list of proposed subcontractors and to object to any particular subcontractor, in which event Contractor shall provide a substitute subcontractor. The Company shall not enter into any agreements with subcontractors, nor shall the Company be liable to any subcontractor by reason of this Contract. The Contractor shall bind every subcontractor to the terms of this Contract, as far as applicable to the subcontracted Work. The delegation of any portion of the Work to a subcontractor shall not operate to relieve the Contractor of full responsibility for the prompt and faithful execution of the entire Work. The Company assumes no obligation to pay or to see to the payment of any sum due to any subcontractor.

Contractor shall provide the Company with the originals of all warranty documents pertaining to Goods or Services provided by each subcontractor. The Contractor shall extend to the Company the same releases and indemnities in connection with the Work that Contractor obtains from its subcontractors, if such releases or indemnities afford the Company a greater degree of protection.

9.0 TERMINATION

9.1 Termination for Default

The Company may terminate this Agreement or any Contract or Contract Release without prejudice to any other right or remedy Company may have, and without recourse against the Company, upon written notice to Supplier if: (1) Supplier should be adjudged bankrupt, (2) Supplier should make a general assignment for the benefit of his creditors or becomes insolvent, or (3) Supplier shall fail to comply with any of the provisions, commitments, schedules, covenants, specifications, instructions, and conditions of this Agreement or a Contract.

9.2 Termination for Convenience of the Company

The Company may terminate for convenience a Contract or Contract Release, in whole or in part by written notice to the Supplier. In the event of such termination, the Company shall pay Supplier for all outstanding invoices associated with Services by Supplier up to the effective date of termination. The Company shall not be obligated to pay any other amounts to Supplier on account of such termination for convenience. This provision shall not be deemed to limit or otherwise affect the Company's right to terminate this Agreement or any Contract or Contract Release on account of the default of the Supplier.

10.0 NOTICE OF COMPLETION

Upon completion of the Services under each Contract Release, Supplier shall notify the Company in writing in the form of notice letter, Attachment #1, of the date of said completion. To the extent the Company determines such Services are not complete, Supplier shall promptly complete such Services and the above procedure shall be repeated.

11.0 SEVERABILITY

In the event that any of the provisions, or portions or application thereof, of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, Company and Supplier shall negotiate an equitable adjustment in the provisions of this Agreement with a view toward effecting the purpose of this Agreement and the validity and enforceability of the remaining provisions, or portions or applications thereof, shall not be affected thereby.

12.0 DISPUTE RESOLUTION

All disputes arising under this Agreement or with respect to its interpretation, whether involving law or fact or both, or extra work, or the scope of work, and all claims for alleged breach of Agreement, shall be submitted by the Supplier in writing to the Company within the earlier of: seven (7) days following the identification of the claim, or the date for submittal of the invoice for the applicable period. This notice shall include: the amount of the claim, a detailed description of the facts surrounding the claim (including any supporting documentation), and the impact of the claim on the scope or schedule of the Services. While the claim is pending, the Supplier shall continue performance of the Services. In addition, the Supplier shall submit such additional information regarding the claim as the Company may request. Any claim not presented within the time limit specified in this provision shall be deemed to have been waived. Within thirty (30) days of the receipt of the claim the Company shall inform the Supplier of the acceptance, rejection or modification of the claim. If the Supplier does not agree with this decision, the Supplier may refer the dispute to the duly authorized representatives of the parties for resolution. Should such officers fail to resolve the dispute within fourteen (14) days after such referral, either Party may seek such further legal recourse as such Party sees fit. In no event shall the Supplier allow the dispute to delay the Services, but may notify the Company promptly that Supplier is proceeding with the Services under protest.

13.0 LAW CONTROLLING

This Agreement is executed with reference to the laws of the Commonwealth of Massachusetts and the rights and liabilities of the parties and the construction and effect of every provision hereof shall be subject to and construed according to said laws. The courts of the Commonwealth of Massachusetts shall be the venue for resolving any dispute hereunder, unless the parties otherwise agree in writing.

14.0 LIENS AND ATTACHMENTS

The Supplier shall not place nor permit any lien, notice of contract, or attachment to be placed upon any property of the Company. In the event that any such lien, notice of contract, or attachment is imposed, Supplier shall immediately discharge the same at Supplier's expense. Until such lien, notice of contract, or attachment is removed, no payment will be made for any claim hereunder.

15.0 TAXES, INSURANCE, PREMIUMS

All Massachusetts State Sales Tax on materials and equipment rentals or any other taxable items will be paid for directly by the Supplier and not the Company. Said Massachusetts State Sales Tax shall be included in all proposals submitted. If appropriate, Company shall provide applicable sales tax exemption certificates upon request.

The Supplier agrees to assume full responsibility with respect to the Services covered by this Agreement for the payment of all federal, state and local taxes and assessments associated with any payments made to Supplier hereunder, and any with respect to any persons performing the Services all federal or state payroll taxes or contributions, unemployment insurance, worker's compensation, pensions, annuities, and similar benefits, in conformity with applicable law, regulations and rules.

16.0 AMENDMENTS

It is understood and agreed that amendments, when issued, shall be subject to all the terms, provisions and conditions of this Agreement and any applicable Contract.

17.0 EQUAL OPPORTUNITY CLAUSE

This Contract is subject to federal and state laws and regulations regarding nondiscrimination. As a material term of this contract, Contractor agrees to comply with all such applicable laws and regulations. The terms and provisions of the Equal Opportunity Clause, Sections 60-1.4, 250.4 and 741.4 of Chapter 60 of Title 41 of the Code of Federal Regulations, regarding "Nondiscrimination in Employment by Government Contractors and Subcontractors", are incorporated by reference and made a part of this Agreement. In addition, the Supplier agrees to comply with the provisions of 29 CFR Part 470. Upon request, the Supplier shall supply the Company with a certificate demonstrating compliance with the foregoing.

18.0 ORDER OF PRECEDENCE

Should a conflict arise among the various documents which comprise the Agreement between the parties, the order of precedence shall be as follows:

18.1 This Consulting Services Agreement
18.2 Any Appendices and Attachments to this Agreement
18.3 The Contract and subsequent Amendments
18.4 Any Plans and Specifications specifically referenced in the Contract
18.5 The Company’s RFP referenced in the Contract
18.6 The Supplier’s proposal, excluding commercial or contractual provisions, referenced in the Contract

19.0 CONFORMITY WITH THE COMPANY'S PRACTICES AND PROCEDURES

Supplier agrees to comply with Company's standard practices and procedures regarding access to and activity performed at all the Company's facilities.

20.0 NONWAIVER

The Company's failure to insist on strict performance of any term, condition, or instruction, or to exercise any right or privilege here included or its waiver of any breach, shall not constitute a waiver of any failure in the future to observe such term, condition, instruction and/or any other right or privilege.

21.0 ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties hereto relating to the subject matter hereof, and supersedes any previous agreements or understandings. No preprinted terms and conditions contained in the Supplier's documents with respect to the Services shall be effective to modify or add to the terms and conditions which are contained in this Agreement unless agreed to in writing by both parties.

22.0 TERM OF AGREEMENT

This Agreement shall remain in force and effect from the effective date until the completion of the Services, unless earlier terminated in accordance with the terms hereof. This Agreement may be extended by mutual written agreement of the parties.

23.0 NOTICES AND CORRESPONDENCE

Except as specifically provided to the contrary, all notices and correspondence permitted or required to be given under this Agreement shall be in writing and shall be deemed duly given if delivered personally, by facsimile by confirmation of receipt, by courier, by evidence of delivery or on the fifth day following the date on which each such notices is deposited postage prepaid in the United States Mail. All notices, requests or communications shall be delivered or sent to the other party at the address shown below or to any other address as the party may designate by ten (10) days prior written notice given in accordance with this provision.

If to Company:	If to Supplier:
NSTAR Electric & Gas Corporation	
One NSTAR Way – SE250	
Westwood, Massachusetts 02090-9230	
Attention: Procurement Director	Attention:

24.0 CONFIDENTIALITY AND PROTECTION OF COMPANY AND CUSTOMER INFORMATION

In performing its obligations under this Agreement, Supplier shall comply with any and all applicable company policies as described in Appendix D, and as such policies may be revised by the Company from time to time.

A. Company Information

The Supplier agrees to keep confidential all information provided by the Company (Confidential Information) pursuant to this Agreement. Supplier also acknowledges such Confidential Information may constitute "critical infrastructure" for purposes of state and federal law, policy or regulation. Confidential Information is not to be reproduced or disclosed to any third party, without the Company's permission. Confidential Information is not to be used by anyone other

than the party to who disclosed, nor used for any purpose other than the performance of Services. Confidential Information shall be destroyed or returned to the Company (at the Company's election) upon completion of the Services or at such earlier time as requested by the Company, and Supplier shall not retain any copies (including in electronic format) of the same. To the extent the Confidential Information relates to "critical infrastructure" as reference herein, Supplier acknowledges and agrees further restrictions regarding such information apply under of state and federal law, policy and regulation.

B. Protection of Non-Public Information

To the extent Supplier (or its subcontractors or any other party acting by or on behalf of Supplier) is provided or has access to non-public information pertaining to the Company's customers, employees, shareholders, contractors, suppliers or any other party ("NPI"), the following provisions apply: The Supplier warrants and represents that the Supplier and its subcontractors and all other persons or entities having access to Company NPI by or through the Supplier have the appropriate safeguards in place to prevent the disclosure or use of any NPI received from the Company or its customers, and further agrees to use such information solely for the purpose of performing Services for the Company under this Agreement. Such safeguards shall include, without limitation, security policies, tools and processes restricting access to such NPI to persons on a need-to-know basis, adequately training and notifying its employees and contractors of the restrictions associated with such information, identifying and correcting any impermissible use or disclosure, and immediately reporting any such use or disclosure. Supplier also agrees to comply with all applicable state, federal and local laws, regulations, codes and policies regarding the protection of customer information, and the avoidance of theft or fraud through the improper use or disclosure of such information, including, without limitation, Mass. Gen. Laws c93H and the regulations promulgated thereunder. Upon the request of the Company, the Supplier shall provide the Company with detailed information and documentation regarding such safeguards, and with certifications regarding the same by an authorized officer of the Supplier, and the Company shall have the right to monitor and audit the compliance of the Supplier at any time with the requirements of this provision. All such NPI shall be returned to the Company upon the Company's request (or destroyed if so directed by the Company), and the Supplier shall retain no copy or other record thereof. The Supplier shall give immediate notice to the Company of any incident that may cause such NPI to be disclosed or otherwise used in an unauthorized manner. Such immediate notice shall be given first by telephone to the Company's Director of Procurement, Barbara Sinisgalli, at 781-441-8117, and to the Company's General Counsel, Douglas Horan, at 617-424-2635, and shall be followed by a more complete written notice to be sent by express mail overnight courier by the close of business on the day that the incident took place and capable of delivery on the day following the date of the notice. Such notice shall set forth all relevant information regarding the incident, including the specific nature and extent of the disclosure / use, the measures taken and to be taken to retrieve and restore the NPI and/or to otherwise prevent the unauthorized use or disclosure of the NPI. The Supplier shall, at its sole cost, cooperate fully with the Company and, as necessary, any law enforcement, regulatory authority, insurance carrier, auditors, attorneys and other parties in the investigation and evaluation of such incident, and shall implement at its sole cost any remedial measures recommended by any such parties as approved by the Company.

C. Protection of Information / Legal and Regulatory Proceedings

Supplier understands and acknowledges the failure the Supplier to honor its obligations with respect to Confidential Information and NPI will result in immediate and irreparable harm and that monetary damages may be inadequate compensation or remedy. Accordingly, Supplier agrees that NSTAR (and in the case of Company customer information, such customer(s) will be entitled to all monetary and equitable remedies available, including injunctive relief, to enforce the terms of this Agreement.

In addition to the foregoing, if Supplier becomes legally compelled to disclose any Confidential Information or NPI, Supplier shall provide advance written notice to the Company, shall provide the Company with the opportunity to seek a protective order or other means to limit the disclosure of the Confidential Information and/ or NPI, and shall inform any recipient of the Confidential Information or the NPI of the restrictions and provisions of this Agreement.

25.0 PROHIBITION ON PUBLICITY

The Supplier may not advertise or promote using the name of the Company, the terms or existence of this Agreement, or the Supplier's relationship with the Company.

26.0 GIFTS, GRATUITIES AND CONFLICTS OF INTEREST

The exchange or offer of any money, gifts, services, or other benefits or gratuities by either party hereto to the other party hereto is hereby prohibited. This prohibition shall be applicable to the party's officers, employees, agents, employees and family members of the foregoing. Supplier hereby represents that to the best of its knowledge and/or belief, no economic, beneficial or employment, or managerial relationship exists between Supplier and any employee of the Company, or any member of such employee's family, which may tend to influence such employee (or those family members) in the performance of his or her duties on behalf of the Company. In the event Supplier becomes aware of any of the foregoing, the Supplier shall promptly advise the Company. Supplier further agrees to disclose any claim against the Company or the Company's Affiliates, or the existence of any relationship with any other entity which is or may be adverse to the interests of the Company. In the event any activities or circumstances as described in this Section 26 arise, the Company shall have the right to elect to terminate this Agreement, effective upon the provision of written notice to the Supplier, without further recourse against the Supplier, and Supplier shall further retain all other rights and remedies in law or equity.

27.0 BACKGROUND CHECKS

Contractor shall comply with the Contractor Background Check Policy attached as Appendix E hereto, and as such Policy may be revised by the Company from time to time.

APPENDIX A

SCHEDULE OF RATES

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APPENDIX B

REIMBURSABLE EXPENSE GUIDELINES

Purpose

Expenses shall be recoverable only to the extent that they have been approved in writing by an authorized representative of the company in advance of being incurred.

The following are established guidelines for the reimbursement of ordinary, necessary and reasonable business expenditures that are incurred by Suppliers of NSTAR when performing services under a contract that allows for the reimbursement of prudently incurred expenses.

General Expense Guidelines

Expenses which are not directly associated with Supplier's work for NSTAR are not eligible for reimbursement. Costs associated with personal activities or entertainment shall not be reimbursed. In no event shall reimbursable expenses exceed 15% of the contract price, unless otherwise specified in a Contract. Suppliers and their employees are expected to exercise conservative, sound business judgment when incurring reimbursable expenses. Original Receipts are required for all expenditures of twenty-five dollars ($25.00) or more, in order for them to be reimbursed. In addition, the employee should submit receipts for lesser amounts if available.

Supplier's employees are reminded that reimbursable expenditures are subject to review at any time without advance notice, including a comparison of submitted receipts with records held by issuing vendors.

All requests for reimbursement of expenses shall be submitted to NSTAR within 45 days if the incurrence of such expense. Supplier shall provide such additional supporting documentation as NSTAR may request, and to the extent such documentation is not promptly provided the reimbursement request shall be denied.

Air Travel

Airline reservations should be made at the earliest possible date to allow time to secure the lowest possible fare. Supplier's employees will utilize Lowest Fare Routing (LFR). Travelers may not specify an airline to accumulate mileage unless rates for use of these airlines are consistent with Lowest Fare Routing. The Company may request the investigation of alternative airlines and flights to save costs. Supplier's employees will be expected to adhere to these arrangements in order to receive approval for their trip. The Company will only reimburse expenses for coach seating.

Rental Cars

Rental cars should be used only when the overall cost would be less than that for taxis or other means of transportation. If chosen, insurance will be the responsibility of the Contractor. Rental cars should be compact unless there is a business reason to do otherwise (i.e., number of people to be transported). If two or more Supplier's employees are traveling to the same destination, they should share a vehicle unless business circumstances prohibit it. The Company will only reimburse the cost of rental cars and fuel used for travel on Company business.

Lodging

Hotel/motel reservations are to be made, whenever possible, through the Company's travel coordinator or Procurement department to obtain the best corporate rates. The minimum corporate single rate should be requested and selected at all hotels and motels. If the Company provides Supplier with a discounted rate at a hotel/motel close to the Supplier's work location, the Company will only compensate Supplier at the rate provided if Supplier's employees make alternative lodging accommodations at a higher rate.

When hotel/motel reservation cancellation is necessary, it is the Supplier's responsibility to cancel reservations made directly. If cancellation is not made in time to avoid a charge, that expense will not be reimbursed.

Meals

The cost of meals incurred by employees of Supplier while traveling on Company business should be reasonable and appropriate to the nature of the business trip. Charges for alcoholic beverages will not be accepted.

APPENDIX C

SAMPLE INVOICE

DATE:_____ Invoice #_____

JOHN DOE CORP.
10 HIGH STREET
BOSTON, MA 02111

TO: NSTAR ELECTRIC & GAS CORPORATION
Accounts Payable
P.O. Box 250
NORWOOD, MA 02062-0250

Contract #_____

Contract Release #:_____

BRIEF DESCRIPTION OF SERVICES PERFORMED IN ACCORDANCE WITH CONTRACT

LABOR	Description	Hours	Rate	Extension
	Consulting Engineer	8	$10.00	$ 80.00
	Technician	8	9.00	72.00
	Draftsman	8	8.00	64.00
	Secretary	8	7.00	56.00
		Sub-Total		$272.00

MATERIALS SUPPLIES: Itemized with paid vouchers attached

EXPENSES/PER DIEM RATES: Itemized with vouchers attached

SUB-CONTRACT WORK: Totals with paid vouchers attached

Sub-Total $000.00

GRAND TOTAL $272.00

APPENDIX D

COMPANY CORPORATE POLICIES

Where the Services involve one or more of the following: (i) interaction with the Company's employees, (ii) work on the Company's premises, (iii) access to Company facilities; or (iv) access to Company Information or other confidential Information as described in Section 24 of the Terms and Conditions , the Supplier shall comply with the following policies, together with such newly-issued and/or revised policies as in effect from time to time, to the same degree such policies apply to NSTAR employees (or contractors as referenced therein), and to the extent such policies are applicable to the Services then being provided by the Supplier:

1. Anti-Fraud
2. Communication
3. Dress Code
4. Drug and Alcohol
5. Environmental
6. Fleet Use
7. Integrity of Company Records
8. Protection of Critical Energy Infrastructure Information
9. Safety
10. Security
11. Sexual Harassment
12. Smoking

The Company shall issue a copy of such policies to the Supplier, and shall make newly-issued and revised policies available to the Supplier from time to time as such are issued. A softcopy of the policies listed above is provided below. A hardcopy is available on request.

Anti-Fraud.pdf

Communication.pdf

Dress Code.pdf

Drug and Alcohol.pdf

Environmental.pdf

Fleet Use.pdf

Integrity of Company Records.pd

Protection of Critical Energy Infrastructure

Safety.pdf

Security.pdf

Sexual Harassment.pdf

Smoking.pdf

APPENDIX E

CONTRACTOR BACKGROUND CHECK POLICY

Policy

NSTAR Contractors are required to ensure that their employees and subcontractors providing services for NSTAR successfully pass a Contractor Employee background check. These background checks are to be done by the Contractor at the Contractor's expense prior to that person performing or continuing work for NSTAR, and for administering a background check program on a continuous basis throughout the period of performance of services for NSTAR. The Contractor is responsible to maintain documentation regarding these background checks through the term of the agreement and for three years following the expiration or other termination of the agreement, which documentation shall be available for review and audit by NSTAR. The Contractor shall be responsible for designing and administering the background check program, provided that such program satisfies the minimum requirements specified below. It is the Contractor's responsibility to maintain compliance with all applicable laws and regulations in conducting background checks and maintaining information relating thereto, including without limitation the Fair Credit Reporting Act and the Consumer Credit Reporting Reform Act of 1996.

Minimum Requirements

Two levels of baseline background checks are required for Contractors, depending upon the nature and location of the work that they will perform. Additional requirements beyond these baselines may be required by NSTAR based upon risk assessments or legal requirements.

Level 1 baseline background checks require identity verification and verification of legal rights to work in the USA (or other host country where the services for NSTAR are performed) and are required of all persons.

Level 2 baseline background checks require, in addition to Level 1 checks, a seven-year criminal history search, a seven-year Sex Offender Registry check, a seven-year residential address verification, three-year employment history verification, and motor vehicle driving record checks (if responsibilities include driving) and are required for all persons who will be performing work for NSTAR and meet any of the following criteria:

- When a criminal background check is required by law, regulation or other legal requirement.
- The person will have direct contact with customers in a non-public location.
- The person will have access to non-public personal information or other information required to be protected under applicable law, regulation or other legal requirement.
- The person has unescorted access to locations containing critical cyber assets (e.g. SCADAS, Computer Rooms, Tel Data Rooms) or where critical functions are performed, or other locations deemed sensitive by NSTAR. This will include critical Gas and Electric infrastructure locations such as substations, gate stations, compressor stations, energy control centers, energy management systems, remote monitoring and control locations, communications centers, and critical backup systems.
- The person will have direct and/or remote electronic access to NSTAR cyber assets (hardware/software) or records (electronic, paper, etc.).

- The person is providing software, database, application development services, critical systems operation, management, maintenance, or repair services, physical or computer security services, or compliance services for NSTAR, whether on-site or remotely.
- The person will have access to information or systems where there is a risk that significant damage or loss could occur.

In the event that Contractor determines to employ or retain any person who has a current misdemeanor case pending or has been convicted of a misdemeanor in the last five years, Contractor shall notify NSTAR by telephone and email (Nicholas.Gianturco@nstar.com, 781-441-8538) of its intention to do so, together with Attachment #2 "NSTAR Contractor Background Check Exception Request Form". In no event shall Contractor assign a person who the Contractor has actual knowledge of having a current felony case pending or having been convicted of a felony.

Supplemental Background Check Requirements

NSTAR may require additional checks to be performed if warranted by the nature of the work and where the work will be performed. Access to highly sensitive information or critical infrastructure locations, for example, may warrant such supplemental checks as credit history or homeland security checks. NSTAR shall determine the need for supplemental background checks by considering the risks involved with the work and the mitigation achieved by performing the supplemental checks.

Supplemental checks that may be required include:

- Five (5) panel drug screening
- Education/verification of degrees
- Validations of required licenses (professional and/or legally required)
- Credit history
- Global screening of offshore international/foreign national persons
- Homeland Security checks
- US Citizenship and Immigration Services E-Verify
- Criminal History Check updates every 7 years

Minimum Background Screening Requirements

1. Identification Verification/Eligibility to Work in the Country
Contractors performing services for NSTAR must be able to provide evidence to NSTAR or its agent that they have verified Contractor Employees' identities and that all Contractor Employees are legally eligible to work in the country where the work is to be performed. NSTAR requires that U.S. Contractors complete a Social Security trace and or a Consent Based Social Security Number Verification – CBSV on their Contractor Employees and match results of this check with other identification documents provided by their employees. This search reveals all names and addresses historically associated with the Contractor Employees provided number, along with the date and state of issue, and verifies if the number is currently valid and logical. This search may also reveal the use of multiple social security numbers, AKAs/aliases, and additional employment information that can then be used to determine the parameters of other aspects of the background investigation. Adverse action should not be taken based solely on this information and may require further verification with the Social Security Administration (SSA) or the Department of Homeland Security (DHS).

2. Criminal History Background Checks
Contractors shall ensure that all their employees performing work or providing services to NSTAR are subjected to a criminal history background check. Such checks shall be conducted on all names, including alias names that are provided or developed, and include County, State, and Federal checks based on jurisdictions of work and residence for the past 7 years, as well as international jurisdictions, if available. Checks must be performed on all current Contractor Employees and any new Contractor Employees hired or assigned to support the NSTAR contract. If the Contractor has had a pre-employment criminal history check process in place and can provide documented evidence that employees assigned to the NSTAR contract have been subjected to the criminal history check within the last 3 years, then additional checks are not necessary. Contractor Employees who work in certain sensitive areas that fall under regulatory requirements, i.e., NERC, are subject to additional criminal history checks. If required, this information is contained in the supplemental background check information above.

The following criteria will be used as guidance by NSTAR in making the determination of whether the Contractor Employee will be allowed to perform work specified in the contract between your company and NSTAR. These criteria should also be evaluated by the contractor prior to making a request to NSTAR for the Contractor Employee to be approved for assignment to the NSTAR contract:

- Number of convictions
- Nature, seriousness and date(s) of occurrence of the offense
- Rehabilitation
- Relevance of the crime committed in relationship to the work to be performed
- Unreasonable risk posed to NSTAR property or to the safety of employees, other Contractors and/or customers

During the term of the contract if the Contractor becomes aware of information concerning a criminal conviction of a Contractor Employee that would fit the above criteria for reporting to NSTAR, this information shall be forwarded to NSTAR's Security Department for determination whether the Contractor Employee should be allowed to continue working or providing services for NSTAR.

3. Sex Offender Registry Search
Most states maintain a sex offender database that is available as a source of public record. Individuals convicted of such crimes as sexual assault, aggravated criminal sexual conduct, luring or enticing, and kidnapping, or who have been found to be repetitive and compulsive by experts and the courts are required to register with their state authorities. Specific registration requirements are dictated by state laws and are based on dates of offense, sentence and/or release from custody. Consistent with the scope of the Criminal History Search, a search will be conducted in the applicant's provided and developed names, in the state(s) of the applicant's residence and place of work, if a statewide repository is maintained and accessible as public record.

4. Residential Address Verification
Contractors must perform a seven-year address verification on all **new** Contractor Employees hired to support the NSTAR contract. The purpose of this check is to confirm that the address exists and relates to a real property, and to establish that the individual permanently resides or previously resided at the address. Verifying the address given by a prospective employee is important because it confirms that other information provided is correct. An individual may wish to omit their current or former address to conceal adverse information, such as criminal convictions.

5. Employment History Verification
Contractors must perform a three-year prior employment history verification on all **new** Contractor Employees hired to support the NSTAR contract. The purpose of this check is important as it serves to

check the accuracy of information provided by the applicant. This check may also reveal prior employment with NSTAR that should be further explored. An individual may wish to omit prior employment history to conceal adverse information, such as criminal convictions.

6. Motor Vehicle Driving Record Check

All Contractor Employees who are required to operate a motor vehicle in conjunction with their contract with NSTAR must be legally licensed and hold a valid driver's license appropriate to the vehicle being driven. This requirement applies to both Contractor-owned or leased vehicles and NSTAR-owned/leased vehicles. A motor vehicle driving record check to include a commercial driver license search, when applicable, must be conducted by the Contractor annually in order to validate this requirement.

7. Employees Previously Terminated or Removal from NSTAR Work for Cause

NSTAR will not permit Contractor Employees who were previously employed by NSTAR and were terminated by NSTAR for cause, or Contractor Employees who were previously removed form working on any contract for NSTAR to work for NSTAR.

8. NSTAR's Right to Revise Requirements for Contractor Background Checks

NSTAR reserves the right to revise its requirements for Contractor Employee background checks during the contract term, which the Contractor must comply with. Any such revisions will be provided in writing.

ATTACHMENT #1

NOTICE OF COMPLETION
CONTRACT NUMBER
CONTRACT DATED , 20

The Services provided pursuant to the Agreement dated _____ and the Contract / Contract Release dated _____. 20_____. including all amendments as of the date of this Notice, (hereinafter called the "Project") between NSTAR Electric & Gas Corporation ("Company") and_____("Supplier") has been completed as of_____, 20__.

BY:_____

TITLE:_____

DATE: _____

ATTACHMENT #2

NSTAR Contractor Background Check Exception Request Form

Section A: Exception Request (to be completed by Contractor)	
Requestor's First and Last Name and Phone Number:	Name of Contractor/Vendor:
Date of Exception Request:	NSTAR Contract Number, if applicable:
Description of work/services provided by Contractor/Vendor:	
Location where work/services are provided:	
Description of exception requested and rationale for exception:	

ACKNOWLEDGEMENT BY REQUESTOR

By signing below, I hereby certify that the information submitted on this form is accurate and complete.

Requestor's Signature: _____ Date: _____

Section B: Management Review/Authorization (to be completed by NSTAR):		
Conclusion, recommendation, and agreed action, if any:		
Business Risk Description/Impact Assessment:		
Start and end period for which exception is granted:		
Name of Procurement Manager:	Title:	
Signature:		Date:
Name of Corporate Security Manager:	Title:	
Signature:		Date:

Note: Exception may not be granted that:

- Allow unescorted access to critical assets
- Violate regulatory requirements

REQUEST FOR PROPOSAL – RFP #2122

Field Implementation Contractor Services

2012 - 2013

August 3, 2011

Response Deadline:
August 31, 2011 by Noon EST

PLEASE NOTE: The information contained within this Request for Proposal (RFP) is confidential and proprietary to the Sponsors, and is to be used by the recipient solely for the purpose of responding to this RFP.

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IMPORTANT DATES - RFP #2122

RFP Emailed to Potential Bidders:	August 3, 2011
Last Date for Questions:	August 22, 2011 by 3pm EST
Responses to Questions:	August 25, 2011 by 3pm EST
Proposals Due:	August 31, 2011 by Noon EST
Finalists Selected:	September 28, 2011
Oral Presentation, if required:	Week of October 3, 2011
Contractor Selected:	October 19, 2011
Kick off meeting with Sponsors and Contractor:	November 14, 2011
Draft retailer support implementation plan due:	December 5, 2011
Begin providing field support services:	January 1, 2011

Correspondence

During the Request for Proposal, up to and including contract award, all correspondence must be directed via email to:

Patricia.Latimer@NSTAR.com

Should it be determined that any vendor is conversing with or directing questions related to this RFP to anyone other than the individual identified above, then that vendor may be immediately disqualified from bidding on this project.

1.0 GENERAL INFORMATION

1.1 Background

On behalf of the Sponsors of the

Massachusetts and Rhode Island ENERGY STAR®
Lighting and Consumer Products Initiative

GasNetworks® Residential Rebate Program and the
Commercial Food Service Equipment Rebate Programs

NSTAR Electric & Gas Corporation (NSTAR) is pleased to present this Request for Proposal (RFP) to qualified contractors to provide Field Implementation Contractor Services. Due to the similarities of these services for each of these programs, and the opportunity for cost savings, the intent of this RFP is to identify and award this work to one or two Suppliers. The overall objective is to select a Supplier(s) that will be responsible for providing retailer outreach and support services, running cooperative promotions, and collecting data and other inventory information for each Sponsors Program Administrator (PA).

1.2 Program Administrators and Sponsors

This Request for Proposal has been issued by NSTAR on behalf of the Program Administrators from the following electric and gas companies in the Commonwealth of Massachusetts, Rhode Island, and New Hampshire utilities as indicated below. These companies are referred to herein as the Sponsors.

For the Massachusetts and Rhode Island ENERGY STAR® Lighting and Consumer Products Initiative:

Cape Light Compact (MA)
National Grid (MA and RI)
NSTAR (MA)
Unitil (MA)
Western Massachusetts Electric (MA)

For the GasNetworks® Residential Rebate Program and the Commercial Food Service Equipment Rebate Programs:

Berkshire Gas (MA)
Blackstone Gas (MA)
Columbia Gas of Massachusetts
National Grid (MA and RI)
New England Gas (MA)
NSTAR (MA)
Unitil (MA and NH)
Western Massachusetts Electric (MA)

1.3 Unauthorized Disclosure

The information contained within this Request for Proposal (RFP) is confidential and proprietary to the Sponsors, and is to be used by the recipient solely for the purpose of responding to this RFP. Additionally, the Sponsors consider any information provided to Bidders in the course of business to be privileged and confidential between Consultant and the Sponsors. This includes, but is not limited to, written data of any kind, business information, request for quotation, specifications, engineering data and any and all technologies and data either obtained or observed while supplying the commodity/service required by the contract. Unauthorized disclosure of information to third parties by Consultant may lead to cancellation of the contract, loss of future business opportunities and/or the effects of any other remedies which may be available to the Sponsors.

All material submitted, produced, data collected, reports, designs and documentation will become the exclusive property of the Sponsors at the end of the contract. The awarded bidder may not share program materials, customer data, industry or program participant contact information, etc. unless explicitly authorized by each Sponsor to do so.

1.4 Definitions

“Bidder” shall mean those firms/vendors acting in the role of Supplier when responding with a Proposal to this RFP. “Proposal” shall mean the Bidder's formal response indicating their committed solutions that meet or exceed the requirements of the RFP. “Subcontractors”, or “subs”, can be defined as any Supplier under Contract or in the RFP response that are considered financially independent of the Bidder in any other business or accounting relationship.

This RFP does not constitute an offer by the Sponsors to enter into a contract, nor does any response to this RFP constitute an acceptance of an offer, nor does any response to this RFP bind the Sponsors in any way. This document shall not be construed as a request or authorization to perform work at the Sponsors' expense. Any work performed by a Bidder in connection with evaluating and responding to the RFP and, if selected, negotiating a definitive Agreement will be at the Bidder's own discretion and expense. This RFP does not represent a commitment to purchase or lease. The Sponsors reserve the right to reject any and all proposals at its absolute discretion. Submission of a bid constitutes acknowledgment that the Bidder has read and agrees to be bound by such terms. The information in this document will enable the recipient to formulate a proposal to meet the workload requirements as described in this RFP. The numbers, volumes, run rates, etc. provided in this RFP are based upon the most recent data available and should serve as estimates to Bidders for pricing and response purposes.

1.5 Sponsors’ Discretion

The Sponsors are not responsible and will not reimburse Bidders for costs incurred to develop proposals.

NSTAR is issuing this RFP on behalf of the Sponsors who at their discretion may:

- Select a Proposal other than the lowest priced, if the Sponsors determine, at its sole and absolute discretion that the Sponsors interests will best be served by doing so.

- Seek clarification from any Bidder regarding Proposal information and may do so without notification to any other Bidder.

- Continue the review procedure until a Bidder is selected successfully or until the Sponsors choose to reject all Proposals.

- Accept any Proposal or alternate as submitted without negotiations.

- Select for negotiations only the overall best Proposal or negotiate all Proposals submitted which fall within a competitive range.

- Perform a complete financial review as well as an on-site investigation of any of the Bidders facilities to ensure it is capable of meeting the demands of Sponsors and the needs identified in this RFP.

- May not award any Contract(s) as a result of this RFP.

- Reserves the right to accept or reject any or all proposals received, or to cancel this RFP in part or in its entirety, if in doing so is in the best interests of the Sponsors.

1.6 Bid Evaluation

The PAs and their related personnel will confidentially review proposals. A cross-functional evaluation committee representing each of the Sponsors will rate all Proposals based on the evaluation criteria provided below and may reduce the number of Bidders being considered to a "short list" of finalists based upon this objective analysis. The Sponsors may elect to meet with finalists for oral presentations. After all responses have been thoroughly reviewed and negotiations completed with finalists, the Sponsors will award the Contract(s) to the Bidder(s) who offers the best overall value. The Sponsors reserves the right not to award any Contract(s) as a result of this RFP.

All bids will remain active for ninety (90) days, and no bid materials will be returned. Each proposal will be evaluated on technical and commercial merits. All proposals will be opened on or after the due date.

Proposals will be evaluated on the following criteria:

- ***Responsiveness*** – is the proposal responsive to the work scope and program needs as presented in the RFP
- ***Ability to Meet Schedules*** - has the bidder shown that they have the resources to provide the services requested within the expected timeframes
- ***Cost Effectiveness*** - whether the itemized costs and overall proposal offer good value
- ***Comprehensiveness*** - has the bidder shown that they understand each programs requirements and responded accordingly
- ***Relevant Experience*** - whether the bidder has demonstrated that their firm has the experience and expertise or the ability to provide subcontractors having the appropriate knowledge to perform the requested tasks
- ***Oral Presentation*** – after review of the proposals, the Sponsors may invite selected bidders to demonstrate their capabilities and provide more details on their plans and budget of the proposed Sponsors field support effort.

1.7 Discrepancies or Omissions

Should a Bidder find any ambiguity, discrepancy or omission in the RFP, or should the Bidder have any questions, the Bidder shall notify NSTAR via e-mail to Patricia.Latimer@NSTAR.com. Such information must be received no later than the "Last Date for Questions", which is indicated on Page 3 of this RFP, to afford NSTAR the opportunity to send any instructions or interpretations to other Bidders who have received an Invitation to Bid. The Sponsors will not be responsible for any oral instructions or interpretations.

2.0 SPECIFICATIONS

2.1 Statement of Work – ENERGY STAR® Lighting and Consumer Products

The purpose of this RFP is to seek a qualified vendor to provide field support for the operation of regional market transformation programs to increase the availability and adoption of ENERGY STAR® Lighting and Consumer Products qualified lighting and consumer products in the Northeast. The proposed contract period for services is January 2012 through the end of 2013, with an option to renew for a third year. The selected contractor will establish a detailed scope of work and individual contract with each Sponsor. A copy of the statement of work is provided below.

Field Support_2011_MUG_

2.2 Pricing Requirements – ENERGY STAR® Lighting and Consumer Products

Proposed pricing by the Bidders to the Sponsors shall conform to the following format:

- **Task 1** Retailer Outreach and Support Costs will cover all related travel, administration, field labor, and associated expenses. The bidder should specify the number, type, duration of visits assumed in their bid, how the frequency of visits that may vary by retailer size and/or type. If necessary, the bidder should develop separate cost estimates for recruitment visits, training visits, product shipment verification visits, and for on going maintenance visits and state whether, and how, these costs would vary by Sponsor territory. Total Task 1 costs should also be aggregated and provided by state and Sponsor territory with the proposed staffing level (FTEs) clearly specified for each state and Sponsor territory.

- **For Tasks 2-5** estimated costs, indicating hourly rates for assigned personnel, travel, total hours by staff, total cost for completing each Task, and other expenses. Any subcontractor and/or expense mark-up should be clearly noted. Total Task 2-5 costs should also be aggregated and provided by state and Sponsor territory with the proposed staffing level (FTEs) clearly specified for each state and Sponsor territory.

- **An annual cost** for recurring central office and general administrative support for

activities identified by the bidder as being common to all Sponsors. The bidder will provide an estimate of hourly rates and labor hours by staff for these activities. Individual Sponsors will require different degrees of detail and documentation when being invoiced for these services. These support services will include, but not be limited to:

- Office rental(s)
- Standard office telephony (non-800#)
- Direct costs of the retailer and consumer support telephone line(s)
- All basic office supplies including:
  - Postage and parcel delivery
  - Stationery supplies
  - Copying/copiers
  - Office machinery (fax machines, computers and servers, etc.) including equipment for field representatives
- All costs associated with employee hiring and training including:
  - Advertising
  - Time associated with interview and researching prospective employees
  - Time and expenses associated with training prior to deployment into field

- **Any subsequent training or vocational enhancement** (i.e. team meetings, conferences etc.)
- **An hourly (per employee) labor rate** for participation in special events (trade shows, sales at retailers, etc.) as directed by the Sponsors.

2.3 Statement of Work – Gas Networks®

The purpose of this RFP is to seek a qualified vendor to provide field support for the operation of regional market transformation programs to increase the availability and adoption of the Gas Networks® Rebates in the Northeast. The proposed contract period for services is January 2012 through the end of 2013, with an option to renew for a third year. The selected contractor will establish an individual scope of work and contract with each Sponsor. A copy of the statement of work is provided below.

Field
Support_2011_GasNe

2.4 Pricing Requirements – Gas Networks®

Proposed pricing by the Bidders to the Sponsors shall conform to the following format:

- **Task 1 Retailer Outreach and Support Costs** will cover all related travel, administration, field labor, and associated expenses. The bidder should specify the number, type, duration of visits assumed in their bid, how the frequency of visits that may vary by retailer size and/or type. If necessary, the bidder should develop separate cost estimates for recruitment visits, training visits, product shipment verification visits, and for on going maintenance visits and state whether, and how, these costs would vary by Sponsor territory. Total Task 1 costs should also be aggregated and provided by state and Sponsor territory

with the proposed staffing level (FTEs) clearly specified for each state and Sponsor territory.

- **For Tasks 2-4** estimated costs, indicating hourly rates for assigned personnel, travel, total hours by staff, total cost for completing each Task, and other expenses. Any subcontractor and/or expense mark-up should be clearly noted. Total Task 2-4 costs should also be aggregated and provided by state with the proposed staffing level (FTEs) clearly specified for each state and Sponsor territory.
- **An annual cost** for recurring central office and general administrative support for activities identified by the bidder as being common to all Sponsors. The bidder will provide an estimate of hourly rates, labor type and labor hours for these activities. Sponsors may require different degrees of detail and documentation when being invoiced for these services. Administrative cost include, but not be limited to:
    - Office rental(s)
    - Direct costs of the retailer and consumer support telephone line(s)
    - All basic office supplies including:
        - Postage and parcel delivery
        - Stationery supplies
        - Copying/copiers
        - Office machinery (fax machines, computers and servers, etc.) including equipment for field representatives
    - All costs associated with employee hiring and training including:
        - Advertising
        - Time associated with interview and researching prospective employees
        - Time and expenses associated with training prior to deployment into field
- **Any subsequent training or vocational enhancement** (i.e. team meetings, conferences etc.)
- **An hourly (per employee) labor rate** for participation in special events (trade shows, sales at retailers, etc.) as directed by the Sponsors.

2.5 Sponsors Terms and Conditions

The successful Bidder's services shall be provided in accordance with each Sponsors' terms and conditions, which are provided below. Any exceptions to these requirements must be clearly stated in the Bidder's RFP response.

Any exceptions submitted by a Bidder does not constitute acceptance by any of the Sponsors. Exceptions will be negotiated and agreed to by each Sponsor and will be part of an exclusive contract between the parties, which will be independent of any other associated contract with another Sponsoring organization.

- Bay State Gas - NiSource Corporate Services Company General Services Agreement and Data Security Requirements

Nisource (Baystate) GSA for Construction,

Data Security12-31-09

- Berkshire Gas – Berkshire Gas' requires Suppliers' adherence to National Grid's T&Cs for Consulting Services

- Blackstone Gas – T&C's to be provided

- Cape Light Compact Terms & Conditions

Capelight 2010
Template Contract bc

- National Grid Terms & Conditions for Consulting Services

00400 Ts and Cs for
Consulting Services 2

- New England Gas Consultant Terms & Conditions

New England Gas
Consultant TCs...

- NSTAR's Terms & Conditions and Insurance Requirements

NSTAR CSA &
Insurance Requireme

- Unitil Terms & Conditions

Unitil T&C

- Western Massachusetts Electric, a Northeast Utilities company, Terms & Conditions

Western Electric
CL&P General Terms &

2.6 Additional Contract Terms

The proposed contract period for services is through the end of 2013, with an option to renew for a third year (2014). The contractor will be compensated by invoicing each sponsoring company for their portion of the work monthly based upon an allocation that will be established during contract negotiations. Bidders are advised that individual contracts with each Sponsor will need to be established in accordance with their specific terms and conditions as stated in Section 2.5.

Regulatory oversight of the Sponsors' energy efficiency programs may affect the ability of Sponsors to maintain planned funding levels for field support activities. The Sponsors will not be liable for changes in their field support budgets due to such oversight.

All material produced, data collected, and reports generated by the contractor on behalf of the Sponsors are confidential and become the exclusive property of the Sponsors. The contractor may not share program materials, customer data, industry or program participant contact information, etc. unless explicitly authorized by the Sponsors to do so. The individual sponsor contracts with the selected field support firm will contain confidentiality agreements addressing these matters in greater detail.

3.0 COMMUNICATIONS AND FORM OF RESPONSE

During the RFP process, all questions must be submitted via e-mail and addressed to Patricia Latimer at Patricia.Latimer@NSTAR.com, on or before the "Last Date for Questions" as specified on Page 3 of this RFP. Answers to Bidder's inquiries will be distributed to all Bidders within four business days of receipt. In order to ensure fairness, until the time an award is made, Bidders shall have no direct communication regarding this RFP with any Sponsors' employees, other than Patricia Latimer of NSTAR's Procurement Department. Failure to comply with these communications guidelines may disqualify the Bidder from further consideration.

Supplier's proposal MUST include three **SEPARATE VOLUMES**. Volume I must address all commercial requirements, while Volume II & III must address all technical requirements for ENERGY STAR® Lighting and Consumer Products, and Gas Networks®, respectively. Volumes I, II, or III shall not be bound or otherwise joined together. **VOLUME II & III MUST NOT CONTAIN ANY COST OR PRICE INFORMATION.** The organization of the proposal **MUST** conform to the organization enumerated in Form B, SUPPLIER BID PROPOSAL FORM, and as described in this section. The first page of the Supplier proposal MUST be Form B-Supplier Bid Proposal Form (cover sheet).

Proposals are limited to twelve (12) pages of text per each Scope of Work, i.e., ENERGY STAR® Lighting and Consumer Products, and Gas Networks®. Examples of prior work, corporate qualifications, proposed budgets and schedules, staff resumes and other supporting materials may be submitted as attachments to the bids.

This RFP has been sent in electronic format to facilitate the completion of proposals. Bidder's are encouraged to email (provided the email being sent is less than 8mb) a complete proposal to Patricia.Latimer@NSTAR.com, an electronic copy on CD, and two (2) hardcopies either hand delivered or sent via commercial carrier for receipt NO LATER THAN the "Proposals Due" date and time specified on Page 3 of this RFP to the following address:

NSTAR Electric & Gas Corporation
Attn: Patricia Latimer, Principal Contracts Agent
One NSTAR Way, SE-250
Westwood, MA 02090-9230
Phone: 781-441-8841

PLEASE NOTE THAT PROPOSALS MAY NOT BE SUBMITTED VIA FAX UNDER ANY CIRCUMSTANCES.

3.1 Volume I: Commercial Proposal

3.1.1 Commercial Exceptions: This section of the proposal MUST state clearly any exceptions which are being taken to the commercial requirements of this RFP, for example terms and conditions, insurance requirements, etc. Exceptions must state what the exception is, the reason for the exception and proposed alternatives, and be organized sequentially in accordance with the organization of the RFP. Commercial exceptions MUST be clearly defined only in this section of the proposal. Bidder's preprinted terms and conditions are not considered specific conditions and are considered null and void in their entirety. The Bidder's proposal will be considered as being in full conformance with all documents, specifications, and commercial terms included in this RFP, unless specific exceptions or clarifications are separately stated and identified in the bid submittal.

3.1.2 Pricing: The Sponsors seek to procure Services at the most cost effective rates possible. Pricing is for January 1, 2012 thru December 31, 2013, with an option to extend for a third year thru 2014, must be provided on the Pricing Request Forms in Appendix D. Pricing shall include estimated costs by key program tasks, on a time and materials basis, indicating hourly rates for personnel, travel, total hours, expenses, and an annual cost for administration in order to complete the project.

All responses to this RFP, whether or not in compliance with the terms of this RFP, shall be considered unconditional offers by the Bidder, which, if accepted, shall create a binding obligation upon the Bidder.

Bidders should identify if a payment discount for early invoice payment (e.g. 2% 15, Net 30) is offered or not. Discounts will be factored into the evaluation of the bids and their acceptance is at the Sponsors option.

3.1.3 Options and Alternates: This section of the proposal would include options or alternates (commercial considerations) which the Sponsor's could consider. Suppliers are encouraged to submit alternate proposals in addition to the requirements defined in Section 2.1, Statement of Work, if such alternate proposals will result in lower price, higher reliability, or improved schedule.

3.1.4 EEOC Compliance: If not previously submitted, please provide a statement that your company is in compliance with EEOC requirements.

3.1.5 Execution of Proposal By officer of Supplier: Form C MUST be completed and executed by an Officer of the Supplier.

3.1.6 Financial Information: Bidders shall provide financial statements of the lead organization proposed to provide Sponsor services to include:

- Federal TaxID number
- Business type, i.e., sole proprietorship, partnership, joint venture, etc. and state of residency
- Number of employees
- Revenues for 2008, 2009, and 2010

- Financial statements for the last 24 months

This information is not considered part of the response limitation and should be provided as a separate tab in Volume 1 of the Commercial Proposal.

3.2 Volume II - Technical Proposal – ENERGY STAR® Lighting and Consumer Products

With the exception of the attachments, Volume II **must not exceed twelve pages.**

The Supplier's technical proposal, addressing all technical requirements MUST be included in this section. **THIS VOLUME MAY NOT INCLUDE ANY COST OR PRICING INFORMATION.** In addition to the Supplier's technical proposal, the following items must be addressed, in the order listed:

3.2.1 Title Page: This section of the proposal should include a title page, which identifies the RFP Title, vendor's name and the volume.

3.2.2 Table of Contents: The vendor's proposal should include a Table of Contents, which lists the titles and page numbers for each major topic and sub-topic.

3.2.3 Executive Summary: This section should include a summary of the key points and highlights of the vendor's response.

3.2.4 Statement of Work: In this section of the proposal, the supplier must state what it believes to be the full scope of the requirements and IN DETAIL describe how it proposes to achieve the requirements delineated in this RFP. Bidders are invited to prepare a proposal with a preliminary two-year, draft field support plan.

Proposals must include descriptions of the retailer and manufacturer recruitment, training and support, and promotion activities that the bidder is suggesting. This will include details on how each of the minimum service elements for each of the Task areas in the Scope of Work will be addressed. Bidders are asked to include any proposed enhancements in this section.

All subcontracted work must be clearly defined in this section.

The supplier needs to provide its bid response any and all supporting documentation based on the Requirements provided in Section 2.1 of this RFP. Bidders should also include a description of all assumptions used to develop their response to this RFP.

3.2.5 Technical Exceptions: This section of the proposal MUST state clearly any exceptions which are being taken to the requirements stated in the Statement of Work of this RFP. Exceptions must state what the exception is, the reason for the exception, and proposed alternate language. Responses must be organized sequentially, in accordance with the organization of the RFP. Any and all technical exceptions MUST be clearly defined only in this section of the proposal.

3.2.6 Options and Alternates: This section of the proposal would include options or alternates which the company could consider. Suppliers are encouraged to submit alternate proposals in addition to the scope of work defined in Section

2.0 Requirements, if such alternate proposals will result in lower price, high reliability or improved schedule. No pricing is to be provided in this section, see Section 3.1.2 above.

3.2.7 Project Personnel: Provide a description of personnel who would be assigned to the project and their specific project responsibilities.

3.2.8 Statements of Bidder's Qualifications: Provide statements of qualifications that detail the bidder's and team members experience, expertise and knowledge with regards to the requirements in the Scope of Work.

3.2.9 Statements of Subcontractors' Qualifications: Provide statements of qualifications that detail any proposed subcontractors and their assigned project personnel's experience, expertise and knowledge with regards to the requirements in the Scope of Work.

3.2.10 Project Schedule: Provide a proposed schedule for 2012 in support of this Scope of Work.

3.2.11 Organization Chart: Provide a staff organization chart with the names and job titles of those individuals who will be supporting this Scope of Work.

3.2.12 References: Provide names, affiliations, and telephone numbers of at least three individuals or organizations for which similar scopes of work have been provided for by the Prime Contractor and all sub-contractors on team. The Sponsors reserve the right to contact these individuals to ascertain the quality and timeliness of previous performance.

3.3 Volume III - Technical Proposal – Gas Networks®

With the exception of the attachments, Volume III **must not exceed twelve pages.**

The Supplier's technical proposal, addressing all technical requirements MUST be included in this section. **THIS VOLUME MAY NOT INCLUDE ANY COST OR PRICING INFORMATION.** In addition to the Supplier's technical proposal, the following items must be addressed, in the order listed:

3.3.1 Title Page: This section of the proposal should include a title page, which identifies the RFP Title, vendor's name and the volume.

3.3.2 Table of Contents: The vendor's proposal should include a Table of Contents, which lists the titles and page numbers for each major topic and sub-topic.

3.3.3 Executive Summary: This section should include a summary of the key points and highlights of the vendor's response.

3.3.4 Statement of Work: In this section of the proposal, the supplier must state what it believes to be the full scope of the requirements and IN DETAIL describe how it proposes to achieve the requirements delineated in this RFP. Bidders are invited to prepare a proposal with a preliminary two-year, draft field support plan.

Proposals must include descriptions of the retailer and manufacturer recruitment, training and support, and promotion activities that the bidder is suggesting. This will include details on how each of the minimum service elements for each of the Task areas in the Scope of Work will be addressed. Bidders are asked to include any proposed enhancements in this section.

All subcontracted work must be clearly defined in this section.

The supplier needs to provide its bid response any and all supporting documentation based on the Requirements provided in Section 2.3 of this RFP. Bidders should also include a description of all assumptions used to develop their response to this RFP.

3.3.5 Technical Exceptions: This section of the proposal MUST state clearly any exceptions which are being taken to the requirements stated in the Statement of Work of this RFP. Exceptions must state what the exception is, the reason for the exception, and proposed alternate language. Responses must be organized sequentially, in accordance with the organization of the RFP. Any and all technical exceptions MUST be clearly defined only in this section of the proposal.

3.3.6 Options and Alternates: This section of the proposal would include options or alternates which the company could consider. Suppliers are encouraged to submit alternate proposals in addition to the scope of work defined in Section 2.0 Requirements, if such alternate proposals will result in lower price, high reliability or improved schedule. No pricing is to be provided in this section, see Section 3.1.2 above.

3.3.7 Project Personnel: Provide a description of personnel who would be assigned to the project and their specific project responsibilities.

3.3.8 Statements of Bidder's Qualifications: Provide statements of qualifications that detail the bidder's and team members experience, expertise and knowledge with regards to the requirements in the Scope of Work.

3.3.9 Statements of Subcontractors' Qualifications: Provide statements of qualifications that detail any proposed subcontractors and their assigned project personnel's experience, expertise and knowledge with regards to the requirements in the Scope of Work.

3.3.10 Project Schedule: Provide a proposed schedule for 2012 in support of this Scope of Work.

3.3.11 Organization Chart: Provide a staff organization chart with the names and job titles of those individuals who will be supporting this Scope of Work.

3.3.12 References: Provide names, affiliations, and telephone numbers of at least three individuals or organizations for which similar scopes of work have been provided for by the Prime Contractor and all sub-contractors on team. The

Sponsors reserve the right to contact these individuals to ascertain the quality and timeliness of previous performance.

4.0 PROPOSAL FORMS

The following forms, which are attached to the end of this document, must be completed.

4.1 Form A - Bid Receipt Acknowledgment Form

This form is used by the Supplier to confirm to Company receipt of the bid package and intent to bid. This form should be completed as soon as possible or within ten (10) business days receipt of the RFP, and returned via email to Patricia.Latimer@NSTAR.com. Any changes in the Supplier's intent to bid should be provided as soon as known.

4.2 Form B - Supplier Bid Proposal Form (Cover Sheet)

Form B - Supplier Bid Proposal Form (Cover Sheet) MUST be the first page of the Supplier proposal.

4.3 Form C - Execution of Proposal by Officer of Supplier

The Supplier MUST complete this form and include it in Volume 1 of the proposal. The form is used to:

- Indicate how long the proposal is valid.
- Confirm in writing that Supplier's proposal represents a complete offering and includes all exceptions to the RFP.

4.4 Pricing Spreadsheets

Pricing must be provided for each program using the attached spreadsheets.

Energy Star Field Svc Bid Form.xls

Gas Networks Field Svc Bid Form.xls

FORM A – BID RECEIPT ACKNOWLEDGMENT FORM

RFP #2122 – Residential Conservation Services

COMPLETE AND RETURN within 10 business days of RFP issued date:

Patricia.Latimer@NSTAR.com

The _____ Company hereby:

1.___ I acknowledge receipt of the above listed Bid Documents.

_____

And

2.___ My proposal will be submitted on the required due date.
___ I choose to not bid, as fully explained in letter to be transmitted under separate cover.

Our Proposal shall list the following companies as joint venture partners or subcontractors:

_____

Please address future inquiries on this work (if different from original mailing) to:

Name: _____

Company: _____

Address: _____

_____

Phone: _____ Fax: _____

by: _____

_____
(Signature)

Title: _____

Date: _____

FORM B - SUPPLIER BID PROPOSAL FORM

RFP #2122 – Field Implementation Contractor Services

(COVER SHEET)

NAME OF SUPPLIER: _____

ADDRESS: _____

_____

NAME OF AUTHORIZED
REPRESENTATIVE: _____

TITLE OF ABOVE: _____

PHONE NUMBER OF THE ABOVE: _____

Direction: This sheet must be the first page of all submittals. The remainder of the proposal must follow the following format with no exceptions. Additional sections may be added at the Supplier's discretion. Volumes I, II and III must be separate documents.

Volume I: Commercial Proposal		**Volume II & III: Technical proposals**	
TABLE OF CONTENTS OF VOLUME I		TABLE OF CONTENTS OF VOLUME II & III	
Section	Description	Section	Description
1.0	Commercial Exceptions	1.0	Title Page
2.0	Pricing	2.0	Table of Contents
3.0	Options and Alternates	3.0	Executive Summary
4.0	EEOC Compliance	4.0	Statement of Work
5.0	Execution of Proposal by Officer of Supplier	5.0	Technical Exceptions
6.0	Financial Information	6.0	Options and Alternates
		7.0	Project Personnel
		8.0	Statement of Bidder's Qualifications
		9.0	Statement of Subcontractor's Qualifications
		10.0	Project Schedule
		11.0	Organization Chart
		12.0	Reference

Proposal Prepared by (Signed): _____

(Printed): _____

Title: _____

Date: _____

FORM C - EXECUTION OF PROPOSAL BY OFFICER OF SUPPLIER

RFP #2122 – Field Implementation Contractor Services

Supplier represents that this proposal is its complete offering and includes all exceptions to this RFP. Supplier agrees that this proposal will be valid for a minimum period of 90 days from date of submittal.

_____
Supplier

By:

_____
(Signature)

_____
(Name)

_____, a duly
(Title)

authorized representative of
the Supplier

_____
Date

nationalgrid

On behalf of:
Program Administrators mentioned on the PA List

REQUEST FOR PROPOSAL
Scope of Services

Codes and Standards Program Design Support for Massachusetts Program Administrators (Commercial/Industrial & Residential)

RFP 004-11

March 10, 2011

CODES AND STANDARDS PROGRAM DESIGN SUPPORT FOR MASSACHUSETTS PROGRAM ADMINISTRATORS (COMMERCIAL/INDUSTRIAL& RESIDENTIAL)

REQUEST FOR PROPOSAL

RFP 004-11

SCOPE OF SERVICES

The Massachusetts Program Administrators (PAs) for the Massachusetts Energy Efficiency programs in the Commercial/Industrial & Residential New Construction areas request proposals to provide technical expertise in developing initiatives related to building codes and appliance standards addressing the state of Massachusetts, as described in this Request for Proposals. The PAs include Berkshire Gas, Cape Light Compact, Columbia Gas of Massachusetts, National Grid (Electric & Gas), New England Gas, NSTAR Electric and Gas Corporation, Western Massachusetts Electric, and Unitil/Fitchburg Gas & Electric. This RFP covers the time period of two years (2), from April 2011 through April 2013 with possibility of further extension.

I. Background

In 2009, the Massachusetts PAs of the Residential New Construction Program agreed to an electric metric that required them to research savings attribution methodologies for new construction codes and standards (C&S) support. The PAs began researching how other utilities, like the California Investor Owned Utilities (IOU) have contributed expertise, research, analysis and other kinds of support to the California Energy Commission to support its efforts to develop and adopt energy efficiency standards for appliances and building codes. During 2010, the PAs of the Residential New Construction Program, voluntarily engaged in activities like trainings to builders and code officials that supported the adoption and reinforcement of more stringent state-wide codes and targeted adoption of a stretch energy code in several communities.

In September 2010, the Massachusetts PAs of the Commercial and Industrial (C&I) programs made a joint decision to actively engage in program initiatives geared towards state building energy code compliance and enhancement and advocacy towards appliance standards. Since then, the C&I Management Committee of Massachusetts PAs have taken some initial steps to establish State-wide “C&S Initiatives”, one of them being an RFP for a consultant to assist PAs in establishing these initiatives. The initiatives will consist of program activities geared towards compliance and enhancement of building codes and equipment/appliance standards.

In March 2010, Residential PAs decided to join with the C&I PAs in their efforts to source the consultant.

Justification for C&S Involvement: There is significant energy savings potential associated with the implementation of existing and new codes and standards. Although, any changes to codes and standards also present challenges of enforcement and implementations since many communities do not have the resources to fully enforce the code, and new manufacturing standards may not be readily adopted by the marketplace as quickly as desired. Additionally, when codes and standards change, the baseline conditions for energy efficient equipment that exceeds the code minimum is adjusted, which can reduce a PAs ability to claim savings and reduce the cost effectiveness of program portfolios.

Utilities and PAs have played a role in accomplishing tasks related to C&S in other states like California. The Massachusetts PAs have the resources to assist the Commonwealth of Massachusetts in building codes and appliance standards support. Since 2006, the California Public Utilities Commission (CPUC) allows IOUs to claim verified “Program Net Savings” for electricity and gas that are attributable to C&S programs. Since there is precedent in California (and possibly other states) for PAs claiming credit for savings due to codes and standards efforts, a similar case may be made for Massachusetts. In the recent past, PAs of the C&I AND Residential programs sponsored New Building Institute’s Core Performance Guide which was used as a prescriptive path for

compliance towards the Massachusetts stretch code. However, energy savings associated with such code related utility efforts were not quantified in the past.

As part of the initial steps towards setting up C&S initiatives in Massachusetts, the PAs have sponsored an ongoing study to understand the current energy code implementation practice in Massachusetts through interviews and site surveys and to determine a code compliance rate for commercial and residential buildings. In addition, another ongoing study will estimate state-wide energy savings potential through upgraded building code (IECC 2009, current stretch code and IECC 2012).These studies will be available to the winning bidder during the course of contract.

Massachusetts Energy Code: The Massachusetts Board of Building Regulations and Standards (BBRS) recently upgraded the "base" building energy code, 780 CMR, to be consistent with the 2009 International Energy Conservation Code (IECC). This upgrade is in accordance with the Green Communities Act of 2008 (GCA), which requires Massachusetts to update its building code every three years to be consistent with the most recent version of the IECC. Effective July 1, 2010, commercial residential construction must comply with the IECC commercial provisions or ASHRAE 90.1 2007. In 2009, Massachusetts became the first state to adopt an above-code appendix to the "base" building energy code—the "Stretch Code" which emphasizes energy performance (780 CMR Appendix 120.AA). The Department of Energy Resources (DOER) is an agency of the Executive Office of Energy and Environmental Affairs (EEA) that assists green communities with implementation of the Stretch Code.

II. Overview

The purpose of this RFP is to seek a qualified bidder or a team of bidders to assist the Massachusetts PAs develop Codes and Standards Initiatives covering Commercial and Residential buildings over a period of two (2) years starting April 2011. In cooperation with the codes community, the PAs will work towards improving compliance with existing energy code and offer continued improvement on proposed building energy codes and standards that lead to the future revisions of the Massachusetts State Building Code and Stretch Code.

Continually refining the building energy codes and standards coupled with enforcement, complement existing energy efficiency programs by establishing more efficient baselines and will help PAs measure the progress and success of their programs. In addition, markets are transformed towards higher efficiency when newer efficient equipment supplements older inefficient equipment to an extent that the latter is either no longer produced, becomes unattractive to end users or is excluded from the marketplace as the result of various standard-setting processes. Some of these standard-setting processes are industry-driven and voluntary; others produce mandatory codes or standards promulgated by federal or state governments.

These C&S initiatives will focus on working with national and local code development organizations and federal and state standards development organizations. Some of the efforts geared towards buildings codes include facilitating and supporting training and education efforts for code enforcers, designers and builders, third party inspections, cost effectiveness studies for energy efficiency upgrades for future code etc. Some of the efforts geared towards standards include participation in USDOE's standard-setting process for electric and gas equipment standards and federal and state level advocacy.

The role of the bidder or team of bidders is as follows:

- To identify and plan program activities that can be incorporated in the PAs codes and standards initiatives—activities geared towards:
    - Compliance of current building energy code (including stretch code) and standards
    - Enhancement of future building energy code (including stretch code) and standards
- To work in collaboration with the PA Evaluation team and their consultants in developing a mechanism to estimate the electricity and gas savings that can be reasonably attributed to the efforts of the PAs' Statewide C&S initiatives.

III. Program Terms – Scope of Work

To achieve the objective described above, the following tasks are anticipated. Bidders are encouraged to provide additional recommendations to accomplish the objective.

Background Research: This task involves background research that may be essential to establish C&S initiatives. Research may include review of existing and ongoing code compliance studies, PA regulatory system, code process for submitting code change proposals, identification of stake holders, existing C&S code initiatives being implemented in other parts of the country etc.

Coordination with Stakeholders and Various Code Activities: There are many players and organizations in the construction and equipment manufacturing market that are impacted by code changes. This task will address each of the stakeholders concerns (through surveys or other means) and ensure coordination with other code activities around the state (with organizations like NEEP, BBRS and DOER among others).

Program Planning for Initiatives: This task involves preparation of aims and objectives and scope of work for each initiative, including implementation plan for specific activities and associated budgets. This also includes assistance to PAs in developing contractor scope for proposals to perform the tasks listed in each initiative.

Integration of C&S Initiatives with Incentive Programs: The contractor is expected to provide a plan for coordination and integration of C&S initiatives with existing incentive programs for consistency across programs, to maximize energy savings and minimize administrative resources.

Documentation and Presentations: The contractor is expected to assist PAs in documentation pertaining to reports for Department of Public Utilities (DPU) and the code community, prepare presentations and present to PA committees, regulators and other stakeholders on an as-needed basis.

Methodology to Quantify Energy Savings through C&S Initiatives: The contractor is expected to coordinate with the PA evaluations' teams (and their consultants) to develop a methodology for PAs to take credit for C&S activities. Examples of possible tasks include comparison of existing methodologies used by other states, identification of baselines to measure performance, approaches to avoid double counting etc.

Long Term Strategic Plan: Codes & Standard by their nature are a long term investment from proposal development to adoption to effective implementation. This long term plan will consist of clearly defined short term and long-term goals for the C&S initiatives, a work plan with timelines, identification of specific initiatives, specific action strategies the PAs will employ in order to meet the C&S goals, estimates for budgets to be spent on overall C&S Initiatives and budgets based on activities associated with each initiative.

CREATIVE APPROACHES TO MAXIMIZING VALUE: Bidders are encouraged to provide additional tasks beyond the above Scope of Work that will benefit the C&S initiatives. Bidders' responses will be evaluated based on these recommendations.

IV. TIME LINE

TENTATIVE PLANNED C&S ACTIVITIES FOR 2011-2013: The table listed below is designed to give bidders an idea of activities the PAs are contemplating and an approximate timeline. These timelines and activities are subject to change. The PAs expect to establish the first initiative (comprehensive code compliance support) by September 2011 and submit for Department of Public Utilities filing by October 2011. Details of each activity including both scope and timeline will be determined once Contractor is selected.

	2011				2012				2013			
ACTIVITIES	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Code Compliance Study (ongoing)												
Energy Savings Potential Study (ongoing)												
Establish C&S contractor (per this RFP)												
Submit Draft Long term Strategic Plan												
Establish Initiative 1: Compliance Support												
Establish other initiatives												
Submit Final Long-term Strategic Plan												
Possible Contract extension												

V. GENERAL DELIVERABLES

Work is anticipated to commence by **April 1, 2011**. In general, the selected contractor will be expected to deliver (but not limited to) the following items during the course of this effort. These items are subject to change post kick-off meeting:

- Background research report, per scope of work described above, 45 days after the first kick-off meeting.
- Draft plan for code compliance initiative, due August 2011, with the final plan due October 2011
- Draft long term strategic plan, due November 2011
- Annual report, due upon completion of each calendar years activities including all supporting documentation, due February 1, 2012 and 2013
- Energy Savings Quantification methodology, due June 2012
- Final long term strategic plan, due March 2013
- The contractor will be required to present to the Massachusetts PA C&I and Residential Committee(s), and respond to questions on an as-needed basis.
- Meetings:
    - The contractor is expected to attend at least one in-person kick-off meeting and subsequent in-person meeting every six months into the contract.
    - The contractor is expected to attend once a month conference call with the Massachusetts PA C&I and Residential Committee(e).
    - In addition, at least one briefing session for outside interested parties may be required.
    - The cost proposal should present the costs for these tasks separately.

INFORMATION REQUESTED: Respondents should submit their proposals with the following information.

- A detailed description of the complete scope of work including a schedule, flowchart and organizational structure for the years 2011-2013. This should not be a re-statement of the scope described here, but a carefully thought out plan of how, when, and where the various tasks will take place using examples wherever possible. This plan should give a reasonably detailed description of how the contractor plans to complete each of the tasks described in the scope of work. For any survey work, a sample of questions and how they would be analyzed should be included.
- Budget: Provide an overall budget for the contract and budgets based on each task to accomplish the scope of work.
- Project Management Plan: Describe how the project will be managed, especially if there are subcontractors or consultants involved. Provide a description of the roles of each business entity named

in the proposal. Identify the Project Manager and its relationships to the project team and oversight of the project by qualified Principals in the lead firm.

- Statements of qualification that detail the bidder's experience and ability to provide multi-year support should be included. The bidder's statements should emphasize their expertise and knowledge with regards to but not limited to the following:
    - At least 10 years experience with building energy efficiency.
    - Familiarity with code language, associated manuals and code enforcement activities (may not be specific to Massachusetts)
    - Familiarity with energy efficiency standards development procedures
    - Experience with national code and standards organizations like ASHRAE, IECC, IESNA, DOE etc
    - Energy efficiency program design, evaluation, and policy support
    - Energy efficiency research and market studies
    - Technical review of energy efficiency reports, manuals etc
    - Experience with large organizations, and complex program portfolios
- One representative example of experience and documentation skills, such as a report.
- Names, affiliations, and telephone numbers of at least two individuals or organizations for which similar services have been provided for Prime Contractor and all sub-contractors on team. The Massachusetts PAs reserve the right to contact these individuals to ascertain the quality and timeliness of previous performance.

With the exception of sample report and staff resumes, limit your response to 20 pages. All material submitted will be treated confidentially.

EVALUATION OF PROPOSALS AND SELECTION OF CONTRACTOR: The PAs and their related personnel will confidentially review proposals. The PAs reserve the right not to select any submitted bid. The PAs are not responsible for costs incurred by bidders to develop proposals. Proposals will be judged on the following criteria:

- **Reasonableness of Approach:** The proposal offers good creative solutions to the evaluation issues presented in the RFP.
- **Dedicated Resources:** The bidder shows that it has the resources to provide the services requested within the expected timeframe.
- **Demonstrated Experience:** The bidder demonstrates that it has the experience and expertise or the ability to provide subcontractors having the appropriate knowledge to perform the requested tasks.
- **Creative Approaches to Maximizing Value:** Bidder's recommendations for innovation assisting the Company to reach its C&S goals add value and/or save money for the Company without consequence to other initiative and/or financial goals.
- **Cost:** Both the total cost and whether overall proposal offers good value will be considered.
- **Comprehension:** The bidders that it understands the issues involved and responds accordingly.
- **Documentation Quality:** The proposal is clear, concise and well written.

nationalgrid

ON BEHALF OF MASSACHUSETTS PROGRAM ADMINISTRATORS

REQUEST FOR PROPOSAL
SCOPE OF WORK

RESIDENTIAL NEW CONSTRUCTION PROGRAM SUPPORT FOR MASSACHUSETTS PROGRAM ADMINISTRATORS

SPRING 2011

CONFIDENTIAL

RESIDENTIAL NEW CONSTRUCTION PROGRAM
SUPPORT FOR MASSACHUSETTS PROGRAM ADMINISTRATORS
REQUEST FOR PROPOSAL

SCOPE OF WORK

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1.0 DEFINITIONS, ABBREVIATIONS, and ACRONYMS

BRA:	Boston Redevelopment Authority
Builder:	The individual or firm responsible for the construction of the housing unit
Builder Agreement:	Contractual document that defines Builder's obligations to build to Program standards
CFL:	Compact Fluorescent Lamp
C&I:	Commercial and Industrial
Customer:	Residential end-use customer of the PAs
DOER:	Department of Energy Resources
DPU:	Department of Public Utilities
EEAC:	Energy Efficiency Advisory Council
ENERGY STAR:	A joint Program of the United States Environmental Protection Agency and the United States Department of Energy promoting energy efficient products and practices, including the ENERGY STAR Qualified Homes Program
HERS:	Home Energy Rating System
HERS Rater:	Energy professional who is trained and certified to evaluate home features and prepare an energy efficiency rating based on REM/Rate; adept in assessing projected energy performance either from construction drawings or by physically inspecting the home[1]
HPBA:	High Performance Building Adder
JMC:	Joint Management Committee; includes PAs, DOER, EEAC Consultants, and the Lead Supplier providing input to Program design and goals
Lead Supplier:	The contracted service provider responsible for Program administration and for managing and implementing related Pilot Programs within the Program
MA:	Massachusetts
Major Renovation:	A pilot under the approved Three Year Energy Efficiency Plans that addresses the gap between the Single-family Residential Retrofit Program and the nature of true new construction. This pilot Program applies to existing homes with an addition of 500 square feet or more
Multi-family:	All projects of five units or more; buildings that are four stories or fewer that are permitted under the residential use group are eligible to participate in the Program and to be certified as ENERGY STAR-qualified homes
Mixed-use:	A building that includes commercial and residential units
Net Zero Energy:	A building with annual zero net energy consumption and zero carbon emissions
Owner:	The individual homeowner or the actual owner of the residential structure
PA:	Program Administrator; utility and/or energy service provider
QA:	Quality Assurance
QC:	Quality Control
QIV:	Quality Installation Verification; refers to the qualifications for a quality installation for central air conditioning systems, including proper equipment selection, installation, and duct distribution
REM/Rate:	Residential Energy Management; modeling software that calculates heating, cooling, hot water, lighting and appliance energy loads, consumption, and costs for new and existing single and MULTI-FAMILY homes
RESNET Accredited:	A national standards-making body for building energy efficiency rating systems for verification of

[1] Definition from Northeast HERS Alliance Website http://www.energyratings.org/hers/index.html

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	building energy performance
RFP:	Request for Proposal
Single-family:	Homes with one to four dwelling units
SSL:	Solid State Lighting
The Program:	Massachusetts Residential New Construction Program, also known as the Massachusetts New Homes with ENERGY STAR Program
Incentive Tiers:	
Tier I:	15% improvement or better over the MA 2011 Hybrid UDRH and compliance with the TBC or Air Sealing and Insulation Section of TEC
Tier II:	30% improvement or better over the MA 2011 Hybrid UDRH and compliance with the TBC or Air Sealing and Insulation Section of TEC
Tier III:	45% improvement or better over the MA 2011 Hybrid UDRH and compliance with the TBC or Air Sealing and Insulation Section of TEC
TBC:	Thermal Bypass Checklist; http://www.energystar.gov/ia/partners/bldrs_lenders_Raters/downloads/Thermal_Bypass Inspection_Checklist.pdf
TEC:	Thermal Enclosure System Rater Checklist; http://www.energystar.gov/ia/partners/bldrs_lenders_Raters/downloads/InspectionChecklists.pdf
UDRH:	User Defined Reference Home; used as the basis of Program savings based on studies performed by an independent consultant to determine the energy standards to which the contractors are currently building and which characterizes the baseline from which savings are derived

Version 3:
http://www.energystar.gov/ia/partners/bldrs_lenders_Raters/downloads/NationalProgramRequirements_v3.pdf

2.0 PROGRAM OVERVIEW

A collaboration of MA PAs who actively manage and steer the statewide Massachusetts Residential New Construction Program ("Program") have issued a Request for Proposal (RFP) for a Lead Supplier to provide a wide range of Program administration and technical services needed to deliver a successful statewide Program. PAs include Utilities and Energy Efficiency Service Providers and are as follows:

- Berkshire Gas
- Columbia Gas of MA
- Cape Light Compact
- National Grid Electric and Gas
- New England Gas
- NSTAR Electric and Gas
- Unitil
- Western MA Electric Company

These are also the PAs that use the Mass Save® brand as the statewide umbrella for their Programs. The objective of the Program is to capture lost opportunities for increased energy efficiency, encourage the construction of energy-efficient homes and drive the market to one in which new homes are moving towards net-zero energy.

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The JMC maintains a consistent statewide Program [2] to encourage Builders to construct homes that exceed the MA baseline (MA UDRH or UDRH). The PAs are seeking services for a Lead Supplier to provide implementation services for this Program. The initial contract term is from June 30, 2011 through December 31, 2013, with the option to renew in one-year intervals, up to two renewal terms.

2.1 Current Program Design

The Program is currently designed to increase energy efficiency and to capture lost opportunities in the residential home building market. The JMC continues its strong commitment to a comprehensive whole-house approach for the Program. The Program leverages the national ENERGY STAR Homes Program and benefits from regional and national advertising efforts from ENERGY STAR Homes. The Program goals are to increase market penetration of energy-efficient homes in 2011 and beyond and drive Builders toward deeper energy savings. The Program strives to retain 75 percent of the participating Builders and recruit additional Builders working in the new construction and major renovations market. The Program supports the national ENERGY STAR Qualified Homes Program to move the residential home building market toward greater energy efficiency. In 2011, the JMC will support new construction using the ENERGY STAR guidelines at the Builder's or owner's request. If a Builder chooses to follow ENERGY STAR guidelines, it can do so with the help of its HERS Rater with no additional Program compensation. For those Builders or owners building Single-family homes and Multi-family buildings four stories or below, the ENERGY STAR Qualified Homes Program provides direction on how to achieve greater energy efficiency for heating, cooling, lighting, and appliance operations. These homes are designed, site inspected, and performance tested to achieve the ENERGY STAR qualification based upon the size of the structure and other items included in Version 3. The Program plans to follow the EPA's schedule for Version 2.5 and Version 3.

The Program does not require the home to qualify for ENERGY STAR designation. However, the Program has MA requirements for percentage savings over the UDRH. The Program participants must meet the savings over baseline in order to receive Program incentives.

The Program currently provides incentives for the following three tiers[3]:

- Tier I – which requires a minimum modeled 15% improvement over the current UDRH
- Tier II – at least 30% improvement over the current UDRH
- Tier III – at least 45% improvement over the current UDRH

The Program provides incentives for direct installation of ENERGY STAR qualified CFLs in appropriate hardwired Edison-based sockets and for on-site training. The list of available lighting products has been expanded to include almost every type of energy saving bulb including candelabra lighting and can be found in the section Attachments as file 2011.CFL.Offerings.pdf. A final verification inspection is required for all homes participating in the Program. The JMC also cross-promotes with the PAs' Lighting Program to introduce SSL into this Program through the Lighting Design Pilot in 2011-2012.

All projects consisting of four units or fewer are designated as Single-family, and all projects five units or more are classified as Multi-family. Buildings that are four stories or fewer that are permitted under the residential use class are eligible to participate in the Program and could be certified as ENERGY STAR Qualified Homes.

Mixed-use buildings may participate if they are permitted in the commercial use class as long as: (1) the entire structure is five stories or fewer (one story being commercial space); and (2) each residential unit has its own heating, cooling, and hot water systems separate from the other units. Homes that exceed these requirements are eligible to participate in the Multi-family New Construction Pilot because of their mixed use nature. The Multi-family New Construction Pilot encompasses buildings with more than four stories and less than nine stories for those that cannot be treated under the MA New Homes with ENERGY STAR Program.

2.2 HERS Rater Services

All homes in the Program must be certified by an independent HERS Rating Company. A HERS Rater reviews home construction plans and informs participants of the most cost-effective upgrades to qualify homes for the Program. In addition to being qualified to certify the HERS Index and Program qualification, the HERS Rater may assist Builders to

[2] Municipalities and towns do not participate as part of the JMC. This Program is for Customers who have either natural gas or electric service provided by one of the PAs

[3] Incentives are subject to change based on PA funding, cost effectiveness or evaluation studies

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qualify the homes as ENERGY STAR. HERS Raters work with the Builder throughout the building process, providing technical assistance, mid construction, and final performance inspections. The additional costs and ENERGY STAR certification are not covered in the Program.

Before enrolling in the Program, applicants first work with a HERS Rater to review the home's plan. After review, the HERS Rater submits an incentive request form to the Lead Supplier indicating which incentives the home is eligible to receive. The Lead Supplier provides the Builder with an Award Letter from the Program confirming the qualifying incentives and the HERS Rater selected. Actual incentive amounts are contingent upon the final performance of the home and validation of equipment during a final inspection. The HERS Rater analyzes the home's potential energy performance using an approved simulation Program called REM/Rate and then completes both on-site inspections and diagnostic tests before issuing a home's HERS Rating, confirming savings above the UDRH (through a MA-specific report), and, if eligible, ENERGY STAR certificate and label. The HERS Rater conducts computer modeling of home plans using REM/Rate to determine the estimated energy usage. If necessary, recommendations are made to help the home meet Program qualifications and/or ENERGY STAR standards. Two or more site visits (at minimum first inspection and final inspection) during construction will be made to verify that the home is being built to Program standards. Upon completion of these steps, the house is qualified within the Program guidelines and/or as ENERGY STAR, and any incentives available from the PAs are paid directly to the applicant. In 2011, the PAs will pay the HERS Raters an incentive to perform this service. First payment is made after the required first inspection paperwork is submitted. Final payment is made to the HERS Rater upon completion and verification of paperwork and REM/Rate files are submitted to the Lead Supplier. The 2011 HERS Rater incentive level is subject to change and may be eliminated in subsequent years.

2.3 Program Requirements

Refer to Program.Requirements.2011.pdf located in the Attachments section. This memo characterizes the changes made to the Program to more closely align with the UDRH, which is the basis for savings.

Refer also to 2010-2012.MA.Joint.Gas.Plan.pdf and 2010-2012.MA.Joint.Elec.Plan.pdf in Attachments which include information on the Program Descriptions of each of the pilots. This can be helpful to understand the Program background as well as the goals during part of this contract period.

The Lead Supplier will contract directly with each PA and will be required to invoice each PA with both PA-specific and PA-proportional or shared costs. The Lead Supplier is also required to track all Program costs, energy savings, and activities by PA and invoice each PA separately on a monthly basis and in a timely manner.

Lead Supplier must address all areas detailing Program support based on filed unit participant goals for 2011 and 2012. Participation levels for 2013-2015 have yet to be filed with the Department of Public Utilities for subsequent years. The participant numbers are for comparative purposes only. The Lead Supplier is expected to adjust staffing levels to meet annual Program goals and changing PA budgets.

	Participant goal 2011	Savings goal 2011	Participant goal 2012	Savings goal 2012 Therms or KWH
Berkshire Gas	47	16,121 Therms	52	17,836 Therms
Columbia Gas	450	116,490 Therms	540	185,220 Therms
Cape Light Compact	56 Low and Standard Income	300,500 KWH	51 Low and Standard Income	283 MWH
National Grid Electric	646 Standard Income 204 Low Income	1,712 MWH 3,955 MWH	700 340	1,538 MWH 2,860 MWH
National Grid Gas	881	97,008 Therms	968	358,280 Therms
New England Gas	36	9,348 Therms	39	10,377 Therms
NSTAR Electric	855 Standard Income 816 Low Income	1,919,508 KWH 363,601 KWH	1004 Standard Income 717 Low Income	1,726579 KWH 273,653 KWH
NSTAR Gas	599	76,073 Therms	543	167,794 Therms

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Western MA Electric	67	117 MWH	101	178 MWH
Unitil Electric	52	52.6 MWH	70	91.3 MWH
Unitil Gas	11	3660 Therms	16	5589 Therms

2.4 Target Market/Eligibility

Any Customer in a PA electric or gas territory planning to build a new home or existing home undergoing total gut renovation (residential home gutted down to the studs) or remodeling is eligible to participate in the Program, subject to PA budget levels. Both Single-family and Multi-family buildings are eligible. Because this Program is comprehensive in nature, Customers choosing to participate in the Program are not eligible to participate in other MA energy efficiency Programs.

Eligible building types include Single-family, townhouse, and Multi-family residential dwelling units[4], including standard income and low income units. Additionally, mixed-use buildings may participate if they are permitted in the commercial use class as long as: (1) the entire structure is five stories or fewer (one story being commercial space); and (2) each residential unit has its own heating, cooling, and hot water systems separate from the other units. Existing residential dwelling units undergoing total, complete rehabilitation may also be eligible for the Program. In addition, there are currently three pilots[5] being implemented by the JMC.

2.5 Builder Participation

To qualify a home into the Program, a Builder must:

- Sign a participation agreement. Refer to Application.and.Agreement.Form.2011.pdf in Attachments
- Provide a building permit to the HERS Rater before construction begins
- Hire a certified, Program-approved, HERS Rater, and meet the criteria required by the Program, which is listed below as follows:
  - Submit building plans for evaluation to a participating HERS Rater
  - Document proper HVAC equipment sizing and installation
  - Seal HVAC duct system joints and seams
  - Pass duct leakage criteria (www.masssave.com/residential/building-a-house-or-addition)
  - Seal all appropriate sources of air infiltration with foam, caulk, or other acceptable weatherization material approved to reduce air leakage. Have the home meet either15%, 30%, or 45% energy savings above UDRH and meet the TEC
  - Install a mechanical ventilation system
  - Install CFLs in 80% or more of available sockets in the new home

2.6 CFL Overview

All home units that participate in the Program receive free CFLs for all of the hard-wired, screw-based sockets available in the home. In order to participate in the Program, at least 80% of the available sockets in the home must be sourced with CFLs.

There are over 20 varieties of energy-efficient lamps offered by the Program so an appropriately matching lamp is available for nearly all fixtures on the market. All lamps are ordered by the HERS Raters through the Lead Supplier.

The PA's lighting Supplier will invoice the Lead Supplier for CFLs ordered. The Lead Supplier is responsible for verifying CFL invoices with inspection data from the HERS Raters. Upon verification of CFLs, the Lead Supplier is responsible to bill the PAs for the all bulb costs during the monthly invoicing process.

[4] Eligibility of Multi-family buildings with residential dwelling units are only for buildings four stories and below.
[5] The three pilots are Major Renovation, Multi-family New Construction, and Lighting Design (see Pilot Program Implementation for more information)

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The PAs welcome a proposed method for verification of CFLs. In the future, other lighting technologies may take the place of CFLs.

3.0 LEAD SUPPLIER RESPONSIBILITIES

This SOW describes the minimum services required for successful implementation of the Program.

In the Attachments section of document is the Program's most recent annual progress report, Final.2009.MA.Homes.Progress.Report.June1.2010.pdf, which outlines the Program's progress over time, including signings, completions, as well as participant attrition rates in the Program since 2006.

The Lead Supplier is encouraged to submit value added and alternate cost-effective approaches and creative solutions to address market barriers to energy efficiency investments in residential new construction during the course of its work. The decision to adopt these suggestions shall remain solely with the individual PAs.

3.1 Program Oversight and Management

- Designate a dedicated lead Program manager for all services related to the Program
- Designate a dedicated reporting and data management lead
- Coordinate, oversee, train, and track all activities as described herein this SOW
- Organize and facilitate monthly meetings with all members of the JMC for Program planning, updates, and reporting.
- Provide PAs with monthly and annual projections of participants, savings and, project costs. This is critical to Program planning, budgeting, cost effectiveness, and regulatory requirements
- Evaluate each project to ensure it will not negatively effect the total cost effectiveness of the Program
- Keep current on all activity related to residential energy conservation within the new construction industry and advise PAs on Program strategy, new actions along with new and innovative ideas having the potential to generate more participants, deeper and cost-effective savings such as day-to-day operations, pilot Program updates, and EPA updates on the national Program, as well as protocols for similar Programs across the US
- Deliver Customer/Builder consultations and trainings
- Project Enrollment (Builder recruitment)
- Send Program award letter to Builder once enrolled in the Program
- Offer incentive packages to Builder/Customer
- Staff toll-free number for the following activities:
    - Program inquiries
    - Builder enrollment
    - Code official inquiries
    - Participant screening
- Have a complaint resolution procedure and reporting procedure to ensure professionalism and Program compliance.
- Marketing activities as described in this Scope of Work
- Coordinate organizations, groups, associations, trade allies, and others involved with or with an interest in residential new construction
- Support evaluation activities – including providing data and making staff available to evaluators – with the separate QA Supplier
- Ensure that all participating HERS Raters and Providers follow RESNET and other appropriate standards

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3.2 HERS Rater Oversight

- Coordinate, oversee, and track all activities with market based HERS Raters
- Subcontract each HERS Rater
- Ensure HERS Rater completes the each task
  - Recommend upgrades to Builder/Customer
  - Verify and perform final quality check of installed energy efficient measures, including but not limited to properly sealed ducts and proper air sealing
  - Conduct duct blaster and blower door tests, where appropriate
  - Inspect central air conditioning systems, where appropriate
  - Install and/or verify CFLs or other measures such as heating/water heating equipment, as appropriate, at final verification
  - Provide complete and accurate documentation to Lead Supplier within one week of final inspection
- Provide designated telephone number for HERS Raters who need assistance or have inquiries
- Provide leads to HERS Raters - Certified.HERS.Rating.Companies.Feb2011.pdf in Attachments lists all certified HERS Raters as of February, 2011.
- Provide quarterly HERS Rater meetings in which the Lead Supplier will discuss changes, challenges, and successes
- Provide HERS Rater schedules to the third party QA/QC Supplier

3.3 HERS Rater and Code Support Trainings

Technical support and training to HERS Raters, building code officials and towns in MA on residential energy code, stretch code, and IECC 2009. Currently there are 64 towns in MA that have adopted the stretch code and potentially another minimum of 40 under consideration.

The Lead Supplier must be prepared to offer additional trainings as needed to ensure the Program is achieving Program savings goals. Lead Supplier shall present the JMC with a training plan and proposed budget on an annual basis.

The selected Lead Supplier must be RESNET Accredited and have certified HERS energy Raters on staff.

3.4 Marketing

Direct Builder contact is the primary Program marketing mechanism.

- Maintain Program information on www.masssave.com
- Develop, maintain, and leverage relationships with manufacturers of energy efficient equipment (e.g. windows, insulation, HVAC equipment, etc.) through outreach and trainings as related to the Program
- Provide monthly reports on Program-related activity on www.masssave.com including but not limited to the number of hits and length of time spent on Program website
- The selected Lead Supplier will propose a marketing plan and proposed budget on an annual basis for the JMC
- Maintain general printed marketing materials and incorporate leveraged Program materials. Items can include but are not limited to: branded brochures, advertisement placement, and printed training materials.
- Maintain and revise standard Program forms and materials, when approved by the JMC, as needed to implement the Program, such as Program enrollment forms, Program participation letter
- Staff educational trainings/conferences such as relevant Home Shows/Trade Shows (i.e. NESEA, Build Boston)
- The Lead Supplier shall not create, use, or distribute any PA brand, logo, or likeness without the prior written consent of the PA

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3.5 Data Management, Project Verification, and Reporting

Provide database management (Oracle-based or proven equivalent) that includes tracking and reporting Programs and pilot activity and participant information. It is critical to this Program to have accurate energy-related savings corresponding with invoicing. The Lead Supplier is responsible for calculating the savings due to heating, cooling, and domestic hot water. Currently, savings are calculated using inputs from the REM/Rate files of the "as-built" units generated by the HERS raters. These inputs, along with the UDRH, are run through a building simulation model[6] to determine the savings. The Lead Supplier shall assure the savings it submits to PAs are accurate and timely. The Lead Supplier will be held responsible for savings and costs that the PAs report to the regulatory bodies in MA. Respondents should provide a data exchange and management protocols plan as well as a plan for quality control of invoicing and savings. Reports of Program activity are required on a monthly basis or upon request in an electronic format. Program activity data reports will be generated for intended use by the PAs, JMC, DOER, EEAC, third party Quality Control contractor, and independent evaluation Suppliers hired by the PAs.

Lead Supplier must comply with data requests with accurate data in a timely manner. PAs frequently respond to DPU information requests and have specific turnaround times that must meet regulatory requirements.

For examples of data upload file formats, see the following files in the section Attachments:

- NGRID.Gas.ESHOME.Application.All.Territories.Gas.txt
- NGRID.Gas.ESHOME.Measure.All.Territories.Gas.txt
- NSTAR.Bulk.Load.File.Layout.2011.xls

3.5.1 Specific Management and Verification Tasks for the Lead Supplier to Perform

- Track project data including:
  - HERS Rater
  - Builder
  - Unit information, e.g. meter number, meter type (if Multi-family), street, town, fuel type
  - PA
  - Fee structure, material cost, material installed
  - Status of project in process and pipeline by PA
  - Timely and verifiable savings per unit and related cost
  - Building permit date provided by the HERS Rater from the Builder
  - Project type, e.g. residential, low-income, Multi-family
  - Detailed project sub-type: all electric project with deliverable fuel source, all gas project in a municipal electric territory, gas and electric project (i.e. town territories which affect more than one PA, i.e.: National Grid Gas and NSTAR Electric)
  - (Payments rendered by each PA is dependent upon the above listed project types and will be invoiced as such)
- Maintain a web based tool with access by HERS Raters to submit REM files for each project
- Maintain UDRH with appropriate documentation of sources and any changes as approved by PA evaluation staff
- Verify installation of CFLs; compare what is invoiced for materials to actual installations

3.5.2 Specific Reporting Tasks for Lead Supplier to Perform

- Develop templates in concert with the JMC to report monthly statewide activity as required for Program implementation and with individual JMC PAs to develop specific PAs-required data transfer files

[6] The building simulation model being used currently in the Program is proprietary to the current Lead Supplier.

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- Report marketing activity and trainings and costs
- Provide monthly reports as deemed necessary by the JMC including but not limited to:
  - Number of units statewide and PA-specific showing actual and projected completions compared to goals
  - Savings
  - Cost per savings
  - PA-specific and statewide year-to-date expenditures
  - Energy Efficient Measures, e.g. CFLs and heating equipment, installed by PA/Statewide
  - Participant attrition rates by PA statewide
  - Summary of signings (signing requires a Builder to pr ovide the Program with a building permit) for each PA territory
  - Summary of completions for each PA territory
  - Energy savings from data collection software (i.e. REM/Rate)
  - Demographics
  - Signing prospects
  - Marketing outreach
  - Projected completions and cost
  - PA-specific state-mandated metric status report
  - Projected expenditure
  - Detailed expenditures report for expenses incurred such as, but not limited to:
    - CFL bulb cost report, by PA territory
    - External marketing related costs by PA territory
    - Materials cost report
    - Technical assistance costs, by staff member
  - Incentives paid by incentive type (e.g. air conditioner, heating system)
  - Appliance and Efficiency Upgrade Report for installations including, but not limited to:
    - ENERGY STAR Windows
    - ENERGY STAR Programmable Thermostats
    - High Efficiency Heating equipment
    - High Efficiency Water Heating equipment
- Ad hoc reports as deemed necessary by the JMC

The PAs welcome the review of any additional reports the respondents deem necessary or of interest.

3.6 Invoicing

By the 5th business day of the each month, the Lead Supplier shall submit an itemized invoice to each PA for payment of goods and services delivered during the previous month as specified by the PA. Lead Supplier shall be paid for invoices within 30 days of receipt of invoice. Invoices will not be processed and will be rejected by the PA if the information submitted is incorrect, unverifiable, and is subject to re-submittal by the Lead Supplier.

4.0 PILOT PROGRAM IMPLEMENTATION

Work in conjunction with the PAs on pilots related to the Program. (i.e. Major Renovations, Lighting Design, and Multi-family Pilot) as well as any proposed pilot Programs or technologies related to the Program as part of Program strategies.

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The following details three pilots and Lead Supplier responsibilities for implementation of each of these pilots[7].

4.1 Major Renovations Pilot

The Major Renovations Pilot Program provides opportunity to increase energy performance for homeowners adding over 500 square feet, renovating, remodeling, or making other home improvements. Full technical support is provided by independent HERS Raters, along with an array of financial a ssistance from the PA, to optimize energy savings in participating homes. The responsibilities for the Lead Supplier are listed below.

4.1.1 Marketing, Recruitment and Outreach

- Develop Program material (per each electric PA sponsor)
  - Application/Overview
  - Flyers
- Update website (Mass Save New Homes page)
- Events (often leveraged with MA New Homes with ENERGY STAR Program)
- Ally Development
- HERS Raters
  - Provide one-on-one training on Program guidelines, objectives and data collection
  - Administer group HERS Rater meetings
  - Visit sites with Program Account Managers
- Program phone line and email box
  - Respond to inquiries
  - Track and report quantity and quality of inquiries

4.1.2 Tracking and Reporting of Project Field Data

- HERS Rater Project Field Questionnaire
- Collect project data and enter into approved database
  - General project information
  - Existing home details
  - Track upgraded and existing measures
    - Thermal envelope
    - Mechanical Systems
    - Appliances
  - Features of Addition-to follow EPA's Builder Option Package (BOPS)
    - Thermal envelope construction
    - Duct systems
  - Verification of Program requirements by HERS Rater
    - Collection of receipts
    - CFL orders
    - Photos requested

4.1.3 Sponsor Reporting

- Monthly Invoices
  - Lead Supplier to pay HERS Rater incentive per unit completed and invoice sponsor
  - Invoice project incentive sponsor (upon completion)
  - Invoice HERS Rater incentive sponsor (upon completion)
  - Invoice monthly Program administrative fees to individual electric sponsors
- Savings Report
  - Existing Home
    - Calculated Electric (KWH), natural gas (Therms), and Demand Savings (KW) consumption prior to demolition
    - Based on REM/Rate model/analysis
    - Square footage reported
  - Addition

[7] Any of the listed pilots could be determined by the JMC to become fully implemented Programs before or after 2012. Lead Supplier would need to fully prepare to successfully implement these as Program components rather than pilots.

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        - Modeled with the MA UDRH features and then added to the existing home to establish baseline home
        - Calculated Electric (KWH), natural gas (Therms), and Demand Savings (KW) consumption
        - Square footage. reported
    - Completed Project
        - Based on completed project REM/Rate model/analysis
        - Calculated Electric (KWH), natural gas (Therms), and Demand Savings (KW) consumption
        - Square footage reported
    - Comparative Analysis
        - Total Electric (MBTU)
        - Total Gas (MBTU)
        - Total Square footage
        - KBTU/sq.ft.
- Quarterly Progress Reports
    - Overall Pilot Program Progress
    - Challenges and Milestones
    - Individual PA Sponsor forecasts
        - Active projects
        - Completed project
        - Leads

4.1.4 Award Letter to Customer

4.1.5 Participant Goals for Participating PAs

Major Renovations	Participant goal 2011	Participant goal 2012
Cape Light Compact	120	133
National Grid Electric	50	50
NSTAR Electric	20	23

4.2 The MA Multi-Family New Construction Pilot

This pilot shall determine energy savings associated with mid- and high-rise Multi-family buildings that do not meet eligibility requirements for the MA New Homes with ENERGY STAR Program. Additionally, this pilot shall determine the optimal delivery mechanism and Program design elements to capture Multi-family project participation as well as the best way to model and test these buildings to ensure compliance. An initial process to provide whole building energy efficiency recommendations from a single point of contact has been developed already. The responsibilities for the Lead Supplier are listed below.

4.2.1 Project Recruitment

- Monitor project development and permitting data
- Direct outreach to developers, contractors, CDC's and state and municipal funding agencies
- Qualify projects for participation through a plan review process
- Offer and advise on Program tools to assist project design improvements that will result in greater levels of energy savings

4.2.2 Marketing – Develop and maintain paper and digital Program materials for distribution during project recruitment meetings and trade shows.

4.2.3 Account Management –

- Monitor the construction process
- Answer questions about design changes
- Assist participants to select third-party verifiers should they opt to participate in the HPBA portion of the Program
- Collect all required Program verification documents

4.2.4 Training – Conduct Program and Multi-family specific educational events for recruitment prospects, participants

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and third party verifiers

4.2.5 QA/QC

- QA 100 percent of all HPBA-tested units and projects
- Visually verify all prescriptive measures
- Collect all pertinent project data that will improve the understanding of MULTI-FAMILY buildings and improve the accuracy of the Programs reported savings

4.2.6 Savings and Evaluation

- Disaggregate, QA and report all project savings to the appropriate sponsor.
- Brake down savings by sponsor
  - o PA
  - o fuel type
  - o gas and electric
  - o meter
  - o Residential or commercial.

4.2.7 Savings Tool Maintenance

- Update the Programs predictive savings tool with upgrades, improvements and additions
- Include new savings data as well as improvements to the tools interface

4.2.8 Program Administration

- Respond to PA sponsor inquires
- Respond to the statewide MULTI-FAMILY Market Integrator project eligibility inquires and leads
- Generate quarterly and ad-hoc reports
- Maintain current and accurate Program participation database, administrative budgets, savings forecasts and incentive budgets.

4.2.9 Participant Goals for Participating PAs

MULTI-FAMILY New Construction Pilot	Participant goal 2011	Participant goal 2012
National Grid Electric	239 units	275 units
NSTAR Electric	9 projects 360 units	10 projects 413 units

4.3 Lighting Design Pilot

The Lighting Design Pilot explores new lighting design strategies, new lighting technologies, and improved designs and controls; customizing lighting solutions for different homes participating in the MA New Homes with ENERGY STAR Program. Participants will work directly with a qualified Lighting Designer to design a plan that may involve different kinds of energy saving lighting, fixtures, and controls. The responsibilities for the Lead Supplier are listed below.

4.3.1 Implementation Tasks

- Hold individual Kick-off meetings with Homeowners, Raters, and Builders for each project
- Account Management – Provide on-site management and Program support for each project
- Solicit for Lighting Designers

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- Rater Coordination – Documentation and support, etc.
- Meeting with lighting designers onsite for each unit in the Lighting Design Pilot
- 100% QA/QC of participating units

4.3.2 Administrative Tasks

- Invoicing
  - Administrative/Unit (Admin Costs and Lighting Designer Fees)
  - Builder Incentive (similar to Builder Invoices for New Homes)
- Initiate Lighting Designer payments for projects
- Review savings associated with Pilot-Create report
- Collect data
- Pre-approve projects, offer letters
- QA/QC units tested and reports created
- Invoice and report Lighting Design Pilot to participating PAs

4.3.3 Participant Goals for Participating PAs

Lighting Design Pilot	Participant goal 2011	Participant goal 2012
Cape Light Compact	10	10
National Grid Electric	6	6
NSTAR Electric	3	3

5.0 ADDITIONAL PROGRAM SUPPORT ACTIVITIES – NATIONAL GRID AND NSTAR SPECIFIC

5.1 Energy Positive (E+) Green Building Demonstration Project

The E+ Green Building Demonstration Program seeks to advance industry practice and public awareness of energy efficient green buildings and to construct high performance one to four unit residential green building prototypes that can serve as models for future practice. E+ buildings give energy back to the grid, improve the environment, and promote social equity. This Program is a pilot initiative of the City of Boston's Department of Neighborhood Development, Office of Environment & Energy Services, and the BRA.

The project will be jointly administered by the Department of Neighborhood Development and the BRA, which will manage development, marketing and outreach efforts including events and promotional materials. National Grid and NSTAR will support the project through Program-related incentives for Builders and HERS ratings, as well as marketing support for the final Projects. The responsibilities for the Lead Supplier are listed below.

5.1.1 Residential Energy Efficiency Workshop

- The Lead Supplier will work in conjunction with the BRA to utilize an existing Program workshop in the Greater Boston area for interested Builders, designers, and the general public.
- The Lead Supplier will provide technical training on Tier III and Program guidelines.

5.1.2 Energy Modeling Assistance for Project – mid 2011 and late 2012

- Evaluate up to six proposals for the Demonstration Project to determine three participating projects, and provide all of the technical review, assistance, and support throughout the two year project
- Review all initial HERS analysis (up to six), determine the three participating projects, and perform energy modeling on site onsite.
- Perform all inspections and provide onsite technical support and assistance.

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- Conduct all midpoint and final testing/scoring
- Cost of Energy Modeling Assistance not to exceed $26,000.

5.1.3 Administrative Tasks

- Invoice Builder incentives (same as Builder invoices for new homes)
- For up to 10 MA New Home units, provide Energy Star (Tier III) rebates for energy efficient construction and building equipment ($8,000 per unit)
- Data Collection
- Pre-approve projects, offer letters
- QA/QC units tested and reports created
- Invoice and report to participating PAs

6.0 PA RESPONSIBILITIES

The PAs oversee the promotion, implementation, and evaluation of the Program. The PAs guide the Program's strategic direction and make management decisions, including Program budget approval. The PAs will:

- Establish annual Program activities, metrics, and associated targets, as well as appropriate incentive mechanisms to measure the Program outcomes including market penetration of new residential home construction to evaluate Lead Supplier performance
- Approve Lead Supplier procedures and work documents
- Work with the Lead Supplier as needed to develop Program logistics
- Monitor Program participation and Lead Supplier conduct of work, including site inspections
- Reserve the right to approve Lead Supplier's personnel, including subcontractors, procedures, system methods, and materials prior to and during performance of work
- Review and approve any change orders or modifications to the approved scope of work for the Program
- Review and approve all forms, materials, procedures, and software proposed for use by the Lead Supplier in conducting the Program scope of work
- Review and provide comments on all Programmatic changes from the Lead Supplier
- Verify, approve, and process Lead Supplier invoices
- Participate, as appropriate, in statewide trade shows, Builder training events, and regional ENERGY STAR Programs
- Introduce and guide MA home Builders through the Program
- Promote energy code with the newly-adopted IECC 2009, primarily by requiring trainings of Builders, subcontractors, and code officials
- Provide 6 month review of Lead Supplier management and Program effectiveness

7.0 KEY PERFORMANCE INDICATORS

Successful implementation will be directly related to meeting established Program savings goals in a cost effective manner. The following are some Key Performance Indicators (KPIs) the Company is considering and are subject to change: A successful Lead Supplier would meet or exceed the following criteria:

- Energy savings goals
- Cost per Savings
- Participation goals (recruitment and retention)
- Customer satisfaction

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- Accurate and timely reporting

To ensure success of this Program, the PAs may implement a performance based contract.

8.0 ATTACHMENTS

2011.CFL.Offerings.pdf

Program.Requirements.2011.pdf

Application.and.Agreement.Form.2011.pdf

2010-2012.MA.Joint.Gas.Plan.pdf

2010-2012.MA.Joint.Elec.Plan.pdf

Final.2009.MA.Homes.Progress.Report.June1.2010.pdf

Certified.HERS.Rating.Companies.Feb2011.pdf

NGRID.Gas.ESHOME.Application.All.Territories.Gas.txt

NGRID.Gas.ESHOME.Measure.All.Territories.Gas.txt

NSTAR.Bulk.Load.File.Layout.2011.xls

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REQUEST FOR PROPOSALS

AVOIDED ENERGY SUPPLY COMPONENTS FOR USE IN ENERGY-EFFICIENCY PROGRAM COST-EFFECTIVENESS ANALYSES "2011 AESC STUDY"

Estimation of Marginal Supply Costs

Avoided By Electricity, Natural Gas, Fuel Oil, Biofuels, Propane, Kerosene, and Wood Savings from

Program Administrator Energy-Efficiency Activities

PURPOSE

Energy efficiency programs are being offered to customers throughout New England, generally by electric and gas utilities, as well as by other program administrators (collectively, "administrators"). Ratepayer funds support these programs, which focus on reducing energy consumption. To support program planning and development, prioritization prior to and during implementation of those programs, and filings with regulators, program administrators must be able to examine estimated program benefits over the lives of the component measures, and possibly beyond (if post-program benefits can be reasonably assumed). Key benefits derived from these conservation programs are the cost associated with avoided use of electricity and natural gas. In addition, several regulatory bodies permit the inclusion of non-electric and non-gas benefits in these benefit-cost analyses.

A subgroup of the administrators[1] in the region have chosen to solicit bids from consulting firms to provide projections of avoided energy costs which will support their internal program decision-making and their regulatory filings during 2011 and 2012. These project sponsors, along with non-utility parties and their consultants, constitute the 2011 Avoided-Energy-Supply-Component ("AESC") Study Group[2]. It will be the Study Group's responsibility to select the Contractor to conduct the study, interact with the Contractor, monitor progress of the study, and ensure that the results satisfy the study goals and provide the necessary factors to facilitate the cost-effectiveness analysis.

This 2011 AESC Study is intended to update prior studies conducted biennially since 1999 which were based on various methods including a survey of forecasts of market prices for electricity and fuels, production cost modeling, and actual experience in the energy markets. The 2009 AESC Study also considered results of Forward Capacity Market (FCM) and Regional Greenhouse Gas Initiative ("RGGI") auctions in the electric forecasts. Also in 2009, the Study Group expanded the study scope to include an assessment of the value of environmental impacts of fuel oil, natural gas, and other fuel efficiency and scenario analyses.

The Scope for 2011 is intended to maintain continuity with prior studies and ensure consistent application of study results despite the varied nature of program offerings. At the same time, we expect it will reflect the latest developments in the ISO-New England wholesale power market, in particular, the FCM and developments in the

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[1] The sponsors of this project include: Berkshire Gas Company, Cape Light Compact, National Grid USA, New England Gas Company, NSTAR Electric & Gas Company, New Hampshire Electric Co-op, Columbia Gas of Massachusetts, Northeast Utilities (Connecticut Light and Power, Western Massachusetts Electric Company, Public Service Company of New Hampshire, and Yankee Gas), Unitil (Fitchburg Gas and Electric Light Company, Unitil Energy Systems, Inc, and Northern Utilities), United Illuminating, Southern Connecticut Gas and Connecticut Natural Gas, Efficiency Maine, and the State of Vermont.

[2] The following agencies or organizations are represented in the Study Group: Connecticut Energy Efficiency Board, Massachusetts Department of Public Utilities, Massachusetts Department of Energy Resources, Massachusetts Attorney General, Massachusetts Low-

natural gas supply and delivery markets that affect the Northeast (Marcellus Shale and new pipeline and storage projects).

This Scope includes a proposed schedule for the project (page 23). The Study Group intends for the Contractor to begin work on the project in mid-February, 2011 and to complete the final report by July 8, 2011. Keeping these dates in mind, the Study Group will look to the Contractor to furnish it with a detailed timeline, consisting of dates for study milestones and deliverables.

The Study Group strongly emphasizes that the intent of this process is to determine energy supply components that will be applied only for the purposes of energy efficiency program planning, evaluation, and implementation and not be regarded as proxies for the market prices of any commodity.

SCOPE OF SERVICES

The Study Group's objective is to update the 2009 AESC Study (see http://www.nationalgridus.com/EnergyEfficiencyReports.asp to view the study) avoided costs for current conditions and current cost projections, beginning with a base year of 2011 and going out 30 years through 2041. The tasks below identify the information that is to be developed in the 2011 AESC Study, including additional requested information.

The tasks below identify twelve intermediate deliverables, as well as the final report and data file deliverables. The Contractor should expect that each intermediate deliverable will be reviewed by the Study Group, which may lead to revisions. Alternatively, through meetings with Study Group members during the analysis and preparation of deliverables, consensus on various assumptions, etc., may be reached, minimizing the necessity of revision. The Contractor will note that some deliverables are dependent on others, and the prior deliverables must be completed and reviewed before doing dependent tasks.

Income Energy Affordability Network (LEAN) and other Non-Utility Parties, New Hampshire Public Utilities Commission, and Rhode Island Division of Public Utilities and Carriers.

Deliverables should be labeled as "Deliverable #," followed by a descriptive name. Intermediate deliverables should be delivered as text and/or spreadsheet, as appropriate, which will allow for review by the Study Group. The full final report should be provided both in printed form and electronic form. Final avoided cost tables must be provided in Microsoft Excel spreadsheets, suitable for manipulation and use by the users. The Study Group will work with the Contractor to develop an acceptable format for the tables.

All assumptions in the avoided cost forecasts should be explicitly stated and documented (e.g., fuel price escalation rates, unit heat rates, including a detailed explanation of how future regional resources are matched with future regional loads, etc.). The Study Group expects that the Contractor will, through methodologies that will be reviewed by the Study Group, develop the requested forecasts for the period 2011 through 2026 and that escalation assumptions will be used to extrapolate the forecasts through 2041. Different real escalation rates may be used, as appropriate, for different avoided cost components (electric energy, electric capacity, natural gas, oil, and other fuels) to apply to final 2026 forecast values through 2041. All forecasts should be presented in real 2011 dollars. Nominal values should be presented for Connecticut zones as well.[3] The Contractor will propose and provide justification for a real discount rate to be used only for the purposes of present valuing in the Study, solely for calculating levelized values and comparing results relative to previous Studies (see Task 11). The Contractor will provide instructions to ensure avoided costs are used consistently and appropriately. Where levelized values are required, three levelized values should be included: for a 10 year period (2012-2021), a 15 year period (2012-2026), and the full forecast period (2012-2041), using the previously identified real discount rate.

[3] Nominal values and discount rate should be presented for Connecticut zones as necessary throughout deliverables.

The selected Contractor will meet with the Study Group at a Kickoff Meeting, preferably in person, or via conference call if necessary, to reach final agreement on the scope of work, costs, deliverables, and the expected study output.

STUDY MANAGEMENT

One member of the Study Group will serve as Study Manager. He or she will organize and facilitate meetings, handle all intra-Study Group communication, be the primary liaison with the Contractor, and monitor the project budget. All teleconferences and meetings will end with a schedule update and summary of action items. The Study Manager or Contractor Project Manager will send out the same information electronically at the conclusion of each meeting.

In addition to the tasks outlined below, the Contractor will be responsible for timely communication with the Study Group and for managing the schedule of the project. Time is of the essence in the completion of this project as its results feed into regulatory filings that will be prepared beginning in summer 2011. Contractor must also establish adequate internal quality control procedures for reviewing numeric results prior to sending them to the Study Group.

The Study Group as a whole anticipates taking an active role in the execution of the study, including understanding the workings of any models used for the analyses. There are a few key areas that the Study Group expects to review with particular attention. Based on prior studies, these areas will include the natural gas forecast, carbon mitigation, the value of capacity, and demand reduction induced price effects (DRIPE).

We expect there will be a number of meetings or teleconferences to discuss the preparation or review of forecast components and deliverables. The Contractor should be aware that achieving consensus is an important element in the widespread acceptance of the forecast, and account for group interaction and consensus building in the schedule. Work that is beyond that described in this Scope of Work should be approved by the Study Group.

TASK 1. Develop electronic communication protocol:

a. **DELIVERABLE #1: "ELECTRONIC COMMUNICATION PROTOCOL AND INSTRUCTIONS FOR USE."** At the outset of the project, the Contra ctor will establish an electronic com munication protocol for the St udy. The Study Group anticipates that this will involve an electronic project site, though other forms will be considered. Th e objective of this site is to facilitate review of project documents. The project site should meet the following criteria:

   i. Contractor and Study Group members would be subscribers or members.

   ii. Documents could be posted on the site for download, review, and upload.

   iii. E-mail notification would be generated every time there was a new posting.

   iv. When the project site is es tablished, the Contractor will distribute instructions for use to the Study Group.

TASK 2. Develop a schedule for completion of the Study:

a. **DELIVERABLE #2: "PROPOSED SCHEDULE OF DELIVERABLES AND MEETINGS."** At outset of the project, Contractor should propose a stud y schedule showing, at minimum, dates for all deliverables and planned conference calls/meetings to meet ultimate final deliver able date of July 8, 2011. Tasks 3 through 9, except where note d, need not be perform ed in the order they are described below.

TASK 3. Develop assumptions for forecast of regi onal electric energy supply prices avoided by energy efficiency and demand response programs for the forecast horizon. This task is a precursor to Task 7:

a. The forecast should be de veloped for the New England region as a whole and for the following 14 com ponent zones. Zonal boundaries ar e to be consistent wit h ISO-New England definitions:

   i) Maine

   ii) Vermont

   iii) New Hampshire

   iv) Connecticut (Statewide)

   v) Massachusetts (Statewide)

   vi) Rhode Island

   vii) SEMA (Southeast Massachusetts)

   viii) WCMA (West-Central Massachusetts)

ix) NEMA (Northeast Massachusetts)

x) Rest of Massachusetts (Massachusetts excluding NEMA)

xi) Norwalk/Stamford

xii) Southwest Connecticut, including Norwalk/Stamford

xiii) Southwest Connecticut, excluding Norwalk/Stamford

xiv) Rest of Connecticut (Connecticut excluding all of Southwest Connecticut)

b. The forecast analyses defined in Subtask 7(c) should be developed using the following definitions of seasons and costing periods:

   i. Electric Energy Costing Periods: For all zones, Summer On-peak is as defined by ISO-NE, June-September, weekdays 6 am to 10 pm; Off-peak is 10 pm to 6 am weekdays, plus weekends, and holidays. Winter period is the remaining 8 months with the same diurnal time divisions, weekends and holidays. The holidays are defined by ISO-New England at http://www.iso-ne.com/stlmnts/holidays/

   ii. Capacity Value. Capacity value should be defined consistently with ISO-New England's FCM.

c. Identify the methodology proposed for use to estimate avoided electric costs. The methodology must account for the following:

   i. Current and expected ISO-NE and Federal Energy Regulatory Commission ("FERC") rules and procedures governing the structure and operation of the electricity market in New England.

   ii. Most recent ISO-NE load forecast, transmission system projects, and capacity additions and retirement assumptions reflected in the 2011 Capacity, Energy, Loads and Transmission ("CELT") report and 2010 Regional System Plan ("RSP"). Contractor will examine the CELT forecast and describe the treatment of DSM in it; describe implications of the treatment of DSM in it (i.e., bias or impact on the avoided cost forecast) and, in consultation with the study group, make a recommendation on use or modification of forecast to appropriately account for DSM load reductions.

   iii. The cost of compliance with current, enacted but not yet in effect, and expected federal, regional, and state emissions control requirements for NOx (including high electric demand days), SOx, carbon/CO_2, and mercury.

   iv. Results of Forward Capacity Auctions and Regional Greenhouse Gas Initiative auctions.

   v. Renewable portfolio standards ("RPS"). All New England states have adopted some form of renewable portfolio standard. Contractor will examine the relevant RPS regulations, make an assessment of non-compliance with the

standards, and account for the standards—as well as non-compliance—in the resource mix for generation.

vi. Other factors that will influence market prices including, but not limited to: Current and projected values of market-based locational marginal prices, other locational factors that may differentiate prices between zones as define by ISO-NE, zonal capacity prices, congestion charges, and operating reserves.

vii. Current and projected values of any avoidable costs not internalized in the market prices going forward (such as the cost of reliability must run generating plants and renewable energy credit purchases avoided by generators or load servers[4]).

viii. If a simulation model is proposed for use, information should be provided on the model clearly describing the model and the input data in general that will be used including information about how the model is calibrated to actual market prices.

ix. Demand reduction induced price effects ("DRIPE"). This refers to the price effects seen by customers as a result of demand savings.

d. Develop and identify assumptions for any and all variables to support the chosen methodology to estimate avoided energy supply costs. Such assumptions should include, but not be limited to:

i. Market fuel prices applicable to marginal sources. These values should be consistent with generation-related gas and fuel oil price projections provided under Tasks (4) and (5) below.

ii. Fixed and variable O&M costs (excluding fuel) of marginal units.

iii. Heat rate, marginal fuel mix, and capital cost of new generation additions.

iv. Load growth by regions or zones.

v. Major transmission projects that are currently planned to be in service during the planning period. Certain projects may have major implications not only for avoided T&D costs, but also for locational marginal prices, zonal capacity prices, congestion charges, operating reserves, superpeak, and other costs.

e. **DELIVERABLE #3 "ELECTRIC FORECAST ASSUMPTIONS DOCUMENT."** Before developing the estimates of avoided costs, the Contractor will present the Study Group with a memo documenting the chosen methodology, all input assumptions, and the actual values of those assumptions which it intends

[4] The cost of compliance with renewable portfolio standards should be included in the cost of generation (item v). In addition, energy efficiency reduces the need for generation; therefore load serving entities may avoid purchase of some Renewable Energy Credits. Both effects of RPS should be included in the avoided costs.

to use. The memo will specifically highlight what the Contractor expects to be key drivers of the forecast. The Study Group will review and comment on this document before the Contractor proceeds with Task 7.

TASK 4. Develop forecast of wholesale natural gas prices for the New England region and each state for the forecast horizon of 2011 through 2041. This task is a precursor to Tasks 6 and 7:

a. Develop regional wholesale natural gas commodity price projections in $/MMBtu for each of the six New England states.

i. **DELIVERABLE #4**: **"GAS FORECAST BACKGROUND."** Provide a written summary memo to the Study Group. The memo should contain:

a. The wholesale natural gas commodity price projections for the region as a whole and for each state.

b. Documentation for the price projections in (a) including:

- Sources of commodity, basis, and supporting assumptions.
- Assumptions on new supply that may be avoided by energy efficiency and the incorporation of this new supply in the forecast.
- Assumptions about the expansion of LNG capacity in New England and its effect on prices in the region.
- Assumptions made regarding the impact of shale gas on the price and demand for natural gas in New England.
- Methods used for the gas commodity forecast for each state, as appropriate.
- An explicit discussion of how the forecast method addresses the issue of volatility and/or uncertainty of gas prices.
- Explanation how volatility, uncertainty, and price spikes are handled.

c. Comparisons between the commodity price projections and:

- Projections from the 2009 AESC study through 2013, with some explanation of differences and key drivers.
- The most recent EIA forecast and forecast as represented by the NYMEX futures market.

d. Wholesale demand/capacity cost projections for the region as a whole and for each state.

e. Documentation for the price projections in (d) including:

- Wellhead, transportation, storage, and peak-shaving costs and characteristics for natural gas available to the region.
- Assumptions about the timing and cost of new transportation, storage, and peak shaving projects that will be available to serve the region in the future.
- Explain how long term capacity additions are handled.

f. Information regarding the existence of demand reduction induced price effects for gas (gas DRIPE), the method the Contractor would use to provide forecasted values of gas DRIPE, and a cost to perform the analysis by state and for the New England region. Based on this information, such values might be requested by members of the Study group as an optional task.

TASK 5. Develop forecast of New England regional oil prices for the forecast horizon (this task is a precursor to Task 7):

a. Develop forecasts for 2011 through 2041 of oil prices, in $MMBtu, used by the following four sectors: electric generation, residential, commercial, and industrial in each state.

i. Apply sector specific characteristics, such as typical contract provisions, transportation charges, to develop end use prices for fuel avoided costs for 2011 through 2041 separated into the following categories:

a. By grade: #2, #4, #6, B5 and B20 (biofuel blends).

b. By sector: generation, commercial and industrial applications, residential heating applications. The prices for the commercial, industrial, and residential sectors should be those that would be avoided by the installation of oil-saving energy efficiency measures.

b. **DELIVERABLE #5 "SECTOR-SPECIFIC FUEL OIL FORECAST FOR THE NEW ENGLAND REGION.[5]"** Document forecasts in memo to study group. Forecast results will be presented in a format acceptable to Sponsors. The forecast will include three levelized costs for the stream of avoided costs. For this and all other streams in other deliverables, Contractor should secure agreement from the Study group about the real inflation and discounting assumptions used to levelize the stream.

i. The memo should explicitly include:

[5] Forecast by region is used based on the assumption that there are no material differences in state specific forecasts.

a. The penetration assumptions used to weight grade specific fuel oil costs into sector specific costs.

b. How the forecast method addresses the issue of volatility and/or uncertainty of oil prices.

c. What portions of the fuel costs are avoidable and how that is reflected in the avoided costs.

d. Other key drivers to the forecast.

e. How the forecast compares to the alternative forecasts. The forecast should be compared by grade with the most recent EIA forecast, a forecast as represented by the NYMEX futures market, and other external forecasts that the Contractor may identify. Identify the strengths and weakness of these forecasts, if possible.

f. Relative consistency of oil forecast with the natural gas forecast because of fuel substitution effects.

g. Environmental impacts of fuel oil. There is an environmental benefit from reduced combustion of fuel oil due to energy efficiency programs. The Contractor will consider the various pollutants created by the combustion of fuel oil, assess whether they are significant and internalized into the cost of fuel oil. For each pollutant determined by Contractor to be significant, the contractor will present the value associated with mitigation of that pollutant through fuel energy efficiency. They will further identify what portion, if any, of this value may be internalized in the avoided fuel costs and what portion should be treated as an externality.

TASK 6. Develop sector specific natural gas prices. Based on Task (4), estimate end use marginal natural gas commodity costs in $/MMBtu for electric generation, commercial, industrial, and residential end uses (the electric generation sector portion of this forecast is a precursor to Task 7).

a. Determine those gas supply sources likely to serve as marginal resources in the New England region during appropriate seasonal and peak day costing periods for the period 2011 through 2041, based on:

   i. Current and projected wellhead, transportation, storage, and peak-shaving characteristics for natural gas available to the region.

   ii. Consideration of how firm vs. interruptible supply is handled for generation.

   iii. Expected regional sales volumes and demand levels.

   iv. Costing period definitions that reflect measures that save natural gas 12 months per year and those that save during the heating season only.

v. A reasonable, clearly stated, and transp arent method of matching anticipated resources and loads for determining marg inal supply source s (which need not involve through-put simulation).

b. Present projected gas wellhead prices and transportation tari ffs to the city gate for each identified geographical division app licable to marginal sources (using secondary sources if desired).

c. Contractor will obtain from sponsoring gas utilities distribution charges applicable from the city gate(s) to the burner tip(s) in the defined regions.

d. Combine the results of Subtasks (a), (b), and (c) t o compute estimates of future natural gas costs avoi ded by en ergy efficiency program savings with all assumptions explicitly stated and docum ented (e.g., conversion of peak day sendout prices, loss factors, fuel price esca lation rates, allocation of load shapes to end uses, contract provisions) at the city gate, and inclusive of stated transportation/compression losses, and f or the costing periods as specified. Results should be stated in all-in $/MMB tu and separated into peak-day $/MMBtu (capacity value) and other $/M MBtu (energy value) for the end use profiles specified as:

i. Electric generation: If necessary for the purposes of the m odeling of electric avoided costs, the costs for this sector should be differentiated by season or zone. If by z one, the zones should be mapped to the zone s for the electric market defined above in Task 3.

ii. Commercial and industrial non-heating

iii. Commercial and industrial heating

iv. Residential heating

v. Residential water heating

vi. Residential non-heating

vii. All commercial and industrial

viii. All residential

ix. All retail end uses

e. Environmental impacts of natural gas e fficiency: There is an environmental benefit from reduced com bustion of natural gas due to nat ural gas energy efficiency programs. The Contractor w ill consider the various pollutants created by the com bustion of natural gas, asse ss whether they are significant and internalized into th e cost of na tural gas. For each pollutant determined by Contractor to be significant, the contract or will present the value associated with mitigation of that pollutant through natu ral gas energy efficiency. They will further identify what portion, if any, of this value is be internalized in the avoided natural gas costs and what portion should be treated as an externality.

f. **DELIVERABLE #6 "SECTOR SPECIFIC NATURAL GAS FORECAST."** Prepare a memo documenting the forecast for each sector and end use developed in Subtask 6(d), plus the findings of Subtask 6(e). The results from the analysis of Subtask 6(e) should be added to each sector and end use, as applicable. Forecast results will be presented for 2011 through 2041 in a format acceptable to Sponsors. The forecast will include three levelized costs for the stream of avoided costs. Present the forecast values in printed form and in a Microsoft Excel spreadsheet.

TASK 7. Develop forecast of regional electric energy supply prices avoided by energy efficiency and demand response programs for the forecast horizon:

a. **DELIVERABLE #7A: "NEW ENGLAND BASIC ELECTRIC AVOIDED COST FORECAST."** Use agreed upon methodology and assumptions to estimate regional marginal electric energy and capacity costs avoided by energy efficiency savings for the New England electrical system out through the projected period. Submit a memo to the Study Group. The memo should contain:

i. For each of the following components as outlined below,[6] streams of capacity and energy values for all of New England in $/kW and $/kWh, respectively, for 2011 through 2041. The energy price should be the hub price, reflecting congestion and losses. This will provide continuity with future AESC studies. The forecast will include three levelized costs, as noted above in the Scope of Services, for each stream of avoided costs:

a. summer on peak energy in $/kWh

b. summer off-peak energy in $/kWh

c. winter on-peak energy in $/kWh

d. winter off-peak energy in $/kWh

e. summer generation capacity in $/kW and $/kWh

f. winter generation capacity in $/kW and $/kWh

g. A comparison of the forecast from Subtask (i) to the prior AESC forecast through 2027 (2009 Study, Exhibits 1-5 and 1-6).

ii. A comparison of the forecast to a trend of actual monthly prices (real time) from ISO-NE for 2009-10.

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[6] There may be an alternative presentation requested depending on the consideration of the high electric demand days per Task 3(c).

iii. A comparison of the wholesale price projection with the most recent EIA forecast, a forecast as represented by the NYMEX futures market, and other external forecasts that the Contractor may identify, if possible.

iv. A high level discussion of reasons for differences identified in the comparisons in (ii) and (iii), without a detailed re-examination of assumptions made in the 2009 Study Explanation of any apparent price spikes and key variables that affect the outcome, as well as identification of potential scenarios worthy of investigation.

b. Estimate zonal marginal electric energy and capacity costs avoided by energy efficiency savings. For each of the components below, [7] combine the foregoing subtasks to compute estimates for the each of the 14 identified regions for 2011 through 2041 in real dollars (2011$) of future electric supply costs avoided by energy-efficiency and demand response program savings at the delivery point to the transmission system, including generation energy and capacity losses. The forecast will include three levelized costs for the stream of avoided costs, including the assumptions used to levelize the stream. Transmission energy and/or capacity losses may be included if conducive to the Contractor's forecast method. Contractor must inform sponsors whether and which Transmission losses are included in the results (see Task 7(d) below). Local distribution energy and capacity losses should not be included.

i. summer on peak energy in $/kWh

ii. summer off-peak energy in $/kWh

iii. winter on-peak energy, in $/kWh

iv. winter off-peak energy in $/kWh

v. summer generation capacity in $/kW[8] and $/kWh

vi. winter generation capacity in $/kW and $/kWh

c. **DELIVERABLE #7B: "ZONAL BASIC ELECTRICITY AVOIDED COST FORECASTS BY COSTING PERIOD."** Develop marginal price projections (factoring in applicable locational differences such as fuel costs, emissions regulations, and congestion) for each defined geographic zone in New England for each of the above six costing period categories for 2011 through 2041 and submit them to the Study Group. Zonal transmission energy and/or capacity losses may

[7] There may be an alternative presentation requested depending on the consideration of the high electric demand days per Task 3(c).

[8] It is the Study Group's expectation that there will be two streams of avoided summer capacity value: one for energy efficiency resources that are bid into the FCM and one for energy efficiency resources that are not bid in.

be included if conducive to the Contractor's forecast method. Distribution energy and capacity losses should not be included.

d. Additions to forecast and other information:

   i. Demand reduction induced price effects (DRIPE): The Contractor will estimate the effect on wholesale market energy and capacity prices resulting from reductions in energy demand on the ISO-NE system due to energy-efficiency savings for 2011 through 2041.

      a. The Contractor will discuss its proposed methodology with the Study Group prior to conducting this analysis, specifically addressing the treatment of demand reductions from expected future DSM programs, duration of DRIPE, and the amount of energy transacted in the market by state that will be subject to the price effect. The Contractor will document its proposed methodology and, if possible, provide information regarding improvements from the prior forecast methodology(ies). In addition, the Contractor should provide guidance about how, in the future, users of the values developed through the proposed methodology can assess and confirm the accuracy of the DRIPE estimates.

      b. The Contractor will conduct their analysis of price effects following the Study Group's consideration of the methodological proposal. The analysis should be consistent with the costing periods as defined above in 3 (b). The results will reflect price effects that may be attributed to the Sponsors' energy efficiency programs. Results should be presented for intrastate DRIPE (effects confined to state boundaries) and regional DRIPE (where cross-boundary impacts are included as well). The Contractor will express results of this analysis in $/kW and $/kWh. The forecast will include three levelized costs for the stream of avoided costs, including the assumptions used to levelize the stream.

   ii. Wholesale Risk Premium:

      a. The Contractor will develop a wholesale risk premium for energy and capacity, as applicable, to reflect the premium that generators may include in their wholesale contract prices over and above the cost of generation. The premium, expressed as a percentage addition to avoided costs, should reflect only that portion of generation prices that would be avoided by the implementation of energy efficiency.

   iii. Reserve Margin Multiplier:

      a. Energy efficiency capacity reductions create value by reducing reserve requirements. The reserve margin multiplier is the number by which generation capacity value should be multiplied to incorporate the reserve margin benefit. The Contractor should research the methodology currently used by ISO-NE to develop its reserve margin, consider factors that may

influence it over the forecast horiz on, and m ake a recom mendation for a single reserve margin multiplier for ap plication over the entire forecast horizon.

iv. Carbon and NOx mitigation values: Qu antify the carbon and NOx mitigation values[9] of energy efficiency as follows:

a. The Contractor will present the total value associated w ith mitigation of carbon and, to the extent necessary , NOx, through electric energy efficiency. The Contractor will furthe r identify what portion, if any, of these values are internalized in th e avoided electricity costs and what portions should be treated as externalities.

b. Using the same assumptions as t hose used to develop t he avoided electricity costs, identify heat rates, fuel sources, and em issions of carbon and NOx in the 2011 base year during each of th e energy and capacity costing periods as defined in Task 6(b).

c. Determine if, and qua ntify how much, carbon and NOx reduction benefits correspond to energy e fficiency and dem and reductions, in lbs/MWh an d lbs/kW, respectively, during each costing period.

d. The Contractor will make a recommenda tion to the Study Group regarding an appropriate dollar value to use fo r avoided carbon and NOx emissions (damage costs or control costs) wh en screening DSM programs. The values should be deve loped in $/kW or $/kWh (a range of values would be acceptable) for 2011 through 2041. Th is recommendation should include a critical examination of the availabl e data, including results of RGGI auctions to date and projections fo r future RGGI auctions, and a soun d theoretical explanation of t he values recommended, using data from existing studies, or other inform ation developed by the contractor. The presentation of the results of this analysis should identify the portions of the value that are already em bedded in t he avoided c osts and w hat portion is not embedded. For the embedded por tions, the presentation should further delineate between the part that is ba sed on current (or enacted but not in effect) regulations and the part that is based on expected regulation.

v. Cost of Compliance with RPS Requirement s: The Contractor will estimate the costs to comply with app licable renewable energy re quirements in each state for 2011 through 2041. This cost shall then be presented as a cost saved per retail kWh avoided.

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[9] The Study Group assum es that the cost of compliance with SOx a nd mercury emissions regulations are reflecte d in the co st of generation or are negligible in com parison to the avoided costs and the cost of carbon mitigation and need not be studied here. If the Contractor believes this assumption is incorrect, they should inform the Study Group.

vi. Transmission and Distribution Factors:

a. Losses: If Transmission energy or capacity losses are included in the forecasts prepared in Task (7), the Contractor should prepare a summary of the embedded loss factors by costing period by zone. Sponsors will compare these values to their own utility-specific loss factors for reasonableness.

b. Capacity Value: Contractor will survey sponsors about the methodology each uses to determine the value of transmission and distribution capacity value and the value in 2011 dollars of transmission and distribution capacity used by each electric Program Administrator in the valuation of their 2011 programs, and include a summary of the findings in the deliverable.

vii. Survey of discount rates: The Contractor will survey Study Group members and other sources as necessary regarding the real discount rate used in cost-effectiveness models for energy efficiency programs in the six New England States as well as California, New York, Oregon and Washington. The Contractor should provide the results of this survey in a table that lists: state, real discount rate, citation (e.g., regulatory order or source), and a very brief description of the rationale for the discount rate in the context of the cost effectiveness test (e.g., "the rate is intended to be a proxy in a societal b/c test for the rate of return of a low risk investment by a consumer"). This subtask is independent from the development of a discount rate for use solely in the study identified on page 4.

e. **DELIVERABLE #7C: "AVOIDED ENERGY SUPPLY COMPONENTS."** Submit a memo to the Study Group containing the New England regional and applicable zonal prices for each of the above six costing period categories from Deliverable #7B, and showing the incremental additions to those prices as a result of the "additions to forecast (Task 7d)" itemized and documented. Items requested in Task 7d but not included in the Avoided Energy Supply Components should also be reported in this deliverable. The forecast will include three levelized costs for the stream of avoided costs, including the assumptions used to levelize the stream. Forecast results will be presented for 2011 through 2041 in a format acceptable to Sponsors. The avoided costs should also be submitted in a Microsoft Excel workbook with one spreadsheet for each zone.

TASK 8. Sensitivity Analyses (this task should be performed after Task 7):

a. In light of volatile fuel markets and other uncertainties going forward, the Study group requests that sensitivity analyses be performed around three issues for electric avoided costs (for example: gas cost, loads, and capacity resources and

plant retirements). The exact parameters of the sensitivity will be determined as the study progresses. The objective of these sensitivity scenarios will be to provide information on how major changes to assumptions such as fuel costs or load growth may affect electric avoided costs. The results of the sensitivity analysis should be included in the final report, including key figures and summary tables for which the sensitivity results are particularly informative. Subject to the parameters of the chosen sensitivity analyses, the Study Group expects that the results will be presented relative to the New England Basic Avoided Cost forecast for electric avoided costs (see Task 7(a)(i)) and the regional wholesale natural gas commodity price projections (see Task 4(a)), and not at a further disaggregated level.

TASK 9. Develop avoided costs by state, if supported by research, for other fuels used in residential heating applications for 2011 through 2041. Determine what sources for price projections are available; identify what portions of costs are avoidable; and develop, and implement a methodology for projecting price, by state, of:

a. Wood; in $/MMBtu
b. Wood chips or pellets; in $/MMBtu
c. Kerosene; in $/MMBtu
d. Propane; in $/MMBtu
e. **DELIVERABLE #9, "OTHER FUELS FORECAST."** Present the results of the forgoing analysis in a memo to the Study Group. The forecast will include three levelized costs for the stream of avoided costs in $/MMBtu. Forecast results will be presented for 2011 through 2041 in a format acceptable to Sponsors.

TASK 10. Instructions for Proper Use of Avoided Cost Forecasts:

a. Develop a set of application instructions to which Sponsors and others may refer to ensure proper use of avoided cost tables (similar to Chapter 8 of the 2009 AESC Study). Instructions should include, but not be limited to:
   i. guidance on the estimation of savings by costing period and season to match avoided costs
   ii. illustrative equations on the calculation of value, e.g., savings x avoided cost x loss factor x reserve margin
   iii. what savings may or may not be eligible for certain components of value
   iv. Instruction on how to develop levelized values from the stream of avoided costs provided for periods other than the three periods presented

v. A reminder that all avoi ded costs are in real 2011$ and what steps m ust be taken if it desired to convert them to nominal dollars for states other than Connecticut.

b. **DELIVERABLE #10: "USAGE INSTRUCTIONS."** Submit a memo to the study group. The memo will contain th e recommendations and findings from (a) above.

TASK 11. Presentation and Follow-Up:

a. **DRAFT FINAL DELIVERABLE**

b. **.** Submit a draft final report t o all study group members by June 15, 2011 i n an electronic format suitable for reviewing. The draft final report will include:

i. An executive summary including the following:

- An overview of the study, methodological processes, and key findings and interpretations.
- The following tables comparing the results of the 2009 A ESC and the present study:
  a. Comparison of 15 year levelized avoi ded cost of gas delivered to retail customers by end use by state
  b. Comparison of 15 year avoide d electric energy costs by costing period for New England overall and by zone
  c. Comparison of 15 year levelized avoided electric capacity costs by zone
- Additional tables to summarize the following results:
  a. Illustrative calculation of differentia l in avoided energy costs for 2011 versus 2009
  b. Summary of electric DRIPE results by state
  c. Summary of other fuel results
  d. Summary of emissions values, internalized and externalized, by fuel

ii. A section for each of the eight major tasks (3 through 10) outlined above. Each section should contain a comp lete and de tailed description of methodology and assumptions supporting the final results, as well as the results themselves. To make the final report a standalone docum ent, the sections should contain relevant information th at had been pre viously presented and documented in interim deliverables and f ollow-up memoranda. The fi nal report should also include the results of any follow-up analyses.

iii. Appendices with the developed avoided energy supply costs by zone for easy application by Program Administrators.

iv. All avoided energy supply costs presented in the draft final report shall be in real 2011 dollars, covering the period 2011 through 2041. Three levelized values should be included: for a 10 year period (2012-2021), a 15 year period, (2012-2026) and the full forecast period (2012-2041), using the previously identified real discount rate.

v. All numeric results should be provided electronically as well.

c. At an appropriate interval after delivery of the draft final report, on or around June 27, 2011, there will be a meeting at which presentation and discussion of the results of Tasks (3) through (10) will occur.

i. Following the oral presentation, the Study Group will submit outstanding written comments on the draft final report to the Study Manager, who will compile them for delivery to the Contractor.[10] The Contractor will revise and resubmit per the oral discussion and written study group comments. The report will be declared final upon a consensus finding by the Study Group.

ii. **FINAL DELIVERABLE.** The final report will be delivered via hard copy in a three ring binder and electronically in Word and PDF format to all members of the Study Group by July 8, 2011. Final avoided cost tables will be submitted in the specified formats in Excel and PDF format as well. All avoided energy supply costs presented in the final report shall be in real 2011 dollars (and nominal and real dollars for Connecticut zones), covering the period 2011 through 2041. Three levelized values should be included, for the 10 year, 15 year, and full forecast period, as described above in 11(a)(iv), using the previously identified real discount rate.

c. Following delivery of the final report, the Contractor will work with the Study Manager (along with any other interested Study Group member) to:

i. Review and revise this scope of work for possible use in the anticipated 2013 update of the AESC study.

ii. Identify potential process improvements for future updates of the AESC Study.

The Study Manager will disseminate a summary of this process to the Study Group.

d. The contactor may be called upon to do follow-up Program Administrator-specific analyses for individual Study Group members for a period of up to two years following completion of the study. Hours for this follow-up work should not be

[10] The format of the transmission of the final set of comments may change depending on the experience with the electronic project site.

included in the proposal, but a billing rate should be provided, as noted below in "Proposal Requirements." If revisions are created, a revised electronic version of the follow-up work should be sent to all members of the Study Group, with an accompanying memo highlighting the changes and identifying the affected pages of the final report.

e. The contractor may be called upon to provide testimony during regulatory proceeding whenever the results of the Study are relied upon in the development of a PA Energy Efficiency Plan.

PROPOSAL REQUIREMENTS

Bidder's responses must include:

1) Methodology:
   a) A description of the bidder's proposed electronic communication protocol, per Task 1.
   b) Identification and descriptions of any data sources, methodology(ies), and work plan that the bidder proposes to use to prepare direct estimates of future gas, oil, marginal electricity supply, electric DRIPE, and other fuel costs avoided by energy-efficiency programs (as described in Tasks 2 through 9).
   c) All models expected to be used should be described in detail, including the extent to which they are transparent and can be reviews by the project sponsors. Detailed reporting on past experience with models in approximating actual prices, costs, other outputs, or other modeled factors should be included.
2) Project Management:
   a) A proposed schedule, including a date for each of the intermediate deliverables as well as the final report.
   b) Written assurance that the proposed work will be provided by the due date specified below.
   c) A description of the bidder's proposed internal quality control procedures.
3) Experience and Qualifications:
   a) Descriptions of projects that demonstrate relevant corporate experience.
   b) Names of the principal personnel that will be responsible for performing the work and preparing the deliverables, plus a brief statement of their qualifications including their participation in the projects cited as relevant experience.
   c) References for relevant work performed in the last three years.
4) Costs:
   a) The total cost for each of Tasks 1 through 11, and total costs summed up across all tasks, along with the hours and hourly rates listed separately for all projected management, professional, analytical, and support personnel.
   b) An hourly and daily billing rate that will be charged for additional work in the course of the project and for any and all follow-up work requested by the Study

Group or individual sponsors for a period of two years following delivery of the final report.

Responses may further include:

1) Any questions, concerns or issues, comments or relevant suggestions on the study as described in the Scope of Work for discussions at the initial meeting with the Study Group;
2) Any comments on how the Contractor would approach Task 4(f) regarding gas DRIPE.

SCHEDULE

Kickoff Meeting, location TBD

Final Deliverable	June 15, 2011
Report Presentation	June 27, 2011
Final Report	July 1, 2011

CONTRACT ISSUES

The contract with the Contractor will be executed with each of the sponsoring entities. The Contractor will bill each sponsor individually according to their percentage of the project cost. Sponsors will process invoices in a timely manner. These percentages will be provided at the time of project Kickoff.

Bidders should note that, because state agencies are among the sponsors of this project, all material that will be shared with the Study Group should be considered to be in the public domain.

It is expected that project sponsors will be billed for work completed in association with completed deliverables, with payments capped at the total proposed bid for Tasks 1 through 11.

Background

New England Gas Company (New England), a division of Southern Union Company, serves over 50,000 residential and commercial customers in southeastern Massachusetts, including 6 cities and towns (Fall River, North Attleboro, Plainville, Somerset, Swansea and Westport). New England Gas Company is seeking proposals from qualified Vendors to provide service delivery as the Lead Vendor (LV) for the Residential Conservation Service (RCS) Program in its service territory. The contract would be a two year renewable contract starting May 1, 2011 and renewable for one additional year. With the exception of the proposal due date, the following milestones are to be used for planning purposes only and are subject to change.

New England RFP Release by: January 28, 2011
Vendor Proposals Due: February 22, 2011
Review and Selection: February 22- March 22, 2011
Contract/ Implementation Conferencing: March 22, 2011- April 19, 2011
Expected Contract Implementation Date: May 1, 2011

Introduction/Overview of Program

New England is soliciting proposals from qualified vendors to provide service delivery as the Lead Vendor (LV) for the Residential Conservation Services (RCS) Program for its entire energy efficiency service territory beginning in April, 2011. The RCS program is also known programmatically as the Mass Save Home Energy Services (HES) Program (Program). The overall objective of the Program is to provide comprehensive information, home energy assessments and energy efficiency incentives in an effort to assist and encourage customers to retrofit their existing homes with cost effective energy efficient measures. The Program is implemented using a fuel blind approach, meaning that all end uses are examined regardless of heating fuel used. All New England residential heating customers residing in 1-4 family properties will be eligible[1].

The Program is offered by all Massachusetts electric and gas program administrators (PAs), according to the gas and electric plans filed and approved by the Department of Public Utilities at http://www.ma-eeac.org/plan09oct.htm.

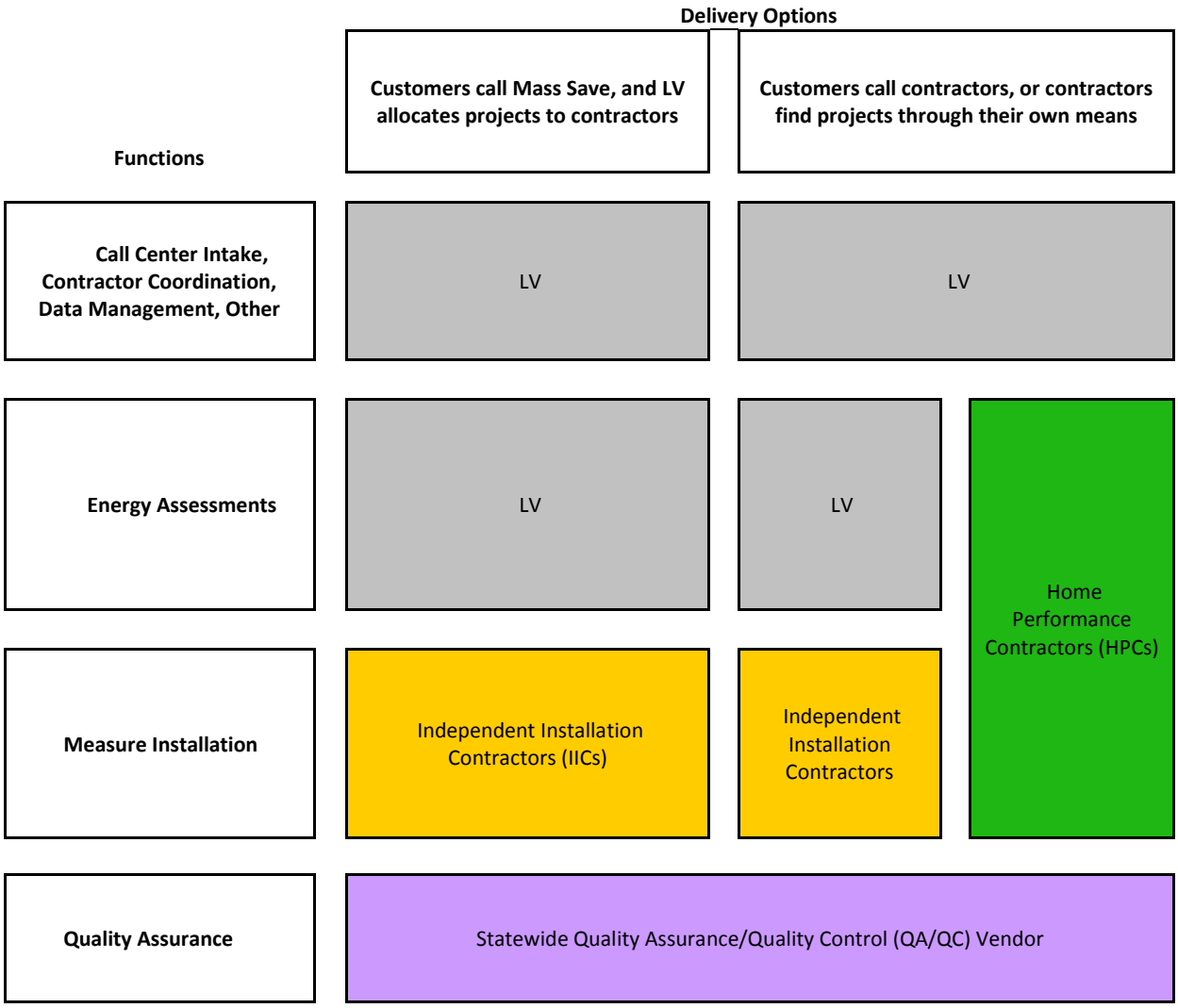
New England will continue to be a participant in the Residential Management Committee (RMC) that includes representatives from Massachusetts electric and gas program administrators, the MA Department of Energy Resources (DOER) and other stakeholders. This allows New England to keep the HES Program up-to-date with statewide modifications agreed to by the RMC Network.

Program marketing is conducted using several mediums. In order to maximize marketing outreach, the PAs collectively maintain a statewide toll-free phone number that directs customer calls based on zip code/town and fuel type. New England will continue to participate in the statewide HES toll-free number. The Program has historically been marketed through channels

[1] Income eligible customers are served through the Low Income program

such as bill inserts, radio, direct mail, billboard advertising, community based marketing, public forums and various New England educational activities. The chosen LV may also be expected to implement enhanced targeted marketing campaigns. Marketing is often used in an effort to promote specific energy efficiency enhancements as they relate to overall program goals.

In 2010, the HES Program has undergone significant redesign efforts in order to integrate additional market actors into the Program. The Program design to be implemented in 2011 is as designed below:



The LV (as shown above) will have responsibility for administration, customer intake and scheduling, contractor coordination and training, data management, in-home energy assessments, marketing support, quality assurance and control, data management and reporting, invoicing, payment of contractors, complaint resolution, evaluation coordination, and attendance at

meetings. New England may require the LV to align software algorithms with other HES LVs and provide software to applicable Home Performance Contractors.

Independent Installation Contractors (IICs) are those weatherization contractors that meet PA-specified program requirements such as certifications, insurance, and background checks as well as comply with designated terms and conditions. IICs will be required to subcontract with the chosen LV. IICs will have the opportunity to refer customers into the program. Participating contractors must choose either IIC or HPC participation status.

Home Performance Contractors (HPCs) are those assessment and weatherization contractors that can provide both energy assessments and measure installations. Services provided must meet program requirements such as certifications, insurance, established performance metrics and background checks as well as comply with the designated terms and conditions for both themselves and any associated subcontractors. HPCs will be required to subcontract with the chosen LV.

In addition to any Quality Assurance/Quality Control (QA/QC) provided by the LV, a statewide QA/QC Vendor procured independently by New England through a separate RFP will be responsible for an independent review of both assessments and installed measures. The QA/QC Vendor may also act as an independent arbitrator between the LV and the Contractors in the event of a disputed QC failure. This will also be further described below.

The proposed 2011 market model will be thoroughly evaluated. The design is subject to adjustments should the evaluation results recommend modifications to support achieving cost effective savings and production goals.

Products & Services to be Provided

Program Management

The LV is responsible for overall management and providing technical assistance to internal field staff and their direct subcontractors. The LV must be Building Performance Institute (BPI) accredited to manage all aspects of the Program. The Program requires BPI certified auditor training (Building Envelope and Analyst) for all internal LV field staff. New England will not compensate the LV for any auditor training costs associated with auditor certification, unless otherwise specified in advance. New England intends on implementing a BPI certification requirement for IICs and HPCs in addition to requiring BPI accreditation of the LV.

Additional coordination with IICs and HPCs will require that the LV manage multiple contractual relationships. In this coordination, the LV must apply the Program requirements and applicable New England terms and conditions to the IICs and HPCs. In addition, in-field training, QA/QC and technical review will be necessary to ensure consistent program delivery and reporting to the customer.

The LV is responsible for facilitating, scheduling, and coordination. This includes internal scheduling for assessments, coordinating work schedules for installation of measures implemented by the IICs, screening the initial intake of the customer for the HPCs, and tracking the schedules for both assessments and installation by the HPCs. The schedule will be shared with the QA/QC vendor to ensure the program quality.

In addition to the program management activities listed above, LVs responsibilities will include the following: (additional details regarding some responsibilities are included in this document):

- Develop all forms and other printed materials necessary for successful and efficient implementation of the Program. All Vendor-developed forms must be submitted to New England for approval and finalized prior to Program implementation.
- Maintain a computerized database tracking system that meets all necessary regulatory and PA-specific reporting requirements. The system, interface, or software must be capable of aggregating all information provided by the IICs and HPCs for customer reports/invoices and reporting to New England.
- All internal personnel recruitment, management and training, other than training which has been specified as being provided by New England
- Procure all equipment and materials necessary for Program implementation for internal responsibilities.
- Provide storage for all materials to be determined by New England for customer education and implementation.
- Participant recruitment and intake
- Reasonably assuring eligibility of participants
- Scheduling of site visits

- Coordinating all on-site work crews if applicable
- Coordinating the resources available through the existing market infrastructure which includes private sector energy product and services vendors
- Maintain a data tracking system capable of tracking implementation of work that may be completed over a multi-year period. The use of this tracking system will allow for appropriate follow up with participants.
- Implementing a systematic process for following-up with customers who do not act on recommendations for additional diagnostic services, weatherization measures or appliance upgrades. This process will include reporting on the effectiveness of the strategy.
- Promptly responding to any customer complaints or inquiries
- Taking appropriate action upon identification of any potential hazards at customer home (e.g., improperly vented combustion equipment, gas leaks, etc.)
- Collecting all data necessary for continuing Program management, monitoring, and evaluation needs
- Performing quality control functions for internal staff, as well as, IICs and HPCs
- Performing ongoing Program development and refinement, in conjunction with New England and other PAs
- Submission of monthly implementation and management reports to New England by no later than the 15th day of each month, as well as any additional reports deemed necessary by New England
- Complete in home assessments within 15 days of original customer request (subject to customer availability) unless special circumstances arise. If the LV is unable to meet this request with internal staff; the use of additional energy service providers should be implemented (e.g., HPCs). If the use of additional energy service providers is required, the assessments should be distributed using the merit based allocation system.
- Distribute installation work orders to IICs utilizing a transparent merit based system
- Adhere to BPI procedures for identification and testing for all potential health and safety issues, as appropriate.
- Adhere to all applicable state and local regulations and codes
- Administration of the Heat Loan program
- Toll Free Hotline maintenance
- Incentive processing

Merit Based Allocation of Weatherization Work Orders

New England will require LVs to distribute weatherization installation work orders to qualified IICs using equitable and transparent merit-based methodologies. New England requires bidders to provide a detailed proposal related to a merit-based distribution of weatherization work orders. A zero tolerance policy will be enforced related to unsafe/unethical work practices. The merit-based system should take, at minimum, the following categories into consideration:

Capacity & Location – IICs differ greatly in organizational size, service regions and production capacity. Allowing IICs to self declare capacity and service region will allow for optimal allocation of work.

Quality of Work – A significant amount of quality assurance will be performed at the project level. Quality of work will play a significant role in the merit-based allocation system. Quality of work should include the following categories (at minimum):

- Safe Work Practices
    - Including working in accordance with all State and Federal codes
- Technically sound installation practices conforming to the Building Performance Institute (BPI) approach
- Installation consistent with energy efficient upgrades offered at the time of the home energy assessment
- Repair work resulting from failed QA/QC

Customer Satisfaction – Customer satisfaction will be closely monitored via follow up QA/QC visits, phone surveys, written surveys, etc. At minimum, customer satisfaction measures should include:

- Reliability: cancellations, adherence to scheduled appointments
- Overall customer satisfaction/professionalism
- Complaint resolution
- Prompt service
- Cleanliness of the worksite

Data Submittal – Quality/integrity of submittals from participating IICs relating to weatherization installation will be required. At minimum this merit category should include:

- Timeliness of submittals
- Accuracy of submittals
- Comprehensiveness of data submitted

The LV has responsibility to take disciplinary action towards non-complying contractors, up to and including dismissal from the program. New England requests the bidder to provide a proposal related to how they intend to perform merit based allocation. New England reserves the right to award this contract without acceptance of the proposed merit-based allocation structure.

New England intends to work collaboratively with PAs to institute a consistent merit based allocation system.

Customer Intake/Follow-up/Technical Assistance Services

The LV will offer both customer intake and continued support throughout participation in the Program. Within customer intake, customers that call either the toll-free Mass Save or PA specific telephone numbers will be interviewed in order to determine their need and reason for calling. The Customer Service Representative (CSR) will use the interview to determine the most appropriate means of addressing the customer's needs. CSRs must be capable of providing support for questions or concerns related to multifamily properties served through the Program. When speaking with a landlord, the CSR will encourage him/her to schedule assessments for all applicable 1-4 family rental properties. Specifically, owners of multiple rental properties will be assured that program staff will work with them and their tenants to develop convenient energy assessment and measure installation schedules. During customer intake, the CSR will also determine whether the customer can benefit from initiatives not related to energy efficiency, such as services offered through other Vendors, the utility or income-eligible programs.

In addition to supporting the toll-free Mass Save and PA telephone numbers, the LV(and staff appropriately) needs to provide a direct line of communication to allow outreach staff to schedule assessments from the field (i.e. a customer's home) or have a member of their staff call the customer to schedule the appointment based on customer choice. This is intended to expedite the scheduling process and have assessments scheduled when the customer is most motivated. IICs must also be provided with a direct line of communication to the appropriate LV staff.

All customers will be provided with educational materials regarding energy use and efficiency opportunities. The LV will schedule eligible customers for the appropriate home energy assessment. For those customers that have completed an assessment within the last 12 months, appropriate follow-up action must be determined by the LV. The LV will be responsible for scheduling the assessment with the customer at the time of the call. Scheduling assessments to be provided by HPCs may not be required.

CSR training and qualifications should include:

- Customer service and telephone experience
- General knowledge of energy efficiency and renewable technology
- Knowledge of all residential energy efficiency, demand-side management and program offerings
- Knowledge of information resources available to customers during initial intake

In addition to CSR's responsibility for initial customer intake, the LV should maintain technical assistance representatives who have a greater degree of technical training.
Technical assistance representatives should possess:

- Extensive knowledge of energy efficiency and renewable technology including but not limited to an HES auditing background, house as a system training, and diagnostic experience (e.g. blower door, infrared technology)

- Additional training in the area of heating system fundamentals for a wide array of systems including high efficiency residential equipment
- Knowledge of all residential energy efficiency, demand-side management and renewable energy program offerings
- Familiarity with "whole house as a system" approach
- In field audit experience

The table below represents historical call volume directly related to New England customers participating in the HES program. These numbers are included to provide the magnitude of past call volume. Call volume for 2011 and later years is expected to be significantly higher than those below.

2009 Call Volume	1,284	
2010 Call Volume January - October	1,298	

Home Energy Assessments

New England strives to offer a whole-house approach to each customer. The home energy assessment objective is to provide customers with the opportunity to understand the impact of all major energy efficiency measures and improvements that can be implemented in their home. The vendor will perform an assessment of all energy efficiency opportunities including thermal measures, HVAC system efficiency, combustion safety, a screening of the existing refrigerator, cost-effectiveness of major measures, and address all health, safety and indoor air quality issues. The use of a blower door, infrared thermography as well as installation of CFL's, domestic hot water instant savings measures (ISM) and thermostats are required during appropriate home energy assessments. This educational process is meant to motivate customers to implement major measures. The LV is expected to demonstrate that it has both the diagnostic tools, as well as the technical capability necessary to comprehensively assess and address all efficiency opportunities from a whole-house perspective.

Energy assessments will utilize an approved HES Program (Class A) energy assessment software tool. If a federal standard is implemented, all HES service providers will be expected to utilize software that falls into the acceptable category.

New England also requires that the LV be capable of providing customers with an energy assessment report at the time of the assessment. The report should provide the customer with energy efficiency opportunities in an easy to understand and an appealing format. The report must include (at minimum) recommended/installed individual efficiency measures, the estimated costs, and the payback and savings. PAs are in the process of developing consistent collateral to be provided to customers during the assessment. The LV will be expected to produce the agreed upon collateral for distribution. The LV may also be required to provide the customer with a list of Program approved contractors.

New England offers three levels of energy assessments:

- Screening Assessment
- Diagnostic Assessment
- Comprehensive Assessment

Please refer to Attachment A for detailed assessment specifications.

In addition to the three levels of service designated above, New England will require the LV to implement Special Home Visits (SHV). These visits are designed to assist those customers who have a concern about high-energy use and request a site visit in order to address their concern. The SHV is also used to qualify a customer for a specific incentive or assist with questions about a particular piece of equipment or home efficiency measure. Instant Savings Measures (ISM) will be made available for installation at this time.

To increase the adoption of major measures, the LV will be required to develop and implement a systematic process for encouraging customers to follow though with actions recommended through the program including: a.) Additional diagnostic services b.) Contracts issued for air sealing and/or insulation; and c.) Recommendations for high-efficiency heating systems and/or energy-efficient refrigerators. Various communication channels including telephone, mail and email may be used.

Efficiency Measures and Customer Incentives

The in-home energy assessments provide customers with a comprehensive review of their home's energy usage as well as recommendations to improve their home within program guidelines. Energy efficiency measures will be selected for installation on the basis of cost-effectiveness, appropriateness and customer acceptability. All determinations will be made on a case-by-case basis. In order to achieve the Program goal of maximum implementation while controlling costs, the LV's approaches, protocols, and procedures used will be designed to identify not just the obvious and most cost-effective opportunities, but also more subtle and "niche" energy retrofit opportunities. For many measures, this will involve the use of the audit software. The software provided by the vendor is intended to guide field staff assessments to determine, while on site, the appropriateness of candidate measures given site-specific circumstances and installation costs.

Current program incentives are listed below. Common pricing related to weatherization installation for IICs and HPCs will be established by the PAs and provided to the LV. As the program continues to evolve, additional incentives are likely to be added. The incentive structure may also change in the future, based on regulatory or evaluation results. New England also continues to collaborate with PAs in order to investigate the opportunity for LVs, IICs and HPCs to offer ancillary services and/or deeper shell measures.

Qualified Measure	Incentive
Compact Fluorescent Lamps (CFL)	Installed at no cost when replacing incandescent lamps
Domestic Hot Water Instant Savings Measures (ISM's)	Faucet aerators and low flow shower heads installed at no cost
7 Day Programmable Thermostats	Provided and installed at no cost when applicable
Insulation	At least 75%, up to $2,000 per year
Blower Door Guided Air Sealing	Targeted, cost effective air sealing is fully subsidized
Heating Systems	Rebates through GasNetworks
Refrigerator Replacement	$150 if existing model is deemed inefficient, provided by the electric PA
Duct Sealing	Targeted, cost effective duct sealing is fully subsidized
HEAT Loan	For qualified customers, up to $15,000, for up to 7 years, provided by the electric PA
Measures Available Through Other Programs	CoolSmart, GasNetworks, Major Renovations, Lighting and Products, etc.

- Weatherization implementation is expected to be implemented in accordance with the Program Materials & Installation Standards (see Attachment B). This document was created with the participation of technical experts and allowed for input from industry professionals. This document provides basic Program approved weatherization protocols and is continually modified by PAs and industry experts.

- Thermostat models must be approved by New England and consist of 7 day programmable capability.

- Domestic Hot Water ISMs must have a maximum flow-rate no greater than 2.5 gpm, at 80psi, as tested in accordance with ANSI A112-18-1M. All flow restrictor installations shall not lead or cause "water-hammer" at the time of installation, and shall be hand tightened only.

- CFL bulbs used in the Program must be installed. All CFL bulbs installed through the Program must be Energy Star-labeled and have a minimum rated life of 10,000 hours. Preference will be given to CFL bulbs that have already successfully completed PEARL testing.

- Refrigerators must be Energy Star® labeled. Eligibility of the $150 incentive is based on early replacement opportunities identified at the time of the audit that lead to sufficient kWh savings. Eligibility will often require on site efficiency screening.

The LV is expected to promote all available/applicable incentives offered via statewide residential energy efficiency programs, such as CoolSmart, GasNetworks, Major Renovations, Lighting and Products, etc.

To address potential financial barriers, the LV will develop and implement a process to allow for multi-year projects for installing major measures. This addition to the program design seeks to encourage customers to achieve deeper savings.

Electric and gas PAs work together in order to offer all available energy efficiency measures on a fuel-blind basis. The LV will be expected to "piggyback" measures with the other LVs to ensure seamless delivery to the customer. The LV serving as the New England LV will be expected to contract with the electric PA(s) sharing New England service territory in order to provide electric incentives.

If applicable, the LV shall provide warranties to participating New England customers covering the materials and labor for a period, which is the greater of one year, or the warranty periods customarily provided by the LV to its customers, commencing on the final date of installation. In addition, all manufacturers and other applicable warranties shall accrue to the benefit of the participating New England customer and the LV shall provide to such customers documentation relating to such warranties. Such warranties shall render vendors solely responsible for the performance of the products and to respond to all complaints of product malfunctions or failures, or problems caused by, or resulting from, the product installation for the stated period. The LV is expected to require the same level of warranty be provided by all applicable subcontractors. Failure of subcontractors to honor warranties will result in dismissal from participation in the program.

The LV will also be expected to work with New England and any leveraged program that may also enhance the customer experience. Awarded grants in specific areas may require that the assessments have an added element of reporting for enhanced incentives (e.g. Renew Boston Program). New England will work with the LV to ensure that this is also seamless for the customer.

Incentive Processing

Customers are offered Energy Efficiency Incentives (EEI) by New England. Once the customer has purchased or installed a qualified measure, the incentive application requires processing, and payments must be sent out to the applicable party in a timely fashion.

The bidder will perform the billing, payment, and informational and reporting services as described below:

1. Maintain mailing address to receive application forms
2. Maintain trained staff capable of reviewing and processing such forms
3. Provide toll-free phone number for customers seeking additional information or assistance and trained staff to provide such information
4. Track each application request through completion (complaint requests and non-compliant requests).
5. Mail check to customer within four weeks of receipt of the rebate request

6. Notify customer in writing of non-compliant application request (contact should also be attempted via phone)
7. Provide monthly reporting of all application request activity

Toll-free Hotline(s) for Rebates/Incentives

The LV will be required to maintain the current New England Energy Efficiency toll-free customer service and information telephone number(s) for customers seeking information related to the processing of specific rebates/incentives. The toll-free line must be maintained by trained staff and provide business hours ensuring a high level of availability for customers. New England requests a copy of the LV rebate/incentive call center availability with this proposal. Please include current staffed hours and specify if operational hours/staff differ from general customer intake call center operations.

Heat Loan Administration

Participation in the HEAT Loan Program is open to Massachusetts consumers that are occupying owners of one to four family homes, that have a current residential electric account, and whose electricity is provided by an electric utility that collects/administers System Benefits Charges under Section 19 of Chapter 25 of the General Laws. The HEAT Loan was included in the Green Community Act of 2008 as a financing component of the Mass Save Home Energy Services Program. Please note that enhancements to the HEAT Loan are in process. The LV will be expected to adopt processes/procedures in accordance with modifications to the Heat Loan Program.

The HEAT Loan Program administration currently consists of the following areas:

- Collaboration with Program Administrators (PAs) to develop HEAT Loan forms, collateral materials, and operational workflow processes.
- Production of approved forms and collateral materials.
- Provide necessary materials related to the HEAT Loan Program for inclusion on the Mass Save website.
- Update Participating Lender List as new lenders join the program.
- Provide training on program details and process to all Energy Advisors.
- Support a toll free phone line to provide information and support to customers and contractors about the program process and requirements.
- Review contractor proposals and required supporting documentation to verify program eligibility including any required follow up if documentation is missing or for clarification.
- Prepare and process HEAT Loan Authorization Forms for eligible submissions.
- Follow-up with customers who indicate on their contract that they will be applying for the HEAT Loan, but never do.
- Assist customers in the resolution of any issues relating to the HEAT Loan Program.
- Track workflow process including interactions with customers, job status and required project data.

- Bi-monthly reporting to the Statewide Interest Subsidy Payment Agent in agreed format.
- Receive monthly data on closed loans from the Statewide Interest Subsidy Payment Agent for inclusion in the HEAT Loan database.
- Process Certificates of Completion when projects are completed.
- Conduct on-site verification inspections.
- Regular monthly reporting to PAs and additional ad hoc reporting as requested.
- Monthly invoicing to PAs for services provided.

Quality Assurance

The LV will provide effective project-level Quality Assurance/Quality Control (QA/QC) procedures. New England will require the LV to provide QA/QC for approximately eighty percent of weatherization projects. The planned percentage may be adjusted as necessary.

Policies and procedures shall include:

1. Documentation and record keeping (paper or electronic)
2. Supervision of work
3. Review and inspection
4. Quarterly Quality Assurance reports to New England

LV performance will be evaluated in the following areas:

1. Customer relations and service
2. Data collection
3. Customer education
4. Testing and diagnostic procedures
5. Measures installed
6. Materials used
7. Sales and presentation
8. Invoice processing
9. Customer problem resolution
10. Scheduling and Backlog
11. Accuracy of work measures and costs
12. Timeliness of Services

The LV shall require the same level of quality assurance from its subcontractors.

The statewide QA/QC Vendor will perform additional quality assurance inspections of Program services and installations based on New England requirements. These will include both in-field, pre and post evaluations. The LV will ensure that identified issues are resolved and reported to New England.

The LV should provide QA/QC protocols currently being implemented for the purpose of this response. The LV should also provide detailed information such as:

- Previous experience in QA/QC activities
    a. Number of assessments performed within the last 12 months

b. Number of QA/QC visits within the last 12 months

Data Transfer and Reporting

The LV is required to provide New England with all customer data, assessment information, work order records and other reports in a timely manner. The vendor shall maintain these records in a database environment that is (at minimum) capable of fulfilling all data requirements for Tier I and Tier II services as defined by the DOER (see Attachment C). PAs also routinely provide updates to the MA Energy Efficiency Advisory Council. LVs must be capable of providing information related to metrics such as, overall savings achieved, time to serve, implementation conversion rates, QA/QC issues/ratings, etc. All file structures, record layouts, and file indexes will be provided to the vendor. This requirement will apply to the LV (with information from all subcontractors including the IICs and HPCs).

Continuous Program activity tracking and monitoring will be the responsibility of the LV. The LV must collect and manage data necessary for its own monitoring and project management, PA oversight of the Program, required reporting to the Department of Energy Resources and for Program evaluations to be conducted by outside evaluation vendors engaged by New England.

Data collection and tracking procedures must be established at Program initiation, and submitted to New England for approval prior to Program delivery. Vendors are required to develop and maintain a computerized data tracking system. Specific data needs may be expanded, at the request of New England. At a minimum, the data tracking system must be able to:

- Monitor Program progress (number of participants, installations, costs, etc.)
- Meet regulatory reporting requirements
- Support New England's ability for early identification of major issues that would jeopardize the ability of the Program to meet its goals
- Support the calculation of energy impacts, by measure and for the Program, using acceptable engineering algorithms
- Lead generation tracking

Such data might include, but not be limited to:

- Participant and non-participant (no shows or customers that decline a visit, contact name, address, building type, owner/renter, household size, etc)
- Number of site visits made, by whom, when
- Detailed information on all measures installed, including size, location, number of units, usage, type and model of equipment removed and installed
- Information relating to efficiency measures that were recommended to the customer, but were not installed

Periodic and ad hoc electronic transfers of any or all of the aforementioned computerized data tracking systems will be required. The timing, format, and contents of these transfers will be specified by New England and may be changed for any reason at any time at no additional cost to New England.

The LV will be required to upload, at least monthly, a detailed file including all energy efficient measures installed, services provided and an invoice for reconciliation with New England's

internal database. Data transfers must be of the highest integrity in order to avoid additional administrative burden and payment requests.

Marketing Support

With extremely aggressive energy savings goals, the HES Program will require marketing support for the Program. New England intends on implementing HES specific marketing initiatives. New England welcomes a marketing plan that will help to support participation and installation of measures in the Program. Please include marketing mechanisms designed to increase program participation and major measure adoption among hard-to-reach sectors including rental properties and customers who speak English as a second language (see Attachment D for more information regarding the PAs Draft Rental Market Strategy). Program marketing will be conducted in order to maximize HES participation. The LV will be required to maintain an open line of communication with the statewide residential marketing team in order to avoid duplicating outreach channels, thus expanding outreach efforts.

Low-Income Agency Administration

The LV will be responsible for the administration of New England's residential low-income program through the low-income agencies. The LV will sub-contract with the low-income agencies, which agencies will provide for the delivery of the program services to certain gas heated households, including (i) low-income single family homeowners and tenants; and (ii) multifamily buildings with low-income tenants. The primary responsibilities of the LV will include coordination of all payments to the low-income agencies and processing of documentation to report savings to New England.

Program Goals and QA Visits

The table below provides a summary of this Program's estimated energy assessments and weatherization QA/QC visits expected to take place 2011-2012. These numbers are included to provide a sense of the magnitude of this Program. Program goals for 2013 and later years may be significantly different than those below.

2011 Home Energy Assessments*	500
2012 Home Energy Assessments*	525
2011 QA/QC Visits*	≈100
2012 QA/QC Visits*	≈105

*Number of Home Energy Assessments includes all levels of service for New England, is projected, and is subject to change. Number of QA/QC visits include in process and post inspections QA/QC visits performed by the LV. Additional QA/QC visits will be performed by a statewide third party QA/QC vendor.

New England expects bidders to achieve these goals while:

- Achieving maximum level of cost-effective energy savings per dollar spent
- Providing cost and value added services not provided in basic program pricing
- Achieving persistence of energy savings through effective and appropriate choice of energy efficiency measures
- Focusing on cost effective energy efficiency measure installation rather than number of audits completed
- Improving participants comfort, health and safety

Refer to http://www.ma-eeac.org/plan09oct.htm for a link to the approved Massachusetts 3 year plans and the draft Statewide Technical Resource Manual.

General Conditions Regarding Material Installations

1. The LV shall not install any materials without prior approval of the customer or landlord.
2. All work shall be performed in a professional manner and be consistent with all applicable safety standards.
3. All installed materials shall be consistent with the application and be sufficiently durable to ensure measure performance.
4. The LV shall at all times keep the customer work site free from accumulations of waste material or rubbish caused by performance of the work. Upon completion of the work all rubbish, tools, equipment, surplus material and supplies shall be collected leaving the location free from any debris in "broom clean" condition.

The proper, safe, and lawful disposal of all items used or removed during implementation of the Program including, without limitation any substances considered hazardous and/or toxic under state or federal law or regulation, is the sole responsibility of the LV and its subcontractors. Upon request, the LV shall advise New England and the applicable customer(s) of the practices, use, storage, treatment, handling and disposal of such hazardous and/or toxic materials, and other material and equipment removed from the customer's location in the course of the work. The LV shall also provide on request, documentation (including without limitation certificates and manifests) evidencing proper use, storage, treatment, transportation, handling, and disposal or such material and associated property and equipment.

Financial Accounting

The LV is responsible for the financial management of the Program. Accounting systems must be sufficient to efficiently implement all aspects of the Program, and keep track of all payments made, liabilities incurred, receivables, and material and equipment inventories. The LV is solely responsible for developing compensation systems between itself and subcontractors, as well as with its own staff. New England reserves the right to audit the LV's financial and accounting records pertaining to the Program at any time.

It is anticipated that the LV will submit invoices to New England by the 15th day of each month. Cost proposals should make clear the invoicing terms. New England will work with the selected LV to identify the information to be provided on invoices. The LV will be required to propose the final form of invoice and secure New England approval of the format before use.

Duplicates of all invoices, supporting documentation and financial reports submitted shall be kept on file at the LVs place of business.

Qualifying Questions/Information

Please provide answers/information/proposals for the following:

1. Detailed description of the proposed approach for implementing all of the requested services
2. List of all currently employed staff proposed to provide the indicated services and summary of their qualifications, including technical training, licensing, etc (e.g. 50 BPI Certified Envelope Professional Energy Auditors)
3. If Bidder intends to hire additional staff in order to provide proposed services, a description of its approach to hiring and the qualifications it will require of prospective employees should be included
4. Sales training provided to field staff (if none, please provide a plan to provide sales training)
5. Current call center operational capacity including, number of full-time call center staff, current hours of operation and 2009 call volume
6. Number of home energy assessments performed in the previous twelve month period
7. Number of quality assurance visits performed in the previous twelve month period
8. Standard procedures used to deal with issues related to potential short and/or long-term health and safety issues (procedures should include those addressed within Program scope and those beyond the immediate scope of the Program)
9. Detailed explanation of how the Bidder proposes to coordinate and develop the ICC and HPC networks for subcontracting relationships
10. Detailed plan on how the Bidder proposes to institute a transparent, merit based distribution of work related to IICs
11. Detailed description of the proposed approach to electronically communicate with New England
12. Detailed description of the proposed approach to ensuring an exceptions customer experience (i.e., initial scheduling, implementation scheduling, backlog management)
13. Detailed description of the tracking and follow up process that will be used to implement major measures over multiple years (include how data will be tracked so

as to allow both calendar year reporting of savings and total savings by customer for these multi-year projects)

14. Detailed description of the proposed approach for following-up with customers on recommendations they have not acted on (must include mechanism for assessing the effectiveness of the approach)
15. Complete description of Bidders technological capabilities in the areas of Information Management Systems hardware and software, electronic data transfer, rebate processing capabilities and HES related technology
16. LV is required to have/obtain suitable office, dispatch and warehouse facilities and vehicles as necessary, located within easy access to all parts of the New England service territory (Identify the planned facilities and equipment to be used in Program implementation and identify the extent to which such facilities and equipment are already on hand. If acquisition of facilities and equipment is required a timeline should be made available to New England)
17. List other similar contracts in force in Massachusetts and/or nationally along with the names or references to be contacted regarding performance for programs that are within the size and scope of the HES Program
18. Assurances that as the HES LV the ability exists to be in the field at the appropriate start up time (April, 2011), given the proposed service(s), such that New England's anticipated delivery projections will not be adversely delayed
19. Complete description of Bidders ability to provide robust marketing support in order to meet Program goals (Provide specific plans to address hard-to-reach rental properties and customers who speak English as a second language)
20. Detailed description of quality control policies and procedures (energy assessment delivery services, measure installations and post-installation inspections)
21. Customer intake policies and procedures (describe a proposed approach for allowing assessments to be scheduled from the field)
22. Protocols for resolving customer dissatisfaction, either at the time of the site visit, or after
23. Quality Assurance Plan, including criteria to judge auditor and subcontractor performance
24. Current warranty policy, if applicable

Summary of New England Responsibilities

In general, New England anticipates a limited role in program implementation, preferring that the LV provide virtually "turn-key" program delivery. Broadly, New England responsibilities can be assumed to be:

1. Providing customer information for those likely to be eligible for the Program including names, addresses, account numbers, telephone numbers, and referrals from other programs
2. Ongoing Program development and refinement, in conjunction with PAs and vendors
3. Monitoring and oversight of LV performance, including
    a. Reviewing and approving any change orders or modifications to program implementation procedures
    b. Reviewing and approving all forms, program materials, procedures, protocols and software proposed for use by the LV in implementing the Program
    c. Reviewing all management reports from the LV
    d. Reviewing the quality and conduct or work performed, including conducting random site inspections through a third-party quality control vendor
    e. Monitoring and tracking the resolution of customer complaints or inquiries
    f. Verifying, approving and processing LV invoices
4. Preparing, developing and supporting New England's Energy Efficiency Plans and Budgets
5. Providing numerous required reporting activities to advisory and regulatory agencies
6. Providing a principal New England point of contact

Lead Vendor Performance Incentive

New England will consider providing performance incentives to the LV for the successful implementation of the HES program. Successful implementation will be directly related to meeting established Program savings goals in a cost effective manner. New England requests the bidder to provide a proposal related to LV performance incentives. New England reserves the right to award this contract without acceptance of the proposed performance incentive structure.

Lead Vendor Multiple Bids

New England encourages Bidders to respond to multiple PA solicitations for LV. In an effort to ensure the most cost effective implementation of the Program, New England requests that the Bidder provide any potential cost reductions as a result of additional customers/PA territories served.

ATTACHMENT A

Mass Save Home Energy Assessment Standards

Version 1.0

July 15, 2010

By:
National Grid
NSTAR Electric & Gas
Western Massachusetts Electric
Cape Light Compact
Bay State Gas
Berkshire Gas
New England Gas
UNITIL

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1.0 Program Overview

1.1 General Overview

1.1.1 Service Description

The focus of the Mass Save® Home Energy Assessment is to deliver on-site services to residential customers and motivate the customers to implement recommended energy efficiency and renewable energy measures.

A customer can receive the Home Energy Assessment through a variety of mechanisms, including a direct referral by calling the general Mass Save phone number, from a Program Administrator, Program Vendor, trade ally, and/or as a result of marketing.

The Home Energy Assessment will include an evaluation of relevant energy efficiency measures and renewable energy measures in the home. The service is fuel-neutral, meaning that end-uses are examined regardless of the fuel used. Specifically, during the HEA, a whole house approach substantially based on the Home Performance with ENERGY STAR® model (HPwES) is used to evaluate the residence which will include a review of the building's heating, HVAC and DHW systems, lighting, thermal building envelope and appliances.

At this time, the Program Administrators require that approved Home Energy Assessment Vendors use an appropriate Home Energy Assessment software tool. Home Energy Assessments based on HPwES "whole-house" model or a rigorous equivalent can qualify. The Program Administrators will consider modifying the Home Energy Assessment software requirements from time to time in consultation with the DOER as needed. The technical session will identify alternative options for reaching technical analysis objectives through alternative software or non-software based analysis techniques.

The objective of the Home Energy Assessment is that the customer has an opportunity to understand the impact of relevant energy efficiency measures and improvements that can be implemented in the home and is motivated to implement major measures. The Energy Specialist will offer Instant Savings Measure (ISM) incentives, Energy Efficiency Incentives, and Renewable Energy Incentives to customers in conjunction with the Home Energy Assessment.

The program is designed for the resident to accompany the Energy Specialist in the examination of the building as appropriate so that explanations and education occur during the course of the visit. The customer is provided with a written report or agreement for work that describes the efficiency of the building and lists measures and available incentives based on order of priority. If needed, the Energy Specialist will provide the necessary paperwork to process the incentives.

1.1.2 Personnel Qualifications

Energy Specialists must be properly trained and certified to perform a comprehensive assessment of the home. All staff will need to receive ongoing training to update their skills and knowledge of evolving and new program elements as well as sales and presentation skills.

- **Training/Certification**

Staff and contractor training are vital to operating a technically rigorous and effective statewide energy conservation program.

The training/certification objectives for the program will consist of the following:

- Annual Statewide Training
- Continuous staff training by vendors

- Building Performance Institute (BPI) certification
- On-site training for contractors
- Web resources

- **Annual Statewide Training**

With the goal of maximizing statewide program standardization, the Mass Save program will work toward coordinating annual statewide trainings. In order to maximize the effectiveness of rate-payer funding, the program will make every effort to leverage existing building science and energy efficiency trainings, such as those sponsored by the GasNetworks and Affordable Comfort, Inc. (ACI).

Trainings may be geared towards Mass Save vendors, Energy Specialists and/or contractors, depending on the program's training needs identified by the subcommittee. Training will be provided, as needed, to support any new measures added to the program.
An RCS Training Outline will be developed and updated annually, or as needed.

- **Staff Training by Vendors**

It is recognized that the bulk of the training for Energy Specialists and CSR is currently and will continue to be delivered by program vendors, as required by their contracts with program administrators. Program Administrators are responsible for notifying DOER of any new program administrator approved equivalent RCS training. The Mass Save program will have consistent baseline standards and/or certification levels to ensure that RCS home Energy Specialists are providing a comprehensive whole house approach, and those utility customers, regardless of where they reside in the Commonwealth, are receiving consistent information and service.

- **Building Performance Institute (BPI) certification**

In the interest of supporting a „whole house' building science approach to home energy assessing and analysis, the program will require all home Energy Specialists to achieve Building Analyst BPI certification.

- **Program Structure and Specifications**

The Mass Save home energy assessment may involve two visits, the screening visit and the diagnostic visit. The screening visit is available to any customer eligible to participate in the program and is a visit focused on determining if the house is a good candidate for weatherization, providing information about program incentives, and installing Immediate Savings Measures (ISM's). The diagnostic visit is performed only for homes that need weatherization work performed and focuses on writing specifications for the weatherization work and presenting these to the customer. Air sealing may be performed at the diagnostic visit by Air Sealing Technicians. A comprehensive visit may be scheduled at the original intake when the customer service representative determines that there is reasonable opportunity for weatherization work, customer commitment, and a lack of roadblocks. A comprehensive visit includes all activities from both the screening visit and the diagnostic visit.

The Mass Save program provides a fuel-blind assessment of a home and possible improvements including air sealing, insulation, lights and appliances, water heating, and heating system upgrades.

Prior to receiving a home energy assessment, customers will have spoken to a Mass Save Customer Service Representative (CSR) associated with the appropriate utility company. This CSR will ask the customer a series of questions intended to ensure that the customer is eligible for the home energy assessment. However, it is still important for the Energy Specialist to be aware of the following concerns:

- 5+ Family Residences

The Mass Save RCS program only covers 1-4 family residences. If the Energy Specialist finds him/herself at a building with 5 or more units, the Energy Specialist should immediately call the CSR and confirm the customer's eligibility.

- Low Income Customers

The Mass Save RCS program is not intended for low income customers. There is a network of weatherization agencies that serve these customers, often providing free energy efficiency improvements. Low income eligible customers need to understand that by receiving Mass Save RCS incentives they are forfeiting their eligibility for free weatherization services.

- Correct Program Administrator

The Mass Save RCS program is funded by program administrators such as electric and gas utility companies. These companies only pay for home energy assessments that are for their customers. The Energy Specialist needs to verify that the customer is a customer of the utility company paying for the home energy assessment. If there are any concerns, contact the appropriate CSR before proceeding with the home energy assessment.

1.2 Screening Visit Overview

The Screening Visit is a whole-house assessment of potential energy improvements and a thorough determination of any "roadblocks" preventing weatherization work from proceeding. It is the Energy Specialist's responsibility to install compact fluorescent light bulbs (CFL's) and other qualified energy saving materials as well as to specify air sealing work. The outcome of the screening visit should result in either a clear indication of what roadblocks exist and information for clearing them or scheduling a diagnostic visit and/or no-cost air sealing appointment.

1.3 Diagnostic Visit Overview

After completion of a screening visit, eligible customers who need insulation work, have interest in pursuing that work, and have no roadblocks preventing such work from occurring should receive a diagnostic visit. The goal of the diagnostic visit is to use diagnostic tools to determine opportunities for improving insulation performance and to then present a proposal for services to the customer with encouraging presentation. When scheduling allows and when appropriate, air sealing may occur simultaneously during this visit.

1.4 Comprehensive Visit Overview

If requested by the customer or deemed appropriate, a comprehensive visit may be performed in the place of a screening and diagnostic visit. At this visit all the aspects of a screening visit combined with a diagnostic visit will be performed.

2.0 Screening Visit Specifics

2.1 Customer Interview

During the initial customer interview, important information must be gathered about the residence. This information must include:
- Demographic Information
- Utility account numbers
- Historical fuel use
- Number of occupants

During the customer interview the Energy Specialist will explain to the customer the steps included in the screening visit and the approximate time it will take to complete those steps during the initial visit. The Energy Specialist will also ask the customer what their specific concerns are for receiving the energy assessment and will be sure to address those concerns during the course of the screening visit.

2.2 Refrigerator Assessment

Homeowners who have qualifying refrigerators may be eligible to receive a rebate for purchasing a qualified Energy Star refrigerator and replacing the old inefficient one. Energy Specialists shall determine the existing age, make, and model number for all refrigerators located within the house to determine if they meet the qualifying regulations to warrant replacement. If metering the refrigerator, the minimum metering time is 30 minutes, but the longer the reading, the more accurate it will be. If the refrigerator does qualify, provide a rebate form to the homeowner from the appropriate utility sponsoring the rebate for that particular home. Refrigerators manufactured after 1995 do not need to be assessed. There is a maximum of 2 rebates per Mass Save participating electric utility residential electric account.

2.3 Combustion Safety Testing

A house must successfully pass combustion safety tests prior to installing weatherization measures in the home. It is the intent that this testing be performed at the screening visit or comprehensive visit when there are identifiable measures. Combustion safety evaluation shall be performed in accordance with current Building Performance Institute Building Analyst standards. This includes testing all combustion heating and hot water systems along with combustion ovens and dryers. A summary of the BPI test procedures are listed below. For more information please visit www.bpi.org.

1. Measure the Base Pressure. Start with all exterior doors, windows, and the fireplace damper(s) closed. Set all combustion appliances to the pilot setting or turn off the service disconnect, including: boiler, furnace, space-heaters, and water heater. With the home in this configuration, measure and record the baseline pressure of the combustion appliance zone (CAZ) with respect to outside.
2. Establish the Worst Case. Turn on the dryer and all exhaust fans. Close interior doors that made the CAZ pressure more negative. Turn on the air handler, if present, and leave on if the pressure in the CAZ becomes more negative, then recheck the door positions. Measure the net change in pressure from the CAZ to outside, correcting for the base pressure. Record the "worst case depressurization" and compare to the CAZ Depressurization Limit Table (refer to BPI standards).
3. Test Worst Case Spillage, Draft, CO. Fire the appliance with the smallest Btu capacity first, test for spillage, measure the draft pressure, and then test for CO. Spillage and CO

are tested close to the burner, draft is measured close to the chimney. The spillage test fails if it is still spilling after 1 minute. The CO test fails if the levels are still too high after 10 minutes. Carbon monoxide needs to be tested in other gas fired appliances such as gas dryers and gas ovens if present at the home.

4. If Test Fails: Retest Spillage or Draft under Natural Conditions. If spillage or draft fails under worst case, turn off the exhaust fans, open the interior doors, leave the first appliance running and test for spillage and draft under "natural conditions". If tests pass under natural conditions, try to figure out which change causes the tests to fail.
5. Ambient CO. Monitor the ambient CO in the breathing zone during the test procedure and abort the test if ambient CO goes over 35ppm. Turn off the appliance, ventilate the space, and evacuate the building. The building may be reentered once ambient CO levels have gone below 35ppm. The appliance must be repaired and the problem corrected prior to completing the combustion safety diagnostics. If the ambient levels exceed 35 ppm during the testing under natural conditions, disable the appliance and instruct the homeowner to have the appliance repaired prior to operating it again.

Energy Specialists shall follow any notification protocols set in place by the Program Administrator for combustion failures.

2.4 Recommendation for Replacing Heating Systems & Cooling Systems

Central Heating Systems

Recommend replacement of heating systems if any of the following are true:

- Heating system is estimated to be more than 15 years old
- Heating system is natural gas or propane with atmospheric venting
- Steady state combustion efficiency was measured to be below 80%

Central Cooling Systems

Recommend replacement of cooling system if any of the following are true:

- Cooling system is estimated to be older than 2005
- Cooling system is determined to be below SEER 10

Domestic Hot Water Systems

Recommend replacement of domestic hot water system if any of the following are true:

- Water heating is provided by a tankless coil in an older boiler
- Water heating is provided by an atmospherically vented water heater

Once all system evaluation has been completed, the Energy Specialist shall distribute any necessary rebates and literature to the customer based upon utility sponsor.

2.5 Assessment of the Basement, Walls, and Attic

The goal of assessing all the major parts of the home is to determine the location and performance of the existing thermal envelope and how it can effectively be improved upon through appropriate air sealing and insulation measures. The thermal envelope is the barrier between conditioned and either unconditioned space or the outdoors. It is important that the thermal envelope continuously encase the entire house, if possible, because heat loss is always dominated by the areas with the least insulation / air sealing. The Energy Specialist during the screening visit will determine if insulation is needed and is possible through the Mass Save program. The Energy Specialist during the diagnostic visit will determine the actual depths and

measurements and provide the customer with a written proposal to install the insulation measures.

2.5.1 Assessment of the Basement/Crawlspace

During the screening visit, the Energy Specialist shall evaluate the potential of the basement area for energy efficiency improvements. In order to achieve this, the Energy Specialist must determine how the basement is used by the customer and its relation to the building envelope. This determination will guide how basement measures will be recommended. Generally, basements are semi-conditioned and should be considered inside the thermal envelope. Attempts to reduce heat loss by separating the basement from the home are not usually successful. Exceptions may include some crawlspaces or basements with large openings to the outside. In these rare cases where the basement is outside the thermal envelope, eligible measures to recommend include:

For basements that are clearly outside the thermal envelope (such as a vented crawlspace):

Heating System Distribution Improvements:

- Duct Sealing – Recommend that all ducts located outside the thermal envelope be sealed with mastic or mastic tape to form a durable, tight seal. Duct sealing shall be recommended in conjunction with duct insulation. These improvements should be recommended for implementation by HVAC contractor.
- Duct Insulation – Recommend fiberglass duct insulation with a foil vapor retarder on all heating ducts located outside of the thermal envelope. Duct insulation shall be recommended in conjunction with duct sealing. These improvements should be recommended for implementation by HVAC contractor.
- Hydronic and Steam Pipe Insulation - Recommend pipe insulation for all heating pipes located outside the thermal envelope.

Basement / Crawlspace Ceiling Insulation:

If the basement is located outside of the thermal envelope, insulating the ceiling is the best measure to complete the thermal envelope.

- Fiberglass Insulation – If the ceiling joists are spaced appropriately, fiberglass insulation shall be recommended.
- Densepack cellulose – If minimal to no pipes or wiring are present, the basement is very dry, and the joists are unevenly spaced, recommend ceiling densepack cellulose. If the space is already enclosed, recommend densepack cellulose. If the space needs reinforced mesh in order to hold the densepack cellulose in place, recommend drypack cellulose. Pay close attention to how difficult it may be to install cellulose in the space and if it is possible.
- High Density Polyurethane Spray Foam – Recommend spray foam and any necessary barriers for crawlspace ceilings located outside of the thermal envelope as allowed by Program Administrator.

Basement Stairwell Insulation:

If the basement is considered outside of the thermal envelope and basement ceiling insulation is recommended, insulating the stairwell and door shall be recommended to improve the thermal envelope.

- Fiberglass Insulation - If the joists are evenly spaced and open, recommend fiberglass insulation.
- Drypack Cellulose - If the joists are unevenly spaced and open, recommend drypack cellulose.
- Densepack Cellulose - If the stairwell is already enclosed, recommend densepack cellulose.
- Stairwell Door – Insulate the back of the stairwell door with polyisocyanurate foamboard in conjunction with basement stairwell insulation.

Dirt Floors: All accessible dirt floors shall be recommended for coverage with 6 mil polyethylene plastic sheeting.

For basements that are inside the thermal envelope:

Basement Rim Joist Insulation:

- Fiberglass Insulation – When joists are spaced appropriately, recommend fiberglass insulation for the rim joist area in basements that are within the thermal envelope.
- 2-Part Spray Foam – Recommend 2-part spray foam for basements within the thermal envelope. This insulation application should be recommended when an insufficient ledge depth exists to hold a fiberglass batt in place securely.

2.5.2 Assessment of the Exterior Walls and Enclosed Cavities

In order to create a proper thermal envelope, all exterior walls, overhangs, and enclosed cavities must be fully insulated. Determine the existing level of insulation in enclosed cavities by drilling small holes or checking behind light switch or outlet plates. During the diagnostic visit the Energy Specialist will use an IR camera to help verify the existing level of insulation within wall cavities. All enclosed cavities shall be insulated with densepack cellulose. In order for an enclosed cavity to be properly insulated, at least two inches of free space must exist for the cellulose hose to fit into the cavity properly. The following measures depict the specific types of wall insulation measures available through the Mass Save program.

Exterior Wall Insulation:

- Exterior blow – Recommend an exterior blow if the house has removable siding. If previously blown in insulation is found in the wall cavities, recommend a diagnostic visit to determine the extent of the existing insulation.
- Interior Drill and Blow – Recommend an interior drill and blow if the home has stucco, brick, masonry, or asbestos siding under another type of siding.

Interior Walls: Recommend interiors walls that separate conditioned space from unconditioned space, such as between an apartment and an unconditioned hallway, get insulated with densepack cellulose using the interior drill and blow method.

Overhangs: Recommend any overhangs that are not insulated or are insufficiently insulated be densepacked with cellulose either from the outside, if possible, or through the floor of the living space above.

Garage Ceilings: Recommend garage ceilings be insulated using densepack cellulose as long as hidden distribution pipes and plumbing will be properly protected from cold

temperatures. Proper protection generally involves installing a larger R-value between the pipes and the exterior than between the pipes and the interior of the home.

Flat Ceilings: Recommend densepack cellulose insulation for small enclosed cavities, such as above bay windows and bump-outs, that are uninsulated or insufficiently insulated. These areas shall be insulated either from the interior living space or from the exterior, depending upon the accessibility.

2.5.3 Assessment of the Attic

Insulating an attic is a very cost effective home improvement and shall be recommended anytime the existing level of insulation is below R-30. The Energy Specialist shall determine all existing types of insulation present in a given attic space and use the most predominant type to base R-value from, referencing BPI standards. The Energy Specialist will base the existing R-value off of the most commonly recurring low spot throughout the given attic space. If needed, the attic will be divided into multiple sections to more accurately recommend insulation specifications. In most cases, blown cellulose will be the insulation of choice. The following is a list of eligible attic recommendations:

Open Attic Flat and Kneewall Flat: Recommend blown cellulose for all open attic spaces, including behind the kneewall up to R-38.

Attic Slope: If no insulation is present within an attic slope, recommend densepack cellulose for this space. If the cavity has inadequate preexisting insulation, recommend densepack cellulose to fill the entire cavity, as long as there are two inches of free space and the cellulose can be applied to the cold side of the assembly.

Floored Attic and Floored Kneewall Floor: The floored cavity can be densepacked with insulation as long as three inches of free space exist. The densepack cellulose will compress any preexisting insulation.

Attic Kneewall: Recommend this measure in conjunction with adequately insulating the kneewall floor if there are no heating or hot water pipes and the kneewall area can be effectively sealed off from the living space and vented properly. This is the recommended way to insulate the attic kneewall area.

- Densepack Cellulose - If the attic kneewall is already enclosed, recommend densepack cellulose.
- Drypack Cellulose - If the attic kneewall is not already enclosed, recommend drypack cellulose where reinforced material will be applied to the kneewall joists to create an enclosed cavity, which will then be densepacked with cellulose.
- Fiberglass Batts – If fiberglass batts already exist within an attic kneewall area and only a few bays are missing, recommend fiberglass batts to complete the thermal envelope in that area.
- Polyisocyanurate Foamboard – Recommend this be installed on the attic side of the kneewall when existing fiberglass insulation is present and completely fills each bay.

Attic Kneewall Slope: Recommend this measure only if the kneewall and kneewall floor can not be insulated or kneewall slope insulation already exists. This is not the preferred way to insulate the kneewall area; insulating the kneewall and kneewall floor is.

- Densepack Cellulose - If the attic kneewall slope is already enclosed, recommend densepack cellulose so long as existing insulation will not create air pockets on the cold side of the assembly.
- Drypack Cellulose - If the attic kneewall slope is not already enclosed, recommend drypack cellulose where reinforced material will be applied to the kneewall joists to create an enclosed cavity, which will then be densepacked with cellulose.
- Fiberglass Batts – If fiberglass batts already exist within an attic kneewall slope area and only a few open bays are missing, recommend fiberglass batts to complete the thermal envelope.

Insulate Attic Hatch or Door: Recommend that polyisocyanurate foamboard be applied to the back of all attic hatches and doors to achieve an R-14.

Insulate Attic Pull-Down Stairs: Recommend the installation of an insulated attic-side cover with fastener for all attic pull-down stairs. Additional carpentry may be needed in some cases.

Additional Attic Accesses: Recommend creating additional attic accesses if no existing way of entering the attic area is present.

Housewrap: When recommending the installation of fiberglass insulation into kneewalls, housewrap shall be recommended in conjunction.

2.5.4 Attic Ventilation

Do not recommend insulation in an attic space unless adequate and permanent ventilation is installed.

Adequate cross-ventilation shall be maintained above all attic insulation by providing both low and high vents or gable end vents where possible. One square foot of net-free vent area (NFA) shall be provided for every 300 ft2 of attic area with 50 to 60% of the vent area located near the roof ridge and 40 to 50% located near the eaves. One level of venting may be used provided that adequate cross ventilation can be maintained.

NOTE: Although the use of window vents is allowed, the vents must be permanently fixed and must meet the minimum requirements for free vent area as noted above.

Ventilation should be improved wherever reasonable and practical to meet current code requirements when attic insulation is installed. The details of the types of vents and where they may be practically installed on each specific house varies. Consideration should be given to the type and location of vents to provide as much cross ventilation as possible for the specific application depending on existing conditions and retrofit options.

Options for achieving high ventilation include:

1. Ridge Vent
2. High Gable Vent
3. Window Gable Vent
4. Roof Vent

Options for achieving low ventilation include:

1. Soffit Vents
2. Low Gable Vent
3. Roof Vent

Aluminum Ridge Vent: These vents are made of aluminum and stick up above the roof a few inches. Contractor installation restrictions may apply such as the inability to install aluminum ridge vents in slate or tin roofs.

Gable Vents: Gable vents are generally rectangular and made from aluminum or wood. Gable vents can not be installed through asbestos siding. Contractor installation restrictions may apply such as the inability to install gable vents in aluminum siding.

Soffit Vents: Soffit vents are generally made from aluminum. Contractor installation restrictions may apply such as the inability to install soffit in aluminum soffits.

Propavents: Recommend at least one propavent with each existing soffit vent and for every proposed soffit vent to allow for proper air transfer.

Window Vents: When attics can not be ventilated by other means and windows exist, recommend gable vents to be installed in the existing window sash. Plywood will be constructed around the gable vent which is then fitted into the place of one of the window sashes.

Roof Vents: Roof vents are typically made of metal. Contractor installation restrictions may apply such as the inability to install roof vents in slate, tin, or flat roofs.

Vent Bath Fan to the Outside: Any bathroom exhaust fan vents into an attic, must be vented to the outside. Contractor installation restrictions may apply such as the inability to vent the bath fan to the gable end wall if asbestos siding is present.

2.5.5 Guidelines for Outside Assessment:

After assessment of the interior is complete, the Energy Specialist should complete one full loop around the outside of the home. While outside, it is best to make note of the following building characteristics:

- Siding Type(s)
- Roof Type(s)
- Attic Ventilation Combinations
- Water or Moisture Intrusion Issues
- Peeling, chipping paint

2.5.6 Electric Heat Thermostats

In the case of electrically heated homes, replacing old thermostats with new, programmable thermostats can provide significant energy savings. A minimum number of electric thermostats may need to be achieved according to Program Administrator requirements. In order to install electric heat thermostats the existing thermostats must be wall mounted. Thermostat replacement recommendations and proposals should be issued at the Screening Visit.

2.6 Assessing Air Sealing Potential

During the screening visit, the Energy Specialist must determine the number of hours of air sealing needed in the home to achieve significant energy savings. Most homes could benefit from some amount of air sealing work. Spray foam, caulking, metal flashing, door sweeps, and weatherstripping are used to seal the home. If attic insulation is a recommendation, air sealing must be completed before insulation work can begin. Attic air sealing should be emphasized since that is where the air and heat loss is strongest. Attic air sealing can have a large impact on energy savings and reducing attic moisture problems. Below is a list of significant air sealing features:

- an open chimney chase
- open wall cavities such as found in balloon framing
- attic kneewalls
- ducts in the attic (requires sealing between duct boots and drywall and increases overall air sealing time as the technician must maneuver around the ductwork)
- drawers in attic kneewalls
- open duct chase or other chase
- multiple doors or hatches that need to be weatherstripped
- multiple attic spaces or unheated basements
- recessed lights (air tight insulation barrier boxes can be installed over these)
- floored attic areas and transition areas where densepack cellulose is not going to be installed
- plumbing and electrical penetrations
- rim joist / wall plate seams

2.7 Identifying Roadblocks (Heath and Safety Barriers)

Throughout the screening visit, a primary objective is to identify roadblocks. Roadblocks are problems with the safety of the home that could prevent insulation or air sealing work from proceeding. The main roadblocks are moisture, knob & tube wiring, asbestos-like material, and combustion safety problems. There are also some unusual roadblocks discussed below.

2.7.1 Moisture

In order to insulate a home, it is important to determine that the insulation will not become wet and that the insulation will not significantly worsen any existing moisture problems. Moisture can be a roadblock for some measures or all measures in the home, depending on the severity. Here are some guidelines for deciding when there is too much moisture for insulation or air sealing to occur:

1. General: If the framing cavities into which we would like to install insulation are wet, we cannot insulate. This is a roadblock only for the area of the home that is wet, but typically entire measure should be roadblocked. For example, if one wall of the house is too wet to insulate, it is a good idea to leave all the walls uninsulated. Wet framing cavities can be identified by severely peeling paint, mold growth, moss, mushrooms, rot, moisture content, or by touch.

2. Basements: All basements have an elevated level of moisture compared to the living space because concrete absorbs moisture from the ground. Excessive elevated levels of moisture in the basement shall stop the installation of insulation in the basement. Signs of elevated moisture include staining, mold growth, and dirt floors. If the level of moisture in the basement is especially high, then no insulation or air sealing should occur in the home. Very moist basements may have pools of water or streams running through them, may have signs of flooding, or may have rotten framing.

3. Attics: Attic moisture problems are usually caused by one of three things – 1) roof leaks, 2) ice damming, or 3) condensation.

- Roof leaks: If there are any roof leaks that have not been repaired, this is a roadblock for any insulation work in the attic, including cellulose and fiberglass. In most cases air sealing shall not occur until after a roof leak is addressed by the homeowner. If the source of moisture in an attic cannot be determined, it should be assumed that the source is a roof leak.

- Ice damming: Ice damming is generally caused by too much heat escaping from the home into the attic and melting the snow on the roof, which then refreezes when the temperature drops or the water reaches a lower point on the roof. The moisture seeps into the attic from the outside of the roof. Air sealing, insulating, and venting the attic may reduce ice damming and may solve the moisture problem.

- Condensation: Condensation is generally caused by warm, moist air escaping from the home and condensing on the cold roof deck. Water forms on the underside of the roof decking and in severe cases, the water will freeze on the underside of the roof decking and form icicles. Air sealing and venting will reduce condensation and can solve the moisture problem. Air sealing work must be completed before insulating is added.

2.7.2 Knob & tube wiring

Knob & tube wiring should always be suspected in pre-1950 houses. Energy Specialists need to look carefully through the attic and basement and look for rotary, two button, or porcelain switches. Any evidence of knob & tube wiring roadblocks a diagnostic energy assessment until the homeowner addresses the wiring. Remember that knob & tube wiring is a concern even if the electrical panel has been replaced. If knob & tube wiring is present, it is a roadblock to all insulation in the home, except for areas of the home where fully visible, uninsulated open cavities where the Energy Specialist can visually verify that no knob & tube wiring is present. Air sealing, duct sealing, pipe insulation, and duct insulation can still occur in a home with knob & tube wiring.

When knob & tube wiring is found, the Energy Specialist should inform the customer of how to proceed with getting the knob & tube decommissioned noting the specific areas where insulation is recommended. The customer will need to have an electrician certify that the wiring has been deactivated or removed before proceeding with a diagnostic energy assessment.

2.7.3 Asbestos

If the Energy Specialist finds asbestos-like material on the pipes or ducts in a basement or attic, it is a roadblock to any work occurring in that area for fear of disrupting the material. The Energy Specialist must check where pipes go into floors or walls as asbestos-like material is commonly

missed in these areas. Embossed or smooth paper on ducts could potentially be asbestos-like material. If there is asbestos-like material on pipes in the basement, typically basement air sealing and basement ceiling insulation must be roadblocked. Sometimes small amounts of air sealing or rim joist insulation can be completed if the asbestos-like material will not interfere with these measures. If there appears to be any risk that a worker would touch the asbestos-like material or knock a ladder into it, the work must be roadblocked.

The presence of asbestos-like material or any sign that asbestos-like material used to be present will prevent blower door testing in the home. The Energy Specialist should assume that any steam heat system once had asbestos-like insulation on it, even though not all steam heat systems were insulated with asbestos. The Energy Specialist can assume that any vermiculite insulation contains asbestos-like material, even though not all vermiculite contains asbestos. Cellulose cannot be blown into or on top of an attic area that contains vermiculite insulation.

Due to health concerns, air sealing technicians must not dig through vermiculite insulation in the attic. Therefore the air sealing estimate for the home shall be reduced based on this factor.

Asbestos can also be found in board-like form. This would typically be located directly above the heating system and resemble drywall. If this is found it shall be considered a roadblock to any work that would be done within close proximity.

The Energy Specialist should give the customer the appropriate roadblock information to explain the situation. When informing the customer, the Energy Specialist should take care to emphasize the need for professional removal, testing, and certification. He or she should avoid saying anything that may give the customer the idea that they can solve the problem on their own. After professional removal or encapsulation of the asbestos-like material, the work can proceed. The customer must have a letter from the asbestos removal professional certifying that the asbestos problem has been corrected.

2.7.4 Combustion Safety
Follow all BPI guidelines for checking combustion safety in the home.

If any combustion safety problem is identified as a “stop work” or “emergency” situation, it is a roadblock to any tightening measures on the home, including air sealing and insulation. The only measure that can proceed is thermostat installation. Unvented fossil fuel space heaters will always stop work until they are removed or vented properly.

2.7.5 Other Roadblocks
There are other roadblocks that will prevent work from happening at a customer’s home. Some roadblocks listed below are conditional and should be assessed based on the Energy Specialist’s best judgment. Additional roadblocks are listed below:

- Access to house: Occasionally a home is too far from the road or the walls are inaccessible due to trees or shrubbery. Work that requires access to areas that are blocked by shrubbery or trees must be roadblocked.

- Structural problems: Occasionally the structure to be insulated cannot hold the weight of the insulation. This is true for freestanding ceiling tiles. In this case, the area cannot be insulated.

- Inability to vent: Occasionally an attic needs insulation but cannot be ventilated properly (for example, a home with slate roof, asbestos shingles, and aluminum soffits). For more information on this topic, refer to page 10 section 2.5.4 "Attic Ventilation".

- No Carbon Monoxide Detector Present: In homes with any type of combustion appliance and/or an attached garage, at least one carbon monoxide detector must be present in the home by the time work is completed. In the case of completely electric homes, no carbon monoxide detector is required unless the home has an attached garage.

- Unvented Bath Fan, Dryer, and/or Kitchen Exhaust Fan: If any exhaust fan vents directly into the attic, the fan must be vented to the outside before work is completed either through the scope of work or by the customer outside of the Mass Save program. If any dryer is not vented to the outside, it is a roadblock for any work until addressed by the homeowner.

- No Return Ductwork: If a home contains a furnace with no return ductwork, work must be roadblocked until a return system is installed.

- Minimum Workspace Clearance: If any space that needs work has inadequate clearance for workers, that particular work must be roadblocked.

- Floored Attics: If a floored attic contains existing insulation up to the floorboard level, but can not be effectively air sealed, no insulation shall be recommended to be installed over the existing floorboards. This measure must be roadblocked until the homeowner removes all the floorboards. Contractor installation restrictions may also apply for floored attics that do not contain at least 3" of free space between the top of the insulation and the floorboards.

- Vermiculite Insulation: No attic space can have additional insulation installed if vermiculite insulation exists.

- Heavy Storage Use and Accessibility: If an area contains excessive storage, work in that area can not proceed until the items are moved and access to the particular area is gained. This includes access to areas of the basement and attic where air sealing and/or insulation measures are recommended.

- Overall Safety and Condition of the Home: If the Energy Specialist discovers any issues at a home that are dangerous or an impediment to proceeding with work, work can not proceed until the issue is addressed by the homeowner. This includes too much bat guano in an attic, unsafe access to the home, basement, or attic areas, unhealthy living conditions, excessive mold or rot, etc.

- Personal Safety: Personal safety of all field staff should be paramount at all times. If any field staff feel unsafe at an appointment, they have the right to leave and have the support and understanding of the Program Administrator.

2.8 In-Home Installation Measures

During the energy assessment, the Energy Specialist will have the opportunity to install items that lead to immediate energy savings. These are referred to as Immediate Savings Measures (ISM's). The most important ISM to install is light bulbs – compact fluorescent light bulbs (CFL's) are a very cost effective way to reduce electricity usage. There is no maximum number of CFL's, but they should only be installed in fixtures that get used regularly (usually not basements, closets, attics, etc.).

Other installations that save electricity or gas are second highest priority. This includes programmable thermostats, showerheads and faucet aerators. Last would be weatherstripping and other draft-stopping measures since these are better performed during an air sealing visit. However, for a customer that is not getting an air sealing visit, draft stopping measures can be very helpful. For a complete list of measures, see Appendix I.

2.9 Presentation of Recommendations and Next Steps

At the end of every screening visit, a receipt for installations completed during the visit must be provided to the customer. For each home, one of the two following scenarios will prevail:

- If No Roadblocks Prevent Work: The Energy Specialist shall inform the customer of what possible insulation measures are applicable to their home and try to sell the diagnostic visit. The Energy Specialist will present an agreement for air sealing work, if applicable, and try to sell the air sealing visit that will happen during or after the diagnostic visit, if a diagnostic visit is needed. The customer will be given the chance to call and schedule their air sealing appointment and diagnostic visit while at the screening visit.

- If the Home is Roadblocked: Distribute all appropriate forms to the customer and clearly explain what must be done in order for them to proceed with the program.

Solar Site Assessment

When requested by a customer or in the judgment of the auditor, a solar site assessment will be recommended.

2.10 Explanation of Incentives

The Energy Specialist will distribute all relevant utility rebates to the home owner. Also, if the homeowner is interested and eligible, the Energy Specialist will distribute all necessary paperwork to apply for the HEAT Loan through a participating lender. If a diagnostic visit is recommended, the Energy Specialist shall explain to the customer any relevant incentives related to the type of energy efficiency improvements the Energy Specialist will present at the diagnostic visit.

3.0 Diagnostic Visit Specifics

3.1 Customer Meeting

The goal of the customer meeting is to thoroughly explain to them the tests and procedures the Energy Specialist will be performing at the home as well as get an understanding of the customers' insulation concerns.

3.2 Assessment of the Basement / Crawlspace

Please refer to all procedures defined in 2.5.1
Information from the screening visit will be used where possible. In addition to the procedures listed in section 2.5.1, the Energy Specialist will measure the area of each component and determine the depth of framing cavities. Refer to 3.8 for more information about calculating areas.

3.3 Assessment of Exterior Walls and Enclosed Cavities

Please refer to all procedures defined in 2.5.2
Information from the screening visit will be used where possible. In addition to the procedures listed in section 2.5.2, the Energy Specialist will measure the area of each component and determine the depth of framing cavities. Refer to 3.8 for more information about calculating areas.

3.4 Assessment of the Attic and Attic Ventilation

Please refer to all procedures defined in 2.5.3 and 2.5.4
Information from the screening visit will be used where possible. In addition to the procedures listed in section 2.5.3 and 2.5.4, the Energy Specialist will measure the area of each component and determine the depth of framing cavities. Refer to 3.8 for more information about calculating areas.

3.5 Roadblocks

It is imperative that the Energy Specialist keep an eye out for roadblocks. It is possible that the Energy Specialist during the screening visit missed a roadblock or that a roadblock has since been created after the initial screening visit. Please refer to 2.7 for detailed information regarding roadblocks.

3.6 Diagnostic Testing

The goal of diagnostic testing is to help provide the Energy Specialist with more in-depth information to help determine the current level of insulation within a home to more accurately prescribe insulation measures.

It is the Energy Specialist's job to use all necessary diagnostic tests to best recommend eligible measures to the customer through the Mass Save program. These tests shall be run to verify the ability to insulate the home or to help convince the customer to get the work done. If air sealing is happening at the same time as the diagnostic visit, the Energy Specialist shall consult with the Air Sealing Technician about what measures to recommend. Here are all the diagnostic tests that an Energy Specialist can utilize during a diagnostic visit:

- **Infrared Camera Scan**

The infrared scan is performed to learn more about the insulation present in the home. It is helpful for the customer to watch this part of the home energy assessment so they can see the images on the screen. If the Energy Specialist will be running a blower door test, the infrared camera should be used first so that the blower door does not eliminate the needed temperature difference. An 18-degree temperature difference between the inside of the home and the outside of the home is recommended to get a clear picture of the existing insulation. When using the IR camera from inside the home and the temperature outside is cold, if there is no insulation in the walls, the wall framing should appear warmer than the cavities. If the walls

are insulated, the wall framing should appear cooler than the cavities. The Energy Specialist must be careful of situations where the walls may be warmed by the sun or other heat source which could blur or reverse the images. Infrared scans are best done in the morning while it is still cold outside and before the sun shines on the building. Energy Specialists should be especially careful when viewing the south and west wall in the afternoon.

Infrared images of ceilings often don't reveal much because the attic or roof is often warm compared to the outdoors. Infrared images of metal surfaces or glass surfaces can be meaningless since they tend to reflect other infrared light rather than emit their own.

- **Blower Door Test**

  A blower door test shall be run only after determining that no asbestos-like material or vermiculite insulation is present in the home. The Energy Specialist should explain to the customer what they are doing and show the customer areas of the house that are leaking. A blower door test can help determine the relationship of an attic or a basement to the rest of the house based on pressure differential readings. Using the blower door test in conjunction with the IR camera can be helpful in seeing what effect the blower door has on the IR scan.

3.7 Outside Assessment of the Home

The goal of an outside assessment of the home and area calculation is to detail a floor plan of the home to create accurate calculation of the areas to be insulated. These diagrams and calculations will be used to aid the insulation contractor during the insulation and needs to be as accurate as possible. Performing an outside assessment of the home allows the Energy Specialist to gain a 360 degree view of the home, look at siding and ventilation, and accurately measure the entire home.

After completing an assessment of the inside of the home, the Energy Specialist will complete one full loop around the building. The Energy Specialist will take measurements and draw a diagram of the home at this time. The following shall be checked from the outside of the home:

- Check the siding types on all sides and levels of the building where you are recommending wall insulation. Determine if there are multiple layers of siding by checking at the bottom edge and windows and asking the customer if there are multiple layers of siding. Check for the possibility of pre-1979 paint.
- If there are attic insulation opportunities and the attic needs more ventilation, look for ways to add ventilation to the attic. Check for ventilation that was unnoticed from the attic.
- Look for evidence of water intrusion into the building, such as steep valleys with brush caught in them, rotten siding or trim, peeling paint, or incorrectly flashed areas.
- Look for depressions in the ground near the foundation, adequate slope away from the foundation, dampness of the ground around foundation, and type of vegetation (moss, grass, shrubs, etc.).
- Check window wells and bulkhead door for signs of water entry or water damage.
- Condition of siding, grade, and other site conditions that may affect installation.

3.8 Area Calculations

Whenever energy efficiency improvements are recommended, the Energy Specialist will draw a diagram of the home and calculate area and volume. All measurements shall be made to the

nearest six inches. Wall insulation measurements will be gross measurements and therefore subtraction of windows and doors will not be needed.

3.9 Installation Measures

During the diagnostic visit, it is possible for specialty CFL's to be installed if identified during the screening visit.

3.10 Creation of Reports and Contract

At the end of the diagnostic energy assessment, the Energy Specialist should create a report to present to the customer based on the findings and recommendations. As long as all roadblocks are cleared the Energy Specialist during the diagnostic visit will be able to leave an agreement for work with the customer almost every time. It is possible that the Energy Specialist during the screening visit missed a roadblock or a roadblock has since been created. If this ever occurs, the Energy Specialist during the diagnostic visit shall make clear to the customer what has happened and what needs to be done to resolve the roadblock. After the roadblock is cleared, an agreement for work can be sent to the homeowner to proceed with work.

If the customer has received this diagnostic visit based on a contractor referral, a report showing the recommended costs for the proposed measures must be left with the customer but an agreement should not be provided at the audit. The customer can use the proposed measures and prices as a guide when they get the work done through the contractor that referred them to the Mass Save Program.

3.11 Presentation and Sale of Recommended Work with Incentives

After all data has been entered and an agreement for work generated, the Energy Specialist will present this proposal to the homeowner for completion. The Energy Specialist must clearly explain all recommended measures and leave the customer with appropriate handouts for proceeding with and preparing for the work. The Energy Specialist shall try their best to get the homeowner to agree to get work done while at the home energy assessment as long as they have not been referred by a contractor. If the customer does not sign the contract at the home energy assessment, the Energy Specialist must leave the customer with the information they need to schedule in the future. It is imperative that the Energy Specialist also clearly explain what incentives are available for each and every customer. That includes the insulation incentive, the HEAT Loan information, and other utility specific rebates. This will give the customer a greater understanding of what they are eligible for and make them feel more confident when deciding whether or not to get work done through the program. If the Energy Specialist during the screening visit has not already given the customer rebate and HEAT Loan information, the Energy Specialist during the diagnostic visit is responsible for providing this information if the customer is interested and eligible. For additional information regarding rebates and incentives, see Appendix II and III.

4.0 Software

Each home energy assessment must be entered into appropriate home energy assessment software approved by Program Administrators. For each measure proposed, an approximate savings in fuel will be generated.

5.0 Reporting

Information gathered at each home and savings proposed and achieved will be reported to the participating utility company per requirements set forth by the Program Administrator.

APPENDIX I: List of installations (ISM's)

Compact fluorescent light bulbs (CFL's)
Programmable thermostats (oil, propane, natural gas)
Showerhead
Flip aerator
Standard aerator
Pipe insulation
Door weatherstripping
Outlet gasket
Door sweep
Automatic door sweep

APPENDIX II: List of Available Incentives for Recommended Measures

100% Instant Rebate Provided by Utility Sponsor:

- Air Sealing
- Installation of programmable electric heat thermostats. Minimum 4 per household, not located within a bathroom.

75% off up to $2,000.00 Instant Rebate Provided by Utility Sponsor:

- Attic Insulation Measures
- Basement Insulation Measures
- Exterior Wall Insulation Measures
- Duct Sealing
- Heating Duct, Hydronic and Steam Pipe Insulation

Rebates and incentives are subject to change.

APPENDIX III: List of Eligible Rebates

Electric Utility:

- Furnace, furnace with ECM blower, steam boiler, or hot water boiler replacement (oil or propane only)
- Weather responsive control installation with hot water boiler (oil or propane only)
- Indirect water heater (oil or propane only)
- High Efficiency on-demand water heater (propane only)
- ENERGY STAR or 7-day programmable thermostat (oil or propane only)

Gas Utility:

- High efficiency gas furnace or boiler (natural gas only)
- Combined high efficiency boiler and water heating unit (natural gas only)
- High efficiency indirect water heater (natural gas only)
- Condensing gas water heater (natural gas only)
- High efficiency on-demand water heater (natural gas only)

- ENERGY STAR rated storage water heater (natural gas only)
- After-market boiler reset controls (natural gas only)
- ENERGY STAR labeled or 7-day programmable thermostat (natural gas only)

ATTACHMENT B

Mass Save Program Standard for Materials, Installation, and Conduct for Energy Efficiency Measure Installation Contractors

Version 0031
Publication Date: May 13, 2010

This Standard applies to all work performed under the Mass Save Program for contracts entered into **beginning July 1, 2010**. Program Administrators will be establishing a Quality Assurance program to verify that work meets the requirements in this Standard. Proposed changes or additions to the Standard will be considered on a regular basis by the Program Administrators or their designee.

By Program Administrators:

Bay State Gas
Berkshire Gas
Cape Light Compact
National Grid
New England Gas
NSTAR Electric & Gas
Unitil
Western Massachusetts Electric

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1.0 PROGRAM DESCRIPTION

The primary objective of the Mass Save Program (the Program) is to provide residential customers with energy efficiency recommendations that enable them to identify and initiate the process of installing cost-effective energy efficiency upgrades. The Mass Save Program makes it easy, clear, and compelling for customers to participate in all comprehensive energy efficiency programs by providing information through bold outreach mechanisms, incentives, and multiple financing options.

The Program promotes a house-as-a-system approach and focuses on the home's thermal envelope (shell insulation and air leakage conditions), mechanical systems (HVAC & DHW), and lighting and appliances to identify cost effective energy efficiency improvement and/or replacement opportunities.

This systematic approach to home improvement that addresses all aspects of building systems requires clear standards to maximize energy savings and assure customer satisfaction. It is important to note that this initial version of the Mass Save Standard for Materials, Installation, and Conduct (the Standards) is primarily focused on traditional weatherization materials and strategies. The Program Administrators ("PAs")view these Standards as a "living document" that will be updated periodically as the Program continues to evolve.

The Program will coordinate with other Massachusetts programs such as GasNetworks and Cool Smart to develop consistent standards across programs as well as to assure consistent customer education and promotion of the house-as-a-system approach.

Future revisions of the Standards may include alternative/new technologies and approaches for new measures (e.g., spray foam in attics). The PAs are in the process of conducting a cost-effectiveness evaluation of new measures, measures packages, and a pay for savings rebate approach to go after deeper savings per house.

The PAs are supportive of more coordinated statewide training as a means to ensure correct installation techniques for the Program. It is expected that training requirements will increase over time in order for contractors to retain their status as an authorized program contractor. The goal is to have a sustainable and experienced workforce that is focused on achievable maximum energy savings ready and able to meet customer demand.

2.0 CONTRACTOR QUALIFICATIONS AND RESPONSIBILITIES

The term "Contractor" as used in this document applies to any individual or company performing covered work that is being performed within the Mass Save program. This applies equally to vendors working directly for the PAs and to independent contractors doing work for homeowners.

The purpose of these guidelines and associated information is to codify the requirements of weatherization contractors who participate in the Mass Save Program. They are intended as *minimum* standards for participation in the program.

2.1 LICENSES and CERTIFICATIONS

a. CONTRACTORS must have all licenses and registrations required for their area of work by the Massachusetts Department of Public Safety. Appropriate documentation must be supplied to The Program upon request.
b. CONTRACTORS must also obtain any certifications or other recognitions required by individual PAs.

2.2 MATERIALS

a. All materials supplied must meet applicable specifications.
b. All materials must conform to catalog listing.
c. Material substitutions are not allowed without a written pre-approval by the PAs.
d. CONTRACTORS will keep a MSDS on the job site for every material used.

2.3 PERFORMANCE OF WORK

a. All labor to be performed in a workmanlike manner.
b. All work must be performed in a lead-safe manner according to all State and/or Federal Requirements in force at the time of the work
c. All work must be performed in conformance with all applicable OSHA requirements and other governmental standards.
d. All measures installed must be in conformance with the Work Order.
e. Pre-Approved written Change Orders by the PA designee are required before any modifications to the original Work Order are made. If the PA designee is unreachable, the contractor should use their best professional judgment to make changes to scope of work, recognizing that final approval for program incentives lie with the program.
f. CONTRACTORS are *required* to make acceptable repairs for all accidental damages made to a customer's property at the contractor's expense.
g. CONTRACTORS will treat homeowners and their property in a respectful and professional manner.

2.4 JOBSITE CLEAN UP

a. CONTRACTORS are responsible to remove all construction debris from the jobsite.
b. CONTRACTORS are responsible to restore every jobsite to its pre-work condition at project completion.

2.5 DOCUMENTATION

a. Before Starting Work - CONTRACTORS must document that a blower door test and combustion safety testing has been performed and an Order to Proceed has been issued.
b. After Work Completion - CONTRACTORS must submit documentation (signed by customer and contractor) that the approved Scope of Work is complete.
c. The Completion document must include:
    - An itemized confirmation that the Program Audit recommendations were addressed.
    - An itemized list of each measure, area, R-value, etc, installed.
    - Document that post -blower door testing and post-combustion safety testing has been performed.

See Appendix 15.4 for Program Forms (to be added)

2.6 COMMUNICATIONS

2.6.2 CONTRACTOR communications with CUSTOMER

a. CONTRACTORS will be courteous to CUSTOMERS at all times.
b. CUSTOMERS and Mass Save must be notified as soon as possible if an appointment must be rescheduled.
c. CONTRACTORS will clearly explain all work procedures and items to be installed to the CUSTOMERS home before and during the work process.
d. CONTRACTORS will answer all CUSTOMER questions in an honest and straightforward manner. If the CONTRACTOR does not know the answer to a question they will refer the CUSTOMER to Mass Save for an answer. CONTRACTORS will not “make it up” answers.
e. CONTRACTORS will inform CUSTOMERS of any fragile items in the work area and request that the CUSTOMER move those items to a safe location prior to start of work.
f. CONTRACTORS will ask CUSTOMERS for permission to use a household restroom.
g. CONTRACTORS will keep CUSTOMERS informed regarding estimated daily arrival, break, and departure times.
h. CONTRACTORS will document any problems and unusual situations as they occur.

2.6.2 CONTRACTOR communications with Mass Save

a. CONTRACTORS will respond promptly and accurately to Mass Saves communications.
b. CONTRACTORS will document problems and unusual situations and promptly report those to Mass Saves.
c. CONTRACTORS will respond promptly to address problems as they occur.

2.7 CONTRACTOR ACTIONS REQUIRING Mass Save RESPONSE

2.7.1 Theft

Theft may result in immediate cancellation or suspension as a Mass Save Approved CONTRACTOR and full legal remedies including but not limited to prosecution. Theft includes but is not limited to:

a. Charging for materials not installed or labor not incurred.
b. Inflating the actual cost for services provided.
c. Unauthorized removal of client personal property.

2.7.2 Other Unacceptable Actions

The following CONTRACTOR actions, as examples but not limited to, may result in immediate cancellation or suspension as a Mass Save Approved CONTRACTOR. Additional training may be required before reinstatement as a Mass Save Approved CONTRACTOR.

a. Charging clients for services while job is open (one year period).
b. Providing false information to Mass Save or the client concerning work requirements.
c. Failure to correct job deficiencies.
d. Use of inferior materials.
e. Repeatedly missing timelines.
f. Repeatedly performing work of poor quality.

2.8 BUILDING PERMITS

CONTRACTORS are required to obtain and to pay for all applicable work site inspection permits, certificates of inspection, and license fees related to work performed through the Mass Save program.

2.9 CONTRACTOR'S INSURANCE

All Mass Save CONTRACTORS shall:

a. provide insurance at the coverage amounts listed below with respect to the work they perform within the Program;
b. maintain this insurance at their own expense and in full force and effect for the full term of the contract;
c. list each Mass Save Program sponsor as "additionally insured" on insurance certificates.

All policies shall be issued by companies authorized to write that type of insurance under the laws of the Commonwealth of Massachusetts.

CONTRACTORS shall provide minimum coverage with respect to the operations performed by any employee, subcontractor or supplier:

Workers Compensation: $500,000
General Liability: $1,000,000
Automobile: $1,000,000
Excess Liability = $1,000,000 Each Occurrence or Aggregate

Contractors who supply subcontractors are subject to additional levels of insurance, which must be purchased prior to commencement of any work.

3.0 HEALTH AND SAFETY

3.1 OVERVIEW

The health and safety of CUSTOMERS, PROGRAM staff and CONTRACTORS is of primary concern to the Mass Save Program. It is important that all personnel maintain a high level of awareness concerning the potential hazards associated with the weatherization process. The requirements set forth in this standard provide only general guidelines for health and safety concerns.

CONTRACTORS must familiarize themselves with all the health and safety issues associated with weatherization. More specific information concerning indoor air quality problems can be obtained through the U.S. Environmental Protection Agency (EPA) and the U.S. Consumer Product Safety Commission.

Detailed specifications regarding the health and safety of workers in the construction industry can be found in Construction Industry OSHA Safety and Health Standards (29 CFR 1926/1910) that is available from the U. S. Department of Labor. (http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910)

The above standards are applicable to all CONTRACTORS, their employee's, associated workers, and all SUB-CONTRACTORS providing services using funding under the Mass Save program.

Each home weatherized under the Mass Save program must be individually assessed to determine the existence of potential hazards to CONTRACTORS or CUSTOMERS.

If unsafe conditions exist that would endanger the health or safety of the CUSTOMERS or weatherization CONTRACTOR, and those conditions cannot be corrected, no Mass Save work may be started on that home.

A Mass Save energy assessment must be completed prior to CONTRACTOR'S work. It is the CONTRACTOR'S responsibility to confirm that a Combustion Appliance Zone (CAZ) test and Spillage test on all applicable appliances has been completed prior to the work commencing. This may be achieved through documentation from the PROGRAM.

CONTRACTORS their employee's, associated workers, and all SUB-CONTRACTORS are required to take all reasonable precautions against performing work on homes that will subject occupants to health and safety risks.

CONTRACTORS shall maintain a copy of its Health and Safety Policy, and train all employees accordingly. They shall supply Material Safety Data Sheets (MSDS) for products and materials used by their crews and have these documents available on all jobsites.

Adherence to worker health and safety and applicable OSHA standards are required for all jobs performed by CONTRACTORS their employee's, associated workers, and all SUB-CONTRACTORS.

CONTRACTORS shall ensure lead-safe work practices in all Mass Save program weatherization work.

CONTRACTORS shall fully document and communicate all problems and concerns to the Mass Save program staff.

3.2 CONFIRM COMBUSTION APPLIANCE OPERATION

CONTRACTORS must confirm through documentation that a Carbon Monoxide test and complete combustion appliance inspection was performed by others before beginning work, and that a working CO alarm is in place.

NOTE: The following section takes effect on October 1, 2010. Before that time, PAs may identify an alternate approach.

A. Before leaving the site, the CONTRACTOR or other entity approved by the Program Administrator shall perform combustion safety tests in accordance with the Building Performance Institute's Building Analyst Standard on all atmospheric-vented appliances located within the home after completion of air sealing, duct sealing, closed cavity insulation, or any fan alteration including venting a dryer to the outside.

B. Individuals performing these tests shall either hold the appropriate BPI certification, as determined by the Program Administrator, or shall be an employee of a BPI Accredited company.

C. Results of these tests must be reported by CONTRACTOR in the completion documentation.

D. If spillage continues after five minutes of operation or if fan depressurization exceeds 5 pascals, contractor must immediately notify occupants and the Program.

Exceptions. Tests are not required:
1) On direct vent or power vented appliances.
2) Where equipment is located in an isolated mechanical room with all combustion air from outside including from a vented attic or crawlspace. Note that all equipment in open basements must be tested.

4.0 MEASURE INSTALLATION GUIDELINES

Through the Mass Save program, thermal shell improvements may be installed only after a comprehensive whole house assessment is conducted by a program-approved entity and an approved Scope of Work has been developed.

It is only through a whole house assessment that site-specific appropriate recommendations can be made. While a home may benefit from thermal shell improvements in theory, there may be existing conditions that would preclude safe implementation of the possible energy saving improvements.

Examples of such conditions include, but are not necessarily limited to
- existing moisture problems,
- mold or the appearance of mold like substance,
- structural concerns,
- active knob-and-tube wiring,
- existing conditions of specific building components,
- combustion safety issues,
- indoor air quality,
- inaccessibility,
- infestation,
- etc.

Correcting these conditions is outside the scope of the Mass Save program.

Conditions precluding implementation of thermal shell improvements must be documented and explained to the individual customer. If the customer corrects the noted concerns at their own expense, then the recommended thermal improvements may be able to be implemented. Such corrections must be made prior to program work, and must be documented in writing to the satisfaction of the program.

Not every condition will be found before work. If any of the above is discovered during the course of approved work, the CONTRACTOR must contact the PA designee for instructions to:
1. disclose and leave specific areas unaltered,
2. disclose and suspend work until alterations are made by others,
3. disclose conditions to homeowner and proceed with work.

5.0 MATERIALS

5.1 IMPERMEABLE AIR BARRIER MATERIALS

Materials must be durable, and restrict airflow through the material to no greater than 0.004 CFM_{75} per square foot as tested in accordance with ASTM E283 or E2178. Such materials include:

- Plywood,
- OSB,
- ½" gypsum board,
- rigid closed cell foam boards meeting ASTM C578 and ICC ES AC12,
- rigid fiberglass board with flame spread 25 FSK facing,
- sheet metal flashing and aluminum coil stock,
- foil faced bubble wrap,
- peel-and-stick flashing membranes,
- other air barrier materials as listed in Canada Mortgage and Housing Corporation Research Highlights Technical Series 98-109, "Air Permeance of Building Materials" (http://www.cmhc-schl.gc.ca/publications/en/rh-pr/tech/98109.htm)
- Spray applied foams that meet ICC ES AC 377 including:
    - 2-part open cell polyurethane foam (0.5pcf),
    - 2-part medium density closed cell spray polyurethane foam (2.0pcf)

5.2. SEALANTS

All caulking materials must be rated for a minimum 20-year life. Acceptable sealants used to join materials and block airflow include:

- Foam sealants that meet ICC ES 377 and ASTM C1642-07 such as:
    - 1-part urethane foam, low CFC (e.g. Great stuff, Pur-fil, Insta-foam, or equivalent)
    - 1-part urethane fire-block foam rated for sealing gaps in wood fire blocking
    - 2-part urethane foam kits 1.75pcf density, 2-part Flame Spread 25 foam kits 1.75pcf,
- Siliconized latex sealants meeting ASTM C834,
- Silicone, 1-part gun grade urethane and other elastomeric sealants meeting ASTM C 920, (“Silicone” refers to 100% silicone caulk, clear or pigmented—not acrylic)
- Water based duct sealant meeting UL 181A-M, UL 181B-M ("RCD #6" or equivalent)
- Sealants rated for contact with chimneys and combustion vents such as:
    - Non-combustible fire barrier caulk or furnace cement meeting ASTM E 136
    - Silicone high temp RTV listed for use on gas vents to 500degrees F, meeting ASTM C920

5.3 WEATHERSTRIPPING

- Windows: Schlegel (PF-524-AB, PF-512-AB, PF-102) or equivalent vinyl
- Door, interior: Schlegel "Q-lon" strips, or Schlegel vinyl weather-strip (PF-S72-AB)
- Doors, exterior: Schlegel "Q-lon with carrier" (preferred), Porta Seal (I-D17), or equivalent
- Door sweeps will be aluminum & vinyl, Dennis 905, Pemko P307-AV or equivalent

- Weatherstripping will have a deflection range of at least 1/4". Weather-stripping will remain compliant in cold weather

5.4 ACCESSORIES AND MATERIALS RELATED TO ATTIC PREP

- Glass or mineral fiber insulation as a backer for other sealants, meeting ASTM 665,
- Backer rod (preformed closed cell foam rope) as a backer for other sealants,
- 6 mil (0.l50 mm) polyethylene sheet (used for ground cover or winter-warm side application only),
- Moisture permeable air impermeable house wrap, flame spread 25 (cold side cover),
- Netting to hold blown insulation in open cavity,
- FSK faced duct wrap insulation R-8 nominal 3" meeting ASTM C1290, and C1136 (facing),
- Soffit ventilation air chutes (propa vent or equivalent) for 16 or 24 inch rafter spacing,
- Insulated flex duct 4 and 6 inch diameter for exhaust fans

5.5 INSULATION MATERIALS

- Cellulose (blown-in) loose fill insulation meeting ASTM C739, 16 CFR 1209, 1404,
- Specific Cellulose ICC ES reports required for fire rated details (e.g. ESR-1996 US Greenfiber, ESR-2217 NuWool),
- Mineral fiber batt and blanket insulation meeting ASTM 665,
- Mineral fiber (blown-in) loose fill insulation meeting ASTM C764,
- Fiberglass wool engineered for resisting airflow to less than 3.5cfm/sq ft @50pa, and tested to ASTM C522 (e.g. JM Spider, Knauf Perimeter Plus)
- Rigid closed cell foam boards meeting ASTM C578, ICC ES AC12,
- Specific foam board ICC ES reports required for uncovered use (e.g. NER-681 Thermax, ESR 2142 Dow XPS),
- Rigid Fiberglass faced insulation boards meeting ASTM C553, C612, and C 1136 for facing

6.0 INSTALLATION

6.1 AIRSEALING

Installation of air sealing materials shall follow the Massachusetts Building Code (780 CMR) and manufacturers' instructions.

Prior to installation, test results shall be provided to Mass Save in ICC ES reports or UL listed detail where specific testing is required by code for a specific use. (For example, low density foam left exposed in an unoccupied attic space, cellulose fiber installed as an air retarder and fire-stop in a rated wall between units.)

Approval by the local code authority having jurisdiction must be obtained in writing prior to installation for uses beyond the specific listing.

6.1.1 Performance Criteria

CONTRACTORS will clearly define where the pressure and thermal boundaries of the home are to be, and insure that access hatches, framing voids, and chimney, plumbing and wiring chases between the conditioned space and unconditioned attics, knee walls and other buffer zones are tightly sealed.

Air sealing measures at all openings between intact building materials shall be continuous, durable, able to support all expected loads, and impermeable to airflow as indicated by chemical smoke at a pressure difference of 50 Pascals.

6.1.2 Conditions for Materials Use

a. Air impermeable barrier materials and sealants shall be used within their listing and installed in conformance with all applicable codes and manufacturer's recommendations.
b. Sealant materials applied to exposed joints in interior or exterior finish shall meet all performance requirements, blend in with adjacent materials, and be acceptable to the owner.
c. Backing shall be provided for any sealant installed in gaps wider than 3/8" whether exposed or covered and all joints shall be tooled.
d. Rigid barriers shall be cut to friction fit openings with gaps not more than 1" for foam sealant and extra material on edges for fasteners.
    I. Support shall be provided to prevent sagging.
    II. Larger enclosures of rigid foam or fiberglass board barrier material for pipes, whole house fans, or fold down stairs shall be fastened and sealed at all edges with weatherstrip provided at operable joints and edges sealed to the substrate where fixed.
e. Only non-combustible rigid barriers such as sheet metal or cement board shall be used to bridge the clearance space to heat sources such as chimneys and metal combustion vents.
f. Only non-combustible sealants such as furnace cement or E 136 rated caulk shall contact solid fuel chimneys or oil vents; for gas vents high temp (500 F, 600F) silicone RTV approved for gas vents may be used to seal the gap between the rigid barrier and heat source.
g. In addition to the airtight non-combustible barrier and seal at the opening, a clearance dam is required to maintain 3" or greater clearance around the chimney or vent for the full height of the insulation. Unfaced mineral fiber meets this criteria but a folded metal collar 2-4" taller than the final height of the insulation, folded into the vent to close the top space and fastened at the bottom and vertical seam is recommended.
h. 1 part sealant foam is listed for sealing gaps and annular spaces around penetrations of up to 1-5/16" in width and 1.5" full depth of wood plate for firestop. *Firestop foam is combustible and not allowed for use in contact with heat sources.*
i. 2-part sealant foam requires backing for openings from 2" to 4" wide and infill of rigid barrier material for openings wider than 4"
j. Insulation must be kept 3" or more away from the sides of a non-IC rated recessed light fixture including any wiring box or ballast and no insulation is allowed above.
    i. If an air tight box is installed to limit air leakage, it shall be sized for clearance from the fixture, taller than the adjacent insulation and with a non-insulating moisture permeable top of gypsum board or equivalent material.
    ii. If access does not allow installation of the box, 3" clearance from insulation is still required with no insulation allowed above.
    iii. The gap between the fixture and ceiling may be sealed with silicone or joint compound.
    iv. For airtightness and insulation continuity, replacement with an airtight IC rated fixture or infill of the opening and replacement with a flush mount fixture are preferred alternates.
k. Dimensional limits:

i. Siliconized acrylic shall not be used in openings or cracks over 3/16" without a backer, and generally should not be used in openings or cracks more than 3/8".
ii. Pure silicone shall not be used in openings or cracks over 3/8" without a backer, and generally should not be used in openings or cracks more than ½".
iii. Foam shall not be used to span gaps or openings more than 1 ½" without a backer material.

l. Foam sealant will not be used where exposed to sunlight or other ultraviolet sources. It will not be used near any heat producing device.

6.1.3 Typical Air Sealing Locations

In every specified work area: locate, uncover and seal all building air leakage pathways between conditioned and unconditioned areas.

These areas can include accessible attics, side attics, crawlspaces, unconditioned basements, attached garages, and leakage from basement to outside; gaps, penetrations and fixture openings that allow interior air into inaccessible roofs, slants and outside wall cavities; and major direct openings between conditioned space and outside.
Basements are typically semi-conditioned spaces, and air sealing between the basement and the living space is therefore not warranted in the scope of work.

6.1.4 Common air leakage details include but are not limited to:

- Dropped soffits, dropped ceilings and ceiling height changes
- Plumbing wet walls, duct chases, duct seams, joints and boot leaks
- Chimney and combustion vent chases
- Openings behind and under tubs, showers, and tub/shower enclosures
- Wall tops open into attic, gaps between gypsum ceiling and wall plates
- Annular space at wiring, pipe penetrations through plates, and at ceiling fixtures
- Floors open under kneewalls, walls open at level changes and gable ends
- 2nd story floors open to attached roofs over porches and additions or garages
- Inside framing open into attic stairs and landings,
- Pocket door framing open into floor above and exterior walls
- Seams and openings in walls and ceilings between attached garages and house
- Non-IC recessed light fixtures. IC rated fixtures with no airtight insert
- Bath and kitchen fans venting into the attic
- All joints seams and penetrations in surfaces without an air retarding membrane
- Gaps in tongue in groove paneling where angles change at hips, valleys, and where walls meet slants and ceilings.
- Acoustical tile and suspended ceilings with no gypsum
- Missing gypsum behind decorative ceiling light trays; built in cabinets in kneewalls
- Missing gypsum or open joints above decorative ceiling beams
- Gaps below baseboard and behind carpet nailing strip at subfloor joint to exterior wall
- Common wall openings between dwelling units
- Attic access openings, operable doors and hatches without tight weatherstrip
- Pull down attic access stair covers
- Rim joist junctions and gaps between sill and foundation.
- Utility penetrations and direct openings through foundation walls
- Openings in gypsum board above suspended ceiling and behind cabinets

- Openings between window and door assemblies and their respective jambs and framing

6.1.5 Confirmation of Air Sealing Effectiveness

Confirmation that air sealing is continuous across all openings in a specified area shall be performed by one of the following methods:

- Visual inspection of air leakage locations,
- Visual inspection aided by a chemical smoke test during blower door operation,
- Whole building air leakage test.
    - Whole building air leakage test results of equal to or less than 5 air changes per hour at 50 pa (5 ACH_{50}) or 0.25CFM_{50} per sq ft of enclosure will qualify as completed airsealing.
    - The air leakage test shall be made following equipment manufacturers instructions and in conformance to Standard CAN/CGSB 149.10-1986, ASTM E-1827-07, or ASTM E-779-03,or
- Infrared inspection of the area aided by blower door operation.
    - When performed on a specified area or whole house, infrared inspection shall be done in accordance with ASTM C1060 (1997) and air leakage pathways determined using ASTM E1186 (2009).

6.2 DUCT SEALING/ DUCT INSULATION

All ductwork in attics or vented crawlspaces shall be sealed at all joints, seams, connections and boots, and insulated per the Massachusetts Building Code.

Exception: When ducts are brought within conditioned volume of the house, no duct sealing or testing is required.

6.2.1 Open existing duct insulation, if any, as required to gain access to all connections, joints, start collars and boots. Replace deteriorated flex duct with new where repair not practical.

6.2.2 Duct seams and joints shall be sealed with water based mastic, with gaps ¼" and larger reinforced with fiberglass mesh tape.

a) Alternate: joints shall be cleaned and sealed with butyl backed aluminized tape meeting UL 181FXB.

6.2.3 Post Sealing Tests

a) When the sealed ducts do not exceed 25% of the total duct system, the contractor shall run air handler and test with chemical smoke to confirm completeness of sealing.
b) When duct sealing is performed on more than 25% of the total duct system, contractor shall:
    I. Perform pressure pan testing of branches sealed, with blower door at 50pa and the air handler off, and

    II. Arrange for a licensed HVAC technician to confirm adequate system airflow, and notify the program that such work is complete. Post installation testing of duct leakage to the exterior and airhandler flow under normal operations shall be made conforming to ACCA QI 5 or ASHRAE 152.

6.2.4 Insulate supply and return ducts outside of conditioned space to a minimum of R-8 except where R-5 duct insulation is in place prior to work. Repair any damaged facing and infill missing insulation needed after opening existing duct wrap for sealing.

6.3 ATTIC INSULATION

Installation must meet or exceed the Massachusetts Building Code. Criteria for the installation of insulation include but are not limited to the additional standards set forth below.

6.3.1 Attic Air Sealing Confirmation

Before insulating the attic, the CONTRACTOR will confirm that all bypasses at chimneys, soil stacks, perimeter walls, dropped ceilings, kneewall floors and wall openings, non-IC recessed light enclosures, other attic air sealing is complete per section 6.1 above. If these areas are not properly sealed, CONTRACTOR must notify program to determine next steps before proceeding.

Thermal insulation shall not be installed above a recessed light fixture or within 3 inches of the fixture's enclosure, wiring compartment, or ballast unless it is identified for contact with insulation, Type IC.

6.3.2 Attic Duct Work

Confirm all attic ductwork is sealed and insulated as per section 6.2 above. If these areas are not properly sealed and insulated, CONTRACTOR must notify program to determine next steps before proceeding.

6.3.3 Attic Preparation

Confirm attic prep per ASTM C1015-06 and MA Basic Insulation Authorization including:

a. Clearance dams that maintain 3" space confirmed installed at all combustion vent heat sources,
b. Clearance dams installed at attic access, bath fans, air handlers and between blown and storage areas.
c. Permanent damming shall be installed around all attic hatch covers in a manner that will not interfere with the opening of the hatch cover, and that when opened will prevent insulation from falling into the living area.
    i. The dam shall be made of ½" thick or greater wood and be tightly sealed at the base and seams, or fiberglass batt laid flat on all four sides around the hatch.
    ii. Insulation surrounding the dam must equal the R-value of the rest of the attic space;
    iii. Insulation should not taper to the damming or be less because of the height of the dam.
d. Install vent chutes at all soffit vents and provide wind baffles or block under chutes,
e. Connect attic bath and kitchen fans to exterior with sealed insulated ductwork,
f. Provide thickness markers 1/300 sq ft for open blow area.

6.3.4. Attic Access Doors

a. Insulate and tightly weather-strip attic access doors.
b. Fasten rigid insulation to access hatches. If infeasible, fiberglass batts may be used.
c. Provide minimum R-14 to hatches and R-10 enclosure at pull down stairs (with air seal gasket, e.g., Thermadome) and behind walkup doors.
d. Rigid foam used shall be rated for exposed use in attics on ICC ES report.
e. Provide latch or hook fastener to keep hatch tight against weatherstrip when closed.

6.3.5 Attic Ventilation

a. Provide attic ventilation per code if included in Scope of Work.
b. Provide access openings to inaccessible attics where feasible.

6.3.6 Flat Attic Insulation

a. Blow in attic insulation level over entire area specified at the depth required to give the required settled R-value.
b. Use the number of bags to meet listed coverage per manufacturers' specifications.
c. Provide attic information card per ASTM C1015-06 and 16CFR 460 requirements.
d. The installer must provide a signed and dated statement describing the:
    i. Insulation installed,
    ii. Installed thickness,
    iii. Coverage area,
    iv. *R*-value,
    v. Number of bags used or pounds installed Per FTC Rule 16 CFR 460.

6.3.7 Sloped Ceiling Insulation

Sloped ceilings (between kneewall and upper attic flat) will be densepacked per section 6.5.3.

Exception: Where interior surface will not support densepack, reduced density is allowed.

6.3.8 Open Cavity Insulation

a. Install mineral fiber batt or blanket insulation in all open wall cavities or open floors to R-value in work scope.
b. Installation of blanket or batt insulation shall conform to ASTM C1320 with cavities completely filled with no voids, gaps or compressions.
c. Batt insulation MUST always be installed in full contact with the warm side air barrier.
d. Batt insulation installed in walls MUST always have a solid air barrier on all six sides of the cavity when access allows.
e. Batt insulation with a kraft or foil covering msut be "face stapled" to the framing or frictin fit.
f. Loose fill insulation (cellulose or mineral fiber) is allowed in open walls, open floors, when sprayed in or blown behind netting, rigid foam, drywall, or other barriers.

6.3.9 Rigid Foam Board

Where rigid foam board is installed over mineral fiber batt insulation or on another attic surface, use foam board listed for uncovered use in attic. As an alternative, install a thermal barrier or prescriptive ignition barrier per IRC 2009 R316.5.3 and MA code.In all cases follow manufacturer's installation requirements.

6.3.10 Floor Blocking

Where present, the kneewall floor joist opening from the attic floor to conditioned space under the kneewall shall be blocked airtight with a rigid barrier sealed place below the interior face of the kneewall.

6.3.11 Dense Pack Floor Insulation

At floored areas inaccessible to air sealing using barrier materials, CONTRACTOR shall densepack to retard airflow. Acceptable materials include:

a. cellulose insulation at 3.5 lbs/cu ft or greater density;
b. fiberglass wool tested for air resistance at 2.2 lbs/cu ft or greater density.

Methods can include lifting one floorboard to gain access to each cavity and inserting a 2 to 2-1/2" insulation hose into the floor for faster production. Material use shall be confirmed to match bags used per unit area to achieve density targets.

6.4 ATTIC VENTILATION

6.4.1 Provide attic ventilation per code with roof, soffit, gable, ridge vent or a combination. Provide soffit vent chutes for each soffit vent.

6.4.2 Follow all manufacturer's instructions and applicable codes. Flash properly, seal and fasten to maintain roof and cladding drainage.

6.5 CLOSED SIDEWALL INSULATION

6.5.1 Performance criteria

In existing closed cavities where air sealing is not feasible, densepack insulation into every cavity to prevent settling with no voids or escape routes for heat and get an extra benefit of reduced hidden airflow and protection that wraps around the whole house and connects to the airtight attic.

6.5.2 Pre-Work Inspection Criteria

Pre inspections are to be performed in compliance with ASTM C 1015 and MA Insulation Authorization. Inspect all walls for pre existing hazards including:

- moisture entry and buildup,
- weak or damaged interior finish materials,
- hazardous wiring, and
- potential heat sources in or adjacent to wall cavities.

Confirm that cavities are intact and openings into the house are blocked.

6.5.3 Wall Insulation Procedure

a. Gain access to every wall cavity.
b. Pack insulation uniformly into all corners.
c. Confirm the number of bags and pounds of material used for a specified area of 4" wall cavities is consistent with:
    i. 3.5 lbs/cu ft (1lb/sq ft) for cellulose, or
    ii. 2.2lbs/cu ft (0.6lb/sq ft) for fiberglass wool tested for airflow resistance by demonstrating low airflow on ASTM C 522.
d. In cases where wall finish is intact but will not support 3.5 lbs/cu ft density, use material listed for 2.2 lbs/cu ft.

6.5.4 Wall Cavity Confirmation

Confirm cavity pack is effective and the machine adjustment is within limits by:

a. testing airflow at 50 pa with smoke at a completed but uncovered installation hole, or
b. testing airflow with chemical smoke at first application hole in completed cavity while blowing adjacent cavity.

6.5.5 Inspection

a. Void areas greater than 10 sq ft per 1000 sq ft of achievable wall area, as determined by Program quality assurance procedures, shall be filled by the CONTRACTOR at no additional cost to the homeowner or the program. The CONTRACTOR will return to correct job deficiencies within 14 days of notification.

6.6 FLOOR INSULATION

Floor systems that are determined to be the thermal boundary will be insulated and air sealed in accordance with Massachusetts Building code and Mass Save Application Details.

6.6.1 Performance criteria

An air barrier shall be created across subfloor by sealing large gaps and openings including any ducts in unconditioned space. Floor insulation shall cover all exposed subfloor to level specified for as continuous a thermal barrier is possible.

6.6.2 Preparation

a. Airsealing of a crawlspace or basement ceiling shall be performed per section 6.1 above and the MA Basic Airsealing Authorization.
b. Inspection before installation shall be made in conformance with ASTM C1320-09.
   i. Inspect the attic, crawlspace, or other area to be insulated, postpone installation until:
      - Potentially faulty wiring is corrected and confirmed OK by a licensed electrician
      - Moisture damage and/or entry is corrected and sources controlled
      - Ground cover is in place over exposed soil in crawlspaces wherever possible. Uncovered conditions must be disclosed to customer.
      - All openings allowing air between conditioned space and attic are sealed
c. Confirm that caulk, gasket, or other sealant is installed at penetrations of the interior wall or floor including plumbing, electrical, heat registers, and grills.

6.6.3 Installation

a. Installation of mineral fiber batt or blanket insulation in open cavities shall be made in conformance with ASTM C 1320 and MA code. Exception, facing if any shall be in direct and complete contact with interior surface - no inset stapling allowed in floor.
b. Installation of cellulose or fiberglass blowing wool into closed cavities shall be made in conformance with attic floor insulation methods above 6.3.11 or wall insulation in 6.5.
   - access shall be gained into every cavity with least damage possible and lead safe process in place for painted surfaces in homes built prior to 1978.
   - material use per unit area shall match weight required to give target densities of 3.5lbs/cu ft for cellulose and 2.2lbs/cu ft for fiberglass wool tested for airflow resistance
c. Install batt or blanket insulation to:
   - Maintain 3” clearance from non-IC rated lights and heat sources, none placed above
   - Completely fill every cavity to required depth or more
   - Where double layers are installed over floors, cross the layers with no gaps between layers

d. Where batt fiberglass is installed beneath floors, insulation shall be in full contact with floor above using wire, screen, nylon mesh fastened in place
   - Fit to length and placed snug to edges without gaps, voids or compressions

- Cut and fit around all cross-bracing, outlets, wiring, into narrow cavities
- No exposed facings rated higher than flame spread 25 left
- Where vapor retarder is installed, place to warm-in-winter side
- Never place insulation between piping and the warm side of the wall, to prevent freezing

6.6.4 Rim Joist Insulation

a. When approved within the scope of work, rim joist framing determined as the thermal boundary shall be insulated to a minimum of R-10 with spray polyurethane foam or rigid foam board and be sealed as defined in the air sealing section of this document. Where spray foam or rigid board are infeasible, other insulation materials may be used, such as 1-part foam with fiberglass batt.
b. CONTRACTOR will confirm no insulation is placed between piping and the warm side of the rim joist framing to prevent freezing.

6.7 FOUNDATION INSULATION

When approved within the scope of work, foundation walls that are determined as the thermal boundary may be insulated to a minimum of R-10 and be sealed as defined in the air sealing section of this document. Prior to application, confirm that roof runoff, surface water, and ground water are drained properly.

6.7.1 Performance criteria

Basement or crawlspace shall be brought inside the thermal/pressure boundary by installing rigid insulation at inside of foundation wall, sealed from subfloor to below grade.

6.7.2 Preparation

Primary air leakage shall be substantially reduced by sealing gaps at the rim joist, sill and surface of the foundation wall.

6.7.3 Installation

a. For basements attach R-5 or higher foil faced isocyanurate board listed for uncovered use to foundation wall, full height; and cut pieces to fit into rim joist and across sill. Seal gaps in foam board edges at rim and sill; and tape seams in foam board on wall
b. For crawlspaces attach R-5 or higher XPS rated for uncovered use in crawlspaces to foundation wall, to 24 inches below grade; and cut and fit pieces to fit into rim and across sill. Seal gaps in foam board edges at rim and sill and tape seams in foam board on wall.
c. If XPS foam board is installed in a basement beyond the listing for uncovered use, follow a. and cover foam with thermal barrier

6.8 WEATHERSTRIPPING

Approved window weatherstripping shall be attached as per manufacturers instructions to meeting rail, sill & sash channels. (Note: if applicable, PF-524-AB may be stapled to the sash itself instead of sill & sash channels.) Door weatherstripping installed on interior of doors will be stapled to top and both sides of door. Approved door sweeps shall be attached as per manufacturers instructions to bottom of door.

7.0 WINDOW REPLACEMENT

Windows shall be installed according to manufacturer's instructions to assure proper operation and moisture protection. Rough openings shall be sealed to be air sealed to be air tight prior to installation of casings and sills. Newly installed windows shall be inspected and verified for proper operation of all hardware and locking mechanisms.

Refer to EPA guidelines and local codes for requirements for retrofit window installations in locations where lead and/or asbestos may be present.

8.0 HEATING SYSTEM REPLACEMENT

The furnace or boiler that is to be installed must meet the minimum AFUE ratings set by the Mass Save program. Installation is to be completed in accordance with the manufacturers' instructions while following the State and Local Codes. Any questions should be communicated with the PROGRAM and/or Authority Having Jurisdiction.

9.0 AIR CONDITIONING SYSTEM MEASURES

The air conditioning system that is to be installed must meet the minimum energy ratings set by the Mass Save program. Installation is to be completed in accordance with the manufacturers' instructions while following the State and Local Codes. Any questions should be communicated with the PROGRAM and/or Authority Having Jurisdiction.

10.0 VENTILATION SYSTEM INSTALLATION

The ventilation system that is to be installed must meet the minimum energy ratings set by the Mass Save program. Installation is to be completed in accordance with the manufacturers' instructions while following the State and Local Codes. Any questions should be communicated with the PROGRAM and/or Authority Having Jurisdiction.

11.0 LIGHTING MEASURES

The lighting unit that is to be installed must meet the maximum energy use set by the Mass Save program. Installation is to be completed in accordance with the manufacturers' instructions and fixture restrictions.

12.0 DOMESTIC HOT WATER MEASURES

The domestic hot water unit that is to be installed must meet the minimum Energy Factor ratings or energy efficiency ratings set by the Mass Save program. Installation is to be completed in accordance with the manufacturers' instructions while following the State and Local Codes. Any questions should be communicated with the PROGRAM and/or Authority Having Jurisdiction.

13.0 QUALITY ASSURANCE

Quality Assurance (In-field Quality Assurance Inspections)

Customer Discussion
Visual Inspections and Diagnostic Tests
Inspection Documentation

Contractor Follow-up

The program has the goal of performing on-site in-process and post installation quality assurance inspections where major measures have been installed.

Any issues identified during on-site inspections will need to be successfully addressed prior to release of CONTRACTOR payment.

Contractor Evaluation

CONTRACTORS will be evaluated on an ongoing basis throughout the Program Year. CONTRACTORS should expect random quality control evaluations on a minimum of 10% of their jobs. This is in addition to the standard Final Inspections performed on all work. Evaluations will be performed by Final Inspectors, Field Supervisors, Program Managers, and/or the Quality Control Department, using a standard evaluation format (see Evaluation Form Attachment).

CONTRACTORS who fall repeatedly below 75% on evaluations, and CONTRACTORS who repeatedly receive more than 25% fails (excluding Assessor fails) on jobs, are subject to a 30 day probationary period and additional training as determined by the Quality Control Department. CONTRACTORS who fail to improve after their probationary period are subject to suspension and/or termination as UTILITY Approved CONTRACTOR.

In addition, CONTRACTORS who repeatedly fail to meet timelines, generate an undue number of CUSTOMER complaints, and fail to adequately fulfill warranty obligations are eligible for suspension and/or termination.

14.0 Program Sponsors

Bay State Gas
Berkshire Gas
Cape Light Compact
National Grid
New England Gas
NSTAR Electric & Gas
Unitil
Western Massachusetts Electric

15.0 REFERENCES:

Documents Published by the Canadian General Standards Board (CGSB)
Place du Portage, III, 6B1Gatineau,
Québec, K1A 1G6 Canada
Telephone: (819) 956-0425; Fax: (819) 956-5740; www.pwgsc.gc.ca/cgsb
CAN/CGSB 51.71-2005 Depressurization Test

Documents Published by the National Fire Protection Association (NFPA)
1 Batterymarch Park
Quincy, MA 30169-7471
Telephone: (617) 770-3000; Fax: (617) 770-0700; www.nfpa.org
NFPA 54-2006, ANSI Z223.1-2006 National Fuel Gas Code

16.0 APPENDICES

16.1 Health and Safety Guidance
16.2 K &T Form 2008
16.3 Application Details

APPENDIX 16.1

HEALTH AND SAFETY GUIDANCE

ASBESTOS

Health/Safety Concerns: The US Environmental Protection Agency's description is: "The most dangerous asbestos fibers are too small to be visible. After they are inhaled, they can remain and accumulate in the lungs. Asbestos can cause lung cancer, mesothelioma (a cancer of the chest and abdominal linings), and asbestosis (irreversible lung scarring that can be fatal). Symptoms of these diseases do not show up until many years after exposure began. Most people with asbestos-related diseases were exposed to elevated concentrations on the job; some developed disease from exposure to clothing and equipment brought home from job sites."

Sources in Homes: Until its use was strictly limited in the 1970s asbestos was used in a large number of building products. The most common applications that could involve interaction with weatherization personnel include:

- boiler insulation
- furnace insulation
- pipe insulation
- duct insulation
- asbestos cement sidewall shingles
- vermiculite insulation
- floor tiles
- acoustical materials

To minimize exposure:

- Learn to recognize suspected asbestos containing materials.
- Avoid disturbance of friable asbestos containing materials (ACM). Friable asbestos is "any material containing greater than one percent asbestos by weight or volume that hand pressure can crumble, pulverize or reduce to powder when dry, or any asbestos containing materials that can reasonably be expected, as a result of the demolition or renovation to be undertaken, to become pulverized through breaking, chipping, crumbling, crushing, or other means of rendering fibers available to the ambient air."
- DO NOT CONDUCT A BLOWER DOOR TEST ON A BUILDING WHERE **FRIABLE** ASBESTOS IS PRESENT.
- When Asbestos Cement sidewall shingles are removed and reinstalled as part of a wall insulation procedure, the CONTRACTOR must complete the work in compliance with the requirements of the Massachusetts Department of Environmental Protection.

This information is a general program guidance for Weatherization personnel and does not provide the detailed specifications for the proper handling of ACM. State law concerning asbestos abatement can be found in Commonwealth of Massachusetts Department of Public Health Asbestos Abatement Regulation; CMR 410.353 and 453 CMR 6.00, THE

REMOVAL, CONTAINMENT OR ENCAPSULATION OF ASBESTOS (http://www.alewife.org/asbestos/453cmr6.txt)

LEAD

Health/Safety Concerns: Ingestion or absorption of lead into the blood stream is a serious health hazard causing brain damage over a period of time. This can be a particularly serious problem with small children, who may ingest paint chips or flakes, or dust contaminated with lead products. Serious learning disabilities can result from excessive lead levels in the bloodstream. Workers can be contaminated in the same way as children, but are most likely to be exposed by breathing dust contaminated by sanding or planning surfaces that contain lead based paints.

Sources in Homes: Lead paint is the primary source of lead in a home that was built prior to 1978, when lead became prohibited as an ingredient in paints. Contamination occurs when lead paint is disturbed by drilling, sanding, chipping, or flaking. Lead is also present in the solder used in plumbing pipe joints. Lead can leach into potable water, particularly when water is stagnant in the pipes for a length of time. To a lesser degree, lead contamination can result from inks used in newspapers and magazines.

To minimize risks to CUSTOMERS and Weatherization personnel:

DO NOT DISTURB LEAD PAINT UNLESS ABSOLUTELY NECESSARY AND THEN ONLY BY INDIVUALS CERTIFIED TO COMPLETE WORK USING LEAD-SAFE PROTOCOLS. CONTRACTORS should assume that any paint on windows and doors in homes built before 1978 contains lead unless it has been verified otherwise. **WHEN THERE IS A POSSIBILITY OF DISTURBING LEAD DURING THE WEATHERIZATION PROCESS, CONTRACTORS MUST COMPLETE THE WORK IN A LEAD-SAFE MANNER IN ACCORDANCE WITH EPA AND MASSDEP REGULATIONS.**

Worker Protection: Detailed specifications regarding the health and safety of workers in the construction industry can be found in Construction Industry OSHA Safety and Health Standards (299CFR 1926/1910) and the specific worker safety requirements in the EPA's "Lead; Renovation, Repair, and Painting Program" (LRRPP) Final Rule. **Also refer to Section 5.13 Lead- Safe Weatherization within the Northeast Weatherization Field Guide.**

ALL CONTRACTORS WORKING IN THE MASS SAVE PROGRAM MUST RECEIVE LEAD-SAFE WEATHERIZATION TRAINING, BECOME CERTIFIED PER USEPA REGULATIONS, AND FOLLOW ALL RELEVANT TECHNCIAL AND ADMINISTRATIVE PROCEDURES pursuant to 40CFR Part 745.225.

LEAD SAFE WEATHERIZATION INFORMATION

EPA and MASSDEP are the guiding authorities for Mass Save work.

When Should Lead-Safe Practices be followed?

According to the U.S. EPA, Lead-Safe practices shall be followed when all three components of the following set of criteria are met:

1. The dwelling was constructed before 1978

2. The dwelling has not been determined to be lead-based paint free, and
3. Either, the amount of disturbed lead-based painted surface exceeds six square feet per room of interior surface or twenty square feet of exterior surface.

Renovation Notice About Lead Safety

Federal law requires that owners and occupants of a house or apartment built before 1978 receive the EPA pamphlet, "Renovate Right Important Lead Hazard Information for Families, Child Care Providers and Schools", prior to the start of the renovation work. A written notification of receipt from an adult resident of the home must be received. If this receipt can not be obtained, this requirement can be satisfied by sending the occupant the pamphlet by certified mail with the receipt included in the client file.

Post Weatherization Cleanup

Clearance testing is not a requirement for weatherization work and is not an allowable expenditure of DOE funds. Cleanup at the completion of Lead-Safe Weatherization work requires the use of a HEPA vacuum, (a HEPA filter in a standard vacuum is NOT an acceptable alternative) wet cleaning methods, a visual inspection and the collection and disposition of any dust, debris or chips with the rest of the jobsite waste.

Certification

All Weatherization Contractors must complete an EPA approved Lead- Safety RRP training and certification prior to participating in the Mass Save program. Per USEPA requirements, a certified individual must be on site to ensure proper work.

Pollution Occurrence Insurance Coverage

The following is DOE's most recent guidance concerning Lead-Safe Weatherization. While many of the mandatory regulatory requirements do not begin until April 1, 2010, DOE considers this guidance a "Best Practice" for Lead-Safe Weatherization work and the techniques outlined must be used as a guideline for working safely in homes that may contain lead.

WIRING

Safety Concerns:

- Electric shock while working around wiring in all areas of homes.
- Fire resulting from arcing between loose wiring connections.
- Fire resulting from lack of dissipation of heat due to insulation around heat producing sources (i.e. recessed light fixtures).
- Integrity and safety of knob and tube wiring.

To Minimize Risk:

- Workers must demonstrate caution when working around wiring.
- Verify proper wiring connections and proper fusing.
- Verify proper blocking out of insulation around heat producing sources.

APPENDIX 16.2
KNOB & TUBE WIRING

During the Energy Survey of your home, indications of "knob and tube" wiring were found. This old style of wiring involves individual wires that are run through walls and ceilings in a house, with ceramic "knobs" and "tubes" to prevent contact with wood framing. The knob and tube wiring that has been noted *may or may not appear to be active*. Even if the observed wiring appears to be inactive, there may still be active knob and tube circuits hidden inside walls or other inaccessible areas of the house.

Program guidelines require that you have the home checked by a licensed electrician and certified as being ***free of all active knob & tube wiring***, before insulation and/or air sealing work can be done. Your electrician should fill out and submit a copy of this document to Program Designee in order to verify the absence or inactivity of the knob and tube wiring in the areas of your home where we are proposing insulation to be installed. **Due to the liability involved in signing such a form, we suggest you show or describe this form to your electrician before hiring him to inspect your home to be sure he/she is willing to sign it.** Your home could benefit from insulation and/or air sealing in the:

- ☐ **Attic**
- ☐ **Walls**
- ☐ **Basement**

**** Only after this certification is received by Program Designee can a Contract be issued for energy saving insulation and/or air sealing work. ****

Electrician's Certification
(This form is invalid when any qualifications or alterations are added.)

Company Name &
Address_____

_____

___

Electrician's Name _____ License #

_____

I have performed an inspection of the wiring at the home of:

_____ at _____ in _____

.

(Owner's Name) (Street Address) (City)

Upon completion of my inspection I have found that there is no active knob and tube wiring in the area(s) noted below.

☐ Attic ☐ Walls ☐ Basement

Electrician's Signature _____ Date _____

APPENDIX 16.3

APPLICATION GUIDANCE

This Appendix is provided for additional guidance to the Contractor, and offers general information about materials and installation procedures.

Caulks and Sealants

1. Locations and use of caulks and sealants are governed by cost-effectiveness standards and procedures. The proper caulk will be matched to the location where it is applied. Consideration will be given to durability, paintability, adherence, color, toxicity, flammability, etc.
   i. Siliconized acrylics will generally only be used in interior locations or where paintability is important. When used in visible areas, customer must approve the application, and see a sample before continuing. Clear acrylics, due to their shiny appearance, must be used only where appropriate, and should be approved by the customer prior to use in visible areas. Clear acrylics should be avoided where possible due to greater shrinkage.
   ii. Pure silicone will generally be used in exterior applications, unless paintability is needed. Pure silicone will be used anywhere that sealants are needed between wood and metal, wood and concrete, or other materials with differential expansion as moisture and temperature vary, or where greater flexibility is needed.
2. Caulking is performed on the interior of the dwelling for general air leakage and to prevent moisture penetration into wall cavities.
3. Caulking is performed on the exterior of the dwelling to prevent bulk moisture from entering the envelope of the building and to seal areas of air leakage.
4. When appropriate, windows will be caulked along the full perimeter of the interior (or exterior), including sill area, side stops, apron, and casings.
5. When appropriate, doors will be caulked along the interior (or exterior) casings and door jambs/stops.

Cellulose Insulation

1. Cellulose insulation from most manufacturers is available in at least two grades that are characterized by the fire retardant added to the insulation. The fire retardants are usually 1) a mix of ammonium sulfate and boric acid or 2) boric acid only (termed “borate only”). Mass Save currently accepts both grades.

Insulation Baffles

1. When soffit vents are installed or existing, baffles shall be installed in the space connected to the soffit vents in such a way that the top plate can be insulated. Where possible, a clearance of 2" from the top of the baffle to the underside of the roof sheathing shall be provided in accordance with local building codes. Blocking should be permanent, mechanically fastened at sides and at bottom, and ensure the free movement of air through soffit vents into the attic, but not allow the air to "wind wash" the insulation and reduce its effectiveness. It should be rigid enough to restrain loose-fill insulation from congesting the soffit vents at the eaves and obstructing ventilation.
2. Baffles should be installed per work scope.. These should allow air to flow from soffit or kneewall area into peak. Baffles must be mechanically fastened at sides and at bottom and be carefully fit with insulation packed in place at the bottom to prevent wind intrusion into or under insulation. Flexible Styrofoam baffles may be used for very low pitch roof areas.

Attic Access

1. When ready access to the attic is not available through an existing opening, access to attic areas should be gained from the exterior through attic vent openings when possible. If this is not feasible, then the following criteria shall be used for access openings:
   a. Surface Openings: Cut existing wall board halfway on two studs (preferably through a closet). When closing the opening, the new materials must be flush with existing wall material and taped and covered with one coat of joint compound.
   b. Plywood Openings: Cut existing wall between two studs. Close opening with 1/2 plywood (G1S/AC) with four (4) 1 1/2" x 8 flat head wood screws secured into studs.
   c. Finish Openings: Cut existing ceilings. Head off opening. Install 2 1/2 casing around rough opening. Allow a 3/8" reveal into opening to receive 1/2" plywood (G1S-AC) to complete opening. Plywood cover to be weather-stripped and insulated. Casing to be mitered neatly. When drill and plug method is used on garage ceilings, the holes must be plugged with wooden plugs and finished with a spackle type compound flush with the existing ceiling.

2. In attics with existing fiberglass batts, remove the batt in the last joist bay on any gable end or other perimeter configuration that runs perpendicular to strapping ends. This space should be dense packed with blown-in cellulose or fiberglass wool tested for air resistance to reduce cavity air movement at the inaccessible floor wall joint.

Attic Ventilation

1. Do not install insulation in an attic space unless adequate and permanent ventilation is installed.
2. Adequate cross-ventilation shall be maintained above all attic insulation by providing both low and high vents or gable end vents where possible. One square foot of net-free vent area (NFA) shall be provided for every 300 ft2 of attic area with 50 to 60% of the vent area located near the roof ridge and 40 to 50% located near the eaves. One level of venting may be used provided that adequate cross ventilation can be maintained.

NOTE: Although the use of window vents is allowed, the vents must be permanently fixed and must meet the minimum requirements for free vent area as noted above.

3. Ventilation should be improved wherever reasonable and practical to meet current code requirements when attic insulation is installed. The details of the types of vents and where they may be practically installed on each specific house varies. Consideration should be given to the type and location of vents to provide as much cross ventilation as possible for the specific application depending on existing conditions and retrofit options.

Sidewall Insulation

1. Pre-Installation Requirements: Prior to starting a job, an interior and exterior inspection must be conducted by Contractor to determine any potential problem areas. These problem areas must be identified and addressed prior to working on that area. Examples of some problem areas are recessed radiators, duct work in wall cavities, recessed bookshelves, stairways on exterior walls, loose or cracked plaster on walls, poor siding, etc. Check wall areas for wall hangings that should be removed prior to working on walls. The process and the work that is to be performed should be explained to the CUSTOMER. Any potential problems discovered should be discussed with a CUSTOMER before commencing work.
2. Inspect cavity or framing detail for wiring, piping or ductwork. Do not densepack ductwork or space containing unsealed ductwork, or isolate plumbing from house – provide a sealed

barrier continuous to adjacent airtight cavities or building element. Provide wood or foam plugs in sheathing. Repair openings made in weather barrier, replace siding and refasten with matching or larger fasteners. Touch up nail holes with silicone based.sealant.

3. Installation Procedures
   a. All wall insulation shall be installed through holes with minimum diameters of 2 1/8" or greater, i.e. large enough to accommodate a fill tube. Exception: wall cavities less than 12" in height.
   b. Use of a fill tube to ensure consistent insulation coverage and density is strongly encouraged. Usually one hole is required per cavity, located to allow the fill to reach both ends of the cavity, with additional holes required if there are obstructions in the wall cavity.
   c. Contractor shall only use equipment compatible with the insulation material used or an all fiber machine. Contractor shall follow the manufacturer's recommendations for air pressure and density to achieve dense pack standards. Most small airlock machines are suitable if designed and maintained to provide at least 80 inches of water column or 2.9 PSI static air pressure when operated at full air with the outlet blocked and no feed. Dense pack requires at least 3.5 pounds per cubic foot or higher with a cavity depth over 4".
   d. Keep a record of the number of bags used to insure the installed insulation conforms to the manufacturer's recommended coverage shown on the material label, 1 pound per square foot for 2x4 wall framing.
   e. Do not leave open holes in wall overnight. Any holes must be plugged before Contractor leaves work site.
4. Drill and Plug (D&P) Applications.
   a. Exterior drill and plug applications on painted surfaces must be completed in the following manner:
      i. After installation, insert the plug so it is flush or slightly (1/16") recessed. At edge irregularities apply one or two coats of an exterior rated filler (Durham Rock Hard wood putty, DAP exterior vinyl spackling or equivalent.)
      ii. This procedure also applies to drill and plug applications on windowsills, frieze boards, and entrances. Note: drilling window sills creates a serious water intrusion risk if not made watertight and should not be performed where a pan flashing or sill wrap is in place. Do not drill sills on homes built since 1990. Foam or urethane sealant below the surface plug may reduce water entry but cannot return integrity of pan flashing.
   b. Exterior drill and plug applications on stained surfaces must be completed in the following manner:
      a. After installation, insert a plug so that is it flush with the existing siding. The plug should be installed by placing a block of wood over the plug and tapping it until the plug is flush with the siding.
   c. Interior drill and plug applications must be completed in the following manner:
      a. After installation, insert a plug so that it is (3/8") recessed. Apply 1-2 coats of setting joint compound, Durabond 90 or equal, patching material or a plaster repair product filling just flush to the existing surface. Allow to dry and skim coat with joint compound or spackle.
      b. Some examples of this application would be exterior walls (not done from the outside), stairway walls, garage ceilings, and slopes.

Post-Installation Procedures

The Contractor shall review the entire job to ensure that all aspects of the job are completed. Before leaving the work site, the Contractor shall assure:

1. All the siding repaired and/or reinstalled
2. All paint touch-up work is completed
3. Shutters are reinstalled
4. The outside work area and yard are cleaned up to pre-existing conditions
5. The basement/house is cleaned of all debris
6. The client satisfied with the quality of the work
7. The Program incentive application is complete with all documentation attached

Weatherstripping

1. All weatherstripping will be permanently installed with fasteners (tacks, staples, brads, etc.) and will make positive contact between surfaces to prevent air leakage.
2. Window weatherstripping
    a. “Three-sided:” LOWER sash channels, & sill; or, if window has spring loaded channels: top, bottom and meeting rail.
    b. “Four-sided:” LOWER sash channels, meeting rail & sill
    c. “Seven-sided:” UPPER & LOWER sash channels, meeting rail, sill & head jamb
3. The weatherstripping will form an air tight seal when the window is closed and latched. A small bead of caulk will be applied as necessary to prevent air leakage behind the weatherstripping
4. The weatherstripping will not interfere with the smooth operation of the door or window.
5. Attic hatch or scuttle openings
    a. Weatherstripping will be permanently affixed to hatch or framing. Generally “Q-lon with carrier” or equivalent is preferred.
    b. A positive closing mechanism will be installed on the hatch if needed.
    c. Existing access to the attic will be maintained.
    d. In the case of drop down folding stairs, an air tight, insulated cap will be built over the opening.
    e. Kneewall access doors will be treated like attic hatch doors whenever possible.

Floor Insulation

1. Locate and note the pathways that plumbing, wiring, heat runs, air return runs and gas lines take through the enclosed floors. Also note any recessed light fixtures in these floors or in nearby floor areas which share the same joist cavities. Take steps to assure that the installation of insulation will not damage or in any way hinder the normal function of those services. In some cases, cavities or groups of cavities may have to be left uninsulated.
2. Insulation should be blown into enclosed floors to capacity.
3. When the drill and plug method is used on garage ceiling, the holes must be plugged and finished with a spackle type compound flush with the ceiling.
4. When the drill and plug method is used on exterior floor overhangs, the holes must be plugged and finished with an exterior wood filler flush with the exterior surface.

APPENDIX 15.4

PROGRAM FORMS

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ATTACHMENT C

MA Department of Energy Resources Reporting (DOER)

On a quarterly basis the DOER requires in depth reporting. The accuracy of this reporting is of paramount importance. The details in the report are expected to be at the customer and measure level. The sample reports provided below reflect historical Program Vendors.

Inquiry

In the DOER Record of Customer Inquiries of Tier One Service, LVs must report the call source, inquiry type and action taken at the customer level.

RECORD OF TIER ONE SERVICE						
Inquiries						
			DOER will map vendor values to the values listed in these fields. The field, **Inquiry Type**, has several values that would logically result in **Action Taken**, Referral Tier 2.			Integer
Date	**Administrator**	**Call Center**	**Call Source**	**Inquiry Type**	**Action Taken**	**Aggregate**
January 31, 2010	A MECO	BSG	Statewide-800	General	Phone Resolution	
February 28, 2010	B NSTAR Electric	AES	Outreach	Bill	Material Sent	
March 31, 2010	C WMECO	CET	Telemarketing	Comfort	Referral Tier 2	
April 30, 2010	D FG&E Electric	CSG	LDC Referral	Durability	Referral Low-Income	
May 31, 2010	E CLC	ENE	Word-of-Mouth	Health	Referral local distribution company	
June 30, 2010	F Keyspan	HDMC	Misdirected	Not Applicable	None	
July 31, 2010	G Bay State	RISE				
August 31, 2010	H NSTAR Gas					
September 30, 2010	I Berkshire					
October 31, 2010	J New England Gas					
November 30, 2010	K FG&E Gas					
December 31, 2010	L Blackstone					
	M Municipal					

Expenditures

In the DOER Record of Expenditures of Tier Two Service, LVs must report the in-home services provided and the cost.

RECORD OF TIER TWO SERVICE
Expenditures

Date	Administrator	Vendor	In-home Service	Cost - Dollars
January 31, 2001	BGC	CET	Monthly Contractual Expenses (MCE)	Program administrator payment to customer or vendor.
February 28, 2001	BSG	CSG	Immediate Savings Piggyback (ISM-PB)	
March 31, 2001	CLC	HDMC	Direct Retail Sale (DRS)	
April 30, 2001	FGE-Ele	muni-lights	Energy Efficiency Incentive (EEI)	
May 31, 2001	FGE-Gas		Energy Efficiency Incentive Special (EEI Special)	
June 30, 2001	FRG		Demand Side Management (DSM)	
July 31, 2001	Keyspan		Renewable Energy Incentive (REI)	
August 31, 2001	MECo			
September 30, 2001	muni-lights			Customer's payment to vendor for Direct Retail Sale.
October 31, 2001	NAG			
November 30, 2001	NSTAR-Electric			
December 31, 2001	NSTAR-Gas			
	TBGC			
	WMECo			

Services

In the DOER Record of Customer Services of Tier Two Service, LVs must report the in-home services provided along with aggregate incentives included in the services provided.

RECORD OF TIER TWO SERVICE
Services

Date	Administrator	Vendor	In-home Service	Aggregate - Integer
January 31, 2010	A MECO	AES	Home Energy Assessment (HEA)	When reporting incentive types, a customer can only receive a single incentive type from a particular Program Administrator. That is a customer can not get 2 EEI incentives from the same PA. However, customer could receive a gas DSM incentive and an electric incentive.
February 28, 2010	B NSTAR Electric	CET	Special Home Visit (SHV)	
March 31, 2010	C WMECO	CSG	Immediate Savings Measures (ISM)	
April 30, 2010	D FG&E Electric	ENE	Immediate Savings Measures Piggyback (ISM-PB)	
May 31, 2010	E CLC	HDMC	Direct Retail Sale (DRS)	
June 30, 2010	F Keyspan	RISE	Energy Efficiency Incentive (EEI)	
July 31, 2010	G Bay State		Energy Efficiency Incentive Special (EEI Special)	
August 31, 2010	H NSTAR Gas		Demand Side Management (DSM)	
September 30, 2010	I Berkshire		Renewable Energy Incentive (REI)	
October 31, 2010	J New England Gas		Inspections	
November 30, 2010	K FG&E Gas			
December 31, 2010	L Blackstone			
	M Municipal			

Measures

In the DOER Record of Measures of Tier Two Service, LVs must report the status of the job, measure and amount in units provided, number of households served, fuel type, and estimated annual savings.

RECORD OF TIER TWO SERVICE								
Measures								
Date	**Administrator**	**Vendor**	**Stage**	**Measure**	**Units**	**Households**	**Fuel Type**	**Estimated Annual Savings - Equivalent BTUs**
January 31, 2010 February 28, 2010 March 31, 2010 April 30, 2010 May 31, 2010 June 30, 2010 July 31, 2010 August 31, 2010 September 30, 2010 October 31, 2010 November 30, 2010 December 31, 2010	A MECO B NSTAR Electric C WMECO D FG&E Electric E CLC F Keyspan G Bay State H NSTAR Gas I Berkshire J New England Gas K FG&E Gas L Blackstone M Municipal	AES CET CSG ENE HDMC RISE	Recommendation Proposal / Work Order Installation	Air Sealing Duct Sealing Duct Insulation Attic Insulation Basement Insulation Rim Joist Insulation Wall Insulation Heating Pipe Insulation Refrigerator Thermostat Heating System Solar Domestic Hot Water Lighting Products DHW Products Weatherization Products	job job job sq-ft sq-ft sq-ft sq-ft linear ft number number number number Only one from each category per house. However, a house may have one of each.	Number of households served that BTU's are attributed	Electric Gas Oil Other 50% + of space conditioning	Only report measures with attributable savings.

ATTACHMENT D

Mass Save Program
Plan for Rental Housing – Q4 2010 & 2011
DRAFT

Since its inception, the Mass Save® program has been providing energy savings to customers throughout Massachusetts. The Program Administrators (PAs) recognize, however, that a plan dedicated to increasing penetration in the rental market is needed to maximize participation among all eligible customers.

This document will focus on the rental market, which in Massachusetts amounts to 862,239 units.[1] Input has come from several sources including: a.) customers who have spoken directly with the Program Administrators; b.) the August 2010 Energy Survey taken by the MRHA; and c.) market research studies performed in 2007 and 2005.

Strategies Deployed To-Date

- Between 2006 and the implementation of the October 2009 Statewide Three-Year plan, Bay State Gas/Columbia Gas was providing a 25% higher incentive for rental property.
- Cape Light Compact is offering 100% incentives on verified rental properties. Approximately one-half dozen customers have taken advantage of this. Obviously, however, the rental market for Cape Cod and Martha's Vineyard is different than in the more traditional urban rental areas.
- Berkshire Gas and other Program Administrators (PAs) have and will continue to meet with local landlord associations to promote the Mass Save Program.
- NSTAR and National Grid are working on the Community Mobilization and Renew Boston initiatives, which impact the rental market.

Opportunities and Limitations

It is generally agreed upon that rental properties offer significant technical potential for energy savings due to the age of the building stock and the fact that these buildings are less likely to have had energy efficiency measures already installed. However, it is important to note that along with significant savings potential, these buildings, like other older buildings, at times present pre-weatherization barriers such as knob and tube wiring, combustion safety issues, significant moisture issues, leaky roofs, and asbestos. While it is the intention of the PAs to increase participation in the rental sector, funding for pre-weatherization barriers is available only through the Low Income program. The PAs will, however, seek to refer customers to the limited known sources of funding that are available to meet this need.

[1] U.S. Census Bureau

Target Markets

Both parties involved in a rental agreement, landlord and tenant, must be engaged in order for any energy efficiency strategy to be successful. Addressing the renters alone will limit the savings achieved since major measures require owner approval and capital. Although the owner is often assumes responsibility for the customer contribution to installed measures, leaving renters out of the equation is unwise because their cooperation and engagement are essential to ensuring easy access to the building. Scheduling work, because of the need to consider the time schedules of multiple households, is exponentially more challenging than working with single-family homes, and therefore tenant cooperation is key. Moreover, educated tenants may also be a powerful source of influence on the decisions made by their landlords.

> "When asked to name the single most important factor that guides decisions relating to energy efficiency, 40% of the landlords named attracting or retaining good tenants, with purchase and installation price (14%) coming in at a distant second".[2]

When it comes to landlords, there is no "one size fits all. For example, owners of many properties may belong to associations such as MRHA and therefore attendance at their group meetings is an effective approach. Those who only own the home they live in may more likely to be reached through a targeted community approach. This hypothesis is currently being tested though the Community Mobilization Initiatives.

Objective

The objective is to bring more rental properties into the program and increase major measure penetration subject to cost-effectiveness, and budget and bill impacts.

Barriers

Potential barriers to achieving the above objective include: a.) lack of awareness and accurate understanding of program eligibility requirements, offerings and benefits; b.) competing demands on the time and attention of landlords; c.) pre-weatherization barriers and concerns over code violations; and d.) finances. Tactical solutions to address these barriers are provided in the next section.

Lack of awareness and an accurate understanding of program eligibility requirements, offerings and benefits.

[2] 2007 Results of NRM Landlord Survey.

Unfortunately, few tenants are armed with the facts needed to assess the energy efficiency of their dwelling unit. Although PA Call Center staffs confirm that utility bills are of key concern to renters,

> "Tenants rarely come to landlords about energy efficiency-related concerns; the few who do complain are concerned with energy bills (8%). The handful of tenants who request energy efficient improvements want landlords to stop drafts from windows (31%) or doors (20%), repair windows (28%) or supply more efficient appliances".[3]

In addition to educating tenants on the direct correlation between the energy efficiency of their home and their energy bills, they must also learn that the most significant savings come from "treating the building" as opposed to the more visible improvements within each unit such as window and door treatments or replacements.

Building owners, as well as tenants, however, need education to understand why it is important to treat the "house as a system" as stated on the Mass Save web site.

> "Responses to questions on improvements made to buildings in the past 5 years demonstrate that the most common efficiency improvement is new windows , which was cited by 43% of the respondents. This suggests that the respondents do not have a very sophisticated understanding of the improvements that will greatly increase their energy efficiency".[4][5]

In addition to educating the target market on the need for energy efficiency, key program features such as eligibility requirements and measure offerings need to be promoted. Landlords need to understand that their property is eligible for the Mass Save program regardless of whether or not the building is owner-occupied.

Competing demands on the time and attention of landlords.

Whether they own a single piece of rental property or many, most landlords agree that there is always something that needs their attention. Because of this factor, energy efficiency improvements are in competition with a whole host of other projects.

[3] 2007 Results of NRM Landlord Survey
[4] 2007 Results of NRM Landlord survey.
[5] It is important to note, however, that unlike insulation and air sealing which are not visible, new windows clearly demonstrate an improvement to the property.

> "It's just one more thing to do in terms of arranging for a contractor, getting bids, having disruptions from tenants. And we're probably all …. pretty well overstressed with other pieces f our jobs, and sometimes it (energy efficiency improvements) doesn't make it to the top of our lists".[6]

To be effective, any outreach strategy needs to focus on not just the technical and financial aspects of the program but also the "customer care" features. Building owners need to know that PA vendors will work with them and their tenants to develop convenient energy assessment and measure installation schedules. Gaining landlord confidence in the program in this regard is one of the key contributors to maximizing savings in this sector, for as the 2010 MRHA Survey determined, "participation in the Mass Save program increased landlord likelihood to participate again in the future".

Pre-weatherization barriers and concerns over code violations

As stated earlier, overcoming pre-existing code violations and pre-weatherization barriers in this housing stock is required if the PAs are to make a meaningful impact in this market.

> "Adhering to building codes" is rated as one of the most important decision factors (affecting installation of energy efficiency improvements)".[7]

> "Small landlords who live in their own rental buildings are less likely to have participated in the program, possibly because they are aware of code violations in their building".[8]

Existing federal funding to resolve these issues may come with lengthy administrative processes that could add to both the timeline for implementing energy efficiency and reluctance on the part of landlords to participate in these programs.

Financing

Like all customer segments, current economic conditions have imposed financial difficulties on landlords. Financing opportunities which were prevalent in the past no longer exist.

<u>Tactical Solutions to Overcome Known Barriers</u>

[6] 2005 NMR Landlord Focus Group Report.
[7] 2007 NRM Landlord Survey Report.
[8] 2007 NRM Landlord Survey Report.

Barrier: Lack of awareness and accurate understanding of the program eligibility requirements, offerings and benefits.

Solution:
LANDLORDS

- Distribute landlord brochure developed in September (see Appendix A). The brochure described both direct and indirect benefits such as:
    - Replacing heating and hot water systems not only reduces heating and hot water costs, but also cuts down on costly maintenance and repairs.
    - Changing standard lighting to energy efficient lighting throughout the building and its common areas can significantly reduce energy use.
    - Improved energy efficiency increases a rental property's value.
    - Improved energy efficiency helps attract and retain quality tenants.
    - Lower energy bills make it easier for tenants to pay the rent.
    - Energy improvements mean increased comfort for tenants year-round.

  The PAs will work with the various landlord associations to obtain mailing lists in addition to providing brochures directly to these organizations. Also, an assessment of the costs and potential benefits from purchasing lists from data aggregators will be conducted.

- Broaden outreach efforts. The PAs will maximize the opportunity to promote the program through trade groups such as the MRHA and enter into partnerships with other organizations that target large landlords as deemed to be appropriate. (Appendix B includes the text that will appear in an MRHA newsletter this fall). In addition to targeting larger associations, the PAs will continue to work with community groups and municipalities to identify local groups who can serve as a communication channel for small landlords who cannot afford to or choose not belong to larger home owner associations. These local resources are also in the best position to ensure that key messages are delivered in ways that are meaningful to the cultures represented in each geographic area.

- Ensure that the language on the web site makes it clear that a landlord can participate in the program regardless of whether or not he or she lives at the property. Other key program features will be included in ways that are easy for landlords to find and understand.

TENANTS

- Develop a "checklist for renters". As stated above, tenants rarely have the understanding of energy efficiency required to properly assess rental property. The PAs can provide a simple checklist of questions to ask when renting

prospective property. The PA group will determine whether it would be appropriate to include the checklist on the web site[9].

- Participate in meetings of local community groups or associations dealing with renter issues, or other appropriate local venues to educate tenants and make sure that they know energy efficiency is not limited to the space they occupy. [10] From an energy efficiency perspective, the most important parts of the home are those that are not often discussed or even considered when choosing a rental unit. PA representatives can explain in layman's terms how a house needs to be treated as a system in order for it to operate efficiently.

- Examine options for acquiring mailing lists for renters. The PAs will also assess the ability of their data systems to provide mailing lists of muti-unit dwellings[11]. It is important to note, however, that generally PA billing systems are set up for mailings at the meter level and do not link units within buildings. It is therefore not always apparent whether a given address is for one unit within in a multi-unit facility or for a single family dwelling. This is particularly true for buildings with 2-4 units. It will be important for the PAs to assess the potential value of such lists (based on expected accuracy vs. cost) before pursuing this option.

- Those PAs with significant rental property opportunities could prioritize the implementation of school and other residential education programs in these areas to capitalize on the educational opportunities for parents and children alike (where allowed).

Barrier: *competing demands on the time and attention of landlords*

Solution:

- Provide refresher training for vendor staff (and PA staff where enrollment is not performed by an outside vendor) to ensure that program communications emphasize the "customer care" components of the program. Specifically, owners of multiple properties must be assured that program staff will work with them and their tenants to develop convenient energy assessment and measure installation schedules.

- Include questions in customer satisfaction survey geared to assess the efficiency of the administrative aspects of the program from the perspective of the landlords. Based on feedback, make adjustments to the existing process as deemed appropriate.

[9] There is currently a statewide prioritized list of enhancements for the web site. Any structural changes to the web site will need to be merged into this existing list.
[10] PA representatives will attend these meetings based on resource availability and sufficient notice of meetings by community groups.
[11] Because there is no way to distinguish between buildings with less than or greater than 5 units, any mailing piece would need to include information pertaining to both the Multi-family and Mass Save programs.

Barrier: Pre-weatherization barriers and concerns over code violations

Solution

- The PAs will attempt to identify potential sources of funding to address pre-weatherization issues. Rather than "re-inventing the wheel" by trying to develop programs to address pre-weatherization barriers, the PAs will focus on making entities such as local governments aware of how their existing funds may be used within the context of the state's energy efficiency programs. Specifically, PA programs will identify and refer customers from Mass Save to these other funding sources.

- In addition to tracking participant data, the PAs will work with their vendors to track the existence of pre-weatherization barriers that prevent rental properties from participating in the program. In this way, the PAs may begin to quantify the extent of theses barriers.

Barrier: Finances

Solution

- The PA Financing group is actively working on opportunities for this sector and updates on this effort will be provided directly from the PA Financing Group.
    - The RMC will document issues pertaining to financing that have been expressed through market research and ensure that the PA Financing Group has access to this data.

- NSTAR, National Grid and the Cape Light Compact will implement "flexible incentives" where the total incentive for the building will remain at $2,000 per unit; however the total amount may be spread across the units based on energy savings potential. In order to qualify, the entire building must be treated. This will be implemented as part of the scope of work for the Lead Vendor that will be put into place in April 2011. This will allow for the development of oversight protocols to ensure the proper allocation of funds.

- Follow-up (i.e. via telephone survey) with program participants where an insulation contract was issued for a rental property (left with the customer), but never acted upon. This will allow the PAs to collect data on the extent of financial barriers that exist as more rental properties are being reached.

- Re-assess in Q3 2011 whether or not incentives need to be modified based on data such as that described above.

Additional Strategies

- Discuss the feasibility of working with the City of Boston (and potentially other municipalities) on pilot programs which provide "virtual energy audits" to landlords, telling them how their apartments compare in energy use to other comparable units.[12]

- Partner with DOE on a pilot program for "building labeling". Currently the pilot is planned for the Springfield area, which has a significant rental population.

[12] This suggestion was raised by DOER, but to-date the PAs do not have any information regarding these plans. More information for the PAs is required before meaningful discussions can ensue.

Implementation Plan

#	Description	Start Date
I.A	AWARENESS & EDUCATION – LANDLORDS	
1	Distribute landlord brochure developed in September 2010.	Q4 2010
2	Work with the various landlord associations to obtain mailing lists and conduct an assessment of the costs and potential benefits from purchasing lists from data aggregators.	Q4 2010
3	Enhance efforts to work with the MRHA • Place articles in statewide and local chapter newsletters. • Provide information and in-kind support, as appropriate, to one or more conferences for landlords that MRHA will sponsor. • Provide brochures that MRHA chapters can distribute to members.	Q4 2010
4	Attend MRHA (as well as those of other associations) and community meetings/events to educate landlords on the Mass Save program. This is generally in conjunction with education on all programs.	Q2 2011
5	Ensure that the language on the web site makes it clear that a landlord can participate in the program regardless of whether or not he or she lives at the property. Other key program features will be included in ways that are easy for landlords to find and understand.	Q1 2011
I.B	AWARENESS & EDUCATION – TENANTS	
1	Develop checklist for renters looking at prospective apartments and distribute them to renters' associations, apartment referral agencies, and college housing offices. Evaluate the option of putting the checklist on the web.	Q1 2011
2	Examine options for acquiring mailing lists for renters. The PAs will also assess the ability of their data systems to provide mailing lists of muti-unit dwellings.	Q1 2011
3	Attend community meetings/events to educate tenants on the Mass Save program. (This is related to item I.A.4 above)	Q2 2011
4	Offer the school and other residential education programs in areas with a large volume of rental properties to take advantage of the educations opportunities they present.	September 2011

II	COMPETING DENAMDS ON LANDLORD TIME & ATTENTION	
1	Provide refresher training for vendors to ensure they emphasize the "customer care" aspects of the program with prospective building owners.	Q4 2010
2	Include questions specifically for landlords on customer satisfaction surveys	Q2 2011
3	Ensure that "customer care" aspects of the program are included in program communications	On-going
III	CODE VIOLATIONS AND PRE-WEATHERIZATION BARRIERS	
1	Identify and refer customers from the Mass Save program to existing sources of funds to address pre-weatherization barriers and code violations.	Q4 2011
2	Review lessons learned from Renew Boston and the Community Mobilization Initiatives with respect to treatment of prevalence of and treatment for pre-weatherization barriers.	2011
3	Work with vendors to track pre-weatherization barriers that prevent the installation of major measures in rental properties.	Q1 2011
IV	FINANCES	
1	The RMC will document issues pertaining to financing that have been expressed through market research and ensure that the PA Financing Group has access to this data.	Q4 2010
2	NSTAR, National Grid and the Cape Light Compact will implement "flexible incentives" where the total incentive for the building will remain at $2,000 per unit; however the total amount may be spread across the units based on energy savings potential. In order to qualify, the entire building must be treated.	Q2 2011 (along with implementation of the new Lead Vendor role)
3	Follow-up (i.e. via telephone survey) with program participants where an insulation contract was issued for a rental property (left with the customer), but never acted upon.	Q2 2011/Q3 2011
4	Re-assess the need to modify incentives to increase penetration of major measures into the rental market.	Q3 2011
V	ADDITIONAL STRATEGIES	
1	Discuss the feasibility of working with the City of	More information on this

	Boston (and potentially other municipalities) on pilot programs which provide "virtual energy audits" to landlords.	is required before meaningful discussions can begin.
2	Perform a pilot with DOE pertaining to a building labeling system	Q2 2011

Agreement No.: SA-_____

SERVICES AGREEMENT

This SERVICES AGREEMENT ("Agreement") is made this _____ day of _____, 2011 ("Effective Date") between **NEW ENGLAND GAS COMPANY, a division of Southern Union Company** ("Company") and _____ ("Contractor").

WITNESSETH:

In consideration of the agreements herein, the parties hereby contract as follows:

1. **SCOPE OF SERVICES/SCHEDULE.** Contractor agrees to perform, in accordance with the terms of this Agreement, the services described in Attachment 1, Section A hereto ("Services"). Contractor shall perform the Services in accordance with the schedule set forth in Attachment 1, Section B hereto.

2. **PAYMENT.** Company shall pay Contractor as provided in Attachment 1, Section C hereto. Payment terms are within 30 days of receipt of invoice.

3. **TERM.** The term of this Agreement shall commence on _____ and expire on _____**.** This Agreement shall automatically renew at the end of the primary term for subsequent month-to-month terms, unless and until either party provides written notice of termination.

4. **PERFORMANCE STANDARDS.** Contractor agrees to perform the Services and its obligations with a level of accuracy, quality, completeness, timeliness and responsiveness that meets the level of performance expected of professional service companies providing services similar to the Services, using prompt and diligent efforts in a professional and workmanlike manner and using qualified individuals. Contractor will perform its Services under this Agreement in a manner that does not infringe, or constitute an infringement or misappropriation of, any patent, copyright, trademark, trade secret or other proprietary rights of any third party.

   THE WARRANTIES SET FORTH IN THIS SECTION ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

5. **INDEPENDENT CONTRACTOR.** This Agreement calls for the performance of the Services by Contractor as an independent contractor. Contractor shall determine the manner and method in which the Services shall be performed, conduct the Services in the name of Contractor, and inform all persons employed that they are employed by Contractor and not by Company. Nothing herein shall be deemed to constitute Contractor and Company as partners, joint venturers, or principal and agent. Neither the Company nor the Contractor has any authority to represent the other party as to any matters, except as expressly authorized in this Agreement.

6. **INSURANCE.** Contractor shall obtain and maintain all insurance required herein, and at the time this Agreement is executed, furnish certificates of insurance to Company evidencing: (a) General Liability Insurance including contractual liability with limits not less than $1,000,000 per occurrence; (b) Automobile Liability Insurance covering owned, non-owned or hired vehicles with limits not less than $1,000,000 per occurrence; and (c) Workers' Compensation and Employer's Liability Insurance including, without limitation, statutory and occupational disease coverage required under applicable law. Employer Liability limits shall be not less than $1,000,000. All insurance policies shall: (i) provide thirty (30) days' prior written notice of cancellation or nonrenewal; (ii) be underwritten by insurers which are rated "A-6" or higher by the most current edition of A.M. Best Rating Guide; (iii) include Company as an additional insured, excluding, however, Workers' Compensation; (iv) be endorsed to waive its rights of subrogation against Company; and (v) provide that such insurance policies are primary and without right of contribution from any other insurance available to Company. Contractor shall comply with all applicable state laws with reference to Workers' Compensation, and agrees to

indemnify and hold harmless Company from and against any and all loss, liability, damages, claims, demands, costs and expenses of whatsoever nature, arising from the performance of the Services hereunder and due to the existence of said laws or resulting from any claim or subrogation in such laws or otherwise.

7. **INDEMNITY. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR AGREES TO INDEMNIFY, DEFEND, RELEASE, AND HOLD HARMLESS COMPANY, ITS PARENT AND AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, AGENTS, AND EMPLOYEES (COLLECTIVELY "INDEMNITEES"), FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, LOSSES, DAMAGES, CAUSES OF ACTION, SUITS AND LIABILITIES OF EVERY KIND, INCLUDING ALL EXPENSES OF LITIGATION, COURT COSTS, AND ATTORNEY'S FEES, FOR INJURY TO OR DEATH OF ANY PERSON, OR FOR LOSS OR DAMAGE TO ANY PROPERTY, ANY CIVIL OR CRIMINAL FINES OR PENALTIES, DISCOVERED OR UNDISCOVERED, DIRECTLY OR INDIRECTLY ARISING OR ALLEGED TO ARISE OUT OF OR IN ANY WAY INCIDENTAL TO THE PERFORMANCE OF THIS AGREEMENT OR ANY SERVICES PERFORMED HEREUNDER (COLLECTIVELY "LIABILITIES"), EXCEPT TO THE EXTENT SUCH LIABILITIES ARE CAUSED BY THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY INDEMNITEE.**

   Except for liability for death, bodily injury, damage to tangible or real property or intellectual property infringement caused by the negligence or willful misconduct of Contractor, the aggregate liability of Contractor under this Agreement shall not exceed the greater of the amount payable hereunder or the amount recovered under any applicable insurance coverage. In no event shall either party be liable for any indirect, incidental, special or consequential damages whatsoever (including but not limited to lost profits or interruption of business) arising out of or related to this Agreement, even if advised of the possibility of such damages.

8. **SAFETY; LICENSES AND PERMITS; COMPLIANCE WITH APPLICABLE LAWS.** Contractor agrees to take all necessary and sufficient precautions and safeguards against the occurrence of any injuries or damages to persons and property. Contractor shall possess any and all permits or licenses required to perform the Services required under this Agreement. Contractor shall comply with any and all federal, state or local statutes, regulations, ordinances, or codes applicable to the Services to be performed under this Agreement and any other requirements of any authority having jurisdiction over such Services. Contractor shall indemnify and hold Company harmless against any loss, damage, liability and expense arising out of Contractor's failure to comply with the foregoing requirements. Contractor and Company both warrant that they are Equal Employment Opportunity employers and that if this Agreement is placed as a contract or subcontract under a United States Government prime contract, those clauses required by federal law to be included are herein incorporated by reference. Contractor agrees to comply with all federal, state and local laws respecting discrimination in employment and non-segregation of facilities including, but not limited to, requirements set out at 41 C.F.R. §§ 60-1.4, 60-250.5 and 60-741.5, which equal opportunity clauses are hereby incorporated by reference. Notification is hereby given that compliance with these clauses may require Contractor to annually file certain reports (e.g. the EEO-1 Report and VETS-100 Report) with the federal government and may require Contractor to develop written Affirmative Action Programs for women and minorities, covered veterans and/or persons with disabilities.

9. **WORK PRODUCT**. All work product resulting from this Agreement, including but not limited to, data, technical and/or business information, specifications, drawings, records, computer programs, documentation, written reports or materials, product information, pricing, cost structure, product development, tooling, business strategies, competitive analysis, and any and all other tangible information or works and all intellectual property first originated or prepared by Contractor in the course of providing the Services, shall become and remain the sole property of Company, and Contractor hereby assigns all of its right title and interest in same to Company.

   In addition to the items specified in the paragraph above, Contractor may also provide Contractor Property. The term "Contractor Property" shall mean all pre-existing material, including, but not limited to, any products, software, materials and methodologies proprietary to Contractor or provided

by Contractor or its suppliers and any trade secrets, know-how, methodologies and processes related to Contractor's products, software or services, all of which shall remain the sole and exclusive property of Contractor or its suppliers. Subject to payment in full and to the terms of this Agreement, Contractor grants to Company a non-exclusive, non-transferable, irrevocable license to use the Contractor Property contained in the deliverables provided hereunder for the purposes of this Agreement.

10. TERMINATION.

A. Termination for Cause. If (i) Contractor shall fail to perform its obligations in accordance with the terms and conditions of this Agreement and such failure is not cured (if capable of being cured in the reasonable judgment of Company) within fifteen (15) days after Contractor's receipt of Company's notice of termination, or (ii) Contractor makes a general assignment for the benefit of creditors, or (iii) a receiver be appointed for its business, then Company, without prejudice to any other right or remedy, may terminate this Agreement and take possession of the premises, work, materials, tools, equipment and machinery and finish the Services as it may deem advisable. In such case, all payments due to Contractor for Services performed under this Agreement shall be suspended until all the Services specified in this Agreement are completed. If the expenses, including compensation for managerial and administrative services for completing the Services, shall exceed the unpaid balance of the Agreement sum, Contractor shall pay the difference to Company. If the unpaid balance of the sum due to Contractor shall exceed such expenses, then such excess shall be paid to Contractor.

B. Termination for Company's Convenience. Company shall have the right to terminate this Agreement for its own convenience, for any reason or for no reason, upon thirty (30) days written notice to Contractor. If Company terminates for its own convenience under this subsection, Company shall thereafter promptly pay Contractor for any Services completed to the effective date of termination, and Company shall bear the entire cost of completing the remainder of the Services as it deems appropriate. Nothing in this subsection shall be deemed to relieve either party of any of its contractual obligations relating to the Services performed by Contractor during the effective term of this Agreement.

11. MISCELLANEOUS.

A. Assignment and Subcontracting. Neither this Agreement, nor Contractor's obligations under this Agreement, may be assigned or subcontracted by Contractor unless agreed to by Company in advance in writing.

B. Governing Law and Venue. This Agreement will be governed by the laws of the State of Massachusetts, without regard to its conflict of law principles. The state and federal courts situated in Bristol County, Massachusetts shall have jurisdiction over and shall constitute proper and exclusive venue for all disputes arising under this Agreement.

C. No Waiver. The failure of either Contractor or Company to enforce at any time, or from time to time, any provision of this Agreement shall not be construed as a waiver.

D. Severability. If any term or provision of this Agreement shall be held void, illegal, unenforceable or in conflict with any law of a federal, state or local government having jurisdiction over this Agreement, the validity of the remaining portions or provisions of this Agreement shall not be affected.

E. Third Party Beneficiaries. Contractor acknowledges and agrees that (i) any affiliate of Company may engage services under this Agreement; (ii) in the event any affiliate of Company receiving the benefits of the services, such affiliate is a known third-party beneficiary of the services with respect to Contractor's obligations required by this Agreement; and (iii) the indemnification provisions in this Agreement shall inure to the benefit of such affiliate.

F. Sole Agreement. This Agreement constitutes the sole agreement and understanding between Company and Contractor regarding the subject matter or any related matters. Accordingly, this Agreement supersedes any and all other agreements or understandings, written or oral, between the parties. This Agreement may be amended or modified only by an instrument in writing signed by Contractor and a duly authorized officer of Company.

G. Force Majeure. Neither party is liable for any delay in performance or non-performance caused by acts of God, war, civil disturbance, government action, labor dispute, computer virus, pandemic illness, inadequate access to site or data, or anything else beyond such party's reasonable control.

H. Notices. Unless otherwise expressly provided herein, all notices, consents, requests, invoices, statements and other communications provided for or permitted to be given under this Agreement must be in writing. Notices shall be sent to the parties by United States mail, registered or certified mail, return receipt requested, postage prepaid, hand delivery, or next business day courier service and addressed as set forth below, and shall be deemed given when delivered in hand, or three (3) days after the day of mailing. Notice may also be sent by facsimile at the facsimile numbers set forth below and shall be deemed received simultaneously with the transmission thereof if delivery of such facsimile is confirmed. Either Contractor or Company may change its address, telephone and facsimile telephone numbers, or designation of contact persons by providing written notice to the other party in accordance with this Notices section.

TO COMPANY:	TO CONTRACTOR:
New England Gas Company	
45 North Main Street – Suite 1	
Fall River, MA 02720	
Attn.: Trish Walker	Attn:
Telephone: 774-488-3635	Telephone:
Fax: 508-679-4355	Fax:

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed the day and year first above written.

NEW ENGLAND GAS COMPANY,
a division of Southern Union Company

By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____

ATTACHMENT 1

SECTION A: SCOPE OF SERVICES
Contractor shall provide all labor, tools, equipment, transportation, supervision, and materials necessary to perform the following scope of services. All Services performed under this Agreement shall be in compliance with all federal, state and local statutes, regulations and ordinances applicable to such services.

SEE ATTACHED EXHIBIT A

SECTION B: SCHEDULE OF PERFORMANCE
Contractor shall commence the Services by _____and complete the Services on or before _____.

SEE ATTACHED EXHIBIT A

SECTION C: COMPENSATION
In consideration for Contractor's strict adherence to the terms and Conditions of this Agreement and subject to Contractor's performance of the Services set forth above to the satisfaction of Company's authorized representative, Company agrees to pay Contractor an amount computed in accordance with this Attachment.

SEE ATTACHED EXHIBIT A

APPENDIX F: Lost Base Revenue Information

Please refer to the Company's Supporting Tables Section IV.I Cost Recovery 1. Calculation of LBR Savings. The Company had only three months of LBR calculation due to the implementation of decoupled rates in May 2011.