ATTACHMENT A

NEW HAMPSHIRE ELECTRIC UTILITIES
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

2011-2012 CORE New Hampshire Energy Efficiency Programs

Granite State Electric Company d/b/a National Grid
New Hampshire Electric Cooperative, Inc.
Public Service Company of New Hampshire
Unitil Energy Systems, Inc.

NHPUC Docket No.
DE 10-188

AUGUST 1, 2010

nhsaves
energy solutions for new hampshire

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I. INTRODUCTION

This filing for the 2011-2012 CORE Energy Efficiency Programs is being made jointly by Granite State Electric Company d/b/a National Grid, New Hampshire Electric Cooperative, Inc., Public Service Company of New Hampshire and Unitil Energy Systems, Inc. (referred to throughout the remainder of this document as "the NH Electric Utilities"). This Introduction is an overview of the programs and highlights of the results achieved to date along with overarching operational proposals for the coming year. The remainder of the filing includes descriptions of the programs, individual program budgets and goals, and utility specific program offerings.

This is the first time the CORE NH Electric Utilities are filing for a two-year period. Additionally, this is the first time the Gas Utilities and Electric Utilities are filing jointly. The NH Electric and Gas Utilities recognize that a number of changes will occur over the next year, including changes resulting from an updated Avoided Energy Supply Cost Study planned for 2011, completed measurement and verification studies, program measure changes, a June 1 discount rate adjustment, budget changes resulting from sales, and carryover adjustments. These changes may require that the 2012 Attachments D, E, F, G and H be revised in 2011 to ensure that program goals and results are updated accordingly. If necessary, the Utilities will file any updates by September 30, 2011.

A. Overview of CORE Energy Efficiency Programs

The CORE Energy Efficiency Programs were born out of the Energy Efficiency Working Group recommendations (Docket No. DR 96-150) that were developed between May 1998 and June 1999 and largely approved by the Commission in November 2000. Thereafter, the NH Electric Utilities, Commission Staff, and other interested parties held numerous technical sessions and settlement talks and made many filings before they received final approval from the Commission in May 2002 to launch the CORE Programs. This represented the first time that a coordinated effort had been made by the electric utilities to offer the same programs statewide.

There are eight CORE programs providing products and services tailored for business, residential and income-eligible customers or members[1]. Each year the NH Electric Utilities work together to review the CORE Programs, make adjustments and improvements as needed or suggested by customers, interested parties, Staff and program administrators. The plans also include utility-specific programs that are used to test certain aspects of energy efficiency and to try new programs that may be pertinent to one utility's customers or to test new technologies.

Since the introduction of the CORE Programs in June 2002, the NH Electric Utilities have reported program results quarterly. In the beginning, results were slow in coming, but customer demand for energy efficiency products and services has steadily grown to the point

[1] Hereinafter the word "customer" will be understood to mean both customers and NHEC members.

where, today, the NH electric utilities are making commitments for projects that will be completed next year and the year after.

The CORE Energy Efficiency Programs in place today have been thoughtfully developed and enhanced by many different parties since 1998. The results of the CORE Energy Efficiency Programs since their inception on June 1, 2002, through December 31, 2009, have consistently exceeded expectations. Key benchmarks highlighting the results include:

- The programs have saved 6.9 billion lifetime kWh – enough energy to power the city of Concord for 18 years!

- Saving 6.9 billion kWh is equivalent to saving $990 million at today's average[2] cost of 14.340 ¢/kWh – benefiting both customers and the NH economy. Based on CORE Program expenditures, this represents a return for customers of $8 for every program dollar invested.

- We have provided customers with 565,000 efficiency products or services and reached customers in every city and town served by the NH Electric Utilities. In addition we have provided training and information through customer seminars, point-of-sale displays, brochures, and catalogs to tens of thousands more.

- Reducing customers' energy needs has the added benefit of reducing power plant emissions. Based on the regional dispatch of plants, we will reduce emissions of CO_2, SO_2, and NO_X by 4.1 million tons – equivalent to the annual emissions of more than 850,000 cars.

New Hampshire CORE Energy Efficiency Programs Results Summary								
	2003	2004	2005	2006	2007	2008	2009	Total
Lifetime kWh Savings (Million)	1,368	925	1,022	973	997	811	806	6,902
Customers Served	59,699	51,136	81,581	86,555	86,113	109,155	90,664	564,903
Dollars Saved (Millions)	$217.1	$146.8	$162.2	$154.4	$158.2	$116.8	$117.4	$1,072.9
Emissions Reductions (Tons)	1,036,277	546,431	603,754	539,520	552,982	450,100	405,136	4,134,200
Lifetime kWH Cost (Cents)	1.70	1.80	1.95	1.95	1.90	2.36	2.32	1.98

Table I.1 – CORE Program Results Summary[3]

The CORE Programs have saved energy at an average cost of approximately 2.0 cents per lifetime kWh – as compared to the average retail price of 14.340 cents/kWh[4]. As energy costs continue to increase, these comparisons become even more compelling. While the NH Electric Utilities are proud of the results achieved to-date, they are very much aware of the need to be looking ahead and to work with Staff and other interested parties to find opportunities to improve the quality and effectiveness of the CORE programs.

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[2] Average cost used for 2003-2007 was 15.87 ¢/kWh, Used 14.388¢/kWh for 2008, 14.563¢/kWh for 2009.
[3] C&I Measure Life adjustments were made in 2008, decreasing the Lifetime kWh Savings and increasing the Lifetime kWh Costs (e.g., New Construction measure life went from 20 to 15 years).
[4] OEP's "Average Fuel Prices as of June 29, 2010", http://www.nh.gov/oep/programs/energy/fuelprices.htm.

B. Program Funding

Initially, the NH CORE Energy Efficiency Programs were funded solely by a portion of the System Benefits Charge on customer's bills. In recent years the budgets have been supplemented by ISO-NE's Forward Capacity Market and impacted by state law.

ISO-NE Forward Capacity Market[5]

On June 16, 2006, the FERC approved a Settlement Agreement that addresses the future capacity needs of New England and laid the groundwork for the Forward Capacity Market. Effective December 1, 2006, under FCM Transition Period rules, the ISO-New England was obligated to pay for qualified capacity reductions in accordance with a determined rate schedule from December 1, 2006 to May 31, 2010. All generation and demand resources installed after June 16, 2006, have been eligible to receive capacity payments in accordance with ISO-NE's Market Rules.

ISO-NE has implemented the Forward Capacity Market, with the first Commitment Period being June 1, 2010 through May 31, 2011. June 1, 2010 marked the end of the "transition period" and the beginning of ISO-New England's Forward Capacity Market. New Hampshire CORE Energy Efficiency program capacity reductions continue to receive capacity payments under the Forward Capacity Market. The utilities have capacity supply obligation for their CORE program capacity reductions up until the third Forward Capacity Market which ends on May 31, 2013. The assets have also been qualified to participate in the upcoming fourth Forward Capacity Auction, scheduled to commence on August 2, 2010. The utilities intend to take all necessary steps to continue to qualify capacity supply obligation from the CORE program capacity reductions in future Forward Capacity Markets. Estimated ISO-NE payments for 2011 and 2012 have been included in the 2011-2012 CORE Energy Efficiency Program budgets. These FCM payments were split first 14.5% for Home Energy Assistance (HEA) and of the remainder, 70% went for C&I and 30% for Residential programs (HEA budget calculated at 15% for 2012).

Continuing the policy approved by the Commission in 2008, the NH Electric Utilities will continue reporting to ISO-NE the demand savings achieved via these energy efficiency programs in Forward Capacity Market. Customers who participate in these energy efficiency programs must agree to forego any associated ISO-NE qualifying capacity payments and allow their electric utility to report kW savings and collect the payments on behalf of all customers. All ISO-NE capacity payments received will be used to supplement the utilities' energy efficiency program budgets.

[5] https://www.iso-neprograms.com/login/

Senate Bill 300 Budget Impact

Senate Bill 300 was signed into law effective January 14, 2010. The law shifted a portion of the System Benefits Charge from energy efficiency to the Electric Assistance Program. Without legislative action, this law will expire on June 30, 2011 and the SBC will revert back to the prior allocation. This shift created a $3.2 million shortfall in the approved 2010 CORE program budgets. The Utilities filed proposed budget revisions for the 2010 Core energy efficiency programs based on the changed allocation on February 5, 2010 as directed by the Commission. The Utilities were able to reduce this shortfall to approximately $500,000 total for NHEC and PSNH by utilizing preliminary 2009 results and estimating carry over/under from 2009, and through adjustments that were made based on a review of other revenue sources. NHEC requested that RGGI funds be allocated to make up the shortfall of $148,534. PSNH did not seek RGGI funds and instead reallocated funds from Marketing and Monitoring & Evaluation to Customer Rebates to reduce the impact to the programs and to customers. The Commission approved the revised budgets and RGGI allocation to NHEC in Order No. 25,099 on April 30, 2010. For the purposes of planning the 2011 budgets, the utilities assumed revenues of 1.5 mills/kWh for January to June 2011, and 1.8 mills/kWh for July to December 2011. There are no SB 300 impacts included in the 2012 budgets.

New Hampshire CORE Energy Efficiency Programs					
2011 Program Funding					
	NGRID	NHEC	PSNH	UNITIL	Total
1. Initial Energy Efficiency Funding [1]	$1,459,522	$1,169,726	$12,881,327	$2,105,535	$17,616,110
2. + Estimated ISO-NE FCM Proceeds	$84,037	$40,000	$1,400,000	$193,485	$1,717,522
3. Total Energy Efficiency Funding	**$1,543,559**	**$1,209,726**	**$14,281,327**	**$2,299,020**	**$19,333,632**
2012 Program Funding					
	NGRID	NHEC	PSNH	UNITIL	Total
1. Initial Energy Efficiency Funding [1]	$1,607,276	$1,286,288	$14,212,322	$2,095,861	$19,201,747
2. + Estimated ISO-NE FCM Proceeds	$13,745	$50,000	$1,500,000	$203,159	$1,766,904
3. Total Energy Efficiency Funding	**$1,621,021**	**$1,336,288**	**$15,712,322**	**$2,299,020**	**$20,968,651**

Note 1: Includes SBC funding, carryforward and interest.

Table I.2 – 2011-2012 Program Funding

NH has additional funding mechanisms in various stages of implementation that have somewhat different, yet similar, goals as the SBC Energy Efficiency Funding. As these efforts are implemented and managed by the NHPUC Office of Sustainable Energy and the NH Office of Energy and Planning, the NH Electric Utilities stand ready to assist the NHPUC and OEP as needed to help deliver additional services to NH residents.

House Bill 1434, Regional Greenhouse Gas Emissions Reductions Fund[6]

The NH Electric Utilities recognize that House Bill 1434 (2008 N.H. Laws Ch. 182) authorizes the use of the Greenhouse Gas Emissions Reduction Fund to support energy efficiency, conservation, and demand response programs to reduce greenhouse gas emissions generated within the state. The success of the New Hampshire CORE Energy Efficiency Programs demonstrates that the NH Electric Utilities are well positioned to provide assistance to the Sustainable Energy Division in the discharge of its responsibilities as they relate to the cost-effective implementation of programs to reduce greenhouse gas emissions. The existing CORE and Utility Specific Programs include a broad range of measures that cost-effectively address the program objectives outlined in HB 1434.

On January 14, 2009, the Commission issued a letter directing the utilities to file a detailed report describing their ability to expand the CORE Programs. On March 20, 2009, the utilities filed the requested report which was also submitted in response to the Commission's Greenhouse Gas Emissions Reduction Request for Proposals. This proposal described the Utilities ability to expand the CORE Programs on a program by program basis and also included some new offerings. The response also set forth the costs of expanding the programs relative to the incremental benefits and ranked the programs in terms of their ability to reduce greenhouse gas emissions. This proposal was approved in August for a July 2009-June 2010 time period. Through May 31, 2010, these programs have resulted in an annual carbon dioxide reduction of 7,995 metric tons, or a lifetime reduction of 105,767 metric tons.

On June 1, 2010, the NH Electric Utilities submitted a proposal for additional RGGI funds for the continuation of the RE-CORE programs in response to the RFP issued on May 5, 2010. The proposal submitted was for Category 1 (program continuation) and Category 2 (portfolio of projects for large energy users). The Utilities were notified that the proposal did not qualify for Category 1 – Continuation of Programs, but the proposal would be evaluated for Category 2. The absence of sustained funding will necessitate the discontinuation of some of these new programs (e.g., expanded low income weatherization, fuel neutral weatherization for NHEC and National Grid, expanded Cut-the-Carbon kits for School libraries, and Build Green NH certifications).

[6] http://www.gencourt.state.nh.us/legislation/2008/hb1434.html

American Reinvestment and Recovery Act

The NH Electric Utilities held initial discussions with staff at the Governor's Office of Energy & Planning to discuss opportunities of collaborating on ARRA funded projects. Preliminary discussions had identified potential opportunities with respect to incenting additional appliances as part of the Energy Star Appliance Program and weatherization via the Home Energy Assistance and NH Home Performance with Energy Star Programs.. For 2010-2011, the NH Utilities worked with the Office of Energy & Planning and Commission Staff to complement the Home Performance with Energy Star program by expanding Energy Star heating and hot water appliance rebates[7] to all NH customers. The utilities will continue discussing these collaboration opportunities and determine how we can help provide effective solutions for NH citizens.

Renewable Energy Portfolio Standards[8]

The NH Electric Utilities also believe they can play a significant role in the efficient use of the incentives that are available for renewable energy systems. The effectiveness and scope of the benefits produced by the renewable energy fund can be increased through the combination of renewable energy systems with end-use efficiency measures that are typically more cost-effective to implement. End-use efficiency improvements, when combined with renewable energy systems, have the potential to drive customers toward net zero energy consumption. A combined programmatic approach has the potential to raise customer awareness and participation in projects which include both energy efficiency measures and renewable energy systems. In addition, this combined approach offers the opportunity to expand the number of customers who can be served by the renewable energy fund. This is because the end-use efficiency improvements can reduce energy demand resulting in smaller renewable system capacity requirements.

C. Evolving Nature of the CORE Programs

While the program names and the customers they serve have not changed[9], the CORE programs themselves are continuing to evolve in response to changing technology, market conditions, program evaluations, and new standards, as well as input from customers and other interested parties. The following examples illustrate this point:

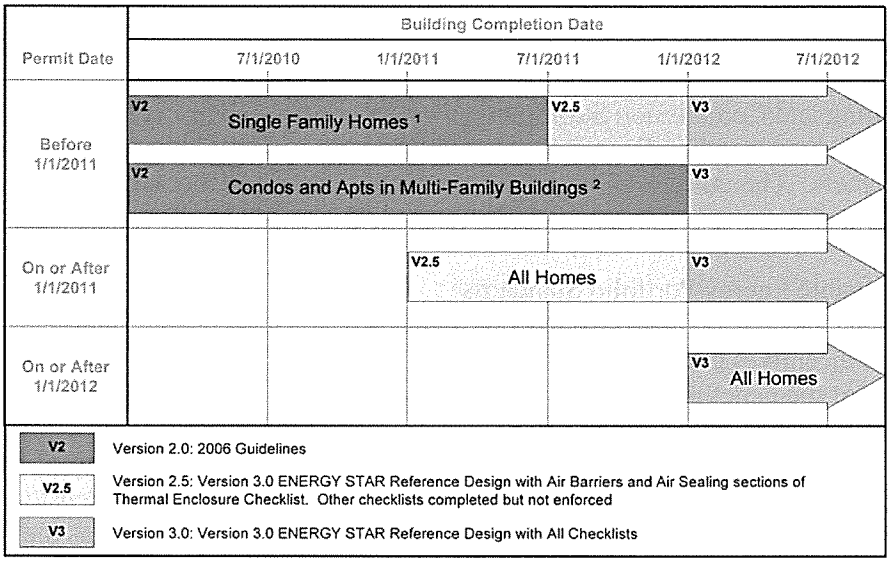
- ☐ The State Building Code Review Board adopted the 2009 International Energy Conservation Code with amendments, effective April 1, 2010. The NH Utilities have reviewed the energy conservation code revisions to identify provisions that may require more stringent measure qualification criteria or revisions to baseline efficiency assumptions governing energy savings calculations. For example, the ENERGY STAR® Homes Program encourages better building techniques in accordance with ENERGY STAR guidelines by offering incentives to build homes that are at least 20% more efficient than homes built to the 2009 International

[7] http://www.nh.gov/oep/recovery/seearp.htm

[8] http://www.gencourt.state.nh.us/legislation/2008/hb1628.html

[9] In 2010, The Utilities are proposing to rename the Home Energy Solutions Program.

Energy Conservation Code (IECC). The electric utilities will work to provide the necessary training for builders, HVAC contractors, and HERS raters. The following chart shows the timing of the transition between ENERGY STAR V2.0, V2.5, and V3.0.



ENERGY STAR New Homes Version 3 Implementation Schedule[10]

- Light emitting diodes (LEDs) have been used to retrofit traffic lights and exit signs for over a decade. Newer LED fixtures and retrofit kits are starting to come on the market. To date there are a few directional lights such as downlights and undercabinet lights that have earned the ENERGY STAR rating. The utilities are closely following progress with LEDs and will look for the U.S. Department of Energy or Illuminating Engineering Society of North America to develop a rating system for LEDs, which is scheduled to happen in 2010 or 2011. For commercial applications, the New England utilities have been working with Rensselaer Polytechnic Institute's Lighting Resource Center to verify the claims of LED retrofit fixtures. In the meantime, LED retrofits are being considered as custom measures in the commercial programs, and Energy Star LED lamps and fixtures will be included in the NHSaves lighting catalog.

- As a result of The Energy Independence and Security Act of 2007 the standards for residential lighting products in the United States will begin to change today's incandescent lamps with "Phase 1" beginning on January 1, 2012. The lumen per watt (LPW) rating for incandescent bulbs will be raised so that these lights become more efficient. The utilities plan to monitor the cost and efficiency of these new products as they enter the market and adjust rebates and savings accordingly.

- In response to product improvements, the ENERGY STAR appliance standards

[10] http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_2011_comments

continue to ratchet upwards. For example, the efficiency standard for clothes washers was increased 36% in January 2007, 5% in July 2009 and will increase another 11% in 2011. The changing standards and the introduction of new models by manufacturers result in continual changes to the list of ENERGY STAR labeled washers. In response to these changes, the utilities are working with retailers to ensure accuracy in point of sale labeling and are monitoring program cost-effectiveness.

Energy Star Clothes Washer Criteria			
As of	1/1/07	7/1/09	1/1/11
MEF >=	1.72	1.80	2.00
WF <=	8.00	7.50	6.00
Federal Standard		MEF>=1.26	MEF >=1.26
MEF = Modified Energy Factor			WF <= 9.5
WF = Water Factors (gallons of water per cycle per cubic foot)			

As the clothes washer market transitions to more efficient standards, the ENERGY STAR Appliance Program rebates will be reduced to $30, which will allow for the allocation of budgeted rebates to ENERGY STAR refrigerators, power strips and room air cleaners. In addition, the program will offer customers a rebate to recycle second refrigerators, an energy savings measure which the New Hampshire Technical Potential Study, discussed below, identified as a potential source of substantial savings in the residential sector.

- Technical Potential Study: During 2008 and into 2009, the Commission employed an independent consultant to conduct a Technical Potential Study in order to determine remaining energy efficiency opportunities[11] in New Hampshire. The results of the study indicate that "*there is still significant savings potential in New Hampshire for cost effective electric and gas energy-efficiency measures and practices (and associated oil and propane savings)*". The study also determined that the current CORE Energy Efficiency Programs "*have been successful and have saved a substantial amount of energy*" and "*Many of the programs have and are continuing to perform quite well in terms of cost per unit of energy saved and customer participation.*" These comments suggest that the CORE Energy Efficiency Programs are well positioned to capture energy savings because they possess the breadth and depth to address the full range of potential opportunities to cost-effectively install energy efficiency measures. Indeed, it was found that "*nearly all of the most cost effective energy efficiency measures are included in current programs in some manner*".

In addition to these positive comments about the CORE Energy Efficiency Programs,

[11] The study, Additional Opportunities for Energy Efficiency in New Hampshire, can be found at the NH PUC website at www.nh.gov.

the report goes on to make the following recommendation: *"Expanding the number and types of products and services available through the existing residential energy efficiency programs, and promotion of those programs to include a larger number of potential participants may lead to increased overall energy savings."*

The Technical Potential Study is an important resource that is used to assist the utilities in the identification of cost-effective energy saving measures with significant market potential that can be potentially realized through strategic program market interventions. Examples of such measures include LED lighting, second refrigerator recycling, and expanded weatherization services for non-electrically heated homes.

- The NH Home Performance with ENERGY STAR program will continue to improve the efficiency of the existing housing stock in NH by assisting customers with improvements to the energy efficiency of their homes. Basic services include insulation, weatherization, and cost effective appliance and lighting upgrades. Since Order No. 24,974 was issued on June 4, 2009, authorizing a fuel neutral Pilot Program, PSNH and UES have been providing weatherization and other energy efficiency services to homes with non-electric heating systems.

  According to the New Hampshire Climate Action Plan, there are approximately 600,000 residential housing units in need of weatherization services. The NH Technical Potential Study discussed above noted that homes with electric heat comprise about 4% of the market and found that there is significant remaining potential to achieve both electric and non-electric energy savings that could be realized via the expansion of program eligibility to include homes with oil and propane heating systems.

  The benefit-cost analysis of this program indicates that program services delivered to non-electric heating customers are cost-effective and represent a significant expansion of the net benefits to New Hampshire home owners. The cost-effectiveness of the program is in part a reflection of the program processes that have been developed to recruit and screen customers for program eligibility, efficient auditing procedures and quality assurance review to promote continuous improvement of program service delivery.

KEMA, Inc. conducted a preliminary evaluation of the program in 2010, in which they performed a general review for the purpose of providing recommendations for

program improvement and to assess the ability of the tracked program data to support a downstream impact evaluation. KEMA's principle findings regarding program implementation were summarized as follows:

The HPwES Program had no significant implementation problems noted at the time of the interviews and tracking review. Our interview data collection regarding program marketing, data tracking and QA/QC suggests that the pilot effort has been successful with respect to program delivery.

PSNH and Unitil are now offering an on-bill financing option to customers in order to address a potential market barrier for households on a tight budget. KEMA notes that "the availability of on-bill financing may offset some of the potential downward pressure of the economy on participants' ability to agree to the co-payment."

PSNH and Unitil are encouraged by the findings of the KEMA assessment but realize that a full-blown impact evaluation will be necessary to provide a more rigorous determination of program savings and customer satisfaction. The KEMA study describes possible technical approaches to the impact evaluation and the data required to support them, and finds that the PSNH and UES program tracking systems have the capability to support each approach. The study recommends that additional data be collected to support the evaluation, and both companies are now collecting the recommended data. Based on these initial findings, PSNH and Unitil have included continued fuel neutral services through this weatherization program for 2011 and 2012.

- ❑ Federal Tax Credits. The American Recovery and Reinvestment Act of 2009 extended many consumer tax incentives originally introduced in the Energy Policy Act of 2005[12] and amended in the Emergency Economic Stabilization Act of 2008. For existing homes, tax credits[13] for 30% of the cost, up to $1,500, are ending on December 31, 2010 (for taxpayer's principal residence – Biomass Stoves, HVAC, Insulation, Roofs (Metal and Asphalt), Water Heaters (non-solar); and Windows & Doors). Federal tax credits are available at 30% of the cost, with no upper limit through 2016 (for existing homes & new construction) for: Geothermal Heat Pumps; Small Wind Turbines (Residential) and Solar Energy Systems. Customers in both the Weatherization Programs and the Energy Star Homes new construction program are being made aware of the additional benefits of this tax credit. Customers are also being informed of the renewable energy incentives offered through the NHPUC Sustainability Division.

[12] http://energy.senate.gov/public/_files/ConferenceReport0.pdf and http://www.energystar.gov/index.cfm?c=products.pr_tax_credits#7

[13] http://www.energystar.gov/index.cfm?c=tax_credits.tx_index

D. Monitoring & Evaluation

A settlement agreement in 2006 approved by the New Hampshire Public Utilities Commission on March 17, 2006 (Order No. 24,599 in DE 05-157) transferred responsibility for monitoring and evaluation efforts from the Utilities to Commission Staff. Under that agreement, the Commission receives input and advice from the utilities on monitoring and evaluation activities.

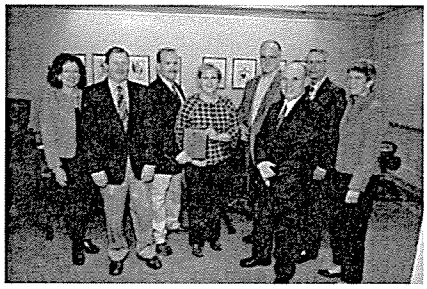
Monitoring & Evaluation efforts are funded at approximately five per cent of the annual program budgets. These funds are utilized to support the following activities:

- Evaluation Planning
- Monitoring & Evaluation of New Hampshire CORE Energy Efficiency Programs
- Regional Measurement and Verification Projects
- Regional Avoided Energy Supply Cost Studies
- Miscellaneous Research
- CORE EE Program Tracking and Reporting

As required by ISO-NE for participation in the Forward Capacity Market, measurement and verification (M&V) will be used to evaluate the impact of efficiency measures during system peak hours and thus the capacity value that will be used in determining any applicable payments. As currently drafted, state utility commissions are responsible for approving M&V plans for efficiency measures installed through programs under their jurisdiction. The utilities will work with the Staff and other interested parties to ensure that the CORE Programs' M&E efforts evolve in such a way that they are in alignment with ISO-NE M&V requirements in order to minimize expense and possible duplication of effort.

E. Customer Comments

While aggregate measures of success such as kilowatt-hours saved, customers served, and emissions reduced provide a sense of the overall impact of the CORE programs, it is also important to recognize the tangible impact of the programs on individual residents and businesses. The following comments from customers who have participated in the energy efficiency programs illustrate the impact these programs have had on New Hampshire families and businesses. These are just a few examples of the comments that participants in the New Hampshire energy efficiency programs have shared.



New Hampshire Ball Bearings was recognized as a Business Leader for Energy Efficiency at the Northeast Energy Efficiency Summit held by the Northeast Energy Efficiency Partnership on March 31. The company undertook many energy efficiency projects at their New Hampshire facilities, with the help of incentives and technical assistance from the Large Commercial & Industrial program. The projects will save the company 2.8 million kWh per year, resulting in an annual savings of over $400,000. Pattie Carrier and her colleagues were on hand to accept this much deserved recognition.

- ✓ *We work hard to incorporate the fundamental principles of sustainability into our business practices. The Energy Star label recognizes our long-term effort to continually reduce our facility's impact on the environment, and we are grateful to [NH Saves] for collaborating with us on that effort.* Bill Jones, NAS Specialty Insurance

- ✓ *During the construction of the club house at the Pease Golf Course, the design team was presented with a number of options to upgrade to more energy efficient products and materials. The decision to proceed with these upgrades was made easier once we conferred with [NH Saves] and reviewed their rebate program. Not only did we save money, we now have a more comfortable building and we reduced our overall energy consumption.* Michael Mates, Pease Golf Course

- ✓ *Not only are we saving money but also the quality of light has greatly improved, making for a more productive environment. This process was made simple with the help of [NH Saves] and my local electrical contractor. We received our rebate check as promised and a lower electric bill! We look forward to our next project.* Jay Meyer, Blue Dolphin Screen Printing

- ✓ *I had a great experience with [NH Saves] during the design phase and all the way through the completion of our corporate offices. I would not have thought that by using electric heat pumps I could have achieved over 33% in energy savings for our facility. We had a payback for our lighting in under 2 years due to their suggestions. I strongly recommend [NH Saves] for their energy efficiency recommendations.* Tom Sullivan, JB Sullivan Construction, Bedford NH

- ✓ *Recently we completed two energy-saving projects at the Tanger Outlet Center in Tilton. We e-mailed [NH Saves] for information regarding energy rebates for these two projects, and Greg Rahe replied to us very quickly and answered all of our questions. He was both extremely helpful and extremely professional, and the entire process was very quick and easy. We were so pleased with the results that we continue to utilize [NH Saves'] assistance in finding other energy-saving product information for our shopping center.* Heidi Larame, Tanger Outlet, Tilton

- ✓ *I must commend Steve Quatromoni and Lighting Retrofit Services. This is the second job they've done for us under this program and both have been well done and trouble free.* Small business customer, Manchester

- ✓ *I wanted to thank you for your involvement in helping [a Manchester convenience store] access the Small Business Energy Efficiency Program. The owner has purchased and installed new refrigeration units and is planning on using a rebate to upgrade additional equipment. Mark Toussaint was great to work with also. We are all looking forward to her next energy utility bill!* Andrea O'Brien, NH Small Business Development Center

- ✓ *Hannaford has partnered with [NH Saves] to implement energy efficiency projects for many years. Their technical expertise is beneficial in evaluating and implementing efficient technologies. The economic incentives help us achieve our aggressive goals for reducing energy use and greenhouse gas emissions.* Harrison Horning, Director of Energy & Facility Services, Hannaford Bros. Co.

- ✓ *[NH Saves] provides extensive prescriptive rebate programs and thorough, probing reviews of custom energy efficiency measures that encourage large C&I customers to embrace energy saving technologies early, and incorporate them more quickly into their facilities than they would without these efficiency programs. [NH Saves] also provides great support and guidance throughout the application, evaluation, and project review process.* Michelle Keller, R & M Engineering, LLC

- ✓ *Last year when we were upgrading [a corporate headquarters in NH], your organization was a great help guiding us through the process. [NH Saves] helped us identify opportunities for improving energy savings and assisted us with the final assessment of the installation to ensure that we were in compliance with the program's criteria. The incentive we received was a substantive amount that we were able to reinvest in the property towards other improvements. Plus, the occupant is realizing the benefits of the improvements with savings of approximately 25% or more.* David Flynn, MRICS, CPM, Altid Enterprises, LLC

F. Statewide Consistency and Coordinated Program Management

The uniform planning, delivery, evaluation and access to energy efficiency programs will continue under the proposed 2009 CORE NH Energy Efficiency Programs. To the extent practicable, the efficient delivery of services will not depend on the community in which the customer resides or does business. CORE Program offerings are designed to be consistent throughout the State with equal access for any eligible customer subject to available budget. Each utility will continue to have flexibility in its implementation strategies and may deliver its programs in a particular way. However, from a customer's perspective, the programs will continue to look virtually the same in all service territories:

In the first Settlement Agreement in Docket No. DE 01-057 the parties provided:

> The Utilities will establish a CORE Program Management Team (the "Management Team") to oversee all CORE Program activities and to resolve problems as they arise. The Management Team will be comprised of representatives from each utility and will make decisions by consensus with one member specifically designated as the liaison with the Parties and Staff. The Management Team will meet at least quarterly to review program progress and to resolve problems. [October 3, 2001, Section 5, page 11]

The Management Team will continue to fulfill its responsibilities to coordinate and oversee statewide activities, recognize problems in program delivery early on, communicate those problems among the NH utilities, identify corrective actions, and provide quarterly status reports to the Staff and interested parties.

Steps continue to be taken to more closely align the CORE Programs with efficiency programs offered to New Hampshire's natural gas customers. From an organizational standpoint, with the completion of the National Grid/Keyspan merger and the acquisition of Northern Utilities by Unitil in 2008, both of the state's regulated gas utilities will become part of one of the CORE Utilities. As a result, program administrators from both the gas and electric utilities work together throughout the year to collaborate on these efficiency programs. Further, in an effort to improve communications, gas program representatives are now included in Quarterly CORE Programs Review Meetings with interested Parties and Staff throughout 2011-2012. And finally, from a customer perspective, dual fuel customers are offered an opportunity to participate in both the gas and electric programs.

G. Administrative Costs

The NH Electric Utilities, Commission Staff, and other interested parties have spent considerable time and effort setting up uniform program administration and reporting protocols, as well as joint marketing and coordinated monitoring and evaluation for all eight of the CORE Programs. The NH Electric Utilities will continue to direct their limited time and resources to successful program implementation, and the Commission Staff and other interested parties will be able to judge each utility's performance relative to agreed-upon program performance goals that are clear and measurable.

Cost-control measures are in place in the performance incentive mechanism, in that an inefficiently managed and administered program will likely fail to meet its cost-effectiveness and energy savings goals. On the other hand, the level of administrative costs that are spent on successful programs will vary from program to program and utility to utility for valid reasons. For example, a small utility and a large utility will generate unequal amounts of System Benefits Charge revenue and have unequal program budgets. However, what matters is that each utility devotes sufficient resources to operate the CORE Programs effectively in their service territory, as demonstrated by the outcomes of the programs and measured through the performance criteria (i.e., cost-effectiveness and energy savings).

H. Performance Incentive

The NH Electric Utilities are proposing that all programs in this filing be included in the determination of the performance incentive. In accordance with Commission Order No. 24,203, issued September 5, 2003, the utilities will continue to utilize the approved performance incentive mechanism with one enhancement, described below. The current incentive mechanism fosters efficient program implementation efforts and the achievement of program goals while retaining most funding for program efforts. The performance incentive also serves as a motivating factor for the NH Electric Utilities and holds each utility accountable for meeting their individual program goals. If any individual utility does not meet its program goals, it will not earn its target incentive, and the Commission can require the utility to take corrective measures.

The NH Electric Utilities continue to participate in the shareholder incentive working group which was convened in 2010 to explore potential enhancements to the current performance incentive. The working group continues to deliberate but has identified one enhancement proposed in this filing. In order to ensure that the utilities have the ability to earn on any dollar collected for energy efficiency only once, the Utilities are proposing to calculate the earned incentive, if any, using actual expenses as the basis for quantifying the target incentive amount. Further details are provided in Attachments D-G.

I. Multi-year Project Approval

In 2003 the Commission authorized what was termed "multi-year approval" – a process whereby customers with multi-year projects could receive a commitment assuring program continuity and funding for long term projects. The NH Electric Utilities seek to continue multi-year approval and specifically request authorization to make customer commitments during 2011 and 2012 for projects to be completed in 2011-2014. All customer classes currently eligible to participate in the CORE Programs will be eligible. The remainder of this section provides background and support for continuing this policy.

Customers of the NH Electric Utilities often plan and budget for large capital projects with multi-year lead times. Construction projects, renovations and replacement of existing equipment for 2011 and 2012 will be developed in 2010, and the resources necessary to fund such projects need to be arranged when these customers' decisions are made. Large commercial and industrial customers sometimes have two-year planning horizons for large capital expenditures, which are essential to the growth of the NH economy. Home Builders will plan construction starts for the following year based upon the number of ENERGY STAR Homes that are approved by the local electric utility. With pre-approval of the number of households that can be served by the Home Energy Assistance Program, the Community Action Agencies or other contractors delivering these services can better plan for the crews that will be necessary to keep on board and coordinate with the Department of Energy Home Weatherization jobs.

The NH Electric Utilities will make commitments to customers who have presented definitive plans for projects to be completed in subsequent years. The energy efficiency measures will include those measures that are approved under the then existing CORE Programs and utility-specific programs. All 2011 program guidelines and rules will apply to the 2011-2014 commitments. Customers receiving commitments in 2011 will not be barred from participating in any new programs introduced in 2012 - 2014 which supplement or supplant the existing programs, subject to any limits on the dollar amount that a single customer may receive under the 2011 and 2012 programs. The funds will be paid out of the 2011-2012 budget amounts, respectively; however, the commitment to the customer will be made contingent upon the continuation of funding.

The total of all customer commitments, in any given program, in any given future year, will not exceed 40% of the amount budgeted for that program in 2011 or 2011 for Customer Rebates and Services without prior concurrence of the Parties and Staff. Any such commitments will be monitored and reported in the NH Electric Utilities' quarterly reports. All customer commitments will be made contingent upon the continuation of the program funding.

J. Interim Changes in Program Budgets

The NH Electric Utilities recommend continuation of the budget adjustment guidelines currently in place. Specifically,

- Once the budgets are approved, there will be no movement of funds between the residential and commercial industrial sectors unless specifically approved by the Commission.

- Budget transfers to or from individual programs of 20% of the individual program's budget or less can be made without consultation and without Commission approval. Notice to the Staff and interested parties is required.

- Budget transfers to or from individual programs greater than 20% of the individual program's budget shall be filed with the Commission. Staff and interested parties may file any comments with the Commission within two weeks of the filing. If no action has been taken by Staff and interested parties, the budget transfer request shall be deemed approved unless the Commission notifies the company of the need for a more in-depth review within thirty (30) days of the filing.

- Notwithstanding the 2nd and 3rd bullets above, no funds shall be transferred out of the Home Energy Assistance Program without prior approval by the Commission.

II. CORE PROGRAM OFFERINGS

A. Residential Program Descriptions

Overcoming Market Barriers and Changing Market Conditions

Key market barriers in the residential sector are generally grouped on the demand side of the efficiency market, though there are barriers impacting the supply infrastructure as well. The central barrier addressed by the CORE residential programs is the general customer lack of awareness regarding energy efficiency services and equipment. More specifically, customer's limited knowledge of energy efficiency measures, uncertainty regarding the energy and cost savings of premium efficiency equipment, as well as lack of awareness of available programs, are important barriers to achieving programs' participation and energy savings goals. Another key factor is the current economic climate and homeowner's competing needs for capital. The high cost of energy efficiency services and equipment installation is often prohibitive; causing homeowner's to choose less efficient weatherization measures, lighting, and appliances.

In order to address these barriers, the utilities offer a variety of programs targeting specific areas where the energy efficiency of the New Hampshire housing stock can be improved. The ENERGY STAR programs promote the benefits of energy efficient lighting, appliances and homes through a variety of marketing techniques. The programs are aligned with national efforts developed by the U.S. Environmental Protection Agency, provide educational materials to customers, and promote energy efficient equipment through allied trade organizations, retailers and the NHSaves catalog.

The suite of residential CORE programs offer a variety of incentives for premium efficiency equipment and homes, in order to reduce the high installation costs for customers, while increasing the demand for energy efficiency services, lighting, appliances and homes. This is particularly necessary for weatherization projects that tend to have high initial costs and long simple pay-backs while yielding potentially significant lifetime energy savings. To address these barriers, financial incentives are offered by programs specifically tailored to promote weatherization projects and efficient lighting and appliances.

The market barriers to achieving the residential programs' goals are the lack of builder/contractor and retailer awareness of the benefits of energy efficiency, perceptions of lack of demand for premium efficiency equipment, and the availability of technical services. These barriers are also addressed by the suite of residential programs. The ENERGY STAR programs train builders, contractors, and retailers regarding the benefits and profitability of marketing energy efficient products.

The incentives for customers, coupled with builder contractor and retailer education and training, foster the development of strong relationships between the efficiency market and the energy consumers. This joint approach addresses a large portion of the efficiency market

and will allow the programs to continue to assist customers in understanding factors affecting home energy use. In addition, it will increase the supply of efficiency service providers and knowledgeable contractors, and ultimately will help to achieve the programs' energy savings and participation goals.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↑ Supply Infrastructure	Lack of customer awareness of the benefits of energy efficient appliances/performance uncertainties	Promotion of energy efficient appliances at point of purchase, through product labeling and educational materials Education on the benefits of energy efficiency Joint promotion with program allies Promotion through websites, bill inserts, catalogues, trade and home shows and retail advertising	Increase demand for energy efficient appliances.
	Prohibitively high cost of efficient homes and technology	Incentives via rebate Information about Federal tax credits	Decrease the cost barrier and increase market share of energy efficient rated lights, appliances and homes
	Retailer uncertainty about product performance and profit potential for providing energy efficiency services	Retailer training and recruitment	Increase visibility and availability of energy efficient appliances
	Lack of builder/contractor awareness, experience and availability	Builder/trade ally training and education Coordination between residential programs	Demonstrate the benefits and value of efficiency certifications Provide builders with the resources necessary to meet energy efficiency standards.
	Perceptions of lack of demand for premium efficiency homes, equipment and services	Increased customer demand through incentives, education and promotion	Increased supply of energy efficiency services, and premium efficiency equipment and homes

1. ENERGY STAR® Homes Program

Overview:

The New Hampshire ENERGY STAR homes program is designed to be a market driving program, encouraging both builders and homeowners to build a new home with energy efficiency in mind. The program provides incentives in the form of rebates and services to help offset the consumer cost of building to a more energy efficient standard. The utilities will continue to offer financial incentives based on the HERS performance rating of a particular home and the energy efficient lighting, appliances and HVAC equipment installed. The HERS performance rating encourages builders and homebuyers to build an even higher performing home, all the way down to a HERS Rating of 0, which would represent a zero energy home. In additional to this incentive, HERs rater services will continue to paid through this program to assist the builder/consumer ensure that the home meets the ENERGY STAR standards. Any new, residential single family or multifamily construction project is eligible for the program, including complete rehabs of existing structures if the amount of rehab work meets the ENERGY STAR guidelines.

This program encourages better building techniques in accordance with ENERGY STAR guidelines by offering incentives to build homes that are at least 20% more efficient than homes built to the 2009 International Energy Conservation Code (IECC)[14]. The program is fuel neutral and aligned with a national effort developed by the U.S. Environmental Protection Agency (EPA). The New Hampshire ENERGY STAR Homes program provides builders with technical assistance, financial incentives and instruction needed to ensure that homes meet stringent ENERGY STAR technical standards. The program provides incentives for home certification, upgrades to ENERGY STAR products, and a sliding scale performance based incentive designed to encourage builders to improve efficiency levels above the minimum required by the national program. The program also addresses market transformation by providing a Home Energy Rating (HERS)[15] - a nationally recognized index for measuring a home's energy efficiency.

NH Utility staff will coordinate program delivery to ensure that consistent services are provided to home builders and homebuyers across the state. In addition, the utilities will continue to collaborate with the New Hampshire gas utilities to incorporate their rebates for high efficiency HVAC equipment. On September 30, 2005 the EPA made changes to the federal ENERGY STAR Homes Program and the NH utilities have incorporated these

[14] The State Building Code Review Board has adopted the International Energy Conservation Code 2009 with amendments, effective April 1, 2010, and the utilities have incorporated this into this program.

[15] Since 2007, an ENERGY STAR® home must meet the Home Energy Rating System (HERS) index of no more than 85/80 (NH standardized on 80 statewide) on a scale of 100-0 (in accordance with the *Mortgage Industry National Home Energy Rating Standards* administered by the Residential Energy Services Network (RESNET). This HERS index is recognized by the US Environmental Protection Agency as the qualification for ENERGY STAR® home designation.

changes into this program. Beginning in 2008, these new standards resulted in the following changes to the program:

- ✓ Home Energy Rater must perform a "Thermal Bypass Inspection" using checklist.
- ✓ Air duct testing is now mandatory to ensure tighter standards are met.
- ✓ Some ENERGY STAR products (heating or cooling equipment, windows, or lighting/appliances) must be part of the new home.

The EPA is currently developing additional changes to the ENERGY STAR Homes Program for 2011 (ENERGY STAR HOMES Version 3.0) and will become fully implemented in 2012, which will raise the bar even further for homes to earn the ENERGY STAR certification. Some of the major changes for the new version 3.0 include:

- ✓ Thermal Enclosure System Rater Checklist
- ✓ HVAC System Quality Installation Contractor Checklist
- ✓ HVAC System Quality Installation Rater Checklist
- ✓ Water Management System Builder Checklist (or Indoor airPLUS Verification Checklist)
- ✓ Increased Rater, builder, and HVAC contractor training

During 2011, the focus will be to continue educating builders on the national Version 3.0 program changes, and assisting them as they work to meet these new requirements. Efforts will also include educating consumers on the benefits of building to the ENERGY STAR level and beyond. The NH electric utilities will continue to work with the Home Builders & Remodelers Association of NH, customers, and building trade allies (e.g., insulation and HVAC contractors) to encourage the construction of ENERGY STAR homes in the state.

Marketing & Education:
Marketing for the Energy Star Homes Program focuses on direct builder contact by program administrators and Home Energy Raters. Continuing marketing and outreach strategies include participating in trade shows such as the NH Home Builders & Remodelers Association Annual Home Show (early March), outreach to realtor groups and HVAC contractors, presenting at home builder and home buyer seminars, promoting energy code training, and directing customers/members and builders to NHSaves and utility web sites. If appropriate and funds are available, utilities may also co-market Energy Star developments with builders.

	2011	2012
Goals/Benefits:		
Estimated Number of Customers to be completed:	503	512
Projected lifetime kWh savings:	13,347,904	13,512,540

The energy savings for this program are developed using lighting and appliance energy savings, historical savings, with heating, cooling and ventilation energy savings adjusted to reflect changes in the Energy Code and the baseline home.

Budget:

January 1 - December 31	$1,402,835	$1,505,872

Measures of Success & Market Transition Strategy:

Success factors for this program include: the number of homes completed versus goal, the energy savings achieved, and the benefit/cost ratio. We expect that increased awareness of and demand for "ENERGY STAR Homes" may eventually decrease the need for incentives. New technologies may change the types of products that are eligible for rebates in the future. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

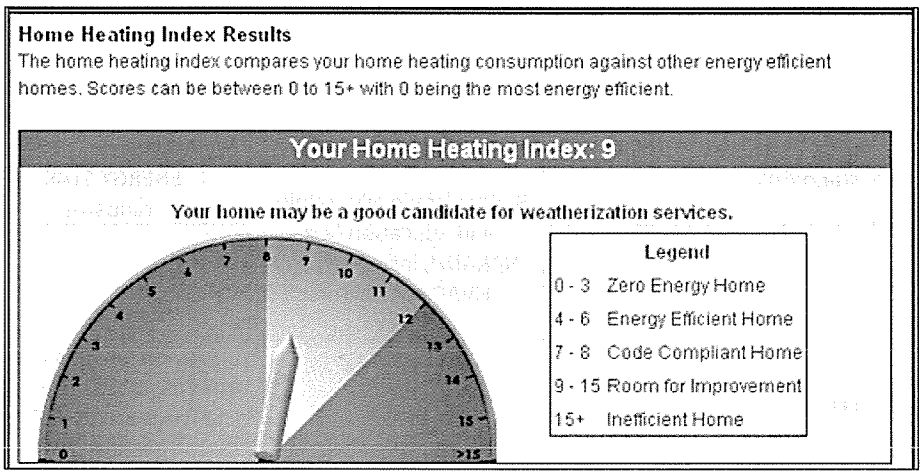
Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↑	Lack of awareness of benefits of energy efficiency among new home buyers	Education on the benefits of building to ENERGY STAR level and beyond (e.g., Providing a HERS rating) Joint promotion with Home Builders and Remodelers Association of NH as well as other trade allies	Increase demand for ENERGY STAR homes
	Incremental cost of energy efficient appliances and homes	Financial Incentives	Increase supply of ENERGY STAR certified appliances and homes
	Lack of builder and trade ally awareness concerning ENERGY STAR homes and their benefits	Builder/trade ally training and education (e.g. HBRANH, insulation and HVAC contractors)	Demonstrate the benefits and value of ENERGY STAR certification
	Builder knowledge of revised code and ENERGY STAR standards		Keep builders and contractors up-to-date on the most stringent ENERGY STAR standards
↓ Supply Infrastructure	Lack of builder experience		Provide builders with the resources necessary to meet ENERGY STAR standards

2. NH Home Performance with ENERGY STAR® Program

Overview:
This program will continue to improve the efficiency of the existing housing stock in NH by assisting customers with improvements to the energy efficiency of their home. Basic services include air sealing, insulation, and cost effective appliance and lighting upgrades. Participating customers can receive up to $4,000 in program services. Co-payments are required and are determined based on the measures installed. The program also has a strong educational component designed to help customers better understand their home and the factors that affect energy use.

All four utilities offer this program to their electric heat customers and customers looking to improve the electric efficiency of their homes. The utilities have been using the Home Heating Index tool to identify homes that are good candidates for weatherization measures. With just three pieces of information (zip code, conditioned square footage of home and annual heating fuel usage) this tool will create a tailored Home Heating Index. The utilities are using this tool to screen for qualified weatherization candidates. (The higher the score, the more energy used per square foot, and therefore the more opportunity for energy savings.)

Customers whose homes are already code compliant or better are given links to educational material and other energy-related web sites. Customers whose homes have room for improvement are asked to fill out an application form and provide two year's of heating fuel usage data. As the higher use customers are served, the qualifications can be lowered over time. The following is a screen shot of our screening tool of a customer who qualifies for the program.



During 2009 and 2010, PSNH and Unitil served fuel neutral customers via a pilot program. In preparation for an impact evaluation, the utilities contracted with KEMA Inc, in 2010 to provide an early assessment of this program, specifically looking to provide recommendations for program improvement and to assess the ability of the tracked program data to support a downstream impact evaluation effort. A summary of their findings include:

The HPwES Program had no significant implementation problems noted at the time of the interviews and tracking review. Our interview data collection regarding program marketing, data tracking and QA/QC suggests that the pilot effort has been successful with respect to program delivery. The traffic to the program has been sufficient in building up program activity to test program operation and to highlight those elements that are performing particularly well from the contractor and utility point of view and some that are not. These have been discussed earlier and are further bulleted below.

- ✓ *HHI screening tool appears to be highly successful in providing candidates that have ample opportunities for efficiency improvements to contractors.*

- ✓ *Closure Rate reported closure rates on major measures were consistently cited to be better than 90%, which is particularly high for a program of this nature.*

- ✓ *Contractors reported high levels of satisfaction with the program and further reported that they believe customers are highly satisfied and are getting a good deal of value from the program offerings. Reasons for reported contractor satisfaction included that they felt like a partner in the program, that the program is authentically trying to help customers and that the program is successful.*

- ✓ *Program Administrators have been satisfied with how program operations have rolled out and been received by customers.*

- ✓ *Customers were reported by contractors to be getting a good value from the program. One contractor reported that many of the customers he has served have been "ecstatic" and he has received many customer referrals. Another reported that they get many comments about draft reduction and comfort level improvements among participating homes.*

Based on these initial findings, PSNH and Unitil have included continued fuel neutral services through this weatherization program for 2011 and 2012.

Marketing & Education:
Marketing for the NH Home Performance with Energy Star Program will focus on referrals from customer service and 211NH.org, referrals from existing customer participants, and customers/members who have self-qualified via the NHSaves.com Home Heating Index screening tool. Program brochures will also be handed out at special events (e.g., home shows) and mailed out upon request. Home Energy Auditors will also market the program as necessary to meet participation goals, and the utilities may include articles in their bill inserts. While ramping this program up in 2009, some new marketing approaches were tested that may also be used in the future, including Twitter and Facebook messages about the program, articles in trade ally newsletters, promotion in senior citizen seminars/newsletters, working directly with towns, interviews on radio shows, and working with realtor groups.

Delivery:
Due to the market saturation of electrically heated homes in different service territories, PSNH and UES are proposing to serve high energy use[16] homes while NHEC and GSECo will continue serving electrically heated homes. NH Electric Utility personnel will administer the program and will contract for the delivery of program services. Additionally, customers will be educated and informed about opportunities for installing renewable energy technologies.

	2011	2012
Goals/Benefits:		
Estimated Number of Customers to be served:	1,150	1,236
Projected lifetime kWh savings:	9,942,742	10,507,451

In addition to improving the energy efficiency of NH homes, another benefit will be the continued development of a NH infrastructure that can support and deliver energy efficiency improvements. Other benefits include developing a demand for energy efficiency by homebuyers, renters, property owners, homebuilders, and the real estate community.

Budget:		
January 1 - December 31	$2,096,748	$2,280,196

Measures of Success & Market Transition Strategy:
Success factors for this program include attaining the planned participation and energy savings goals. New technologies may change the types of products that are eligible for rebates in the future. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

<table>
<tr><th>Efficiency Market</th><th>Market Barrier</th><th>Program Intervention</th><th>Program Objective</th></tr>
<tr><td rowspan="3">Customer Demand
↕
Supply Infrastructure</td><td>Lack of knowledge regarding factors that affect energy use</td><td rowspan="2">Homebuyer, renter, property owners, and homebuilder education

Interest-free weatherization loans for qualifying customers</td><td>Increased program participation

Increased demand for energy effic. upgrades

Support the development of an infrastructure capable of delivering energy efficiency improvements</td></tr>
<tr><td>Uncertainty regarding energy and cost savings of efficiency upgrades</td></tr>
<tr><td>Prohibitively high costs associated efficiency upgrades</td><td>Financial incentives</td><td>Increased market penetration of energy efficient homes, appliances and lighting

Achieve energy savings goals</td></tr>
</table>

[16] "High Energy Use" customers are currently being qualified using the Home Heating Index tool.

3. ENERGY STAR® Lighting Program

Overview:
This program will continue to increase the use and availability of energy efficient lighting products in New Hampshire. The program is open to all residential customers and will (1) offer rebates for interior and exterior ENERGY STAR labeled bulbs and fixtures, (2) promote the efficiency and environmental benefits of the latest lighting technologies, and (3) leverage the ENERGY STAR branding across three programs - Lighting, Homes, and Appliances.

Program delivery will be through New Hampshire retailers, mail order catalogs, and utility web sites. Contractors will continue to provide retailer training and to work with the 130 retailers to ensure the availability and visibility of ENERGY STAR lighting products. Services will also include rebate processing and the development and placement of cooperative advertising with participating retailers. Instant rebate coupons for qualifying bulbs and fixtures will make these products more affordable at participating retailers.

The program catalog is designed to raise customers' awareness of the products, to inform them of the new technologies being developed, and to make it easy to purchase products. The NH Electric Utilities will continue promoting energy efficient lighting via special events with retailers and directly with customers via Energy Fairs, Trade Shows, etc. A statewide toll free number and website will remain available to all New Hampshire residential customers.

Marketing & Education:
Marketing for the Energy Star Lighting Program will include the NHSaves catalog, which will be handed out at events, available at utility offices, and mailed upon request or via targeted mailings. Additionally, marketing will be provided by the utilities' circuit rider who will train sales staff on selling features of Energy Star lighting products, and will update point-of-purchase materials and rebate forms at stores. Utilities may also include articles in newsletters and bill inserts and/or co-market with retailers on special promotions.

	2011	2012
Goals/Benefits:		
Estimated Number of Products Incented:	242,623	284,038
Projected lifetime kWh savings:	53,216,421	61,612,014

The overall goal of the program is to raise the visibility and availability of ENERGY STAR lighting products in order to build customer demand and retailer supply.

Budget:		
January 1 - December 31	$1,091,426	$1,195,760

Measures of Success & Market Transition Strategy:
Program success factors will include attaining the planned participation and energy saving goals, increased market share, and customer awareness and acceptance of the ENERGY STAR brand. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↑ Supply Infrastructure ↓	Lack of customer awareness of the benefits of ENERGY STAR rated bulbs	Promotion of CFLs through websites, bill inserts, trade and home shows and retail advertising	Increase demand for ENERGY STAR bulbs
		Catalogue designed to raise customers' awareness of the products, provide information regarding the development of new technologies and facilitate the purchase of ENERGY STAR products	
	Customer purchasing habits favor traditional incandescent bulbs	In-store promotion and advertising of ENERGY STAR rated bulbs	
	Incremental cost of ENERGY STAR rated bulbs	Incentives via rebate	Decrease the cost barrier and increase market share of ENERGY STAR rate bulbs
	Retailer uncertainty about product performance and profit potential for providing energy efficiency services	Retailer training and recruitment	Increase visibility and availability of ENERGY STAR bulbs

4. ENERGY STAR® Appliance Program

Overview:
This program will increase the use and availability of energy efficient appliances in New Hampshire. It will be tailored to the needs of New Hampshire, but coordinated with similar national or regional initiatives. A prime objective is to raise awareness and educate consumers on the benefits of ENERGY STAR rated appliances through joint marketing, promotional, and educational materials. The program is open to all residential customers and will feature a $30 rebate (reduced from $50) for ENERGY STAR rated clothes washers, a $20 rebate for ENERGY STAR rated room air conditioners, and a $10 rebate for smart power strips. New appliances rebated in 2011 and 2012 include a $30 rebate for refrigerators, a $10 rebate for room air cleaners and a second refrigerator/freezer recycling component. Rebate levels may be adjusted during the year to meet current market conditions.

Contractors will continue to provide services including retailer retention and recruitment, training, point of purchase promotional materials, and product labeling for the more than 90 participating retailers. Services will also include rebate processing and the development and placement of cooperative advertising with participating retailers. In addition, the NH Electric Utilities will seek opportunities to collaborate with manufacturers on matching rebate programs.

Marketing & Education:
Marketing for the Energy Star Appliances Program will be conducted by the utilities' circuit rider who will train sales staff on selling features of the Energy Star models, will update point-of-purchase materials and rebate forms at stores. Utilities may also include articles in newsletters and bill inserts and/or co-market with retailers on special promotions.

	2011	2012
Goals/Benefits:		
Estimated Number of Products Incented:	16,402	18,111
Projected lifetime kWh savings:	26,222,884	28,616,409

The overall goal of the program is to raise the visibility and availability of ENERGY STAR appliances in order to build customer demand and retailer supply.

Budget:		
January 1 - December 31	$1,072,253	$1,127,024

Measures of Success & Market Transition Strategy:
Program success factors will include attaining the planned participation and energy saving goals, and increasing market share. Customers will be surveyed to determine the impact of ENERGY STAR labeling and promotion on their purchasing decisions. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↕ Supply Infrastructure	Lack of customer awareness of the benefits of ENERGY STAR appliances/performance uncertainties	Promotion of ENERGY STAR appliances at point of purchase, through product labeling and educational materials	Increase demand for ENERGY STAR appliances.
	Incremental cost of ENERGY STAR appliances	Incentives via rebate	Decrease the cost barrier and increase market share of ENERGY STAR rate bulbs
	Retailer uncertainty about product performance and profit potential for providing energy efficiency services	Retailer training	Increase visibility and availability of ENERGY STAR appliances

B. Low Income Weatherization

1. Home Energy Assistance Program

Overview:
This program is designed to help low income customers manage their energy use and reduce their energy burden. Basic services include insulation, weatherization, cost effective appliance and lighting upgrades, and appropriate health and safety measures. Participating customers can receive up to $5,000 in program services. Customers served by Community Action Agencies may be eligible for additional DOE Weatherization Assistance (Wxn) funding. The program will also have a strong educational component specifically tailored for income eligible customers and designed to help them better understand their home and the factors that affect energy use.

The utilities are committed to working with the Community Action Agencies (CAAs), the Office of Energy and Planning, The Way Home (TWH), and other interested parties to improve and expand the collaboration initiated during the first phase of this program (see Attachment A). Specific goals for this collaboration include expanding the number of participants served by the CAAs and increasing the number of jobs jointly funded by the CORE and Wxn programs.

Delivery:
The Community Action Agencies (CAAs) and other independent contractors will deliver the program in a way that maximizes participation and energy saving goals. The NH Electric Utilities and contractors will cooperatively market the program, address customer intake, schedule work, conduct the initial home visit, install energy efficient measures, and perform quality assurance. The program will be open to all customers who meet the eligibility criteria for participation in the Fuel Assistance Program, the NH Electric Assistance Program, the DOE Weatherization Program and anyone living in subsidized housing or municipal and non-profit shelters serving the needy.

Qualified CAAs will be offered right of first refusal to deliver services under the Low Income Home Energy Assistance Program provided: (1) The CAAs agree to participate in a bidding process with other energy service providers to establish qualifications and pricing for program services. (2) The CAAs agree to provide services at established statewide rates. Where the same services are provided in the NH Home Performance with Energy Star Program, pricing would be the same for both programs. (3) CAAs would meet established statewide standards for customer response time, work quality, and delivery of program services. These statewide standards will apply to both the Home Energy Assistance as well as the NH Home Performance with Energy Star Programs.

The Electric Utilities will strive to market the program in such a fashion as to promote a reasonably level flow of work. In cases where the CAAs cannot provide low income energy efficiency services in accordance with the approved CORE weatherization production schedule, or they choose not to deliver the services, the work will be assigned to other

qualified vendors who will be held to the same standards for pricing, customer responsiveness and work quality. In such cases, the utility will provide notice to the CAA, and thereafter to the Weatherization Directors Association (WDA), that the work is being assigned to other qualified vendors. The utility will offer to discuss the matter with the CAA and WDA; however, the utility shall be permitted to assign work to other qualified vendors once notice has been provided to the CAA. If the matter cannot be resolved, the CAA reserves the right to file an appropriate motion with the Commission for resolution of the matter.

Marketing & Education:
The program will be promoted in a number of ways, including direct mail, call center and website promotion, and/or distribution of brochures at CAA or other social service agencies. Direct mailing of the program brochure will be used if CAA direct referrals are not adequate to meet program goals. Other marketing mediums will be investigated as needed. Utilities will work with the EAP program and CAAs to market the programs as efficiently as possible. The Energy Savers Booklet will also be given to program participants. Lastly, the CAP Energy Conference may include sponsorships by some of the utilities.

	2011	2012
Goals/Benefits:		
Estimated Number of Customers to be served:	840	933
Projected lifetime kWh savings:	21,150,327	21,395,548

The program will be coordinated closely with the Electric Assistance Program (EAP) in order to identify eligible customers. While all income eligible customers may participate in this program, working with EAP participants to reduce their energy burden has the further benefit of increasing the EAP funds available to other customers.

Budget:		
January 1 - December 31	$2,592,173	$2,899,061

Measures of Success & Market Transition Strategy:
Success factors for this program include: attaining the planned participation and energy savings goals, high customer satisfaction ratings, and successful delivery of all program services through the CAAs and independent contractors. No market transition strategy is recommended at this time based on the significant need for these services in the state, and the relatively small number who can be served in any given year due to budget constraints. This is consistent with the recommendation of the Energy Efficiency Working Group[17].

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↕ Supply Infrastructure	Lack of knowledge regarding factors that affect energy use	Educational component tailored specifically for low-income eligible customers	Foster a better understanding of home energy use
	Uncertainty regarding energy and cost savings of efficiency upgrades		
	Prohibitively high costs associated efficiency upgrades	Financial incentives	Ease the energy burden for low-income households Achieve energy savings goals
	Lack of CAA experience or knowledge of statewide standards	Option of delivering program through other qualified vendors	Maintain standards for pricing, customer responsiveness and work quality

[17] See Final Report of the Energy Efficiency Working Group, July 6, 1999, Docket No. DR 96-150, page A34.

C. Commercial & Industrial Program Descriptions

The programs offered for Commercial and Industrial customers seek to address and overcome a number of market barriers. The barriers in these sectors can be designated into three general categories:

1. barriers affecting the demand side (customers),
2. barriers affecting the efficiency installers, and
3. barriers affecting the supply infrastructure.

Specifically, the major barriers on the demand side consist of uncertainly regarding energy and cost savings of energy efficiency measures, limited staff availability for implementation and management of new energy efficient equipment, high costs associated with efficiency measures, and limited staff knowledge regarding the identification and installation of energy efficient equipment.

To address and overcome these barriers, the CORE programs provide support to the commercial and industrial sector through a variety of different offerings. Lack of customer awareness of the program and uncertainty regarding energy and cost savings of efficiency measures will be addressed through outreach on the CORE Utilities' program websites, training seminars for large commercial and industrial customers and service providers, outreach to energy service companies and third party service providers, and program marketing to leads generated from referrals to customer service or energy service representatives. To address high costs associated with energy efficient equipment, financial incentives are be provided to promote program participation and overcome the first cost issue associated with more expensive equipment. Technical assistance, including but not limited to project evaluation, measure identification and energy audits, will be provided to increase customer knowledge regarding identification, installation, implementation and management of energy efficient measures.

Barriers impacting the supply infrastructure include business practices and policies that deter the development and delivery of energy efficient products and services. In particular, barriers addressing these barriers include: limited availability of trained energy efficiency professionals, lack of contractor availability and knowledge regarding energy audits, commercial energy building codes and other services, and lack of builder awareness and experience with efficiency technology.

The increasing demand for efficiency services from the customers and installers will address many of these barriers, ultimately causing builders and contractors to perceive energy efficiency services as profitable values added services, increasing availability and knowledge of contractors focused on building changes and expansions. Training will also be provided to supply contractors with code compliance assistance. Opportunities will be provided for customers to partner with third party service providers to help develop a competitive marketplace in the energy efficiency industry.

Barriers in the supply infrastructure include business practices and policies that deter the development and delivery of energy efficient products and services or indicate an insufficient availability or commitment to such energy efficient products or services. Perceptions of lack

of demand for energy efficient projects and cost barriers to the development of innovative technology are among the larger barriers. To address these obstacles, incentives are available for energy efficient equipment not addressed by the prescriptive rebates. These steps in turn stimulate and facilitate development of innovative energy efficiency projects.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ▲	Lack of customer awareness of the full range of program offerings	CORE utility program and NHSaves websites Outreach: to Energy Service Companies and third party service providers, program website, annual bidders conferences Training Seminars Program marketing to leads generated from referrals by Customer Service or Energy Service Representatives	Increased program participation Increased demand for energy efficient equipment and services
	Uncertainty regarding energy and cost savings of efficiency measures		
	Prohibitively high costs associated with premium efficiency equipment	Financial incentives	Achieve energy efficiency goals Increased program participation Develop contractor infrastructure in a market-driven capacity
	Limited staff knowledge and availability regarding the identification, installation, implementation and management of energy efficiency measures	Technical Assistance, including project evaluation, measure identification and energy audits Customers utilize existing relationships with contractors	
	Limited availability of trained energy efficiency professionals	Potential for customers to partner with third party service providers Incentivize increased demand for energy efficiency services, driving increased supply of service professionals	Development of a competitive market place in the energy efficiency industry
	Lack of contractor availability and knowledge regarding energy audits , commercial energy building codes and other efficiency services	Contractors view energy services as profitable, due to increasing demand for efficiency measures Training activities	Increased supply of contractors capable of providing Technical Services Provide contractors with the expertise to provide code compliance assist.

Supply Infrastructure	Lack of builder awareness and experience with technology	Increased demand for efficiency services causes builders/contractors to perceive offering efficiency services as profitable	Increased supply of builders and contractors capable of providing energy efficiency services
	Perceptions of lack of demand for premium energy efficiency projects	Incentivize increased demand for energy efficiency equipment	
	Cost barriers to the development of innovative technology	Program focuses on projects not eligible for other programs	Stimulates and facilitates the development of innovative energy efficiency projects.

1. New Equipment and Construction Program

Overview:
This program targets customers with new construction, major renovation, or failed equipment replacement projects. The program offers prescriptive and custom rebates designed to cover the lesser of a one year payback or 75% of incremental costs up to the customer's incentive cap. The program also offers Technical Assistance including project evaluation, measure identification, equipment monitoring, and efficiency studies. Technical Assistance and Commissioning services may require a customer co-payment.

Other initiatives will include: Energy Efficient Schools Initiative - offering rebates of up to 100% of incremental costs; Building Codes - training on the proper implementation of New Hampshire's commercial energy building code; and Compressed Air Services - assisting customers with comprehensive audits and training. NH Electric Utilities will initially reserve five percent of the program budget for the Energy Efficient Schools Initiative; however, actual funding will be higher or lower depending on the number of new school building opportunities.

Delivery:
NH Electric Utility staff will be responsible for delivery of this program through multiple channels including: Account Executives and Energy Service Representatives working directly with customers; Economic Development staff working with new prospects as well as assisting customers who are relocating; and Energy Efficiency Program Administrators generating leads through the building development community, real estate professionals, and town permitting offices. The program will emphasize the benefits of selecting premium efficiency alternatives during the design stage of a project.

Marketing & Education:
The utilities will market the program through a number of strategies including one-on-one marketing by utility representatives, vendors, energy service providers, seminars and training sessions, and may use direct marketing in the case of specific market transformation initiatives Marketing materials developed may include case studies.

Goals/Benefits:	2011	2012
Estimated Number of Customers to be served:	173	188
Projected lifetime kWh savings:	92,279,165	95,394,775
Budget:		
January 1 - December 31	$2,138,836	$2,290,005
Energy Efficient Schools Initiative Percent	5%	

Measures of Success & Market Transition Strategy:
Program success will be based on attaining the planned participation and energy saving goals. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↕ Supply Infrastructure	Lack of customer awareness of the full range of program offerings	Direct contact by utility representatives to explain benefit of and opportunities for energy efficiency Training seminars	Increased program participation Increased demand for energy efficient equipment
	Uncertainty regarding energy and cost savings of energy efficiency measures		
	Limited staff knowledge regarding the identification and installation of energy efficiency measures.	Technical Assistance, including project evaluation, measure identification and equipment monitoring	Achieve energy efficiency goals
	Prohibitively high costs associated with premium energy efficiency equipment	Financial incentives	Increased program participation
	Lack of contractor availability and knowledge regarding commercial energy building codes	Training activities	Provide contractors with the expertise to provide code compliance assistance.

2. Large C&I Retrofit Program

Overview:
This program targets customers, 200 kW and larger[18], operating aging, inefficient equipment and systems. The program offers prescriptive and custom rebates designed to cover the lesser of a one year payback or 35%[19] of equipment and installation costs up to the customer's incentive cap. Opportunities typically include lighting, motors, HVAC, air compressors, chillers, variable frequency drives as well as custom measures. The program also offers Technical Assistance including project evaluation, measure identification, equipment monitoring, compressed air leak detection, and energy audits. Technical Assistance services may require a customer co-payment.

This program also includes an educational component that will offer training seminars of interest to commercial, municipal and industrial customers. Training seminars being considered include Commercial Audit Training, Compressed Air Services, Certified Energy Manager Class, and EPA's Motor Master.

Delivery:
Account Executives and Energy Service Representatives will offer this program directly to customers. Audits may be used to identify the opportunities for energy efficiency improvements. Customers wishing to take advantage of this program will sign a rebate application that documents what will be done, the estimated completion date, and the anticipated incentive amount.

Marketing & Education:
The utilities will market the program through a number of strategies including one-on-one marketing by utility representatives, vendors, energy service providers, seminars and training sessions, and may use direct marketing in the case of specific market transformation initiatives Marketing materials developed may include case studies.

	2011	2012
Goals/Benefits:		
Estimated Number of Customers to be served:	213	223
Projected lifetime kWh savings:	199,865,271	205,439,392
Budget:		
January 1 - December 31	$3,068,963	$3,248,342

[18] 100 kW and larger for NH Electric Cooperative members

[19] National Grid will pay up to 50% on Custom Retrofit Projects due to current market saturation in its service territory.

Measures of Success & Market Transition Strategy:
Program success will be based on attaining the planned participation and energy saving goals. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↕ Supply Infrastructure	Lack of customer awareness of the full range of program offerings	Direct contact by utility representatives to explain benefit of and opportunities for energy efficiency Training seminars	Increased program participation Increased demand for energy efficient equipment
	Uncertainty regarding energy and cost savings of energy efficiency measures		
	Limited staff knowledge regarding the identification and installation of energy efficiency measures.	Technical Assistance, including project evaluation, measure identification and energy audits	Achieve energy efficiency goals
	Prohibitively high costs associated with premium energy efficiency equipment	Financial incentives	Increased program participation
	Lack of contractor availability and knowledge regarding energy audits and other efficiency services	Contractors view energy services as profitable, due to increasing demand for efficiency measures	Increased supply of contractors capable of providing Technical Services

3. Small Business Energy Solutions Program

Overview:
The Small Business Energy Solutions Program is a turnkey solution tailored to the unique needs of small businesses, a customer base which is very diverse in terms of technical capabilities and financial resources. This program will provide turnkey energy efficiency services for customers under 200 kW demand[20].

As part of the turnkey services, the utilities offer lighting and refrigeration upgrades delivered by competitively selected vendors who perform initial assessments of lighting and refrigeration systems, recommend energy efficient improvements, and then install appropriate measures. Program offerings include but are not limited to lighting, programmable thermostats, electric hot water measures, and refrigeration measures. The program pays 50% of the installed costs up to the customer's incentive cap. In addition, customers may elect to use their own contractors to complete energy projects.

Marketing & Education:
In addition to the marketing being done by the other C&I Programs, marketing for this program will focus on direct mail to customers/members, leads from trade organizations, and referrals from customer service.

Delivery:
Utility personnel will administer the program and will contract for the delivery of program services. Leads will be generated from referrals from Customer Service or Energy Service Representatives, past audits, and other marketing efforts. Contractors will meet with the customer, perform a simple audit of the customer's facility, and recommend cost effective energy saving measures for installation. Customers may elect to have measures installed by the utility's contractor or a licensed electrician of their own choosing.

	2011	2012
Goals/Benefits:		
Estimated Number of Customers to be served:	696	782
Projected lifetime kWh savings:	113,537,882	117,546,049
Budget:		
January 1 - December 31	$3,227,526	$3,548,323

[20] 100 kW and lower for NH Electric Cooperative members

Measures of Success & Market Transition Strategy:
Program success will be based on attaining the planned participation and energy saving goals as well as customer satisfaction with the program. Evaluations will help determine program changes, if needed, over time to address the following market barriers.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↑	Lack of customer awareness of the program	Program marketing to leads generated from referrals by Customer Service or Energy Service Representatives	Increased program participation Increased demand for energy efficient equipment
	Uncertainty regarding energy and cost savings of energy efficiency measures		
	Limited staff availability for implementation and management of energy efficiency equipment.	Program provides turnkey services Customers utilize existing relationships with contractors	Achieve energy efficiency goals Increased program participation\
	Prohibitively high costs associated with premium efficiency equipment	Financial incentives	Develop contractor infrastructure in a market-driven capacity
	Lack of builder awareness and experience with technology	Increased demand for efficiency services causes builders/contractors to perceive offering efficiency services as profitable	Increased supply of builders and contractors capable of providing energy efficiency services
↓ Supply Infrastructure	Lack of contractor availability		

4. Educational Programs

Overview:
The NH Electric Utilities believe that educational programs play an important role in raising awareness about energy efficiency and complement the other programs. The Educational Programs planned for 2010 are as follows:

1. Energy Code Training: Provide financial support for the Utility/State of NH/NHPUC statewide residential and C&I energy code trainings.

2. C&I Customer Education: Deliver a training program to assist facility managers in learning tools of the trade, identifying energy efficiency opportunities, monitoring and tracking energy use, and developing an energy management plan. Also develop and offer training seminars and workshops to help building owners, facility personnel, architects, engineers, energy service companies and others better understand the opportunities for improving the energy performance of their buildings and equipment. This also includes collaborating and partnering with trade allies to encourage and sponsor energy efficiency seminars and presentations for NH businesses.

3. Energy Education for Students: The NH Electric Utilities will support programs such as:
   Grades K-2: Poss's Energy Posse
   Grade 3: Teacher Consultants performing 1 hour Energy Efficiency classes in schools
   Grades 3-4: "We understand it's up to us to use energy....wisely!" ("Energy UUUU")
   Grades 3-4: Energy UUUU2, a 1-day program for students and their teachers
   Grades 5-6: Watt Watchers, a 2-day program for students on lighting surveys
   Grades 7-12: Savings Through Energy Management (STEM)
   Grades 7-12: Bright Ideas, a 3-day program for students and their teachers
   The purpose of these programs is to educate students in grades K-12 about energy efficiency. The NH Electric Utilities will conduct outreach to schools to promote these programs.

In addition, the NH Electric Utilities have committed to numerous education initiatives as part of its CORE programs. The residential and low income education initiatives are integral to the delivery of the respective programs and are budgeted with the programs.

Delivery:
Varies by program; educational classes are presented by industry specialists.

Goals/Benefits:
Each educational effort is focused on meeting the needs of a particular customer or group of customers; however, the common theme of these efforts is to raise awareness and understanding of the benefits of energy efficiency, and encourage the implementation of energy efficiency improvements.

Budget:

Educational Program Budgets	NGRID	NHEC	PSNH	UNITIL	2011
Energy Code Training	$2,000	$3,000	$25,000	$10,000	**$40,000**
C/I Customer Education	$1,000	$10,000	$15,000	$5,500	**$31,500**
Energy Education K-12	$6,000	$13,129	$73,264	$10,000	**$102,393**
Total	**$9,000**	**$26,129**	**$113,264**	**$25,500**	**$173,893**

Educational Program Budgets	NGRID	NHEC	PSNH	UNITIL	2012
Energy Code Training	$2,000	$5,000	$28,000	$10,000	**$45,000**
C/I Customer Education	$1,000	$10,000	$15,000	$5,500	**$31,500**
Energy Education K-12	$6,000	$13,415	$80,793	$10,000	**$110,208**
Total	**$9,000**	**$28,415**	**$123,793**	**$25,500**	**$186,708**

Measures of Success:

Success of these programs is based on customer satisfaction. This includes informal feedback from instructors and participants as well as customer satisfaction surveys used to evaluate a particular training session. These programs will be modified as needed to meet changing customer needs.

III. Utility Specific Program Descriptions

NEW HAMPSHIRE ELECTRIC COOPERATIVE, INC.

A. Smart Start Program

Overview:
The Smart Start Program provides members with an opportunity to install energy efficient measures with no up front costs, and pay for them over time with the savings obtained from lower energy costs. Under the program, NHEC pays all of the costs associated with the purchase and installation of the approved measures. A Smart Start Delivery Charge, calculated to be less than the monthly savings, is added to the member's monthly electric bill until all costs are repaid. The program is designed to overcome many of the traditional barriers to energy efficiency projects including: high first cost, customer uncertainties related to achieving energy savings, customer reluctance to install measures if there is a possibility of moving from the premise before benefiting from the efficiency project, and the so-called "split incentive", where a landlord gets little return on an investment that reduces a tenant's energy costs and a tenant has no incentive to invest in their landlord's building.

Delivery:
NHEC plans to continue offering Smart Start to commercial members. NHEC staff will identify potential projects and make Smart Start offers where it applies. These offers may be combined with other energy efficiency programs for which the member is eligible.

	2011	2012
Budget:		
Program Implementation	$7,105	$7,986

Measures of Success & Market Transition Strategy:
Success factors for this program include Member acceptance of Smart Start offers, achieving high customer satisfaction ratings, and having a low default rate on Smart Start loans.

B. High Efficiency Heat Pump Program

Overview:
The objective of the High Efficiency Heat Pump Program is to assist residential members to reduce their energy costs by installing high efficiency heat pump technologies. These technologies include high efficiency air source heat pumps and geothermal heat pumps. The program has a number of goals, which include:

1. Increasing availability of energy efficient, zero onsite emission solutions to NHEC member's heating and cooling needs;
2. Assessing the market potential and technical feasibility of various heat pump technologies;
3. Identifying barriers to increased penetration of energy efficient heat pumps and ways to overcome them; and
4. Determining the cost effectiveness of various heat pump technologies and applications.

NHEC will offer this program to residential members for new construction applications in conjunction with the Energy Star Homes Program.

Delivery:
Delivery will be coordinated with the Core Energy Star Homes Program. NHEC will work with its members and installation contractors to insure maximum performance from the building shell and heating/cooling equipment.

	2011	2012
Goals/Benefits:		
Estimated Number of Members to be served:	12	13
Projected lifetime kWh savings:	6,351,954	6,856,504
Projected Benefit/Cost Ratio:	2.12	2.22
Budget:		
January 1 - December 31	$96,699	$107,107

Measures of Success & Market Transition Strategy:
Success factors for this program include attainment of the planned participation and estimated savings, and high customer satisfaction ratings. Market barriers that this program is working to overcome are:

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↕ Supply Infrastructure	Lack of customer awareness of the program	Coordination with ENERGY STAR Homes program, leveraging promotional opportunities and providing HERS ratings	Increased program participation Increase awareness of home energy performance
	Uncertainty regarding energy and cost savings of geothermal and air source heat pump systems		
	Acquiring a HERS score of at least 65		
	Prohibitively high costs associated with geothermal and air source heat pump systems	Financial incentives and federal tax breaks	Continued viability and growth of geothermal and air source heat pump systems
	Lack of builder awareness and experience with technology	Coordination with ENERGY STAR Homes program	Provide builders/contractors with the resources necessary to install geothermal and air source heat pump systems
	Lack of strong relationships between builders and geothermal contractors		

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

This section provides details on issues and programs specific to PSNH.

A. Budget Narrative

The following assumptions were used to develop PSNH's budget:

1. The budget is based on forecasted 2011 sales of 7,797,396 MWh (down 0.4% from 2010 forecast of 7,797,396 MWh) and a System Benefits Charge (SBC) rate of 1.5 mills/kWh for the first 6 months of 2011 and 1.8 mills/kWh for the last 6 months of theyear. (2012 sales forecast is 7,895,734 and the SBC was calculated using 1.8 mills/kWh)
2. No 2009 carry forward balance was made as an adjustment was already made to the 2010 budget as a result of SB 300.
3. Estimated ISO-NE Forward Capacity Payments for January – December 2011 were added to this budget ($1,400,000). (In NHPUC Order No. 24,719 on December 22, 2007, the NHPUC stated "We also believe that it is appropriate, as a preliminary matter, to contribute any payments received by utilities for Core program peak load reduction back to the Core programs."). These funds were split first 14.5% for Home Energy Assistance (15% for 2012) and then 70% of the remainder for C&I and 30% for Residential.
4. A set aside was reserved for a shareholder incentive. The actual incentive will be based on the methods approved by the New Hampshire Public Utilities Commission. Two separate calculations are required. The first applies to the Smart Start Program and is based on 6% of Smart Start loans repaid[21]. The second applies to all other programs and is based on the calculations recommended by the Energy Efficiency Working Group and approved by the Commission. The Shareholder Incentive section of this document covers this calculation in more detail. The set aside for the remaining programs was estimated at 8%[22]; the budget includes separate line items for the estimated commercial and residential incentives.
5. All customers fund the Low Income Energy Efficiency Program (HEA) in proportion to their contributions to SBC revenues. Funding for this program comes "off the top" of the budget after the shareholder incentive calculation.
6. Marketing was estimated to be approximately 2% of the budget, with the majority of this being in the Energy Star Lighting Program.
7. Monitoring and evaluation was estimated and budgeted at 5% of the overall budget.
8. The funds remaining after funding the Low Income program are allocated between customer classes in proportion to contributions to SBC revenues (40.5% residential, 59.5% Commercial & Industrial);

[21] Docket DE 01-080, Order No. 23,851, November 29, 2001, Section III, page 19.

[22] More precisely, this calculation is based on 8% of the non-incentive portion of the budget in accordance with the Energy Efficiency Working Group Report which states on page 21, part 3f, " For incentive calculation purposes only, 'planned energy efficiency budget' is defined as the total program budget minus shareholder incentives...".

In addition there are several factors that could impact the budget during implementation of the CORE Programs including:

9. Any difference between the actual spending level achieved in the 2010 CORE Programs and the System Benefits Charge revenues collected will be allocated to future year program budgets.
10. PSNH plans to monitor spending in each of the programs and propose adjustments as necessary (e.g. in response to customer demand) in accordance with the guidelines proposed in the Introduction section of this filing.
11. PSNH will accrue interest[23] monthly at the prime rate[24] on the average net balance of the SBC revenues less funds expended for programs and services.
12. PSNH's budget and SBC revenues are based on sales projections. Actual sales may differ resulting in proportionately more or less SBC revenue available for energy efficiency programs. Budgets will be adjusted to reflect actual sales.

The budget is presented in Attachment H.

B. Availability of C&I Programs

PSNH proposes to offer the CORE and Utility specific programs to all of the Company's commercial and industrial customers except for those taking service under Backup Delivery Service Rate B. Rate B is designed for customers who require backup and maintenance delivery service, but who normally provide their own generation during which time they make no contribution to the System Benefits Charge.

C. Customer Installed Generation

PSNH's commercial and industrial customers who supply a portion of their energy needs through means which by-pass their meter and for which no System Benefits Charge revenues are collected will qualify for services and incentives offered as part of the state-wide energy efficiency programs with certain restrictions. The energy supply could be generation installed by the Customer or another party on the customer's side of the meter. However, the restrictions noted below apply regardless of the source of the energy (collectively referred to here as "customer generation").

- Customer generation which exceeds 50% of the customer's annual maximum kW demand ("Demand") will not qualify for services and incentives.

- A customer's maximum incentive will be based on the net of their demand less the name plate rating of the customer generation. For example, a Rate GV customer with a demand of 150 kW who installs 60 kW of generation will be capped at the incentive available to Rate G customers. The table below depicts incentive levels for commercial and industrial

[23] DE 96-150, Order 23,574, November 1, 2000, page 25.
[24] http://www.moneycafe.com/library/primerate.htm

customers. Incentives are limited to the customer's end uses and may not be applied to the generation equipment.

- ❑ Customers who install generation within one year of the date they install measures for which they receive a monetary incentive must refund any difference between the incentive received and the incentive for which they would qualify after installing generation. Any such amount would be repaid within 60 days of PSNH's request for payment.

This policy does not apply to customer generation used for emergency supply during service outages on PSNH's transmission and distribution system. The customer may periodically test emergency generators without affecting program eligibility. In addition, customer generation which meets the requirements for net metering are not subject to the restrictions noted above.

D. Incentive Caps on C&I Programs

In order to manage the overall budget and to help achieve an equitable distribution of program funds, PSNH proposes the following annual caps on the level of incentives offered to any individual customer.

Customer Classification	Retrofit Programs Annual Cap	New Construction Cap Annual Cap
Rate G Customers (100 kW and below)	$50,000	$50,000
Rate GV Customers (101 kW to 1,000 kW)	$50,000 plus $5,000 for each GWH[25] above 1 GWH	$100,000
Rate LG Customers (in excess of 1,000 kW)	$100,000 plus $1,000 for each GWH above 10 GWH	$150,000

The retrofit caps apply to the total of all retrofit program incentives paid. Retrofit and New Equipment & Construction incentives are independent of one another. Customers selected to participate in the C&I RFP Pilot Program described below in Section I may earn additional incentives and are not limited by the annual incentive caps shown above.

These customer caps are intended to allow PSNH to spread funds out to many different customers rather than on one or two large projects or customers. The caps will serve as guidelines to be used in dispersing rebates, and will not be absolute limits on the amount of incentive to be provided to any particular customer. PSNH reserves the right to provide incentive payments in excess of the caps on a case-by-case basis.

[25] GWH – a gigawatt-hour (equal to 1,000,000 kilowatt-hours). The cap will be based on the customer's GWHs for the preceding calendar year. For new or expanding facilities, the cap will be based on the estimated annual usage.

E. Smart Start Program

Overview:
The Smart Start Program provides customers with an opportunity to install energy saving measures with no up front costs and to pay for them over time with the savings obtained from lower energy costs. Under the program, PSNH pays all of the costs associated with the purchase and installation of approved measures. A Smart Start Delivery Charge, calculated to be no more than the monthly savings, is added to the monthly electric bill until all costs are repaid. The program is designed to overcome many of the traditional barriers to energy efficiency projects including: high first cost, customer uncertainties related to achieving energy savings, customer reluctance to install measures if there is a possibility of moving from the premise before benefiting from the efficiency project, and the so-called "split incentive" where a landlord gets little return on an investment that reduces a tenant's energy costs and a tenant has no incentive to invest in their landlord's building.

Delivery:
PSNH plans to continue offering Smart Start to municipal customers. Company personnel will meet with municipal customers to inform them of the program, identify potential projects, and to make Smart Start offers. Smart Start offers may be combined with other energy efficiency programs for which the customer is eligible.

This program provides eligible customers with an opportunity to purchase energy efficient products and services with no up-front costs.

Budget:	2011	2012
Program Implementation	$30,000	$35,000

Measures of Success & Market Transition Strategy:
Success factors for this program include attaining the planned participation goal, achieving high customer satisfaction ratings, and having a low default rate on Smart Start loans.

F. ENERGY STAR® Homes Program Enhancement: Geothermal and Air Source HP Option

Overview:
This enhancement will provide an incentive for customers to install geothermal and air source heat pumps as part of the ENERGY STAR Homes Program. The objective of this program is to assist residential customers in reducing their energy costs by installing high efficiency heat pump technologies. These technologies include high efficiency air source heat pumps and geothermal heat pumps. The program has a number of goals, which include:

1. Increasing availability of energy efficient, zero onsite emission solutions for home heating and cooling needs;
2. Assessing the market potential and technical feasibility of various heat pump technologies;
3. Identifying barriers to increased penetration of energy efficient heat pumps and ways to overcome them; and
4. Determining the cost effectiveness of various heat pump technologies and applications.

Delivery:
Delivery would be coordinated with the CORE ENERGY STAR Homes Program. Builders working with Geothermal systems contractors and/or HVAC contractors would provide the services specific to these options.

	2011	2012
Goals/Benefits:		
Estimate number of customers to be served	54	48
Projected lifetime kWh savings:	27,205,110	22,599,886
Projected Benefit/Cost Ratio:	2.62	2.02

According to the Environmental Protection Agency, geothermal systems are the most energy efficient, environmentally clean, and cost efficient space conditioning systems available[26]. PSNH has been a strong supporter of geothermal systems in New Hampshire since 1994. More than 400 New Hampshire builders, contractors, and vendors have participated in earlier programs. The industry is growing as evidenced by customer demand and attendance at manufacturers' heat pump training sessions around the state. PSNH has also seen an interest by builders, HVAC contractors and customers to install Air Source Heat Pumps in New Hampshire. This enhancement to the ENERGY STAR Homes Program is important to the continued viability and growth of geothermal and Air Source Heat Pump systems in New Hampshire.

Budget:		
January 1 - December 31	$361,421	$395,578

[26] http://www.ghpc.org/home.htm

Measures of Success & Market Transition Strategy:
Success factors for this program include attaining the planned participation and energy savings goals. The geothermal and air source heat pump options would be available for the duration of the ENERGY STAR Homes Program. Market barriers that this program is working to overcome are:

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↕ Supply Infrastructure	Lack of customer awareness of the program	Coordination with ENERGY STAR Homes program, leveraging promotional opportunities and providing HERS ratings	Increased program participation Increase awareness of home energy performance
	Uncertainty regarding energy and cost savings of geothermal and air source heat pump systems		
	Acquiring a HERS score of at least 65		
	Prohibitively high costs associated with geothermal and air source heat pump systems	Financial incentives and federal tax breaks	Continued viability and growth of geothermal and air source heat pump systems
	Lack of builder awareness and experience with technology	Coordination with ENERGY STAR Homes program	Provide builders/contractors with the resources necessary to install geothermal and air source heat pump systems
	Lack of strong relationships between builders and geothermal contractors		

G. Education Enhancement - C&I Customer Partnerships

Overview:
Partner with up to five customer groups to provide focused education to members on energy efficiency technologies and opportunities available in NH.

Delivery:
There is no set format envisioned for this proposal; it is intentionally left open to accommodate a wide range of opportunities. However, an example may serve to illustrate the type of partnerships undertaken so far.

- ✓ The NH Lodging & Restaurant Association in the development and implementation of a training program for their members interested in the sustainable lodging and restaurant program. In an effort to address member issues associated with travel and schedules, this organization is developing three trial webinars focused on energy issues. Each webinar would be approximately 60 to 90 minutes in length and offered during non-peak operational hours for the hospitality industry.

Goals/Benefits:
In its order[27] approving the CORE Programs, the Commission expressed interest in finding innovative approaches for market transformation. PSNH believes this proposal provides an opportunity to work with customers and other parties to develop alternatives to traditional approaches.

	2011	2012
Budget:		
January 1 - December 31	$28,091	$30,703

Measures of Success & Market Transition Strategy
Specific success factors will vary depending on the partnership; however, in general, the goal will be to advance the partnership to a point where it can become self-sustaining.

[27] Order No. 23,850, November 29, 2001, page 18

H. C&I RFP Program for Competitive and Economic Development

Objective:
To promote competitive market development in the energy efficiency industry by encouraging third parties to bid for energy efficiency projects on a competitive basis. The RFP Pilot Program is aimed at energy efficiency potential from large C&I projects that are not participating through other existing energy efficiency programs.

Target Market:
The minimum customer size is 350 kW of demand, the minimum project energy saving is 100,000 kWh per year (can be aggregated sites), and the minimum total project cost is $150,000. C&I customers of PSNH, energy service companies[28] and other third party service providers representing C&I customers are eligible to participate in this program.

RFP participants can be any PSNH customer[29], energy service company, or third party service provider representing a PSNH customer who contracts with PSNH to provide energy savings from an approved energy efficiency project. It is expected that bidders typically will be of two types:

1. customers with significant in-house technical capability, or
2. customers allied with firms that specialize in implementing energy efficiency projects and have a staff of professionals trained to identify energy efficiency opportunities, calculate potential savings, design system modifications, manage construction and installation of energy efficiency measures, and measure energy savings.

Incentives:
The program offers incentives for measurable energy savings achieved by the installation of energy efficiency measures as specified in a project agreement. Eligible improvements include energy-efficient equipment, products, and measures that are cost-effective according to the criteria established by the NH Energy Efficiency Working Group and approved by the NHPUC. The estimated savings are verified using approved protocols. The estimated savings are measured based on the difference between the energy use of the new versus the existing customer equipment.

Eligible measures include replacing standard fluorescent lighting with high efficiency fluorescent lighting, installing variable speed drives on motors, installing lighting controls to reduce lighting operating hours, and replacing low efficiency air conditioning equipment with high efficiency equipment.

Measures that are not eligible include new construction projects, any power-producing project such as cogeneration, switching from electric energy to another fuel (fuel switching), or any repair or maintenance project.

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[28] Contractors involved in the implementation of PSNH's C&I energy efficiency programs are ineligible to participate in the RFP Program.
[29] Except for Rate B customers (see Availability under C&I Program Descriptions).

One of the program's goals is to assess the degree to which projects require incentives. As such this program will not have published incentives. Each proposal will need to identify the required incentive amount. All bids are evaluated based upon a comparison of energy savings and other price and non-price variables. Non-price variables include such factors as whether the project includes measures other than lighting (e.g., HVAC and process measures) and whether the environmental impacts reduce on-site emissions or waste stream impacts. All projects will be evaluated on the basis of established cost-effectiveness criteria.

Incentive Strategy:
Incentives are intended to be market driven in that bidders (or potential participants) request the incentive level that is needed to implement a retrofit or replacement energy efficient project. If their incentive request is too high or their project savings are too low, a competing project will be awarded the limited RFP Program funds.

Delivery:
Potential bidders are invited to an annual bidders conferences" to learn how to participate in the program. PSNH will provide information on this program at this session as well as on the PSNH website to PSNH customers greater than 200 kW peak demand who might qualify either individually or on an aggregated demand basis. Potential energy service companies and third party service providers will also be notified. Collateral materials will be made available to educate these groups on the RFP Program.

	2011	2012
Goals/Benefits:		
Estimated Number of Customers to be served:	6	6
Projected lifetime kWh savings:	29,295,460	30,184,883
Projected Benefit/Cost Ratio:	3.16	2.96

This program is designed to foster competition and to stimulate the development of innovative energy efficiency projects. It will also provide an opportunity to provide incentives for larger projects that might not be pursued because of funding "caps" in other programs. And finally, it will provide the data needed to assess whether or not the incentive levels in the other C&I programs are set appropriately. For example, if bidders in the RFP program consistently seek incentives lower or higher than those offered in the CORE C&I energy efficiency programs, it may lead to review and possible revision of the CORE incentive levels.

Budget:

January 1 - December 31	$475,542	$519,752

Measures of Success & Market Transition Strategy:

Success factors for this program include: attaining the planned customer participation and energy savings goals as well as and generating a high level of interest among customers, energy service companies and third party service providers that results in a competitive bidding process.

A decision to discontinue this program will be based on factors such as customer/contractor participation, incentive level requirements, and project level details (e.g. innovative energy efficiency measures vs. lighting only projects). PSNH staff will review the success of this program annually.

Efficiency Market	Market Barrier	Program Intervention	Program Objective
Customer Demand ↑	Lack of customer awareness of the program	Annual bidders conferences PSNH website	Increased program participation
	Uncertainty regarding energy and cost savings of efficiency measures	Outreach to Energy Service Companies and third party service providers	Increased demand for energy efficient equipment and services
	Prohibitively high costs associated with premium efficiency equipment	Financial incentives	Achieve energy efficiency goals Increased program participation
	Limited availability of trained energy efficiency professionals.	Potential for customers to partner with third party service providers Incentivize increased demand for energy efficiency services, driving increased supply of service professionals	Development of a competitive market place in the energy efficiency industry
	Perceptions of lack of demand for premium energy efficiency projects	Incentivize increased demand for energy efficiency equipment	
↓ Supply Infrastructure	Cost barriers to the development of innovative technology	Program focuses on projects not eligible for other programs	Stimulates and facilitates the development of innovative energy efficiency projects.

UNITIL ENERGY SYSTEMS, INC.

A. Energy Efficiency On-Line Tools

Overview:
In addition to the CORE programs, Unitil Energy Systems, Inc. ("UES" or "Company") will continue to offer its web-based analysis tools known as HomeEnergySuite and CommercialEnergySuite.

Accessible through the Company's website (www.unitil.com) customers are provided with on-line tools which allow them to explore how they use energy in their homes and businesses. The HomeEnergySuite□ ("HES") features a home energy calculator that allows residential customers to estimate energy use and costs based on individual home profile inputs. Customers who run audits receive customized actionable items, and as a result, learn how to make a real difference in energy use in their home and/or business. Customers will be directed to energy efficiency program offerings upon completion of the on-line home energy audit. Also featured in HES is an interactive house that customers can explore to help them understand where and how energy is used in the home. Other tools in the HES include appliance and lighting calculators, a residential energy library, the Fundamentals of Electricity module, and the popular Kids Korner.

The CommercialEnergySuite™ ("CES") module helps commercial customers, primarily small-to-medium-sized, understand their energy use and find ways to reduce their operating costs. CES includes an energy calculator (ComCalc) and reference libraries of technical information about commercial buildings and energy use, including the Understanding Demand library.

Implementation / Delivery:
The Company will maintain and incorporate enhancements to the platform as needed. Customers will be made aware of these on-line resources via the Company's energy efficiency pages on its website (www.unitil.com), direct referral from customer service or account representatives, and through mail inserts. The Company will continue its outreach to primary school educators to make them aware of the resources available to them in our "Teacher Feature" module of Kids Korner.

Goal and Benefits:
This program offers residential and small-to-medium commercial customers a convenient way to examine their energy use and better understand their energy costs. To the extent it can eliminate on-site audits, it is a relatively inexpensive way to provide customers with the information they need to control their energy use. It also provides an alternative option for customers who may not be ready to make energy efficiency investments or simply wish to make improvements on their own. Overall, the website tools provide Unitil's customers with a high value marketing, informational and promotional tool for energy efficiency.

	2011	2012

Program Budget:

January 1 - December 31	$33,000	$33,000

Measures of Success:

Success for this education enhancement will be measured by the number of participants ("hits" on the site) and customer feedback on their experience with the on-line resources.

IV. Monitoring & Evaluation

A. Monitoring and Evaluation Plan

A settlement agreement in 2006 approved by the New Hampshire Public Utilities Commission on March 17, 2006 (Order No. 24,599 in DE 05-157) transferred responsibility for monitoring and evaluation efforts from the Utilities to Commission Staff. Under that agreement, the Commission receives input and advice from the utilities on monitoring and evaluation activities and to also coordinate efforts with the Utilities' Core programs implementation efforts. In addition, there was also agreement:

> (1) to provide utilities with the opportunity to comment on preliminary study findings and results prior to publication, (2) to invite interested parties to attend and provide input at evaluation presentations, (3) to permit utilities, on a case-by-case basis considered in light of study design, costs, schedule and similar issues, to participate in regional monitoring and evaluation studies as well as studies conducted by multi-jurisdictional utilities, and (4) that the Commission would aggressively pursue all available means to protect customer confidential information as permitted by the Right-to-Know Law, RSA 91-A, given that monitoring and evaluation studies frequently require access to such information. (Order No. 24,599, Page 5)

For 2011 and 2012, Measurement and Verification (M&V) efforts are funded at approximately five per cent of the annual program budgets. These funds are utilized to support the following activities:

1. Evaluation Planning
2. Measurement and Verification of New Hampshire CORE Energy Efficiency Programs
3. Regional Measurement and Verification Projects
4. Regional Avoided Energy Supply Cost Studies
5. Miscellaneous Research
6. CORE EE Program Tracking and Reporting

During 2011-2012, the Utilities have identified a number of evaluation activities planned for or needed in New Hampshire.

1. Evaluation Planning – A multi-year evaluation plan will be developed to describe the measurement and verification projects and activities that will be required to demonstrate the effectiveness and quantify the savings achieved by energy efficiency programs that are funded by New Hampshire customers via the System Benefits Charge. The evaluation plan will also address the requirements that have been established by ISO New England to measure and verify the demand reduction value of qualified demand resources offered into the ISO-NE Forward Capacity Market.

2. NH CORE EE M&V Projects – Several projects will be initiated in 2010 to demonstrate the effectiveness and quantify the savings achieved by the New Hampshire CORE Energy Efficiency programs and to comply with the requirements that have been established by ISO New England to measure and verify the demand reduction value of qualified demand resources offered into the ISO-NE Forward Capacity Market. Impact evaluations are planned to be conducted for the following programs:

- Energy Star Lighting: Impact Evaluation
- Small Business Energy Solutions: Impact Evaluation
- NH Home Performance with Energy Star: Impact Evaluation (to review the effectiveness of program delivery and to verify energy savings achieved by the energy efficiency measures installed during the 2009 implementation year)
- Commercial & Industrial New Equipment and Construction Program: Impact Evaluation

3. Regional Measurement and Verification Projects - The New Hampshire utilities are members of the Regional Evaluation, Measurement and Verification Forum (EM&V Forum). The EM&V Forum measurement and verification projects are focused on the development of data that can be utilized by the members in a variety of applications, including compliance with ISO-NE M&V standards established for participants in the Forward Capacity Market. By pooling the resources of the members in New England, New York and the Mid-Atlantic states, primary data development can be accomplished more cost-effectively than independent contracting by each member. These jointly-funded projects also seek to share and leverage existing data in order to reduce the cost of primary data collection. Planned activities include:

a. Protocol Development Projects:
   #A1. Glossary of EM&V Terms & Definitions Project
   #A2. Develop Common EM&V Methods Guidelines and Survey Savings Assumptions.
   #A3: Survey Existing EE Savings Reporting Requirements and Develop Common Reporting Guidelines.
   #A4: EM&V Protocol Development/Modifications in Wholesale Capacity Markets (for ISO-New England and PJM wholesale markets).
   #A5: Develop Common Savings Assumptions/Algorithms Database. Sub-region Mid-Atlantic project

b. Research & Evaluation Projects:
   #B1: Loadshape Project - Survey Available Data Sources (Phase 1), and Conduct Primary Research (Phase 2).
   #B2: C&I Lighting Measure Life and Persistence Project.
   #B3: Scoping Projects: Survey Net Savings Methods, Impact of EE on Advancing Codes and Standards.

c. Education & Information Access Activities:
   #C1: Develop EM&V Forum website

#C2: Hold Annual Forum Public Meeting
#C3: Develop EM&V Forum library
#C4: Develop communications plan, information sharing and confidentiality policy

4. Regional Avoided Energy Supply Cost Studies – The New England Avoided Energy Supply Component (AESC) Study Group conducts biennial studies to update the avoided energy and capacity costs utilized by member utilities in their energy efficiency program benefit-cost analyses. The next study is scheduled to be initiated in 2011.

5. Miscellaneous Research – In addition to program M&V studies, special studies are conducted to inform CORE EE Program planning and policy efforts. For example, a study was completed in 2009 to evaluate the potential for cost-effective energy efficiency investments in the residential, small commercial, large commercial and industrial classes in New Hampshire.

6. CORE EE Program Tracking and Reporting – M&V activities are supported by program tracking and reporting systems that maintain detailed energy efficiency project and measure data that are used to report energy and peak demand savings achieved by the programs.

B. REPORTING

Beginning in 2002, the NH Electric Utilities have worked with Parties and Staff to refine the NH CORE Energy Efficiency Quarterly Reports that are used to help gauge the progress of both the CORE Programs and the Utility Specific Programs. These reports provide information on the progress towards goals of each program by utility and in aggregate. These quarterly reports are defined as follows:

1. "**CORE NH Program Highlights**" compares program goals to actual accomplishments and includes data about progress toward achieving program goals, including actual expenditures, participation, and lifetime kWh savings.

2. "**Budget Details Report**" provides a series of pie charts illustrating program and sector (e.g. residential and commercial/industrial) expenditures by the program tracking activities defined on the next page.

3. "**Home Energy Assistance Program Report**":
   - states the number of single family homes and the number of multi-family units that received energy efficiency measures and services for that quarter.
   - identifies the county where energy efficiency services were provided and includes the number of units in the county where such services were provided or measures installed.
   - identifies for each Electric Utility and for the state in total, the number of projects completed, the number of jobs funded by both CORE and DOE, the cumulative collaborative DOE expenditures, the cumulative collaborative CORE expenditures, and the cumulative non collaborative CORE expenditures.
   - provides a breakdown of the types of measures installed and services provided sorted by county, utility, and dwelling type (e.g. single or multi-family).
   - provides a breakdown of completed jobs by county and contractor type (e.g. Local CAA, Outside CAA, Private Contractor).
   - includes an action plan for any utility that is below its quarterly production goals by more than 20%. The action plan shall include revised production goals. The subsequent quarterly report shall report on the status of the revised production goals.

4. **"Forward Capacity Market Report"** documents the payments received from ISO-NE and the associated expenses with this effort.

These reports will be submitted to the Commission with copies to the Parties and Staff in advance of quarterly meetings of the CORE Management Team with Parties and Staff.

Program Tracking Activities	
Tracking Activity	**Description**
ADMINISTRATION – INTERNAL	Used to track all internal utility costs associated with program design, development, regulatory support, and quality assurance. Costs captured in this activity include: employee labor, benefits, expenses, materials, and supplies
ADMINISTRATION – EXTERNAL	Used to track the total cost of contractors and consultants used in support of program design, development, regulatory support, and quality assurance. Captures all of the utility's external costs associated with program administration.
CUSTOMER REBATES & SERVICES	All rebate dollars paid directly to customers as well as "indirect" payments to customers such as discounted prices. Also includes all costs directly attributable to providing energy efficiency services to customers (e.g. technical audits, employee and contract labor for installing efficiency measures, expenses, materials, and supplies).
INTERNAL IMPLEMENTATION SERVICES	Used to track the utility's internal costs associated with delivering program services to customers. Costs captured in this activity include: employee labor, benefits, expenses, materials, and supplies.
MARKETING	Used to track all costs associated with marketing, advertising, trade shows, toll free numbers, and WEB site. Costs captured in this activity include: labor, benefits, expenses, consultants, contractors, materials, and supplies.
EVALUATION	Used to track all costs associated with monitoring and evaluation. Costs captured in this activity include: labor, benefits, expenses, consultants, contractors, tracking systems, materials, and supplies.

V. Shareholder Incentive Methodology

Basic Calculation

The NH Electric Utilities are allowed to earn a portion of their energy efficiency budget as an incentive "to motivate companies to achieve and exceed program goals." NHPUC Order No. 24,203, at 13 (September 5, 2003). The formula used to calculate this incentive was initially proposed by the Energy Efficiency Working Group in its final report and the Commission adopted the formula in its order regarding Electric Utility Restructuring – Energy Efficiency Programs, 85 NHPUC 684, 694 (2000) and approved the formula in Order No. 23,982 (May 31, 2002) regarding the CORE Energy Efficiency Programs. Most recently, the Commission found that "the present incentive mechanism provides a just and reasonable balance between the interest of shareholders and the interest of customers." Order No. 24,203, at 13 (September 5, 2003)

Three factors influence the incentive: (1) the size of the budget, (2) the ratio of the actual Benefit-to-Cost Ratio achieved to the predicted Benefit-to-Cost Ratio, and (3) the ratio of the kWh savings achieved to the predicted kWh savings. The basic formula is:

$$\text{INCENTIVE} = [4\% \times \text{BUDGET}] \times [(BC_{ACT}/BC_{PRE}) + (kWh_{ACT}/kWh_{PRE})]$$

Where:

INCENTIVE - Shareholder incentive in dollars
BUDGET – Total dollars budgeted less the shareholder incentive (Use ACTUAL Dollars Spent for final calculation)
BC_{ACT} - Actual Benefit-to-Cost ratio achieved
BC_{PRE} - Predicted Benefit-to-Cost ratio
kWh_{ACT} - Actual Lifetime Kilowatt-hour savings achieved
kWh_{PRE} - Predicted Lifetime Kilowatt-hour savings

Residential and Commercial/Industrial Incentive Components

The shareholder incentive is made up of a residential component and a commercial/industrial component. The residential component is determined by summing the budgets and kWh savings and calculating a combined program benefit-to-cost ratio for residential programs. These values are then used in the formula above to determine an overall residential incentive. Programs included in the residential calculation are as follows: NH Home Performance with Energy Star, Low Income Energy Efficiency (Home Energy Assistance), ENERGY STAR® Homes, ENERGY STAR® Lighting, ENERGY STAR® Appliances and any utility specific programs. The commercial/industrial component is determined in an analogous manner. Programs included in the commercial/industrial calculation are as follows: New Equipment & Construction, Large C&I Retrofit, Small Business Energy Solutions, Education, and any utility specific programs.

Avoided Costs

The NH Electric Utilities requested and the NHPUC approved[30] the use of a single avoided cost methodology for Generation, Transmission, and Distribution. In determining the Benefit-to-Cost ratio, the NH Electric Utilities used the avoided generation costs from the *2009 Avoided-Energy-Supply Costs in New England*[31].

For the avoided Transmission and Distribution costs, we used the weighted average of all the NH Electric Utilities costs. Refer to Attachments B and C for additional information on avoided costs.

Other assumptions used in determining the future and present values of benefits include inflation at 0.50%[32] per annum and a nominal discount rate of 3.25%[33].

Threshold Conditions

There are three threshold conditions that apply to the shareholder incentive calculation. Specifically,

1. The combined benefit-to-cost ratio for residential programs must be 1.0 or greater. If not, there is no incentive associated with program cost effectiveness. The commercial/industrial component is calculated similarly.

2. The actual lifetime kWh savings for the residential programs must be 65% or greater than the predicted lifetime kWh savings; otherwise, there will be no incentive associated with kWh savings. Kilowatt-hour savings for the commercial/industrial component are treated similarly.

3. The Residential and Commercial/Industrial components are calculated separately and are independent of one another. The residential incentive component is capped at 12% of the combined budget for residential programs. The commercial/industrial component is calculated similarly.

[30] DE 01-057, Order No. 23,850, November 29, 2001, page 19.
[31] *Avoided Energy Supply Costs in New England*, August 2009.
[32] Used the Gross Domestic Product: Implicit Price Deflator and calculated the difference between the January 1, 2009 and January 1, 2010 rates. See http://research.stlouisfed.org/fred2/data/GDPDEF.txt
[33] Prime rate as of June 1, 2010, in accordance with Energy Efficiency Working Group Report, Section 7, page 17. Prime rate data taken from http://www.moneycafe.com/library/primerate.htm.

Potential Earnings: Shareholder Incentive Set Aside

The NH Electric Utilities have set aside a portion of their budget for the shareholder incentive. The Energy Efficiency Working Group Report states, "For incentive calculation purposes only, 'planned energy efficiency budget' is defined as the total program budget minus shareholder incentives[34]..." To comply with this, the NH Electric Utilities budgeted for an 8% shareholder incentive as follows:

$$INCENTIVE = 8\% \times [BUDGET_{TOT} - INCENTIVE]$$

Where:
INCENTIVE - Shareholder incentive in dollars
$BUDGET_{TOT}$ – Total dollars budgeted

Solving this equation for the shareholder incentive:

$$INCENTIVE = 0.074074 \times BUDGET_{TOT}$$

Smart Start Shareholder Incentive

A different methodology has been adopted by the Commission for determining the Smart Start shareholder incentive. It is calculated as 6% of loans repaid.

Shareholder Incentive Calculations

Attachments D, E, F, and G present each utility's calculations for cost effectiveness, shareholder incentive, planned benefit-to-cost ratios, and planned energy savings for each program.

[34] DR 96-150, Energy Efficiency Working Group Report, July 6, 1999, page 21, part 3f.

VI. Attachments

ATTACHMENT A: CORE/WXN COLLABORATION IMPLEMENTATION PLAN

Project Timeline

While each customer situation may be different, the CAAs will make every effort to contact a customer within two weeks of the time the customer is assigned and to work with the customer to conduct all necessary audits within four weeks, and to complete the installation of all approved measures within eight weeks. The following illustrates the typical project timeline.

Task	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Schedule Audit								
Conduct Audit								
Transmit Data To OEP/Utility								
Provide Services								

Implementation Targets:

Initial Contact Customer:	2 weeks
Lead Assignment to Invoice Submittal:	8 weeks (on average) Up to 10 weeks (with exceptional conditions) Over 10 weeks – CAAs must submit customer specific documentation explaining the reason(s) for the extended timeline. No case should exceed 12 weeks.

Program Outline

1. Customer Intake
   This step produces a prioritized list of eligible customers from the combined intake efforts of the Wxn and CORE programs. Eligibility for CORE includes customers who meet the eligibility criteria for participation in the Electric Assistance Program, the Fuel Assistance Program, the DOE Weatherization Program or anyone living in subsidized housing. Customers who are eligible for DOE Weatherization and who authorize any required data sharing between their Utility and CAA, will be eligible for funding from both programs. See the Customer Intake Process diagram below for additional detail.
   a) CORE Customers (Utility Marketing)
      i. Marketing priority is based on (first priority) electric heat and (second priority) high usage, and then to all EAP participants
      ii. Utilities send marketing package with Customer Reply Card
      iii. Interested customers request services by returning Customer Reply Card
   b) Direct inquiries to Utilities from customers not participating in the EAP
      i. Customers accepted based on (first priority) electric heat and (second priority) high usage
      ii. Customer's eligibility is verified by CAA.
      iii. Customer is notified of eligibility outcome.
   c) Weatherization Program Customers (CAA Marketing)

i. Customers are prioritized in accordance with DOE Wxn Program rules (e.g. elderly, young children, persons with disabilities, households with high energy burden), and as needed, to meet CORE prioritization requirements described in Section (a)(i) above.
ii. Customers will be given an opportunity to request services from both Wxn and the CORE energy efficiency program and authorize required data sharing.

2. Work Scheduling
In this step eligible customers are assigned to a CAA, and an audit is scheduled. Every effort will be made to contact the customer within a two week period to schedule the audit at a mutually agreeable time.
   a) Utility assigns jobs to CAA. Alternatively, Utility may request CAAs to develop leads and initiate A-lead jobs[35] from the Wxn waiting list. CAAs initiate B-lead jobs[36] from the Wxn waiting list.
   b) CAA prescreens customer (e.g. electric heat? high use? still at this address?, previously served? any remaining opportunities? Etc.)
   c) Utility assigns all customers who will receive CORE program services and who pass the prescreen regardless of how they were brought into the program (EAP list, direct inquiry, and Wxn customers). [*Note: Based on field experience, this step may be moved to a point after the audit if it can simplify overall implementation of the program.*]
   d) CAA schedules audit within two weeks of job assignment.
   e) CAA notifies Utility of audit schedule date.
   f) If audit is not scheduled within two weeks, Utility may elect to reassign job to another CAA or a non-CAA contractor, approved by the Utility and trained in low income program delivery.

3. Conduct Audit
In this step the CAA will conduct all necessary home audits as detailed below, the initial blower door and combustion air zone testing as appropriate, and provide the customer and the Utility with their report. The home visit is typically completed within four weeks of assigning the job; report distribution may take longer as noted below.
   a) For A-lead jobs that include weatherization services, the audit software creates a list of cost effective measures to install.
   b) For B-lead jobs conduct Baseload Audit which will identify measures such as refrigerator replacement, CFLs, etc. The Utility provides a list of predetermined cost effective measures to install.
   c) Auditors will also identify any health and safety items and/or customer education that need to be addressed.
   d) The auditor will review the preliminary audit results with the customer and/or landlord, and if appropriate, seek written customer approval to provide weatherization services.

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[35] Jobs where CORE pays for conservation measures, i.e. wall insulation, air sealing, baseload etc. and DOE pays for health & safety and repairs (For details see Section on Project Funding).
[36] Jobs where DOE pays for non-baseload conservation measures, wall insulation, air sealing, health & safety, and repairs and CORE pays for baseload (For details see Section on Project Funding).

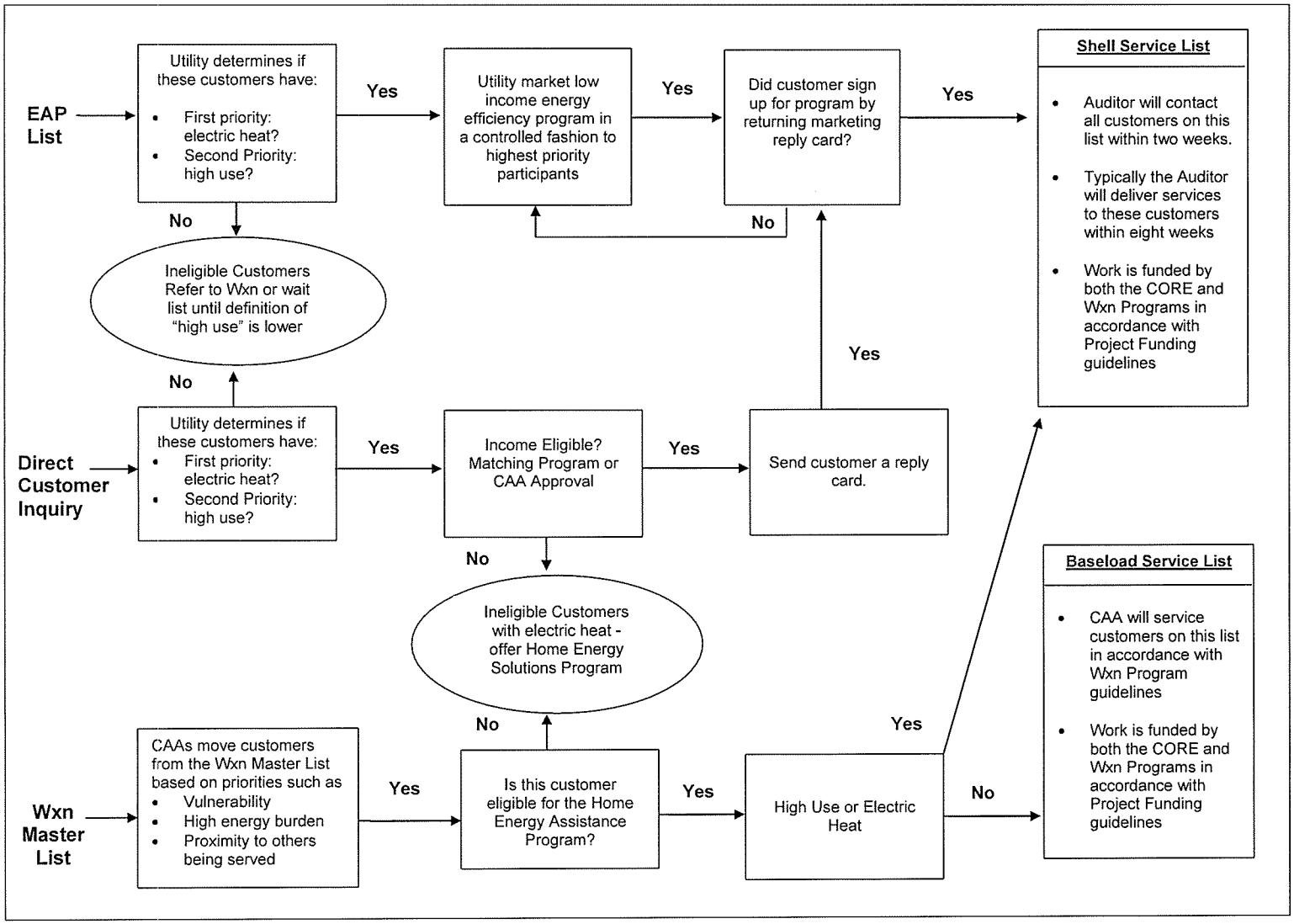
e) Audit data is sent electronically to Utility within six weeks of the time the job is assigned.
f) During the home visit, the CAA auditor identifies energy saving actions the customer can take and provides appropriate educational materials.
g) A report is provided to customer/landlord within two weeks of the home visit and details the list of proposed services to be provided.

4. Provide Services
This step includes the installation of measures, continuing customer education, the inspection of all completed work, customer signoff, and invoicing.
a) All services, final inspections, and invoicing will typically be completed within eight weeks of authorization to provide services.
b) CAA conducts final inspection on all jobs. Final inspection includes:
   i. Post-completion blower door and combustion air zone test
   ii. Review of all work completed by sub contractors to ensure compliance with program specifications
c) CAA delivers education component of program including:
   i. Energy efficiency materials (as appropriate, may be covered in step 3.f above)
   ii. Review the "as installed" measures and audit report with the customer/landlord
d) Obtain customer/landlord acknowledgement and approval of the services provided.
e) When job (including Final Inspection) is complete, CAA electronically sends job completion report and invoice to Office of Energy & Planning (OEP) and Utility as appropriate.
f) A customer satisfaction survey is mailed to the customer; survey results are shared by the Utility and OEP as appropriate.

5. Quality Assurance
This step provides overall assurance that services are delivered in compliance with all program requirements.
a) To ensure compliance with federal auditing requirements, OEP personnel will inspect a sampling of all jobs receiving Wxn funding. The Utilities will coordinate their QA activity with OEP when possible to avoid duplicate inspections of the same premise.
b) QA will typically be conducted on a minimum of 10% of all jobs – more as deemed necessary.

6. Job Closeout
This step includes follow-up on any customer concerns and invoice payment.
a) Follow-up on any call back or QA concerns before processing invoices for payment.
b) Review and pay CAA invoices. Check for errors such as "double billing."
c) Process Customer Satisfaction Surveys.

Customer Intake Process



Project Funding

Measures will be funded based on the table below. The current program "caps" are $5,000 for the CORE low income program and $2,500 for Wxn.

Measure Description	Funding Source	
	Shell	Baseload
Health & Safety	CORE/DOE[37]	DOE
Repair/Replace Non-electric Heating System[38]	DOE	DOE
Refrigerator	CORE	CORE
Lighting	CORE	CORE
Weatherization Services	CORE	DOE
Repair/Replace Electric Heating System[39] & Controls	CORE	CORE
Additional Measures As They Are Defined	*To Be Determined*	*To Be Determined*

CORE Program Auditor Training

All program auditors will be trained in the following areas. Training will be coordinated with utilities, OEP, and software vendor(s) to insure continuity, efficiency and consistency:

a) Sensitivity to low income customer's needs and guidelines for safe professional behavior in the low income community
b) Health and safety protocols related to Wxn will be reviewed and emphasized
c) Health and safety elements relating to appliances will be covered in depth
d) In-depth appliance diagnostics training
e) Training on customer education including how adults learn and how best to motivate customers to conserve.
f) Elements (b) through (e) must be coordinated with appliance software training and must thoroughly address the elements in the Customer Education Specifics Chart.
g) Auditing software and the process for communicating data to the Utilities.

The training will be offered as needed to accommodate new staff and changing program requirements. Costs for training may be shared between OEP and the Utilities.

[37] In the event the work is assigned to a non-CAA contractor or DOE funds are not available, CORE funds may be used for Health & Safety measures.
[38] Applies to qualifying systems fired by oil, propane, and solid fuels.
[39] Applies to electric heating systems only (for National Grid, does not apply to thermal storage or heat pump systems).

Training For Customer Service Representatives

Utility Customer Service Representatives will be trained to handle customer inquires regarding the CORE/Wxn program as well as other related programs designed to assist low income customers such as the Electric Assistance Program, the Fuel Assistance Program, and winter protections.

Low Income Customer Education and Training

Customer education will include a review of the customer's energy usage, and ways to reduce the energy usage. The auditor will discuss advantages of efficient lighting and appliances as well as life style changes that could reduce energy usage. The auditor will also discuss the weatherization opportunities in the customer's home. The booklet *Practical Tips for Saving Energy & Money at Home,* will be provided to all program participants. Written materials will be available in English, Spanish, and other languages as appropriate.

Capacity Planning

The tables on the next page depict (1) the Quarterly Production Schedule for each Utility and (2) the year end Job Distribution By County and By Utility.

The Utilities are committed to working with OEP and the CAAs to ensure there are sufficient qualified CAA personnel to meet program goals. If problems develop, the Utilities will address them with the CAAs and OEP before reassigning work to non-CAA contractors. It is understood that OEP cannot reimburse non-DOE approved subgrantees, and this must be taken into account in any work reassignment plan. For example, this would create significant problems in reassigning work that is already in progress. As such, to the extent non-CAA contractors were required to meet program goals, they would likely be given work that had not yet been assigned.

Maximizing Potential Benefits To Income Eligible Customers

The fundamental principle underlying the collaboration with the Community Action Agencies (CAAs) is that by working together, it will be possible to bring more services to more low income customers. As detailed in the Project Funding Table above, both Shell and Baseload jobs will be jointly funded by CORE and DOE dollars for all jobs implemented by the CAAs. The following table details the quarterly production schedule as well as the annual distribution of jobs by county and utility.

Low Income CORE & Wxn Participants by County

2011 HEA Quarterly Production Schedule

Utility	Total Jobs	1st. Qtr. 24%	2nd. Qtr. 29%	3rd. Qtr. 29%	4th. Qtr. 18%
Unitil	61	14	18	17	11
NGRID	50	11	18	16	5
NHEC	50	11	16	15	8
PSNH	679	169	191	194	125
TOTAL	840	205	243	242	149
Year-to-date TOTAL		205	448	690	839

2011 HEA Job Distribution By County and By Utility

BY COUNTY	Unitil		Nationalgrid		NHEC		PSNH		Totals		Grand Total
	Shell	Baseload	Shell	Baseload	Shell	Baseload	Shell	Baseload	Shell	Baseload	
	A	B	A	B	A	B	A	B	A	B	
Belknap					1	6	24	39	25	45	70
Carroll					1	7	40	56	41	63	104
Cheshire			6	2			10	15	16	17	33
Coos					1	1	36	52	37	53	90
Grafton			14	3	5	13	7	20	26	36	62
Hillsborough			7	1			90	129	97	130	227
Merrimack	24	14			1	4	12	34	37	52	89
Rockingham	15	8	8	1	1	3	15	20	39	32	71
Strafford					0	0	21	34	21	34	55
Sullivan			6	2	1	5	10	15	17	22	39
Program Totals	39	22	41	9	11	39	265	414	356	484	
Grand Totals	61		50		50		679		840		840

A = Shell job - where Utility pays for conservation measures, ie wall insulation, air sealing, baseload etc. and DOE (or other programs) pays for H
heating system, repairs (See Section on Project Funding)

B =Baseload job - where Utility pays for baseload measures and DOE (or other programs) pays for non-baseload conservation measures,
ie: wall insulation, air sealing, etc., H&S and repairs (See Section on Project Funding)

Low Income CORE & Wxn Participants by County

2012 HEA Quarterly Production Schedule

Utility	Total Jobs	1st. Qtr. 24%	2nd. Qtr. 29%	3rd. Qtr. 29%	4th. Qtr. 18%
Unitil	58	14	18	17	11
NGRID	54	11	18	16	5
NHEC	61	11	16	15	8
PSNH	760	169	191	194	125
TOTAL	933	205	243	242	149
Year-to-date TOTAL		205	448	690	839

2012 HEA Job Distribution By County and By Utility

BY COUNTY	Unitil		Nationalgrid		NHEC		PSNH		Totals		Grand Total
	Shell	Baseload	Shell	Baseload	Shell	Baseload	Shell	Baseload	Shell	Baseload	
	A	B	A	B	A	B	A	B	A	B	
Belknap			0	0	1	7	27	44	28	51	79
Carroll			0	0	1	9	45	63	46	71	117
Cheshire			6	2			11	17	18	19	37
Coos			0	0	1	1	40	58	42	59	101
Grafton			15	3	6	16	8	22	29	41	71
Hillsborough			8	1			101	144	108	145	254
Merrimack	23	13	0	0	1	5	13	38	37	56	94
Rockingham	14	8	9	1	1	4	17	22	41	35	76
Strafford			0	0			24	38	24	38	62
Sullivan			6	2	1	6	11	17	19	25	44
Program Totals	37	21	44	10	13	48	297	463	391	542	
Grand Totals	58		54		61		760		933		933

A = Shell job - where Utility pays for conservation measures, ie wall insulation, air sealing, baseload etc. and DOE (or other programs) pays for H& heating system, repairs (See Section on Project Funding)

B =Baseload job - where Utility pays for baseload measures and DOE (or other programs) pays for non-baseload conservation measures, ie: wall insulation, air sealing, etc., H&S and repairs (See Section on Project Funding)

ATTACHMENT B: COMPLETED MONITORING & EVALUATION STUDIES

Evaluation Studies Completed since 2000

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ATTACHMENT C: AVOIDED COSTS

Summary of Avoided Electric Costs

In accordance with Commission Order No. 23,850, in DE 01-057, dated November 29, 2001, the NH Electric Utilities have based their avoided costs on the 2009 *Avoided-Energy-Supply Costs in New England: 2009 Report* ("2009 AESC"). Use of common avoided costs by the utilities ensures that all New Hampshire customers will have access to the same programs and services.

The present value of avoided costs over the life of program measures was calculated using a discount rate of 3.25% and a general inflation rate of 0.50%. The use of the 15% adder to represent non-quantified benefits – including environmental and other benefits as recommended by the Energy Efficiency Working Group, originally authorized by the NHPUC in DR 96-150, Order No. 23,574, dated November 1, 2000, has been discontinued because the 2009 AESC avoided costs include market-based price proxies for power plant emissions of NOx, SO_2, Mercury and CO_2.

The 2009 AESC avoided costs also include a 9% generic retail adder to account for the expected differential between retail and wholesale market prices. In recognition of diversity among states and utilities in energy service procurement and retail pricing policies, the contractor provided the sponsors the option to remove the adder from the avoided cost data. PSNH and NHEC have concluded that the 2009 AESC forecasted wholesale prices of energy and capacity represent a better approximation to the cost of energy service avoided by their retail customers than the prices which include a 9% increase to the wholesale prices.

Avoided Transmission and Distribution Costs

In accordance with Commission Order No. 23,850, in DE 01-057, dated November 29, 2001, the NH Electric Utilities have based their avoided transmission and distribution costs on the weighted average of NH utility costs and have escalated them for inflation and put them in 2009 dollars. Use of common avoided costs by the utilities ensures that all New Hampshire customers will have access to the same programs and services.

The following table also includes an adjustment to reduce the energy and capacity line loss multipliers by the estimated losses that are accounted for in the 2009 forecast of energy prices.

Marginal T&D Costs and Line Loss Factors ($2009)

	MDC ($/kW-yr)		MTC	Line Loss Multipliers				
	Res.(1)	C&I(2)	($/kW-yr)	Transmission Capacity	Summer Capacity	Winter Capacity	On-Peak Energy	Off-Peak Energy
Granite State	$118.71	$86.39	$49.63	1.1220	1.1500	1.1350	1.0630	1.0890
PSNH	$24.70	$24.70	$2.00	1.0000	1.0820	1.0820	1.0820	1.0840
Unitil	$71.57	$71.57	$28.67	1.0000	1.1217	1.1217	1.1217	1.0152
NHEC	$101.38	$101.38	$64.57	1.0000	1.0917	1.0917	1.0917	1.0917

MWh Sales to Ultimate Customers in 2009

Granite State	599,938	5.91%
PSNH	7,657,453	75.46%
Unitil	1,177,554	11.60%
NHEC	712,461	7.02%
Total	10,147,406	100.00%

Weighted Average Marginal T&D Costs and Line Loss Factors
(2009 Energy Line Loss Multipliers have been reduced by estimated transmission losses.)

	MDC ($/kW-yr)		MTC	Line Loss Multipliers				
	Res.(1)	C&I(2)	($/kW-yr)	Transmission Capacity	Summer Capacity	Winter Capacity	On-Peak Energy	Off-Peak Energy
2009$	$41.08	$39.17	$12.30	1.007	1.071	1.070	1.062	1.053

ATTACHMENT D: NATIONAL GRID PROGRAM COST-EFFECTIVENESS

National Grid Program Cost-Effectiveness

Program Cost-Effectiveness - 2011 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Present Value Utility Costs ($000)	Present Value Customer Costs ($000)	Present Value Shareholder Incentive ($000)		Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs											
ENERGY STAR Homes	6.39	$ 907.2	$ 141.9	$ -			154	1,501	35	21	50
NH Home Performance with ENERGY STA	1.89	$ 203.2	$ 102.5	$ 4.9			182	2,652	19	9	101
ENERGY STAR Lighting [*1]	1.85	$ 209.1	$ 77.0	$ 35.9			573	2,905	133	35	13,142
ENERGY STAR Appliances	1.70	$ 233.9	$ 86.4	$ 51.3			119	1,207	16	17	875
Home Energy Assistance	1.92	$ 396.3	$ 206.3	$ -			82	1,231	11	8	50
Subtotal Residential	**2.58**	**$ 1,949.6**	**$ 614.1**	**$ 92.1**	**$ 49.1**		**1,109**	**9,496**	**214**	**91**	**14,218**
Commercial/Industrial Programs											
New Construction / Major Renovation	2.48	$ 647.2	$ 201.4	$ 59.2		#	501	7,703	86	121	11
Large C&I Retrofit	3.25	$ 3,201.3	$ 391.8	$ 592.5			3,064	39,828	388	532	26
Small C&I Retrofit	1.65	$ 532.0	$ 221.9	$ 101.1			553	6,082	71	127	33
Subtotal C&I	**2.79 2.68**	**$ 4,380.5**	**$ 815.1**	**$ 752.8**	**$ 65.2**		**4,118**	**53,613**	**546**	**780**	70
Total	**2.65**	**$ 6,330.1**	**$ 1,429.2**	**$ 844.9**	**$ 114.3**		**5,227**	**63,109**	**760**	**871**	**14,288**

Note 1: National Grid plan estimates number of products rebated.

National Grid Program Cost-Effectiveness

Present Value Benefits - 2011 PLAN

	Total Benefits ($000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
ENERGY STAR Homes	$907	$14	$0	$4	$11	$29	$36	$16	$18	$780
Home Performance w/Energy Star	$203	$3	$0	$1	$4	$51	$62	$26	$31	$24
ENERGY STAR Lighting *1	$209	$5	$0	$2	$7	$60	$72	$29	$34	$0
ENERGY STAR Appliances	$234	$4	$0	$2	$6	$24	$29	$13	$14	$142
Home Energy Assistance	$396	$4	$0	$1	$4	$23	$29	$13	$14	$308
Subtotal Residential	**$1,950**	**$30**	**$0**	**$10**	**$33**	**$187**	**$228**	**$96**	**$111**	**$1,254**
Commercial/Industrial Programs										
New Construction / Major Renovation	$647	$45	$0	$19	$61	$235	$111	$123	$54	$0
Large C&I Retrofit	$3,201	$164	$0	$73	$237	$1,210	$602	$627	$289	$0
Small C&I Retrofit	$532	$34	$0	$15	$49	$229	$59	$118	$28	$0
Subtotal C&I	**$4,381**	**$242**	**$0**	**$107**	**$347**	**$1,674**	**$771**	**$868**	**$371**	**$0**
Total	**$6,330**	**$273**	**$0**	**$117**	**$380**	**$1,862**	**$999**	**$965**	**$481**	**$1,254**

National Grid Shareholder Incentive Calculation

Shareholder Incentive Calculation
2011

		Planned	Actual
Commercial/Industrial Incentive			
1. Benefit/Cost Ratio		2.68	
2. Threshold Benefit / Cost Ratio [1]		1.00	
3. Lifetime kWh Savings		53,612,814	
4. Threshold Lifetime kWh Savings (65%) [2]		34,848,329	
5. Budget		815,093	
6. Benefit / Cost Percentage of Budget		4.00%	
7. Lifetime kWh Percentage of Budget		4.00%	
8. C/I Shareholder Incentive		$65,207	
9. Cap (12%)		$97,811	
Residential Incentive			
10. Benefit / Cost Ratio		2.58	
11. Threshold Benefit / Cost Ratio [1]		1.00	
12. Lifetime kWh Savings		9,496,306	
13. Threshhold Lifetime kWh Savings (65%) [2]		6,172,599	
14. Budget		$614,128	
15. Benefit / Cost Percentage of Budget		0	
16. Lifetime kWh Percentage of Budget		0	
17. Residential Incentive		$49,130	
18. Cap (12%)		$73,695	
19. TOTAL INCENTIVE EARNED	**$**	**114,338**	

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

National Grid Planned Benefit/Cost Ratio by Sector

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2011 TRC BENEFIT COST TEST

Planned Versus Actual Benefit / Cost Ratio by Sector

2011

		Planned	Actual
Commercial & Industrial:			
1. Benefits (Value) From Eligible Programs	$	4,381	
2. Implementation Expenses	$	815	
3. Customer Contribution	$	753	
4. Total Costs Excluding Shareholder Incentive	$	1,568	
5. Benefit/Cost Ratio - C&I Sector		**2.79**	
6. Benefit/Cost Ratio - C&I Sector including SI		**2.68**	
Residential:			
6. Benefits (Value) From Eligible Programs	$	1,950	
7. Implementation Expenses	$	614	
8. Customer Contribution	$	92	
9. Total Costs Excluding Shareholder Incentive	$	706	
10. Benefit/Cost Ratio - Residential Sector		**2.76**	
11. Benefit/Cost Ratio - Residential Sector including SI		**2.58**	

National Grid Planned Lifetime kWh Savings by Sector

Actual Lifetime Energy Savings by Sector and Program
2011

	Lifetime kWh Savings	
	Planned	Actual
Commercial & Industrial:		
New Equipment & Construction	7,703,362	
Large C&I Retrofit	39,827,552	
Small Business Energy Solutions	6,081,900	
Total Commercial & Industrial Included for Incentive Calculation	**53,612,814**	
Residential:		
Home Energy Assistance Program	1,230,839	
NH Home Performance with ENERGY STAR	2,652,330	
ENERGY STAR Homes Program	1,501,391	
ENERGY STAR Appliance Program	1,206,631	
ENERGY STAR Lighting Program	2,905,116	
Total Residential Included for Incentive Calculation	**9,496,306**	
Total	**63,109,119**	

National Grid Program Cost-Effectiveness

Program Cost-Effectiveness - 2012 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Utility Costs ($000)	Customer Costs ($000)	Shareholder Incentive ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs										
ENERGY STAR Homes	6.52	$ 935.9	$ 143.6	$ -		154	1,501	35	21	50
NH Home Performance with ENERGY STA	1.92	$ 227.4	$ 112.9	$ 5.4		198	2,894	21	10	110
ENERGY STAR Lighting [*1]	1.89	$ 237.9	$ 86.0	$ 39.6		632	3,207	147	39	14,507
ENERGY STAR Appliances	1.79	$ 237.1	$ 80.8	$ 51.3		119	1,207	16	17	875
Home Energy Assistance	1.95	$ 438.0	$ 225.1	$ -		88	1,324	16	9	54
Subtotal Residential	**2.61**	$ 2,076.3	$ 648.5	$ 96.4	$ 51.9	1,192	10,134	235	96	15,596
Commercial/Industrial Programs										
New Construction / Major Renovation	2.64	$ 794.2	$ 230.0	$ 71.1		601	9,244	104	145	13
Large C&I Retrofit	3.30	$ 3,315.4	$ 400.0	$ 606.1		3,110	40,425	394	540	26
Small C&I Retrofit	1.53	$ 540.1	$ 222.5	$ 130.0		553	6,082	71	127	33
	2.80									
Subtotal C&I	**2.69**	$ 4,649.6	$ 852.5	$ 807.2	$ 68.2	4,264	55,751	569	812	72
Total	**2.66**	6725.90	1500.95	903.54	120.08	5,456	65,884	804	908	15,668

Note 1: National Grid plan estimates number of products rebated.

Present Value Benefits - 2012 PLAN

	Total Benefits ($000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
ENERGY STAR Homes	$936	$14	$0	$4	$11	$30	$37	$16	$18	$805
Home Performance w/Energy Star	$227	$4	$0	$1	$5	$57	$70	$29	$35	$27
ENERGY STAR Lighting [*1]	$238	$5	$0	$2	$8	$68	$83	$33	$39	$0
ENERGY STAR Appliances	$237	$4	$0	$2	$6	$24	$30	$13	$15	$143
Home Energy Assistance	$438	$4	$0	$1	$5	$25	$32	$14	$16	$340
Subtotal Residential	**$2,076**	**$30**	**$0**	**$11**	**$34**	**$205**	**$252**	**$106**	**$123**	**$1,315**
Commercial/Industrial Programs										
New Construction / Major Renovation	$794	$54	$0	$23	$73	$289	$137	$151	$67	$0
Large C&I Retrofit	$3,315	$156	$0	$74	$242	$1,258	$628	$654	$303	$0
Small C&I Retrofit	$540	$31	$0	$15	$49	$234	$60	$121	$29	$0
Subtotal C&I	**$4,650**	**$241**	**$0**	**$112**	**$364**	**$1,781**	**$825**	**$926**	**$399**	**$0**
Total	**$6,726**	**$271**	**$0**	**$123**	**$399**	**$1,987**	**$1,077**	**$1,032**	**$522**	**$1,315**

National Grid Shareholder Incentive Calculation

Shareholder Incentive Calculation
2012

		Planned	Actual
Commercial/Industrial Incentive			
1. Benefit/Cost Ratio		2.69	
2. Threshold Benefit / Cost Ratio [1]		1.00	
3. Lifetime kWh Savings		55,750,642	
4. Threshold Lifetime kWh Savings (65%) [2]		36,237,918	
5. Budget		852,473	
6. Benefit / Cost Percentage of Budget		4.00%	
7. Lifetime kWh Percentage of Budget		4.00%	
8. C/I Shareholder Incentive		$68,198	
9. Cap (12%)		$102,297	
Residential Incentive			
10. Benefit / Cost Ratio		2.61	
11. Threshold Benefit / Cost Ratio [1]		1.00	
12. Lifetime kWh Savings		10,133,588	
13. Threshhold Lifetime kWh Savings (65%) [2]		6,586,832	
14. Budget		$648,472	
15. Benefit / Cost Percentage of Budget		0	
16. Lifetime kWh Percentage of Budget		0	
17. Residential Incentive		$51,878	
18. Cap (12%)		$77,817	
19. TOTAL INCENTIVE EARNED	**$**	**120,076**	

Notes
1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

National Grid Planned Benefit/Cost Ratio by Sector

2011 TRC BENEFIT COST TEST

Planned Versus Actual Benefit / Cost Ratio by Sector

2012

		Planned	Actual
Commercial & Industrial:			
1. Benefits (Value) From Eligible Programs	$	4,650	
2. Implementation Expenses	$	852	
3. Customer Contribution	$	807	
4. Total Costs Excluding Shareholder Incentive	$	1,660	
5. Benefit/Cost Ratio - C&I Sector		**2.80**	
6. Benefit/Cost Ratio - C&I Sector including SI		**2.69**	
Residential:			
6. Benefits (Value) From Eligible Programs	$	2,076	
7. Implementation Expenses	$	648	
8. Customer Contribution	$	96	
9. Total Costs Excluding Shareholder Incentive	$	745	
10. Benefit/Cost Ratio - Residential Sector		**2.79**	
11. Benefit/Cost Ratio - Residential Sector including SI		**2.61**	

National Grid Planned Lifetime kWh Savings by Sector

Actual Lifetime Energy Savings by Sector and Program
2012

	Lifetime kWh Savings	
	Planned	Actual
Commercial & Industrial:		
New Equipment & Construction	9,244,034	
Large C&I Retrofit	40,424,709	
Small Business Energy Solutions	6,081,900	
Total Commercial & Industrial Included for Incentive Calculation	**55,750,642**	
Residential:		
Home Energy Assistance Program	1,324,252	
NH Home Performance with ENERGY STAR	2,894,297	
ENERGY STAR Homes Program	1,501,391	
ENERGY STAR Appliance Program	1,206,631	
ENERGY STAR Lighting Program	3,207,018	
Total Residential Included for Incentive Calculation	**10,133,588**	
Total	**65,884,230**	

ATTACHMENT E: NHEC PROGRAM COST-EFFECTIVENESS

NHEC Program Cost-Effectiveness

NEW HAMPSHIRE ELECTRIC COOPERTIVE, INC.
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Program Cost-Effectiveness - 2011 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Present Value Utility Costs ($000)	Present Value Member Costs ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Members Served
Residential Programs									
ENERGY STAR Homes	4.0	$ 733.1	$ 113.5	$ 69.4	46.1	799.9	11.2	13.0	37
Home Performance w/Energy Star	2.0	$ 301.8	$ 127.8	$ 21.2	220.0	2,398.2	49.1	126.2	39
ENERGY STAR Lighting [*1]	4.5	$ 580.9	$ 105.1	$ 25.1	1,548.2	8,070.2	365.5	97.1	35,864
ENERGY STAR Appliances	1.4	$ 368.2	$ 129.8	$ 127.7	326.5	3,329.8	45.0	40.4	1,735
Home Energy Assistance	2.1	$ 338.3	$ 162.4	$ -	58.6	717.7	19.7	19.7	50
High Efficiency Heat Pump	2.1	$ 400.1	$ 96.7	$ 91.8	254.1	6,352.0	139.9	8.5	12
Subtotal Residential	**2.5**	**$ 2,722.4**	**$ 735.3**	**$ 335.2**	**2,453.5**	**21,667.7**	**630.4**	**304.9**	**37,737**
Commercial/Industrial Programs									
New Construction / Major Renovation	1.3	$ 167.1	$ 107.4	$ 20.1	149.9	2,248.9	19.8	21.6	5
Large C&I Retrofit	1.8	$ 681.3	$ 122.1	$ 253.4	705.2	9,167.8	265.5	84.3	22
Small C&I Retrofit	1.3	$ 264.1	$ 122.1	$ 74.4	253.7	3,298.1	41.9	48.7	32
Other (Education)	0.0	$ -	$ 26.1	$ -	-	-	-	-	-
Smart Start	0.0	$ -	$ 7.1	$ -	-	-	-	-	-
Subtotal C&I	**1.5**	**1,112.5**	**384.8**	**348.0**	**1,108.8**	**14,714.9**	**327.2**	**154.6**	**59**
Total		**$ 3,834.9**	**$ 1,120.1**	**$ 683.2**	**3,562.4**	**36,382.6**	**957.6**	**459.5**	**37,796**

Note 1: Plan included 8,966 members purchasing a total of 35,864 lighting products (4 per member)

NHEC Present Value of Benefits

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Present Value Benefits - 2011 PLAN

	Total Benefits ($000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
ENERGY STAR Homes	$733	$8,712	$0	$2,404	$7,803	$14,478	$17,670	$9,185	$9,416	$663,467
Home Performance w/Energy Star	$302	$33,164	$0	$14,902	$48,383	$47,941	$58,777	$23,846	$28,122	$46,630
ENERGY STAR Lighting *1	$581	$14,587	$0	$5,894	$19,136	$166,586	$198,907	$81,286	$94,510	$0
ENERGY STAR Appliances	$368	$9,843	$0	$4,388	$14,245	$66,212	$81,023	$34,269	$39,195	$118,985
Home Energy Assistance	$338	$5,759	$0	$2,576	$8,363	$14,183	$17,461	$7,072	$8,369	$274,511
High Efficiency Heat Pump	$400	$8,416	$0	$1,939	$6,295	$127,661	$237,914	$9,886	$8,005	$0
Subtotal Residential	**$2,722**	**$80,481**	**$0**	**$32,103**	**$104,225**	**$437,061**	**$611,752**	**$165,544**	**$187,617**	**$1,103,593**
Commercial/Industrial Programs										
New Construction / Major Renovation	$167	$7,824	$0	$3,331	$10,816	$41,736	$54,899	$21,807	$26,700	$0
Large C&I Retrofit	$681	$25,962	$0	$11,561	$37,534	$226,952	$258,400	$75,218	$45,707	$0
Small C&I Retrofit	$264	$14,996	$0	$6,678	$21,681	$81,746	$64,113	$43,345	$31,522	$0
Other (Education)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Smart Start	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal C&I	**$1,113**	**$48,782**	**$0**	**$21,570**	**$70,031**	**$350,434**	**$377,412**	**$140,370**	**$103,929**	**$0**
Total	**$3,835**	**$129,263**	**$0**	**$53,673**	**$174,256**	**$787,495**	**$989,164**	**$305,914**	**$291,546**	**$1,103,593**

Shareholder Incentive Calculation

2011

	Planned	Actual
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	**1.52**	**0.00**
2. Threshold Benefit / Cost Ratio [1]	1.00	
3. Lifetime kWh Savings	**14,714,884**	**0**
4. Threshold Lifetime kWh Savings (65%) [2]	9,564,675	
5. Budget	$384,776	$0
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
8. C/I Member Incentive	$30,782	
9. Cap (12%)	$46,173	
Residential Incentive		
10. Benefit / Cost Ratio	**2.54**	**0.00**
11. Threshold Benefit / Cost Ratio [1]	1.00	
12. Lifetime kWh Savings	**21,667,690**	**0**
13. Threshhold Lifetime kWh Savings (65%) [2]	14,083,999	
14. Budget	$735,341	
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
17. Residential Incentive	$58,827	
18. Cap (12%)	$88,241	
19. TOTAL INCENTIVE EARNED		

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

NHEC Planned Benefit/Cost Ratio by Sector

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Planned Versus Actual Benefit / Cost Ratio by Sector
2011

	Planned	Actual
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	$ 1,112,528	$ -
2. Implementation Expenses	$ 384,776	$ -
3. Customer Contribution	$ 347,953	$ -
4. Total Costs Excluding Member Incentive	$ 732,729	$ -
5. Benefit/Cost Ratio - C&I Sector	**1.52**	**0.00**
Residential:		
6. Benefits (Value) From Eligible Programs	$ 2,722,376	$ -
7. Implementation Expenses	$ 735,341	$ -
8. Customer Contribution	$ 335,197	$ -
9. Total Costs Excluding Member Incentive	$ 1,070,538	$ -
10. Benefit/Cost Ratio - Residential Sector	**2.54**	**0.00**

NHEC Planned kWh Savings by Sector

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Actual Lifetime Energy Savings by Sector and Program
2011

	Lifetime kWh Savings	
	Planned	Actual
Commercial & Industrial:		
New Equipment & Construction	2,248,898	0
Large C&I Retrofit	9,167,837	0
Small Business Energy Solutions	3,298,149	0
Education	0	0
Other	0	0
Total Commercial & Industrial Included for Incentive Calculation	**14,714,884**	**0**
Residential:		
Home Energy Assistance Program	717,727	0
Home Energy Solutions Program	2,398,242	0
ENERGY STAR Homes Program	799,852	0
ENERGY STAR Appliance Program	3,329,756	0
ENERGY STAR Lighting Program	8,070,159	0
High Efficiency Heat Pump Program	6,351,954	0
Total Residential Included for Incentive Calculation	**21,667,690**	**0**

NHEC Program Cost-Effectiveness

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Program Cost-Effectiveness - 2012 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Present Value Utility Costs ($000)	Present Value Member Costs ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Members Served
Residential Programs									
ENERGY STAR Homes	4.2	$ 812.2	$ 125.2	$ 69.4	49.8	863.4	12.1	14.1	40
Home Performance w/Energy Star	2.0	$ 330.1	$ 147.2	$ 21.2	237.5	2,588.8	53.0	136.2	42
ENERGY STAR Lighting [*1]	4.8	$ 659.3	$ 112.3	$ 25.1	1,704.7	8,886.2	402.4	106.9	39,490
ENERGY STAR Appliances	1.5	$ 399.4	$ 136.9	$ 127.7	347.9	3,547.6	47.9	43.0	1,848
Home Energy Assistance	2.3	$ 429.8	$ 185.6	$ -	71.8	879.6	24.2	24.2	61
High Efficiency Heat Pump	2.2	$ 442.7	$ 107.1	$ 92.1	274.3	6,856.5	151.1	9.2	13
Subtotal Residential	**2.7**	**$ 3,073.5**	**$ 814.3**	**$ 335.5**	**2,685.9**	**23,621.9**	**690.7**	**333.6**	**41,494**
Commercial/Industrial Programs									
New Construction / Major Renovation	1.4	$ 187.0	$ 118.1	$ 20.1	163.7	2,456.0	21.6	23.6	5
Large C&I Retrofit	1.9	$ 746.7	$ 134.2	$ 253.4	751.5	9,768.9	273.7	94.0	24
Small C&I Retrofit	1.4	$ 294.2	$ 134.2	$ 74.4	277.1	3,601.9	45.8	53.2	35
Other (Education)	0.0	$ -	$ 28.4	$ -	-	-	-	-	-
Smart Start	0.0	$ -	$ 8.0	$ -	-	-	-	-	-
Subtotal C&I	**1.6**	**1,227.9**	**423.0**	**348.0**	**1,192.3**	**15,826.9**	**341.1**	**170.8**	**64**
Total		**$ 4,301.4**	**$ 1,237.3**	**$ 683.5**	**3,878.2**	**39,448.8**	**1,031.8**	**504.4**	**41,558**

Note 1: Plan included 9,873 members purchasing a total of 39,490 lighting products (4 per member)

NHEC Present Value of Benefits

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Present Value Benefits - 2012 PLAN

	Total Benefits ($000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
ENERGY STAR Homes	$812	$9,653	$0	$2,607	$8,465	$16,004	$19,603	$10,183	$10,508	$735,210
Home Performance w/Energy Star	$330	$32,783	$0	$16,167	$52,488	$52,865	$65,438	$26,359	$31,367	$52,620
ENERGY STAR Lighting *1	$659	$13,128	$0	$6,523	$21,177	$188,683	$228,580	$92,592	$108,593	$0
ENERGY STAR Appliances	$399	$9,481	$0	$4,698	$15,253	$72,182	$89,167	$37,472	$43,221	$127,915
Home Energy Assistance	$430	$6,562	$0	$3,173	$10,300	$17,784	$22,025	$8,892	$10,593	$350,505
High Efficiency Heat Pump	$443	$9,486	$0	$2,103	$6,829	$141,057	$263,322	$10,958	$8,924	$0
Subtotal Residential	**$3,073**	**$81,093**	**$0**	**$35,271**	**$114,512**	**$488,575**	**$688,135**	**$186,456**	**$213,206**	**$1,266,250**
Commercial/Industrial Programs										
New Construction / Major Renovation	$187	$8,589	$0	$3,656	$11,871	$46,681	$61,621	$24,458	$30,149	$0
Large C&I Retrofit	$747	$27,103	$0	$12,951	$42,046	$249,095	$276,701	$86,113	$52,709	$0
Small C&I Retrofit	$294	$15,339	$0	$7,329	$23,796	$91,460	$72,035	$48,620	$35,615	$0
Other (Education)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Smart Start	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal C&I	**$1,228**	**$51,031**	**$0**	**$23,936**	**$77,713**	**$387,236**	**$410,357**	**$159,191**	**$118,473**	**$0**
Total	**$4,301**	**$132,124**	**$0**	**$59,207**	**$192,225**	**$875,811**	**$1,098,492**	**$345,647**	**$331,679**	**$1,266,250**

NHEC Shareholder Incentive Calculation

Shareholder Incentive Calculation
2012

	Planned	Actual
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	**1.59**	**0.00**
2. Threshold Benefit / Cost Ratio [1]	1.00	
3. Lifetime kWh Savings	**15,826,877**	**0**
4. Threshold Lifetime kWh Savings (65%) [2]	10,287,470	
5. Budget	$422,982	$0
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
8. C/I Member Incentive	$33,839	
9. Cap (12%)	$50,758	
Residential Incentive		
10. Benefit / Cost Ratio	**2.67**	**0.00**
11. Threshold Benefit / Cost Ratio [1]	1.00	
12. Lifetime kWh Savings	**23,621,928**	**0**
13. Threshhold Lifetime kWh Savings (65%) [2]	15,354,253	
14. Budget	$814,322	
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
17. Residential Incentive	$65,146	
18. Cap (12%)	$97,719	
19. TOTAL INCENTIVE EARNED		

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

NHEC Planned Benefit/Cost Ratio by Sector

Planned Versus Actual Benefit / Cost Ratio by Sector
2012

	Planned	Actual
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	$ 1,227,937	$ -
2. Implementation Expenses	$ 422,982	$ -
3. Customer Contribution	$ 347,953	$ -
4. Total Costs Excluding Member Incentive	$ 770,935	$ -
5. Benefit/Cost Ratio - C&I Sector	**1.59**	**0.00**
Residential:		
6. Benefits (Value) From Eligible Programs	$ 3,073,498	$ -
7. Implementation Expenses	$ 814,322	$ -
8. Customer Contribution	$ 335,497	$ -
9. Total Costs Excluding Member Incentive	$ 1,149,819	$ -
10. Benefit/Cost Ratio - Residential Sector	**2.67**	**0.00**

NHEC Planned kWh Savings by Sector

Actual Lifetime Energy Savings by Sector and Program
2012

	Lifetime kWh Savings	
	Planned	Actual
Commercial & Industrial:		
New Equipment & Construction	2,456,026	0
Large C&I Retrofit	9,768,924	0
Small Business Energy Solutions	3,601,927	0
Education	0	0
Other	0	0
Total Commercial & Industrial Included for Incentive Calculation	**15,826,877**	**0**
Residential:		
Home Energy Assistance Program	879,556	0
Home Energy Solutions Program	2,588,751	0
ENERGY STAR Homes Program	863,389	0
ENERGY STAR Appliance Program	3,547,575	0
ENERGY STAR Lighting Program	8,886,153	0
High Efficiency Heat Pump Program	6,856,504	0
Total Residential Included for Incentive Calculation	**23,621,928**	**0**

ATTACHMENT F: PSNH PROGRAM COST-EFFECTIVENESS

PSNH Program Cost-Effectiveness

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Program Cost-Effectiveness - 2011 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Present Value Utility Costs ($000)	Present Value Customer Costs ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs									
Home Energy Assistance	1.70	$ 6,053.6	$ 1,917.4	$ 1,652.3	643.7	8,946.9	80.3	21.3	679
Home Performance w/Energy Star	2.22	$ 4,401.9	$ 1,626.4	$ 358.7	456.8	4,396.6	131.9	23.1	945
ENERGY STAR Homes	4.76	$ 6,031.3	$ 948.7	$ 317.4	561.1	9,644.8	128.5	83.1	378
ENERGY STAR Appliances	1.42	$ 2,057.8	$ 721.1	$ 730.2	1,780.1	18,253.1	252.2	238.1	12,170
ENERGY STAR Lighting	2.38	$ 2,389.1	$ 774.3	$ 231.0	6,366.3	33,222.0	1,492.3	396.6	149,628
EnergyStar Homes (Geothermal)	2.62	$ 1,677.2	$ 361.4	$ 279.9	1,088.2	27,205.1	734.2	19.8	54
Other		$ -	$ -	$ -	0.0	-	-	-	-
Subtotal Residential	**2.28**	**$ 22,611.0**	**$ 6,349.350**	**$ 3,569.6**	**10,896.2**	**101,668.506**	**2,819.3**	**782.0**	**163,853**
Commercial/Industrial Programs									
New Construction / Major Renovatior	3.13	$ 6,962.3	$ 1,605.1	$ 618.5	5,254.8	73,895.9	1,053.1	2,078.6	144
Large C&I Retrofit	1.93	$ 10,458.6	$ 2,113.5	$ 3,302.4	9,543.2	119,762.0	1,736.0	2,796.2	136
Small Business Energy Solutions	1.67	$ 7,356.4	$ 2,508.6	$ 1,900.4	7,164.1	89,551.1	1,268.0	1,497.3	573
C&I RFP Pilot	3.16	$ 2,658.8	$ 475.5	$ 367.1	2,451.4	29,295.5	451.3	874.9	6
Other (Education)	0.00	$ -	$ 113.3	$ -	0.0	-	-	-	-
CI Partnerships		$ -	$ 28.1	$ -	0.0	-	-	-	-
Subtotal C&I	**2.11**	**27,436.0**	**$ 6,844.1**	**$ 6,188.3**	**24,413.5**	**312,504.4**	**4,508.5**	**7,247.0**	**859**
Smart Start		$ -	$ 30.0	$ -	0.0	-	-	0	-
		$ -	**$ 30.0**	**$ -**	**0.0**	**-**	**-**	**0**	**-**
Total	**2.18**	**50,047.0**	**$ 13,223.4**	**$ 9,757.9**	**35,309.7**	**414,172.9**	**7,327.8**	**8,029.0**	**164,712**

Note: Energy Star Lighting Program plan included 37,407 customers purchasing a total of 149,628 lighting products (4 per customer)

PSNH Present Value of Benefits

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Present Value Benefits - 2011 PLAN

	Total Benefits	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
Home Energy Assistance	$6,053,623	$6,998	$0	$3,092	$10,039	$175,035	$215,470	$87,544	$103,847	$5,451,599
Home Performance w/Energy Star	$4,401,904	$4,902	$0	$2,163	$7,021	$90,679	$128,766	$32,167	$37,623	$4,098,582
ENERGY STAR Homes	$6,031,330	$66,841	$0	$16,363	$53,126	$182,131	$222,045	$92,195	$110,845	$5,287,785
ENERGY STAR Appliances	$2,057,800	$57,984	$0	$25,843	$83,904	$356,889	$436,901	$200,371	$216,483	$679,425
ENERGY STAR Lighting	$2,389,104	$59,914	$0	$24,089	$78,211	$685,307	$818,223	$334,427	$388,933	$0
EnergyStar Homes (Geothermal)	$1,677,211	$19,575	$0	$4,509	$14,641	$553,288	$1,047,706	$20,779	$16,714	$0
Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Residential	**$22,610,972**	**$216,214**	**$0**	**$76,060**	**$246,941**	**$2,043,329**	**$2,869,110**	**$767,482**	**$874,446**	**$15,517,391**
Commercial/Industrial Programs										
New Construction / Major Renovation	$6,962,263	$725,312	$0	$311,914	$1,012,680	$1,239,125	$1,291,829	$1,455,160	$926,241	$0
Large C&I Retrofit	$10,458,560	$838,287	$0	$374,119	$1,214,639	$2,420,434	$2,002,974	$2,104,891	$1,503,216	$0
Small Business Energy Solutions	$7,356,422	$444,849	$0	$198,681	$645,050	$2,420,554	$1,577,017	$1,287,947	$782,323	$0
C&I RFP Pilot	$2,658,784	$241,667	$0	$108,251	$351,454	$470,317	$481,339	$571,045	$434,710	$0
Other (Education)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
CI Partnerships	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal C&I	**$27,436,028**	**$2,250,116**	**$0**	**$992,965**	**$3,223,823**	**$6,550,431**	**$5,353,160**	**$5,419,044**	**$3,646,489**	**$0**
Total	**$50,047,001**	**$2,466,330**	**$0**	**$1,069,025**	**$3,470,764**	**$8,593,760**	**$8,222,270**	**$6,186,526**	**$4,520,935**	**$15,517,391**

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Shareholder Incentive Calculation
2011

	Planned	Actual
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	**2.02**	**0.00**
2. Threshold Benefit / Cost Ratio [1]	1.00	
3. Lifetime kWh Savings	**312,504,380**	**0**
4. Threshold Lifetime kWh Savings (65%) [2]	203,127,847	
5. Budget	$6,844,100	$0
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
8. C/I Shareholder Incentive	$547,528	
9. Cap (12%)	$821,292	
Residential Incentive		
10. Benefit / Cost Ratio	**2.17**	**0.00**
11. Threshold Benefit / Cost Ratio [1]	1.00	
12. Lifetime kWh Savings	**101,668,506**	**0**
13. Threshhold Lifetime kWh Savings (65%) [2]	66,084,529	
14. Budget	$6,349,350	$0
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
17. Residential Incentive	$507,948	
18. Cap (12%)	$761,922	
19. TOTAL INCENTIVE EARNED		

Notes

1. Actual Benefit/ Cost Ratio for each sector must be greater than or equal to 1.0.

2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

PSNH Planned Benefit/Cost Ratio by Sector

Planned Versus Actual Benefit / Cost Ratio by Sector
2011

	Planned	Actual
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	$ 27,436,028	$ -
2. Implementation Expenses	$ 6,844,100	$ -
3. Customer Contribution	$ 6,188,313	$ -
4. Estimated Shareholder Incentive	$ 547,528	
5. Total Costs (including shareholder incentive)	$ 13,579,941	$ -
6. Benefit/Cost Ratio - C&I Sector	**2.02**	**0.00**
Residential:		
7. Benefits (Value) From Eligible Programs	$ 22,610,972	$ -
8. Implementation Expenses	$ 6,349,350	$ -
9. Customer Contribution	$ 3,569,610	$ -
10. Estimated Shareholder Incentive	$ 507,948	
11. Total Costs (including shareholder incentive)	$ 10,426,908	$ -
12. Benefit/Cost Ratio - Residential Sector	**2.17**	**0.00**

PSNH Planned kWh Savings by Sector

Actual Lifetime Energy Savings by Sector and Program
2011

	Lifetime kWh Savings	
	Planned	**Actual**
Commercial & Industrial:		
New Construction / Major Renovation	73,895,868	0
Large C&I Retrofit	119,761,974	0
Small Business Energy Solutions	89,551,078	0
C&I RFP Pilot	29,295,460	0
Other (Education)	0	0
CI Partnerships	0	0
Total Commercial & Industrial Included for Incentive Calculation	**312,504,380**	**0**
Residential:		
Home Energy Assistance	8,946,884	0
Home Performance w/Energy Star	4,396,643	0
ENERGY STAR Homes	9,644,760	0
ENERGY STAR Appliances	18,253,113	0
ENERGY STAR Lighting	33,221,995	0
EnergyStar Homes (Geothermal)	27,205,110	0
Other	0	0
Total Residential Included for Incentive Calculation	**101,668,506**	**0**

PSNH Program Cost-Effectiveness

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Program Cost-Effectiveness - 2012 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Present Value Utility Costs ($000)	Present Value Customer Costs ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs									
Home Energy Assistance	1.65	$ 6,713.0	$ 2,182.3	$ 1,895.2	654.8	9,101.7	81.7	21.7	760
Home Performance w/Energy Star	2.12	$ 4,658.8	$ 1,780.1	$ 412.8	490.3	4,719.4	141.1	24.9	1,019
ENERGY STAR Homes	4.73	$ 6,134.3	$ 1,038.4	$ 257.7	570.7	9,809.4	130.7	84.5	384
ENERGY STAR Appliances	1.44	$ 2,327.6	$ 789.3	$ 825.9	2,013.5	20,646.6	285.3	269.3	13,766
ENERGY STAR Lighting	2.62	$ 2,971.1	$ 847.5	$ 287.3	7,917.3	41,315.7	1,855.9	493.2	186,081
EnergyStar Homes (Geothermal)	2.02	$ 1,394.3	$ 395.6	$ 295.5	904.0	22,599.9	628.5	17.0	48
Other		$ -	$ -	$ -	0.0	-	-	-	-
Subtotal Residential	**2.20**	**$ 24,199.1**	**$ 7,033.069**	**$ 3,974.4**	**12,550.5**	**108,192.682**	**3,123.0**	**910.5**	**202,058**
Commercial/Industrial Programs									
New Construction / Major Renovat	2.96	$ 7,068.4	$ 1,716.9	$ 671.9	5,368.4	75,470.8	1,082.6	2,083.4	157
Large C&I Retrofit	1.88	$ 10,883.8	$ 2,272.6	$ 3,502.9	9,940.2	124,738.9	1,805.0	2,899.7	144
Small Business Energy Solutions	1.54	$ 7,699.2	$ 2,816.6	$ 2,181.8	7,637.5	93,559.2	1,351.8	1,596.2	656
C&I RFP Pilot	2.96	$ 2,747.6	$ 519.8	$ 407.3	2,538.7	30,184.9	464.3	915.0	6
Other (Education)	0.00	$ -	$ 123.8	$ -	0.0	-	-	-	-
CI Partnerships		$ -	$ 30.7	$ -	0.0	-	-	-	-
Subtotal C&I	**1.99**	**28,398.9**	**$ 7,480.4**	**$ 6,763.8**	**25,484.8**	**323,953.9**	**4,703.8**	**7,494.4**	**963**
Smart Start		$ -	$ 30.0	$ -	0.0	-	-	0	-
		$ -	**$ 30.0**	**$ -**	**0.0**	**-**	**-**	**0**	**-**
Total	**2.08**	**52,598.0**	**$ 14,543.4**	**$ 10,738.2**	**38,035.3**	**432,146.6**	**7,826.8**	**8,404.9**	**203,021**

Note 1: Energy Star Lighting Program plan includes 46,520 customers purchasing a total of 186,081 lighting products (4 per customer)

PSNH Present Value of Benefits

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Present Value Benefits - 2012 PLAN

	Total Benefits	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
Home Energy Assistance	$6,712,962	$7,119	$0	$3,146	$10,213	$178,063	$219,198	$89,058	$105,644	$6,100,521
Home Performance w/Energy Star	$4,658,794	$5,289	$0	$2,334	$7,577	$97,304	$137,888	$34,722	$40,614	$4,333,067
ENERGY STAR Homes	$6,134,281	$67,981	$0	$16,642	$54,033	$185,240	$225,835	$93,769	$112,737	$5,378,044
ENERGY STAR Appliances	$2,327,638	$65,588	$0	$29,232	$94,906	$403,687	$494,191	$226,646	$244,871	$768,517
ENERGY STAR Lighting	$2,971,148	$74,511	$0	$29,958	$97,265	$852,264	$1,017,562	$415,901	$483,687	$0
EnergyStar Homes (Geothermal)	$1,394,264	$16,750	$0	$3,859	$12,528	$459,630	$870,359	$17,256	$13,881	$0
Subtotal Residential	**$24,199,087**	**$237,238**	**$0**	**$85,171**	**$276,521**	**$2,176,189**	**$2,965,033**	**$877,353**	**$1,001,433**	**$16,580,149**
Commercial/Industrial Programs										
New Construction / Major Renovation	$7,068,385	$726,327	$0	$312,427	$1,014,346	$1,272,738	$1,327,914	$1,470,646	$943,987	$0
Large C&I Retrofit	$10,883,787	$869,260	$0	$387,943	$1,259,522	$2,536,228	$2,085,998	$2,186,672	$1,558,164	$0
Small Business Energy Solutions	$7,699,188	$465,540	$0	$208,248	$676,109	$2,533,503	$1,650,199	$1,347,358	$818,232	$0
C&I RFP Pilot	$2,747,589	$251,576	$0	$112,709	$365,929	$479,922	$492,333	$592,963	$452,157	$0
Other (Education)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
CI Partnerships	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal C&I	**$28,398,949**	**$2,312,702**	**$0**	**$1,021,327**	**$3,315,905**	**$6,822,392**	**$5,556,443**	**$5,597,640**	**$3,772,539**	**$0**
Total	**$52,598,036**	**$2,549,940**	**$0**	**$1,106,498**	**$3,592,427**	**$8,998,581**	**$8,521,476**	**$6,474,992**	**$4,773,973**	**$16,580,149**

PSNH Shareholder Incentive Calculation

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Shareholder Incentive Calculation
2012

	Planned	Actual
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	**1.91**	**0.00**
2. Threshold Benefit / Cost Ratio [1]	1.00	
3. Lifetime kWh Savings	**323,953,873**	**0**
4. Threshold Lifetime kWh Savings (65%) [2]	210,570,017	
5. Budget	$7,480,377	$0
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
8. C/I Shareholder Incentive	$598,430	
9. Cap (12%)	$897,645	
Residential Incentive		
10. Benefit / Cost Ratio	**2.09**	**0.00**
11. Threshold Benefit / Cost Ratio [1]	1.00	
12. Lifetime kWh Savings	**12,550,538**	**0**
13. Threshhold Lifetime kWh Savings (65%) [2]	8,157,850	
14. Budget [3]	$7,033,069	$0
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
17. Residential Incentive	$562,646	
18. Cap (12%)	$843,968	
19. TOTAL INCENTIVE EARNED		

Notes

1. Actual Benefit/ Cost Ratio for each sector must be greater than or equal to 1.0.

2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

PSNH Planned Benefit/Cost Ratio by Sector

Planned Versus Actual Benefit / Cost Ratio by Sector
2012

	Planned	Actual
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	$ 28,398,949	$ -
2. Implementation Expenses	$ 7,480,377	$ -
3. Customer Contribution	$ 6,763,801	$ -
4. Estimated Shareholder Incentive	$ 598,430	
5. Total Costs (including shareholder incentive)	$ 14,842,608	$ -
6. Benefit/Cost Ratio - C&I Sector	**1.91**	**0.00**
Residential:		
7. Benefits (Value) From Eligible Programs	$ 24,199,087	$ -
8. Implementation Expenses	$ 7,033,069	$ -
9. Customer Contribution	$ 3,974,432	$ -
10. Estimated Shareholder Incentive	$ 562,646	
11. Total Costs (including shareholder incentive)	$ 11,570,147	$ -
12. Benefit/Cost Ratio - Residential Sector	**2.09**	**0.00**

PSNH Planned kWh Savings by Sector

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Actual Lifetime Energy Savings by Sector and Program
2012

	Lifetime kWh Savings	
	Planned	**Actual**
Commercial & Industrial:		
New Construction / Major Renovation	75,470,806	0
Large C&I Retrofit	124,738,939	0
Small Business Energy Solutions	93,559,245	0
C&I RFP Pilot	30,184,883	0
Other (Education)	0	0
CI Partnerships	0	0
Total Commercial & Industrial Included for Incentive Calculati	**323,953,873**	**0**
Residential:		
Home Energy Assistance	654,798	0
Home Performance w/Energy Star	490,262	0
ENERGY STAR Homes	570,681	0
ENERGY STAR Appliances	2,013,512	0
ENERGY STAR Lighting	7,917,288	0
EnergyStar Homes (Geothermal)	903,995	0
Other	0	0
Total Residential Included for Incentive Calculation	**12,550,538**	**0**

ATTACHMENT G: UES PROGRAM COST-EFFECTIVENESS

UES Program Cost-Effectiveness

Program Cost-Effectiveness - 2011 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Utility Costs [1] ($000)	Customer Costs ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs									
ENERGY STAR Homes	3.2	$ 859.8	$ 215.4	$ 53.4	72.0	1,402.0	36.0	4.2	36
Home Performance with Energy Star	1.6	$ 500.9	$ 266.2	$ 41.9	35.0	496.0	16.5	1.0	65
ENERGY STAR Lighting [2]	3.6	$ 690.7	$ 152.3	$ 41.3	1,800.0	9,019.0	436.0	115.9	43,961
ENERGY STAR Appliances [2]	1.3	$ 433.5	$ 152.5	$ 181.6	333.0	3,433.0	46.1	56.4	1,622
Home Energy Assistance [3]	2.4	$ 786.9	$ 330.7	$ -	545.2	8,863.1	13.3	1.2	58
Res/K-12 Education	0.0	$ -	$ 15.0	$ -	-	-	-	-	-
ISO-Related Expenses Res/LI	0.0	$ -	$ 6.5	$ -	-	-	-	-	-
Subtotal Residential	**2.2**	**$ 3,271.8**	**$ 1,138.6**	**$ 318.2**	**2,785.2**	**23,213.1**	**547.9**	**178.6**	**45,742**
Commercial/Industrial Programs									
New Construction / Major Renovatio	2.3	$ 698.0	$ 248.5	$ 48.7	562.0	8,431.0	127.6	155.6	13
Large C&I Retrofit	2.5	$ 2,442.6	$ 483.0	$ 504.2	2,393.0	31,108.0	326.4	433.9	19
Small C&I Retrofit	1.9	$ 1,208.6	$ 411.0	$ 235.2	1,124.0	14,607.0	203.7	277.9	40
C&I Education	0.0	$ -	$ 10.5	$ -	-	-	-	-	-
ISO-Related Expenses C&I	0.0	$ -	$ 7.5	$ -	-	-	-	-	-
Subtotal C&I	**2.2**	**4,349.2**	**1,160.5**	**788.0**	**4,079.0**	**54,146.0**	**657.7**	**867.4**	**72**
Total		**$ 7,621.0**	**$ 2,299.1**	**$ 1,106.3**	**6,864.2**	**77,359.1**	**1,205.6**	**1,046.0**	**45,814**

(1) Utility Costs include direct program costs plus projected Shareholder Incentive.

(2) Target number of products purchased.

(3) The Home Energy Assistance (HEA) Program is offered as fuel-blind. Estimated lifetime non-electric savings have been converted into kWh as follows to establish UES' HEA program savings goal: [Lifetime MMBtu ÷ 0.003413] ÷ 1,000 = Lifetime MWh.

UES Present Value of Benefits

Present Value Benefits - 2011 PLAN

		CAPACITY				ENERGY				
	Total Benefits ($000)	Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	Non Electric Resource
Residential Programs										
ENERGY STAR Homes	$859,842	$2,878	$0	$4,135	$13,424	$28,119	$51,292	$3,548	$2,787	$753,660
Home Performance w/Energy Star	$500,886	$182	$0	$1,420	$4,611	$10,370	$18,340	$1,138	$1,325	$463,500
ENERGY STAR Lighting [*1]	$690,676	$16,970	$0	$16,175	$52,513	$186,432	$222,214	$90,825	$105,547	$0
ENERGY STAR Appliances	$433,526	$13,893	$0	$5,609	$18,211	$67,889	$83,097	$36,166	$40,536	$168,124
Home Energy Assistance	$786,946	$303	$0	$1,139	$3,699	$19,895	$28,048	$7,359	$8,775	$717,728
Subtotal Residential	**$3,271,875**	**$34,226**	**$0**	**$28,478**	**$92,458**	**$312,704**	**$402,991**	**$139,036**	**$158,970**	**$2,103,012**
Commercial/Industrial Programs										
New Construction / Major Renovation	$697,983	$56,389	$0	$21,848	$70,933	$139,710	$181,527	$120,115	$107,461	$0
Large C&I Retrofit	$2,442,634	$133,647	$0	$52,141	$169,284	$761,860	$577,832	$446,296	$301,575	$0
Small C&I Retrofit	$1,208,552	$85,587	$0	$33,025	$107,221	$380,702	$268,846	$200,735	$132,436	$0
Subtotal C&I	**$4,349,169**	**$275,623**	**$0**	**$107,014**	**$347,438**	**$1,282,272**	**$1,028,205**	**$767,146**	**$541,471**	**$0**
Total	**$7,621,043**	**$309,848**	**$0**	**$135,492**	**$439,896**	**$1,594,976**	**$1,431,196**	**$906,182**	**$700,441**	**$2,103,012**

UES Shareholder Incentive Calculation

Shareholder Incentive Calculation
2011

		Planned	Actual
Commercial/Industrial Incentive			
1. Benefit/Cost Ratio		**2.2**	**0.0**
2. Threshold Benefit / Cost Ratio [1]		1.0	
3. Lifetime kWh Savings		**54,146,000**	**0**
4. Threshold Lifetime kWh Savings (65%) [2]		35,194,900	
5. Budget		$1,074,486	$0
6. Benefit / Cost Percentage of Budget		4.00%	
7. Lifetime kWh Percentage of Budget		4.00%	
8. C/I Shareholder Incentive		$85,959	
9. Cap (12%)		$128,938	
Residential Incentive			
10. Benefit / Cost Ratio		**2.2**	**0.0**
11. Threshold Benefit / Cost Ratio [1]		1.0	
12. Lifetime kWh Savings		**23,213,127**	**0**
13. Threshhold Lifetime kWh Savings (65%) [2]		15,088,533	
14. Budget		$1,054,237	
15. Benefit / Cost Percentage of Budget		4.00%	
16. Lifetime kWh Percentage of Budget		4.00%	
17. Residential Incentive		$84,339	
18. Cap (12%)		$126,508	
19. TOTAL PLANNED / EARNED INCENTIVE	**$**	**170,298**	

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

UES Planned Benefit/Cost Ratio by Sector

Planned Versus Actual Benefit / Cost Ratio by Sector
2011

		Planned		Actual
Commercial & Industrial:				
1. Benefits (Value) From Eligible Programs	$	4,349,200	$	-
2. Implementation Expenses	$	1,074,486	$	-
3. Customer Contribution	$	788,046	$	-
4. Shareholder Incentive	$	85,959	$	-
5. Total Costs	$	1,948,491	$	-
6. Benefit/Cost Ratio - C&I Sector		**2.2**		**0.0**
Residential:				
6. Benefits (Value) From Eligible Programs	$	3,271,800	$	-
7. Implementation Expenses	$	1,054,237	$	-
8. Customer Contribution	$	318,214	$	-
9. Shareholder Incentive	$	84,339	$	-
10. Total Costs	$	1,456,790	$	-
11. Benefit/Cost Ratio - Residential Sector		**2.2**		**0.0**

UES Planned kWh Savings by Sector

Actual Lifetime Energy Savings by Sector and Program
2011

	Lifetime kWh Savings	
	Planned	Actual
Commercial & Industrial:		
New Equipment & Construction	8,431,000	0
Large C&I Retrofit	31,108,000	0
Small Business Energy Solutions	14,607,000	0
Total Commercial & Industrial Included for Incentive Calculation	**54,146,000**	**0**
Residential:		
Home Energy Assistance Program	8,863,127	0
Home Energy Solutions Program	496,000	0
ENERGY STAR Homes Program	1,402,000	0
ENERGY STAR Appliance Program	3,433,000	0
ENERGY STAR Lighting Program	9,019,000	0
Total Residential Included for Incentive Calculation	**23,213,127**	**0**

UES Program Cost-Effectiveness

Program Cost-Effectiveness - 2012 PLAN

	Total Resource Benefit/Cost Ratio	Present Value Benefit ($000)	Present Value Utility Costs [1] ($000)	Present Value Customer Costs ($000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs									
ENERGY STAR Homes	3.3	$ 889.0	$ 215.4	$ 53.4	72.0	1,402.0	36.0	4.2	36
Home Performance with Energy Star	1.7	$ 518.6	$ 266.2	$ 41.9	35.0	496.0	16.5	1.0	65
ENERGY STAR Lighting [2]	3.7	$ 710.8	$ 152.3	$ 41.3	1,800.0	9,019.0	436.0	115.9	43,961
ENERGY STAR Appliances [2]	1.3	$ 440.5	$ 152.5	$ 181.6	333.0	3,433.0	46.1	56.4	1,622
Home Energy Assistance [3]	2.5	$ 810.9	$ 330.7	$ -	545.2	8,863.1	13.3	1.2	58
Res/K-12 Education	0.0	$ -	$ 15.0	$ -	-	-	-	-	-
ISO-Related Expenses Res/LI	0.0	$ -	$ 6.5	$ -	-	-	-	-	-
Subtotal Residential	**2.3**	**$ 3,369.7**	**$ 1,138.6**	**$ 318.2**	**2,785.2**	**23,213.1**	**547.9**	**178.6**	**45,742**
Commercial/Industrial Programs									
New Construction / Major Renovation	2.4	$ 714.0	$ 248.5	$ 48.7	562.0	8,431.0	127.6	155.6	13
Large C&I Retrofit	2.5	$ 2,493.1	$ 483.0	$ 504.2	2,393.0	31,108.0	326.4	433.9	19
Small C&I Retrofit	1.9	$ 1,230.9	$ 411.0	$ 235.2	1,124.0	14,607.0	203.7	277.9	40
C&I Education	0.0	$ -	$ 10.5	$ -	-	-	-	-	-
ISO-Related Expenses C&I	0.0	$ -	$ 7.5	$ -	-	-	-	-	-
Subtotal C&I	**2.3**	**4,438.0**	**1,160.4**	**788.0**	**4,079.0**	**54,146.0**	**657.7**	**867.4**	**72**
Total		**$ 7,807.8**	**$ 2,299.0**	**$ 1,106.3**	**6,864.2**	**77,359.1**	**1,205.6**	**1,046.0**	**45,814**

(1) Utility Costs include direct program costs plus projected Shareholder Incentive.

(2) Target number of products purchased.

(3) The Home Energy Assistance (HEA) Program is offered as fuel-blind. Estimated lifetime non-electric savings have been converted into kWh as follows to establish UES' HEA program savings goal: [Lifetime MMBtu ÷ 0.003413] ÷ 1,000 = Lifetime MWh.

UES Present Value of Benefits

Present Value Benefits - 2012 PLAN

	Total Benefits ($000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
ENERGY STAR Homes	$889,042	$2,951	$0	$4,155	$13,491	$28,801	$52,653	$3,650	$2,897	$780,444
Home Performance w/Energy St	$518,566	$157	$0	$1,427	$4,634	$10,634	$18,865	$1,176	$1,384	$480,289
ENERGY STAR Lighting [*1]	$710,777	$13,783	$0	$16,255	$52,776	$191,791	$232,021	$93,990	$110,161	$0
ENERGY STAR Appliances	$440,454	$12,596	$0	$5,637	$18,302	$69,425	$85,811	$37,098	$41,940	$169,645
Home Energy Assistance	$810,893	$280	$0	$1,145	$3,717	$20,380	$28,830	$7,563	$9,080	$739,899
Subtotal Residential	**$3,369,732**	**$29,767**	**$0**	**$28,620**	**$92,921**	**$321,031**	**$418,180**	**$143,476**	**$165,461**	**$2,170,276**
Commercial/Industrial Programs										
New Construction / Major Renov	$714,047	$56,682	$0	$21,957	$71,288	$143,088	$186,567	$123,355	$111,110	$0
Large C&I Retrofit	$2,493,076	$125,170	$0	$52,402	$170,130	$780,508	$594,478	$458,390	$311,998	$0
Small C&I Retrofit	$1,230,905	$80,159	$0	$33,190	$107,757	$390,021	$276,590	$206,175	$137,014	$0
Subtotal C&I	**$4,438,028**	**$262,010**	**$0**	**$107,549**	**$349,175**	**$1,313,616**	**$1,057,635**	**$787,920**	**$560,122**	**$0**
Total	**$7,807,760**	**$291,777**	**$0**	**$136,169**	**$442,096**	**$1,634,647**	**$1,475,815**	**$931,396**	**$725,583**	**$2,170,276**

UES Shareholder Incentive Calculation

Shareholder Incentive Calculation
2012

		Planned	Actual
Commercial/Industrial Incentive			
1. Benefit/Cost Ratio		**2.3**	**0.0**
2. Threshold Benefit / Cost Ratio [1]		1.0	
3. Lifetime kWh Savings		**54,146,000**	**0**
4. Threshold Lifetime kWh Savings (65%) [2]		35,194,900	
5. Budget		$1,074,486	$0
6. Benefit / Cost Percentage of Budget		4.00%	
7. Lifetime kWh Percentage of Budget		4.00%	
8. C/I Shareholder Incentive		$85,959	
9. Cap (12%)		$128,938	
Residential Incentive			
10. Benefit / Cost Ratio		**2.3**	**0.0**
11. Threshold Benefit / Cost Ratio [1]		1.0	
12. Lifetime kWh Savings		**23,213,127**	**0**
13. Threshhold Lifetime kWh Savings (65%) [2]		15,088,533	
14. Budget		$1,054,236	
15. Benefit / Cost Percentage of Budget		4.00%	
16. Lifetime kWh Percentage of Budget		4.00%	
17. Residential Incentive		$84,339	
18. Cap (12%)		$126,508	
19. TOTAL PLANNED / EARNED INCENTIVE	**$**	**170,298**	

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

UES Planned Benefit/Cost Ratio by Sector

Planned Versus Actual Benefit / Cost Ratio by Sector
2012

		Planned		Actual
Commercial & Industrial:				
1. Benefits (Value) From Eligible Programs	$	4,438,028	$	-
2. Implementation Expenses	$	1,074,486	$	-
3. Customer Contribution	$	788,046	$	-
4. Shareholder Incentive	$	85,959	$	-
5. Total Costs	$	1,948,491	$	-
6. Benefit/Cost Ratio - C&I Sector		**2.3**		**0.0**
Residential:				
6. Benefits (Value) From Eligible Programs	$	3,369,732	$	-
7. Implementation Expenses	$	1,054,236	$	-
8. Customer Contribution	$	318,214	$	-
9. Shareholder Incentive	$	84,339	$	-
10. Total Costs	$	1,456,789	$	-
11. Benefit/Cost Ratio - Residential Sector		**2.3**		**0.0**

UES Planned kWh Savings by Sector

Actual Lifetime Energy Savings by Sector and Program
2012

	Lifetime kWh Savings	
	Planned	Actual
Commercial & Industrial:		
New Equipment & Construction	8,431,000	0
Large C&I Retrofit	31,108,000	0
Small Business Energy Solutions	14,607,000	0
Total Commercial & Industrial Included for Incentive Calculation	**54,146,000**	**0**
Residential:		
Home Energy Assistance Program	8,863,127	0
Home Energy Solutions Program	496,000	0
ENERGY STAR Homes Program	1,402,000	0
ENERGY STAR Appliance Program	3,433,000	0
ENERGY STAR Lighting Program	9,019,000	0
Total Residential Included for Incentive Calculation	**23,213,127**	**0**

ATTACHMENT H: STATEWIDE BUDGET S AND GOALS

Proposed Budgets by Activity

NH CORE Energy Efficiency Program - 2011 Budget Details

RESIDENTIAL PROGRAMS	Internal Adm	External Adm	Cust Rebts/Services	Internal Impl.	Marketing	Evaluation (see Note 1)	Total
National Grid	$5,933	$14,039	$117,961	$0	$2,967	$1,013	$141,913
NHEC	$10,367	$1,667	$66,661	$27,446	$1,150	$6,222	$113,513
PSNH	$23,665	$0	$796,866	$82,000	$7,700	$38,499	$948,730
Unitil	$13,385	$993	$115,174	$49,470	$5,000	$14,657	$198,679
ENERGY STAR Homes	$53,350	$16,699	$1,096,662	$158,916	$16,817	$60,391	$1,402,835
National Grid	$2,858	$17,480	$69,919	$0	$2,124	$10,129	$102,510
NHEC	$10,367	$1,667	$76,660	$31,777	$1,150	$6,223	$127,844
PSNH	$40,568	$35,000	$1,286,628	$185,000	$13,200	$65,998	$1,626,394
Unitil	$11,771	$2,802	$157,265	$42,484	$8,000	$17,678	$240,000
Home Performance w/ Energy Star	$65,564	$56,949	$1,590,472	$259,261	$24,474	$100,028	$2,096,748
National Grid	$14,759	$21,000	$40,670	$0	$7,105	$2,834	$86,368
NHEC	$10,367	$1,667	$84,994	$21,858	$4,650	$6,223	$129,759
PSNH	$17,987	$0	$623,023	$45,000	$5,853	$29,263	$721,126
Unitil	$6,233	$2,145	$72,954	$21,684	$22,000	$9,984	$135,000
Energy Star Appliances	$49,346	$24,812	$821,641	$88,542	$39,608	$48,304	$1,072,253
National Grid	$10,016	$11,137	$178,605	$0	$1,533	$5,008	$206,299
NHEC	$10,367	$1,667	$111,383	$31,777	$1,000	$6,223	$162,417
PSNH	$47,827	$20,000	$1,606,205	$150,000	$15,561	$77,807	$1,917,400
Unitil	$17,795	$5,387	$189,383	$70,230	$4,000	$19,262	$306,057
Home Energy Assistance	$86,005	$38,191	$2,085,576	$252,007	$22,094	$108,300	$2,592,173
National Grid	$15,775	$12,269	$27,070	$0	$18,573	$3,351	$77,038
NHEC	$10,367	$1,667	$54,994	$21,858	$10,000	$6,223	$105,109
PSNH	$19,313	$0	$402,262	$65,000	$256,284	$31,420	$774,279
Unitil	$5,238	$1,735	$68,616	$18,812	$32,500	$8,100	$135,000
ENERGY STAR Lighting	$50,693	$15,671	$552,942	$105,670	$317,357	$49,094	$1,091,426
National Grid	$0	$0	$0	$0	$0	$0	$0
NHEC	$10,367	$1,667	$49,995	$27,447	$1,000	$6,223	$96,699
PSNH	$9,015	$5,000	$284,807	$45,000	$2,933	$14,666	$361,421
Unitil (Res. Website, ISO Expenses)	$1,725	$5,600	$22,400	$9,775	$0	$0	$39,500
Other Residential Programs	$21,107	$12,267	$357,202	$82,222	$3,933	$20,889	$497,620
Total Residential Programs	**$326,063**	**$164,590**	**$6,504,495**	**$946,618**	**$424,283**	**$387,006**	**$8,753,055**
COMMERCIAL, INDUSTRIAL AND MUNICIPAL PROGRAMS							
National Grid	$26,686	$6,672	$125,000	$24,000	$1,000	$18,000	$201,358
NHEC	$10,367	$1,667	$60,444	$27,562	$1,150	$6,223	$107,413
PSNH	$40,304	$0	$1,257,549	$220,000	$7,000	$80,255	$1,605,108
Unitil	$10,553	$4,499	$146,138	$41,270	$8,999	$13,497	$224,957
New Equipment & Construction	$87,910	$12,838	$1,589,131	$312,832	$18,149	$117,975	$2,138,836
National Grid	$24,000	$6,000	$327,074	$15,755	$4,000	$15,000	$391,829
NHEC	$10,367	$1,667	$74,392	$28,264	$1,150	$6,223	$122,063
PSNH	$53,069	$0	$1,597,733	$350,000	$7,000	$105,674	$2,113,476
Unitil	$26,843	$4,416	$271,470	$98,238	$14,132	$26,496	$441,595
Large C&I Retrofit	$114,279	$12,083	$2,270,669	$492,257	$26,282	$153,393	$3,068,963
National Grid	$8,000	$2,000	$200,000	$1,000	$3,151	$7,755	$221,906
NHEC	$10,367	$1,667	$74,392	$28,265	$1,152	$6,223	$122,066
PSNH	$62,990	$0	$1,845,112	$450,000	$25,086	$125,431	$2,508,619
Unitil	$19,879	$6,749	$235,176	$76,765	$13,496	$22,871	$374,935
Small Business Energy Solutions	$101,236	$10,416	$2,354,680	$556,030	$42,885	$162,280	$3,227,526
National Grid	$0	$0	$0	$0	$0	$0	$0
NHEC	$1,904	$0	$23,248	$8,082	$0	$0	$33,234
PSNH (Education, RFP, Smart Start)	$15,490	$0	$529,393	$65,000	$6,169	$30,845	$646,897
til (Education, C&I Web, ISO Expenses)	$2,250	$3,600	$14,400	$12,750	$0	$0	$33,000
Other C&I Programs	$19,644	$3,600	$567,041	$85,832	$6,169	$30,845	$713,131
Total Non-Residential Programs	**$323,069**	**$38,937**	**$6,781,521**	**$1,446,952**	**$93,485**	**$464,493**	**$9,148,455**
TOTAL (Both Sectors)	**$649,132**	**$203,526**	**$13,286,015**	**$2,393,570**	**$517,768**	**$851,499**	**$17,901,511**

Note 1: Evaluation amounts are based on 5% of total budgets. Actual program expenses will vary from numbers shown.

Proposed Budgets with Participation and Lifetime kWh Savings Goals

New Hampshire CORE Energy Efficiency Goals - 2011

	National Grid		NHEC		PSNH		UNITIL		TOTALS	
PROGRAMS										
Energy Star Homes										
Number of Homes / Lifetime kWh Savings	50	1,501,391	37	799,852	378	9,644,760	38	1,401,902	503	13,347,904
B/C Ratio / Planned Budget	6.39	$141,913	4.01	$113,513	4.76	$948,730	3.20	$198,679		$1,402,835
NH Home Performance with Energy Star										
Number of Units / Lifetime kWh Savings	101	2,652,330	39	2,398,242	945	4,396,643	65	495,527	1,150	9,942,742
B/C Ratio / Planned Budget	1.89	$102,510	2.02	$127,844	2.22	$1,626,394	1.60	$240,000		$2,096,748
Energy Star Appliances										
Number of Rebates / Lifetime kWh Savings	875	1,206,631	1,735	3,329,756	12,170	18,253,113	1,622	3,433,384	16,402	26,222,884
B/C Ratio / Planned Budget	1.70	$86,368	1.43	$129,759	1.42	$721,126	1.30	$135,000		$1,072,253
Home Energy Assistance (see Note 1)										
Number of Units / Lifetime kWh Savings	50	1,230,839	50	717,727	679	8,946,884	61	10,254,877	840	21,150,327
B/C Ratio / Planned Budget	1.92	$206,299	2.08	$162,417	1.70	$1,917,400	2.40	$306,057		$2,592,173
Energy Star Lighting										
Number of Rebates / Lifetime kWh Savings	13,142	2,905,116	35,864	8,070,159	149,656	33,221,995	43,961	9,019,151	242,623	53,216,421
B/C Ratio / Planned Budget	1.85	$77,038	4.46	$105,109	2.38	$774,279	3.60	$135,000		$1,091,426
C&I New Equipment & Construction										
Number of Participants / Lifetime kWh Savings	11	7,703,362	5	2,248,898	144	73,895,868	13	8,431,037	173	92,279,165
B/C Ratio / Planned Budget	2.48	$201,358	1.31	$107,413	3.13	$1,605,108	2.30	$224,957		$2,138,836
Large C&I Retrofit										
Number of Participants / Lifetime kWh Savings	26	39,827,552	22	9,167,837	136	119,761,974	29	31,107,908	213	199,865,271
B/C Ratio / Planned Budget	3.25	$391,829	1.81	$122,063	1.93	$2,113,476	2.50	$441,595		$3,068,963
Small Business Energy Solutions										
Number of Participants / Lifetime kWh Savings	33	6,081,900	32	3,298,149	573	89,551,078	58	14,606,755	696	113,537,882
B/C Ratio / Planned Budget	1.65	$221,906	1.34	$122,066	1.67	$2,508,619	1.90	$374,935		$3,227,526
Educational Programs (see Note 2)										
B/C Ratio / Planned Budget		$9,000		$26,129		$113,264		$25,500		$164,893
Company Specific Programs										
Number of Participants / Lifetime kWh Savings			12	6,351,954	60	56,500,570				62,852,524
B/C Ratio / Planned Budget		$0	2.12	$96,699		$865,054		$47,000		$1,008,753
Smart Start Program										
Number of Participants / Planned Budget		$0		$7,105		$30,000		$0		$37,105
Utility Incentive										
B/C Ratio / Planned Budget		$114,338		$89,609		$1,057,876		$170,298		$1,432,121
TOTAL PLANNED BUDGET		**$1,543,559**		**$1,209,726**		**$14,281,326**		**$2,299,021**		**$19,333,632**

NOTES:
(1) Unitil's HEA savings target equals 1,008,466 lifetime kWh + (31,558 lifetime MMBtu ÷ 0.003413) = 10,254,877 lifetime kWh.
(2) National Grid's Educational Program budget is included within other program budgets and therefore is not included in the total to avoid double counting.

Proposed Budget & Goals

NH CORE Energy Efficiency Program Goals

(January 1 - December 31, 2011)

NH CORE ENERGY EFFICIENCY PROGRAMS	EXPENSES ($)	SAVINGS (Lifetime kWh)	NUMBER OF CUSTOMERS
RESIDENTIAL (nhsaves@home)			
ENERGY STAR Homes	$1,402,835	13,347,904	503
NH Home Performance w/Energy Star	$2,096,748	9,942,742	1,150
Home Energy Assistance	$2,592,173	21,150,327	840
ENERGY STAR Lighting [1]	$1,091,426	53,216,421	242,595
ENERGY STAR Appliances	$1,072,253	26,222,884	16,402
TOTAL RESIDENTIAL	**$8,255,435**	**123,880,278**	**261,490**
COMMERCIAL & INDUSTRIAL (nhsaves@work)			
Educational Programs	$165,389		
Small Business Energy Solutions	$3,238,522	113,537,882	696
Large Business Energy Solutions	$3,078,227	199,865,271	213
New Equipment & Construction	$2,145,872	92,279,165	173
TOTAL COMMERICAL & INDUSTRIAL	**$8,628,009**	**405,682,317**	**1,082**
TOTAL	**$16,883,445**	**529,562,595**	**262,572**

[1] "Number of customers" is actually number of lighting products purchased.

Proposed Budgets by Activity

NH CORE Energy Efficiency Program - 2012 Budget Details

RESIDENTIAL PROGRAMS	Internal Adm	External Adm	Cust Rebts/Services	Internal Impl.	Marketing	Evaluation (see Note 1)	Total
National Grid	$6,002	$14,201	$119,325	$0	$3,001	$1,025	$143,554
NHEC	$10,885	$1,667	$71,956	$33,367	$1,150	$6,222	$125,247
PSNH	$25,960	$0	$875,412	$85,000	$10,384	$41,636	$1,038,392
Unitil	$13,385	$993	$115,174	$49,470	$5,000	$14,657	$198,679
ENERGY STAR Homes	$56,232	$16,861	$1,181,867	$167,837	$19,535	$63,540	$1,505,872
National Grid	$3,149	$19,257	$77,029	$0	$2,341	$11,160	$112,936
NHEC	$10,885	$1,667	$82,750	$44,484	$1,150	$6,223	$147,159
PSNH	$44,503	$37,000	$1,419,420	$190,000	$17,801	$71,377	$1,780,101
Unitil	$11,771	$2,802	$157,265	$42,484	$8,000	$17,678	$240,000
Home Performance w/ Energy Star	$70,308	$60,726	$1,736,464	$276,968	$29,292	$106,438	$2,280,196
National Grid	$14,930	$14,389	$41,442	$0	$7,187	$2,867	$80,815
NHEC	$10,885	$1,667	$75,554	$22,953	$4,650	$6,223	$121,932
PSNH	$19,732	$0	$685,005	$45,000	$7,893	$31,647	$789,277
Unitil	$6,233	$2,145	$72,954	$21,684	$22,000	$9,984	$135,000
Energy Star Appliances	$51,780	$18,201	$874,955	$89,637	$41,730	$50,721	$1,127,024
National Grid	$10,931	$12,154	$194,919	$0	$1,672	$5,465	$225,141
NHEC	$10,885	$1,667	$136,497	$29,324	$1,000	$6,223	$185,596
PSNH	$54,557	$22,000	$1,842,208	$160,000	$16,000	$87,502	$2,182,267
Unitil	$17,795	$5,387	$189,383	$70,230	$4,000	$19,262	$306,057
Home Energy Assistance	$94,168	$41,208	$2,363,007	$259,554	$22,672	$118,452	$2,899,061
National Grid	$17,615	$14,332	$29,597	$0	$20,740	$3,742	$86,026
NHEC	$10,885	$1,666	$75,554	$22,952	$10,000	$6,223	$127,280
PSNH	$21,186	$0	$468,792	$65,000	$258,496	$33,980	$847,454
Unitil	$5,238	$1,735	$68,616	$18,812	$32,500	$8,100	$135,000
ENERGY STAR Lighting	$54,924	$17,733	$642,559	$106,764	$321,736	$52,045	$1,195,760
National Grid	$0	$0	$0	$0	$0	$0	$0
NHEC	$10,885	$1,666	$53,967	$33,367	$1,000	$6,223	$107,108
PSNH	$9,889	$6,000	$310,655	$50,000	$3,172	$15,862	$395,578
Unitil (Res. Website, ISO Expenses)	$1,725	$5,600	$22,400	$9,775	$0	$0	$39,500
Other Residential Programs	$22,499	$13,266	$387,022	$93,142	$4,172	$22,085	$542,186
Total Residential Programs	**$349,909**	**$167,996**	**$7,185,874**	**$993,902**	**$439,137**	**$413,281**	**$9,550,099**
COMMERCIAL, INDUSTRIAL AND MUNICIPAL PROGRAMS							
National Grid	$28,021	$7,005	$150,000	$25,000	$1,050	$18,900	$229,976
NHEC	$10,885	$1,667	$66,011	$32,207	$1,150	$6,223	$118,143
PSNH	$43,124	$0	$1,349,557	$230,000	$8,000	$86,248	$1,716,929
Unitil	$10,553	$4,499	$146,138	$41,270	$8,999	$13,497	$224,957
New Equipment & Construction	$92,583	$13,171	$1,711,706	$328,477	$19,199	$124,868	$2,290,005
National Grid	$25,200	$6,300	$331,978	$16,543	$4,200	$15,750	$399,971
NHEC	$10,885	$1,667	$81,244	$33,050	$1,150	$6,223	$134,219
PSNH	$56,951	$0	$1,728,979	$365,000	$8,000	$113,628	$2,272,558
Unitil	$26,843	$4,416	$271,470	$98,238	$14,132	$26,496	$441,595
Large C&I Retrofit	$119,879	$12,383	$2,413,671	$512,831	$27,482	$162,097	$3,248,342
National Grid	$8,157	$2,039	$200,000	$1,081	$3,275	$7,974	$222,526
NHEC	$10,885	$1,666	$81,244	$33,050	$1,152	$6,223	$134,220
PSNH	$70,586	$0	$2,112,058	$465,000	$28,166	$140,832	$2,816,642
Unitil	$19,879	$6,749	$235,176	$76,765	$13,496	$22,871	$374,935
Small Business Energy Solutions	$109,507	$10,454	$2,628,478	$575,896	$46,089	$177,900	$3,548,323
National Grid	$0	$0	$0	$0	$0	$0	$0
NHEC	$1,999	$0	$25,389	$9,014	$0	$0	$36,402
PSNH (Education, RFP, Smart Start)	$16,896	$0	$578,896	$73,000	$6,743	$33,713	$709,248
til (Education, C&I Web, ISO Expenses)	$2,250	$3,600	$14,400	$12,750	$0	$0	$33,000
Other C&I Programs	$21,145	$3,600	$618,685	$94,764	$6,743	$33,713	$778,650
Total Non-Residential Programs	**$343,113**	**$39,608**	**$7,372,540**	**$1,511,969**	**$99,513**	**$498,578**	**$9,865,320**
TOTAL (Both Sectors)	**$693,022**	**$207,604**	**$14,558,413**	**$2,505,871**	**$538,650**	**$911,859**	**$19,415,420**

Note 1: Evaluation amounts are based on 5% of total budgets. Actual program expenses will vary from numbers shown.

Proposed Budgets with Participation and Lifetime kWh Savings Goals

New Hampshire CORE Energy Efficiency Goals - 2012

	National Grid		NHEC		PSNH		UNITIL		TOTALS	
PROGRAMS										
Energy Star Homes										
Number of Homes / Lifetime kWh Savings	50	1,501,391	40	799,852	384	9,809,396	38	1,401,902	512	13,512,540
B/C Ratio / Planned Budget	6.32	$143,554	4.17	$125,247	4.73	$1,038,392	3.30	$198,679		$1,505,872
NH Home Performance with Energy Star										
Number of Units / Lifetime kWh Savings	110	2,894,297	42	2,398,242	1,019	4,719,385	65	495,527	1,236	10,507,451
B/C Ratio / Planned Budget	1.72	$112,936	1.96	$147,159	2.12	$1,780,101	1.70	$240,000		$2,280,196
Energy Star Appliances										
Number of Rebates / Lifetime kWh Savings	875	1,206,631	1,848	3,329,756	13,766	20,646,638	1,622	3,433,384	18,111	28,616,409
B/C Ratio / Planned Budget	1.77	$80,815	1.51	$121,932	1.44	$789,277	1.30	$135,000		$1,127,024
Home Energy Assistance (see Note 1)										
Number of Units / Lifetime kWh Savings	54	1,324,252	61	717,727	760	9,101,692	58	10,254,877	933	21,398,548
B/C Ratio / Planned Budget	1.76	$225,141	2.32	$185,596	1.65	$2,182,267	2.50	$306,057		$2,899,061
Energy Star Lighting										
Number of Rebates / Lifetime kWh Savings	14,507	3,207,018	39,490	8,070,159	186,081	41,315,686	43,960	9,019,151	284,038	61,612,014
B/C Ratio / Planned Budget	1.66	$86,026	4.80	$127,280	2.62	$847,454	3.70	$135,000		$1,195,760
C&I New Equipment & Construction										
Number of Participants / Lifetime kWh Savings	13	9,244,034	5	2,248,898	157	75,470,806	13	8,431,037	188	95,394,775
B/C Ratio / Planned Budget	2.15	$229,976	1.35	$118,143	2.96	$1,716,929	2.40	$224,957		$2,290,005
Large C&I Retrofit										
Number of Participants / Lifetime kWh Savings	26	40,424,709	24	9,167,837	144	124,738,939	29	31,107,908	223	205,439,392
B/C Ratio / Planned Budget	3.18	$399,971	1.93	$134,219	1.88	$2,272,558	2.50	$441,595		$3,248,342
Small Business Energy Solutions										
Number of Participants / Lifetime kWh Savings	33	6,081,900	35	3,298,149	656	93,559,245	58	14,606,755	782	117,546,049
B/C Ratio / Planned Budget	1.51	$222,526	1.41	$134,220	1.54	$2,816,642	1.90	$374,935		$3,548,323
Educational Programs (see Note 2)										
B/C Ratio / Planned Budget		$9,000		$28,415		$123,793		$25,500		$177,708
Company Specific Programs										
Number of Participants / Lifetime kWh Savings			13	6,351,954	54	53,784,769				60,136,723
B/C Ratio / Planned Budget		$0	2.22	$107,108		$946,033		$47,000		$1,100,141
Smart Start Program										
Number of Participants / Planned Budget		$0		$7,987		$35,000		$0		$42,987
Utility Incentive										
B/C Ratio / Planned Budget		$120,076		$98,984		$1,163,876		$170,298		$1,553,234
TOTAL PLANNED BUDGET		**$1,621,021**		**$1,336,290**		**$15,712,322**		**$2,299,021**		**$20,968,653**

NOTES:
(1) Unitil's HEA savings target equals 1,008,466 lifetime kWh + (31,558 lifetime MMBtu ÷ 0.003413) = 10,254,877 lifetime kWh.
(2) National Grid's Educational Program budget is included within other program budgets and therefore is not included in the total to avoid double counting.

Proposed Budget & Goals

NH CORE Energy Efficiency Program Goals

(January 1 - December 31, 2012)

NH CORE ENERGY EFFICIENCY PROGRAMS	EXPENSES ($)	SAVINGS (Lifetime kWh)	NUMBER OF CUSTOMERS
RESIDENTIAL (nhsaves@home)			
ENERGY STAR Homes	$1,415,016	6,288,557	490
NH Home Performance w/Energy Star	$2,096,386	9,462,682	916
Home Energy Assistance	$2,756,092	24,611,970	1,008
ENERGY STAR Lighting [1]	$1,246,037	82,956,120	339,786
ENERGY STAR Appliances	$1,014,292	21,222,738	14,392
TOTAL RESIDENTIAL	**$8,527,823**	**144,542,068**	**356,592**
COMMERCIAL & INDUSTRIAL (nhsaves@work)			
Educational Programs	$228,764		
Small Business Energy Solutions	$3,063,640	112,903,212	582
Large Business Energy Solutions	$3,347,551	214,898,761	274
New Equipment & Construction	$2,575,761	107,110,887	218
TOTAL COMMERICAL & INDUSTRIAL	**$9,215,716**	**434,912,860**	**1,074**
TOTAL	**$17,743,539**	**579,454,927**	**357,666**

[1] "Number of customers" is actually number of lighting products purchased.

ATTACHMENT I: NH ELECTRIC UTILITY RGGI PROPOSAL (SUBMITTED JUNE 1, 2010)

New Hampshire CORE Utilities
Response to Greenhouse Gas Emissions Reduction Fund RFP

1.1. Program Title: *RGGI Expansion - CORE Energy Efficiency Programs (RE-CORE)* The Utilities are applying under Proposal Category I for program continuation of the multi-year *RE-CORE* Programs approved for funding under the 2009 GHGERF. While the Utilities believe that the *RE-CORE* Programs qualify for consideration under Category I, should the Commission determine otherwise, the Utilities request that the programs[40] serving large commercial, industrial, and municipal customers be considered under Category II.

1.2. Program Summary: *RE-CORE* is a multi-year plan comprised of a portfolio of programs for residential, low-income, business, and municipal customers. It is a continuation of the successful *RE-CORE* programs currently being implemented and is based on the CORE Energy Efficiency Programs approved by the New Hampshire Public Utilities Commission. *RE-CORE* expands both the funding and the program features available to customers through the CORE Programs. The suite of proposed programs includes initiatives in 10 of the 11 RGGI fund use eligibility categories identified in PUC 2604.01 (c).

1.3. Identification of Applicant Organizations: This proposal is submitted by the four CORE Utilities on behalf of their customers and members: Granite State Electric Company, d/b/a National Grid, 9 Lowell Road, Salem, NH 03079, Domestic Corporation organized under NH Law, Tax ID: 02-0140660; New Hampshire Electric Cooperative, 579 Tenney Mountain Highway, Plymouth, NH 03264-3147, Rural Electrical/Agricultural Cooperative organized under NH Law, Tax ID: 02-0172119; Public Service of New Hampshire, 780 North Commercial Street, Manchester, NH 03101, Domestic Corporation organized under NH Law, Tax ID: 02-0181050; Unitil Energy Systems, 6 Liberty Lane West, Hampton, NH 03842, Domestic Corporation organized under NH Law, Tax ID: 02-0121400

1.4. Length of Program: For planning purposes the dates of operation are assumed to be January 1, 2011, through December 31, 2012; however, the Utilities are prepared to begin implementation upon grant approval. From a benefits perspective, the *RE-CORE* efficiency measures will continue to save energy, money, and carbon for more than 20 years. In future RFPs, the Utilities expect to seek approval to extend the *RE-CORE* Programs beyond 2012 and to continue to co-operate *RE-CORE* with the CORE Programs.

1.5. Total Program Costs: Assuming funding at the Requested level, the total cost over the two year planning horizon for this proposal is $28,788,469. This includes program costs, revolving loan funds, a performance incentive, and customer costs.

1.6. GHGER Funds Requested: Over the two year time line for this proposal, the Utilities are requesting $18 million from the GHGER Fund to implement this proposal. This proposal is scalable and lesser amounts can be used cost-effectively; specific budget details would need to be discussed.

2. Proposed Work Scope and Schedule

[40] Large Business Retrofit, New Equipment & Construction, Energy Rewards RFP

2.1. Success In Implementing The 2009 *RE-CORE* Program: While implementation of the *RE-CORE* Program is ongoing, the Utilities expect to exceed their stated overall carbon reduction goal of 105,000 metric tons. Through February 28, 2010, the *RE-CORE* Programs have resulted in an annual carbon dioxide reduction of 4,606 metric tons or a lifetime reduction of 61,610 metric tons. These overall reductions are supported by some key successes including:

- Weatherization of 466 low-income homes – exceeding goal by 25% and saving customers 15% on their annual energy bill – with more homes still in the "pipeline";
- Implementation of the very popular "Cut The Carbon" Program giving consumers the information and tools they need to identify opportunities and reduce usage with energy monitoring kits available at libraries throughout the state;
- Development of a very popular second refrigerator/freezer turn-in program that recycled more than 700 units and sold out the program in just four weeks – four weeks ahead of schedule;
- Implementation of an on bill no interest loan program for residential and municipal customers participating in approved energy efficiency programs;
- Completion of 86 projects for business and municipal customers saving them more than 100 million kWhs – 20% more than planned.

Details of the successful implementation of the RE-CORE goals can be found in the "Greenhouse Gas Emissions Reduction Fund Quarterly Progress Reports" filed with the New Hampshire Public Utilities Commission. The Utilities expect that all major program elements of the initial *RE-CORE* Program will be completed by the end of summer 2010.

2.2. Modifications To Original Proposal:
In response to customer demand, there is a request to realign budgets in order to provide additional funding for the Home Performance with Energy Star program. This request is still being considered by the Commission. Other program elements are being implemented as originally planned.

2.3. Program Plan, Management, and Key Staffing

2.3.1. Program Plan: Major Program Elements and Scheduling

RE-CORE builds on the existing CORE Programs by adding new program elements and by increasing funding for current programs. Because much of the infrastructure for administering and delivering the expanded programs is already in place, RGGI dollars will be used primarily for services and equipment to reduce energy use and lower CO_2 emissions. The following paragraphs note the major program elements this proposal adds to the CORE Programs and notes any changes from the current *RE-CORE* implementation.

Energy Star Appliance Program: This program will be expanded to include a turn in/recycle component second refrigerators and freezers. The second refrigerator-freezer recycle program addresses two of the top energy saving measures identified in *Additional Opportunities for Energy Efficiency in NH*. Customers will be able to responsibly recycle their second refrigerator or freezer by notifying their utility to arrange for pickup and removal. This turn-in program was first offered in the spring of 2010 and sold out in four weeks – four weeks earlier than planned. Due to its cost-effectiveness and high demand, this program will be expanded by two fold over the spring 2010 offering. The air conditioner recycling program offered last year will be discontinued as a result of a New England wide study which showed hours use for air conditioners was only half of what had been predicted – significantly lowering realized savings.

Energy Star Homes Program: Partnering with the Home Builders & Remodelers Association of NH (HBRANH), the Utilities seek to continue the National Green Building Program developed by the National Association of Home Builders. The Utilities will provide incentives and accredited verifiers to inspect homes and report to the NAHB for certification of homes to the nationally recognized and ANSI approved Green Building Standard.

Home Performance with Energy Star: The fuel-neutral HPwES Program will be offered statewide for single family homes. In addition, the Utilities will offer a corresponding fuel-neutral multi-family program for multi-family facilities larger than four units. The multi-family weatherization services include a comprehensive up-front facility audit, assistance with bid preparation and evaluation, and a post installation quality assurance inspection.

Education: The Utilities propose to continue support for the highly successful "Cut The Carbon" Program introduced last December as part of the original *RE-CORE* Program. Considerations include deployment of additional Kill-A-Watt monitors, updates to instructional materials, and marketing.

Project Financing: With this proposal the Utilities plan several improvements to the current financing options: (1) All residential customers will be able to finance between $500 and $7,500 for qualifying measures. (2) On-bill financing will be made available to small[41] business customers. Loans will be available at no interest in amounts up to $20,000. The loans are offered at no interest, capped at the customer co-payment, and funded through a revolving loan pool established by each utility.

2.3.2. Program Management And Key Staff

The Management Team is authorized to negotiate any and all aspects of the proposed grant on behalf of their individual organizations. Members of the Management Team, which consists of a representative from each utility, are identified along with their contact information below in Section 5.2. The Management Team is responsible for the coordination and oversight of statewide activities including quality assurance measures, invoicing, grant reporting, and financial management.

The Utilities provide independent oversight and Quality Assurance inspections to ensure program implementers comply with program requirements and produce quality workmanship. Varying levels of oversight are used. For example, the work of experienced program implementers with a proven track record are randomly spot checked, whereas implementation personnel and vendors new to a program will undergo a much higher level of scrutiny.

Cost-control measures are in place in the proposed performance incentive mechanism. Programs which are inefficiently managed and administered will fail to meet cost-effectiveness and energy savings goals. This not only reflects poorly on the program's management, but it also has financial consequences inasmuch as cost-effectiveness and savings are the primary determinants of the performance incentive (see Section 5 below).

To maximize efficiency and to leverage what is already in place, the Utilities will utilize the existing protocols and tracking systems for management and reporting purposes. Consolidated reports along with individual utility results will enable the Commission Staff and other interested parties to assess overall progress as well as be able to judge each utility's performance relative to program performance goals that are clear and measurable.

[41] Unitil and NGRID will offer financing to large business customers at a maximum loan of $50,000.

2.4 Key Partners And Allies: The Utilities have well-established relationships with customers, members, state and local leaders, and a statewide network of contractors, Community Action Agencies, retailers, educators, vendors, affinity groups, and community energy committees. There are more than 100 contractors, the vast majority New Hampshire based, who are working in close collaboration with the Utilities and their customers to implement the *RE-CORE* Programs. In addition, we have received letters of support for the *RE-CORE* Program from the following partners: Home Builders & Remodelers of NH, Community Action Association, GDS Associates, and KW Management, Inc.

2.5 Major Tasks/Milestones: Major tasks associated with each *RE-CORE* program include program development, customer acquisition, measure installation, and quality assurance. Work estimates for these tasks vary widely from program to program, and in many cases, there are significant variations from one project to another within a single program. In addition there high level tasks such as program reporting and Monitoring & Verification that cut across all programs.

With the exception of the new loan programs for business customers, development activities are expected to be minimal inasmuch as the programs are in the field and operational today. The Utilities estimate direct labor expenditures for energy efficiency programs at 4.5 FTEs per $1,000,000 expended. The direct labor expenditures include the tasks performed by utilities' personnel and their vendors: program development, customer acquisition, measure installation, quality assurance, reporting and M&V. Based on Total Program Costs of $26.8 million (excludes loan funds), The Utilities estimate direct labor to implement this phase of the *RE-CORE* Program at 120 FTEs or 250,000 hours.

NH CORE Energy Efficiency Program Goals
(January 1 - December 31, 2011)

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RESIDENTIAL (nhsaves@home)			
ENERGY STAR Homes	$1,402,835	13,347,904	503
NH Home Performance w/Energy Star	$2,096,748	9,942,742	1,150
Home Energy Assistance	$2,592,173	21,150,327	840
ENERGY STAR Lighting [1]	$1,091,426	53,216,421	242,595
ENERGY STAR Appliances	$1,072,253	26,222,884	16,402
TOTAL RESIDENTIAL	**$8,255,435**	**123,880,278**	**261,490**
COMMERCIAL & INDUSTRIAL (nhsaves@work)			
Educational Programs	$165,389		
Small Business Energy Solutions	$3,238,522	113,537,882	696
Large Business Energy Solutions	$3,078,227	199,865,271	213
New Equipment & Construction	$2,145,872	92,279,165	173
TOTAL COMMERICAL & INDUSTRIAL	**$8,628,009**	**405,682,317**	**1,082**
TOTAL	**$16,883,445**	**529,562,595**	**262,572**

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(January 1 - December 31, 2012)

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TOTAL RESIDENTIAL	**$8,527,823**	**144,542,068**	**356,592**
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TOTAL	**$17,743,539**	**579,454,927**	**357,666**

The Power to make a difference.

365 days a year.

Since 2002 New Hampshire electric customers have been taking advantage of the CORE Energy Efficiency Programs. All energy improvements, from the very small to the very large, have combined to make a real difference -- saving energy, money, and protecting the environment. Since the inception of the CORE Programs, New Hampshire electric customers have:

Saved enough energy to power 987,000 homes for a full year.

Saved $1,073 million – the amount customers would have paid for energy that is no longer needed.

Reduced emissions by 4.1 million tons – the equivalent of taking 859,000 cars off the road for a full year.

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