THE STATE OF NEW HAMPSHIRE

before the

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

CORE ENERGY EFFICIENCY PROGRAMS
Home Performance with ENERGY STAR Fuel Neutral Program
Docket No. DE 10-188

Joint Testimony of Gilbert E. Gelineau, Jr. and Thomas Palma

February 15, 2012

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Introduction and Background

Q. Mr. Gelineau, please state your name, your employment and business address.

A. My name is Gilbert E. Gelineau, Jr. I am Manager of Marketing Support at Public Service Company of New Hampshire ("PSNH"). In that role I supervise the planning, operation, and reporting of conservation and load management ("C&LM") programs offered by PSNH. My business address is Energy Park, 780 North Commercial Street, Manchester, New Hampshire.

Q. Have you ever testified before this Commission?

A. Yes. I have testified in numerous conservation and load management proceedings (Dockets Nos. DE 01-057, DE 03-169, DE 05-157, DE 07-106, DE 09-170 and DE 10-188) and in the previous low income Electric Assistance Program proceedings.

Q. Mr. Palma, please state your name, your employment and business address.

A. My name is Thomas Palma I am the Manager of Distributed Energy Resources, Planning and Design for Unitil Service Corp. My business address is 325 West Road, Portsmouth, New Hampshire 03801.

Q. What are your background and qualifications?

A. I have been employed by Unitil Service Corp. since November, 2009. As part of my responsibilities, I perform work for Northern Utilities, Inc.'s ("Northern") and Unitil Energy Systems, Inc.'s ("Unitil" or "UES") energy efficiency programs. Previously I worked for the New Hampshire Electric Cooperative. During my career I have gained extensive knowledge of renewable energy systems and energy efficiency systems. I have created renewable energy programs and researched renewable energy and energy efficiency technologies. I have also managed projects that are the subject of this proceeding. I hold a Bachelor of Science Degree in Mechanical Engineering from the University of Massachusetts, Amherst and a Juris Doctorate Degree from Suffolk University. I am also a

member of the Massachusetts Bar. I have also been active in leadership roles in various organizations including the New Hampshire Sustainable Energy Association, the Northeast Sustainable Energy Association, and the Cooperative Research Network.

Q. Have you ever testified before this Commission?

A. Yes. I testified on March 2, 2010 in Docket DE 09-137: Investment in and Rate Recovery of Distributed Energy Resources and on July 13, 2010 in Docket DG 09-053: Request to Modify Energy Efficiency Components. I also testified twice in this docket (DE 10-188), at hearings on December 16, 2010 and December 22, 2011.

Purpose of Testimony

Q. What is the purpose of your joint testimony in this proceeding?

A. On January 9, 2012, the Commission issued Order No. 25,315 in this docket, approving modifications to the 2012 Energy Efficiency programs offered by gas and electric utilities in New Hampshire. As part of that order, the Commission approved the continuation of the fuel neutral Home Performance with ENERGY STAR ("HPwES") Pilot Program, but directed the Staff and parties to file testimony and positions regarding whether to fully implement the HPwES program in the future. Docket No. DE 10-188, Order 25,315, slip op. at 9-10 January 9, 2011.

We are filing this joint testimony to present our companies' position with regard to continuation of the fuel neutral HPwES program, including why it should no longer be a pilot program, and why PSNH and UES (the "Companies") should be allowed to earn a performance incentive on both the electric and the nonelectric measures installed.

Summary of the HPwES Proposal

Q. Please describe the HPwES program design for which UES and PSNH are seeking approval.

A. The Companies are requesting that the Commission approve the HPwES program which is described on Attachment GEG/TP-1. The major features of this program are as follows:

Customers with high home heating costs are eligible to participate in the HPwES program. Qualified participants receive a whole house audit which identifies energy savings opportunities and educates customers on weatherization needs and benefits. Program services include insulation, air sealing, ENERGY STAR rated space heating and water heating upgrades, replacement of inefficient appliance and lighting upgrades. The customer is responsible for fifty percent of the costs of the project. The rebate is capped at fifty percent of the costs or $4,000, whichever is lower. Customers may choose to spend more than $4,000 to achieve additional energy savings, and they can opt for a more costly measure such as spray foam insulation, if they pay the incremental difference in price above more cost effective insulation. On bill financing is available for helping pay the customer's portion of the project costs. The Companies propose to earn a performance incentive calculated in the same way as the incentive for other CORE programs.

Q. Please explain how the program would operate from a participating customer's perspective.

A. Participation in the program consists of four phases:

1. Screening and Application

To participate, customers are invited to self-screen for the program by going on-line or working with program staff to complete the Home Heating Index screening application. Participants' homes are screened on a scale of zero to 15, where zero to three is a zero energy home and 15+ is an inefficient home. Homes ranked eight or higher on the index present significant energy savings

opportunities and qualify for the program.

2. Audit and Recommendations

Once a homeowner is qualified for the program, they may either select their own participating program contractor or one will be assigned to them upon enrollment. The contractor schedules and conducts an audit of the home for a $100 customer fee. The audit consists of a comprehensive review of the house, including, in most instances, a blower door test to determine the level of air infiltration and whether air sealing should be included in the audit recommendation. The evaluator also assesses information such as insulation levels, type and condition of heating, cooling and hot water systems as well as major appliances as they determine necessary. Additionally, health and safety conditions are evaluated and may include a test of combustion appliances for elevated carbon monoxide levels and/or gas leaks, evidence of moisture problems and their source and whether asbestos exists in the form of insulation found in older pipe wrap and insulation. During the audit the customer is provided with up to six compact fluorescent light bulbs (CFL's), water saving devices and educational materials.

Upon completion of the audit, the auditor produces a customized report for each participant outlining a list of recommended improvements, their estimated energy savings and cost to install. The report also includes an estimate of the home's new Home Heating Index score should all of the recommended measures be installed.

3. Implementation and Program Incentives

Homeowners can schedule a program contractor to install some or all of the recommended energy efficiency measures. The program currently offers an incentive that covers approximately 50% of the cost of measures up to a maximum total of $4,000. Incentives are paid directly to the contractor thereby reducing one of the potential market barriers for participation where customers would have to provide all of the project funds up-front. Qualified homeowners are also able to finance their program co-payment through the utility's on-bill financing (OBF) program.

4. Quality Assurance Inspection

In accordance with ENERGY STAR requirements, at least 10% of projects are evaluated by a quality assurance (QA) contractor. During the inspection, the QA contractor verifies that the agreed-upon measures have been implemented properly. The QA contractor also addresses any potential, missed, or future opportunities and develops a report based on the findings. The report is forwarded to the utility program administrator for review and follow-up with the installation contractor if necessary.

Background and Procedural History

Q. Please provide some background regarding the history of weatherization and home energy efficiency programs which are supported by the System Benefits Charge (SBC).

A. The electric utilities provide energy efficiency services to residential customers via the CORE programs, which are now approved by the Commission in two-year cycles. These programs are funded by the SBC, and residential customers may avail themselves of several efficiency opportunities, including, but not limited to, a new home construction program (ENERGY STAR Homes), as well as rebates for lighting and appliances. In 2004, the electric utilities began offering the Home Energy Solutions (HES) program to residential customers, which included services such as insulation, weatherization and cost effective appliance and lighting upgrades. Weatherization and insulation services, however, were only offered to customers with electrically heated homes. In 2010, Homes Energy Solutions was renamed Home Performance with ENERGY STAR, and the national guidelines for that program were adopted.

Q. Why did the Companies propose a fuel neutral weatherization and home efficiency program?

A. Based on the configuration of energy efficiency programs such as HES, there are limited opportunities to provide comprehensive energy efficiency measures to

residential customers despite the fact that the need for energy efficiency measures among these customers is significant. Over time, it became apparent to the Companies that fewer customers who heated their homes principally with electricity were responding to solicitations for participating in the HES program. For nearly twenty years, PSNH and UES have provided insulation and weatherization services to those customers who heat their homes with electricity and have offered those services to the remaining electrically heated homes. The Companies do not believe that there are significant opportunities left to serve this segment of residential customers. As a result, the only services that are effectively available through the HPwES program to most residential customers without a fuel neutral option are appliance and lighting upgrades. While these are important services, the ability to achieve significant energy efficiency savings is limited given the nature of these measures.

As described in more detail below, the Companies are aware that there is a significant need for insulation and weatherization services for residential customers who do not heat their homes with electricity. Those services can be provided to these customers through the HPwES program and can meet that significant need. Thus, the primary driver behind the Companies' proposal is to maximize energy savings for our customers. In addition, it is important to note that this goal aligns with New Hampshire's Climate Action Plan, discussed in further detail below, which cites "maximize energy efficiency in buildings" as one of the Plan's 10 major recommendations[1].

Q. What evidence do the companies have that there are insufficient opportunities remaining to provide insulation and weatherization services in electrically heated homes?

A. In 2008, PSNH mailed promotional materials specifically to nearly 8,500 high use residential customers in the following categories: (a) customers using more than

[1] New Hampshire Climate Action Plan, p.19. http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_ch2.pdf

8,000 kilowatt-hours per year, (b) HeatSmart[2] customers, (c) customers using between 5,000 and 8,000 kilowatt hours per year, and (d) tenants in certain housing communities which were known to use electric heat. Fewer than 4% of these customers responded to an invitation to receive services from the HES program.

Out of 674 PSNH customers served by the fuel neutral HPwES pilot program in 2010 and 2011, approximately 4.5% or thirty (30) customers participating in the program use electricity for home heating and do not supplement that heat with another fuel such as wood or liquid propane. Out of 80 UES customers who installed weatherization via UES's HPwES program in 2010 and 2011, seventeen (17) or 21% had electric heat as their primary heat source. We expect that customers with electrically heated homes will continue to participate in the HPwES program at a relatively small percentage level; however, this level is not tapping into the real need of other electric customers who heat their homes with other types of fuel.

Q. When the Companies made their proposal in 2008, was there any precedent for fuel neutral programs to be funded with SBC funds?

A. Yes. For many years, SBC funds have been applied to nonelectric measures in the low income Home Energy Assistance (HEA) program and the ENERGY STAR Homes program.

Q. What did the Commission do in response to the Companies' initial proposal for a fuel neutral home weatherization program?

A. In Order No. 24,930, approving a settlement agreement involving all of the 2009 CORE programs, the Commission found that insufficient detail had been supplied to approve a fuel neutral residential program going forward. The Commission listed twelve issues or concerns that the utilities needed to address in order to

[2] "HeatSmart" is the trade name for PSNH's radio controlled Rate LCS, an interruptible delivery rate for electrically heated homes with backup heating supply.

assist in analyzing any future proposal.. Although the Commission did not authorize the program to begin at that time, it encouraged the participating utilities to file a more detailed proposal which addressed the issues of concern. In that early 2009 decision, the Commission concluded that it was "not precluded as a matter of law from authorizing the use of SBC revenues for energy efficiency programs such as the proposed fuel blind pilot."[3] Docket No. DE 10-188, Order No. 24,930, slip op. at 19 (Jan. 5, 2009).

Q. What did the Companies do in response to this decision?

A. The Companies responded to the Commission's request for more information by submitting a petition and a revised proposal for a fuel-neutral HES program in April of 2009. The Companies' filing addressed the twelve issues of concern raised by the Commission in Order 24,930. The Companies' responses to the

[3] The Commission further found that:

> RSA 374-F:3, VI states that SBC revenue, as approved by the Commission, "may be used to fund public benefits related to the provision of electricity." (emphasis added). There is no question that electric efficiency measures ancillary to the HES weatherization services, such as the ENERGY STAR appliance rebate and ENERGY STAR lighting programs, relate to the provision of electric service. Furthermore, weatherization of any home which uses electric-powered air conditioning or fans for cooling provides system benefits by reducing electricity usage during the peak summer electric loads that are associated with electric home cooling measures. In addition, most non-electric heating systems, such as fuel oil, propane and wood fired boilers and furnaces, also use electricity to power pumps or fans to circulate water and air. Although energy efficiency measures such as improved insulation and air sealing may primarily save non-electric fuels in non-electrically heated buildings, there can often be significant electric savings from such measures as well.
>
> RSA 374-F:3, X concerns "Energy Efficiency," not just electrical efficiency, calls for reducing "market barriers to investments in energy efficiency," and states that "[u]tility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers." Running programs that attempt to isolate and target energy efficiency to a single fuel source, such as electricity, may in itself be a market barrier when energy efficiency measures delivered as a comprehensive package, such as systematic whole house retrofits that reduce multiple energy uses and costs, including the size and cost of high efficiency replacement HVAC systems, may be the overall most cost-effective approach to achieving energy efficiency and conservation of all fuel sources. We find it consistent with the purpose of RSA 374-F to broadly construe our authority to approve utility sponsored energy efficiency programs in the state of New Hampshire. We also agree with PSNH that the Utilities could benefit from the experience of running a fuel blind pilot program to prepare for the prospect of using RGGI funds to support more energy efficiency measures." Docket No. DE 01-120, Order No. 24,930, slip op. at 19-20 (January 5,2009).

The Commission recently reaffirmed its decision on the legality of the fuel neutral HPwESprogram. Docket No. DE 10-188, Order No. 25,315, slip op. at 10 (January 9, 2012).

twelve concerns submitted in 2009 are set forth in Attachment GEG/TP-2. We will update the comments on some of those issues raised by the Commission in our joint testimony below. The Commission approved the Companies' proposal, permitting a modified pilot program to go forward.[4]

Q. Did the Commission place any limitations on the pilot program?

A. The Commission limited the size of the pilot program to permit evaluation of the "cost and electric and non-electric energy savings, and related cost-effectiveness". Docket No. DE 08-120, Order 24,974, slip op at 5 (June 4, 2009). The Commission also limited the performance incentive to electric-based portions of the budget because the program was a *pilot*. Finally, the Commission raised an issue about whether the cost of the program would be prohibitive for customers.

Q. Did the pilot program continue to operate after 2009?

A. Yes, the fuel neutral program successfully concluded the 2009 year, and operated again as a pilot during 2010. In 2010, the name was changed to Home Performance with ENERGY STAR, and certain other changes were made. Importantly, as a result of discussions with Staff and the Parties to the docket, in 2011 the companies reduced the rebate for customers from 75% of project expenditures to 50% of project expenditures. Docket No. DE 10-188, Order No. 25,189 (Dec. 30, 2010). In the same year, the Commission also permitted an increase in the number of participants in the program for PSNH, from 200 participants in 2009 to 716 in 2010. The Commission indicated that it expected the Companies to complete an evaluation of the HPwES program, which would consider cost effectiveness, energy savings, impacts on contractors and the market, program design, market transformation effects, and recommendations on how the program could be improved. Docket No. DE 10-188, Order No. 25,189, slip op. at 14. For the 2012 program year, the Commission again approved a pilot program, directing the parties to provide testimony and positions regarding full

[4] Docket No. DE 08-120 Order No. 24,974 (June 4, 2009).

implementation of the program. Docket No. DE 10-188, Order No. 25,315, slip op. at 9-10 (Jan. 9, 2012).

Results of the Pilot Program

Q. What have been the results?

A. As reflected in the chart below, the majority of the customers who participated in the pilot program heated their homes with fuels other than electricity. The Companies believe that the high level of participation by these customers demonstrates both the interest and need for insulation and weatherization services focused on non-electrically heated homes.

Home Performance with ENERGY STAR Program
Percent of Customers Served With Electric Space Heating
(Program year: 2010 – 2011)

	Unitil		PSNH	
Space Heating Fuel	Number of Customers	Percent of Customers	Number of Customers	Percent of Customers
Electric	17	21.3%	30	4.5%
Non-electric	63	78.8%	644	95.5%
Total	80		674	

Q. Have other funds been leveraged for the HPwES pilot program?

A. Yes. The Companies received a RGGI grant in 2009, which included funds for HPwES fuel-neutral projects and on-bill-financing, as well as ARRA funding for a heating and hot water appliance program. ENERGY STAR heating and hot water appliances are incented via the HPwES program only if the auditor determines these appliances to be a cost effective measure.

In another effort the gas and electric utilities are currently in discussions with BetterBuildings to reach agreement on a collaboration that would expand funding for HPwES projects and on bill financing. This program is designed to improve

the building stock in New Hampshire and is being implemented by the state's Community Development Finance Authority, funded by an ARRA grant awarded to the state's Office of Energy and Planning.

Q. During the pilot phase of the HPwES program, has there been any coordination with gas utilities on the provision of these services?

A. Yes. While gas customers usually undertake the weatherization programs offered by their gas utility, they are eligible to receive lighting services from their electric utility, which is usually made up of six CFLs. Energy efficiency auditors for the gas utilities also provide information to customers about electric efficiency opportunities such as an older refrigerator which might be replaced with the help of a CORE Program rebate.

Evaluation of the HPwES Pilot

Q. Have there been any evaluations of the HPwES pilot program?

A. Yes. The Companies in cooperation with the Commission Staff have undertaken three evaluations of the HPwES pilot: a preliminary evaluation conducted by KEMA, Inc., an impact evaluation conducted by The Cadmus Group, Inc. ("Cadmus"), and a process evaluation also conducted by Cadmus.

Q. Please summarize the KEMA evaluation and results.

A. KEMA, Inc. conducted a preliminary evaluation of the program in 2010, in which it 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. 2011-2012 CORE Energy Efficiency Programs filing , August 1, 2010, Docket No. DE 10-188, Exhibit 2 at 11.

The KEMA study demonstrated that the Companies were moving in the right direction and that we were collecting the right data so that a complete evaluation could be conducted later.

Q. Please summarize the Cadmus study and results.

A. The Cadmus evaluation was done in two parts. An Impact Evaluation was performed to verify the energy savings reported. An in-depth Process Evaluation was conducted to understand how the program is being implemented and to determine what customers actually thought of the program, the work being done and how this program has improved the comfort of their home.

Cadmus Impact Evaluation Results[5]

Cadmus conducted 127 site visits and measured specific unit savings through engineering review and simulation modeling. In addition, Cadmus conducted gas, electric and fuel billing analyses to provide additional estimates of savings. Finally, an analysis was performed to examine savings data and information from similar programs.

Presented below are the general conclusions and recommendations of these efforts:

→ HPwES programs were successful with high participation rates and high savings per participant compared to other home energy performance programs.

→ Cadmus field staff received positive feedback from many program participants. (Field staff described participants as very satisfied with the services and incentives they received. Participants reported being more comfortable in their

[5] The Cadmus impact evaluation can be found on the Commission's website. http://www.puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/124%20NH%20HPwES%20Impact%20Evaluation%20Report%20June%2013%202011.pdf

homes and seeing a noticeable decrease in their fuel bills.)

→ Cadmus combined engineering and billing analyses to estimate utility savings. Annual energy savings for this program ranged from 13.8 to 24.8 MMBTUs per home (equivalent to 100 to 180 gallons of fuel oil per home each year).

→ While not statistically conclusive, analysis of oil heated homes in PSNH's service territory may indicate higher savings. An analysis of the oil bills of 13 customers yielded an average annual savings of 33 MMBtu/site (approximately 240 gallons of fuel oil per home each year). Cadmus engineering analysis for these same houses indicated a similar savings of 34 MMBtu/site.

Cadmus Process Evaluation Results[6] - Program Performance and Delivery

The process evaluation was based on more than 150 interviews with program participants, administrators, auditors, and implementation contractors. The 2009-2010 HPwES program has been successful and effective. Overall, the program is delivered very smoothly, helping customers implement energy saving measures with relative ease. It is administered by a few program staff members who track projects and manage relationships with customers and contractors. Contractors liked working with each of the utilities and indicated that program processes generally worked well.

Participants exhibited very high satisfaction with the program:

→ 93% satisfied with program overall

→ 95% satisfied with the energy efficiency upgrades made to their homes

→ 83% generally satisfied or very satisfied with the first energy audit

→ 77% generally satisfied or very satisfied with program communications and marketing

→ 86% generally satisfied or very satisfied with the report and recommendations received

→ 91% generally satisfied or very satisfied with work done to the home

[6] The Cadmus process evaluation can be found on the Commission's website. http://www.puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/124%20NH%20HPwES%20Process%20Evaluation%20Report%20June%2013%202011.pdf

→ 87% generally satisfied or very satisfied with the incentives provided

→ 81% generally satisfied or very satisfied with the final QA review

Q. Did Cadmus make any recommendations regarding the HPwES program process?

A. Yes, Cadmus provided the Companies with seven recommendations, which are summarized on page 4 of the Process Evaluation report.

Q. What have the Companies done in response to the Cadmus' recommendations?

A. The Companies have reviewed the impact evaluation of the pilot HPwES program which was submitted to the Commission on June 13, 2011, and, wherever possible, have already implemented changes to the design of the HPwES program in response to the findings of that evaluation, which changes are summarized below:

1. Full Scale Fuel Neutral Program: The Companies are proposing in this testimony to move this program to a full scale program rather than a pilot program. [Cadmus Process Evaluation, Table E- 1, Page 4, First Recommendation].

2. Audit Tools: The Companies will continue using Performance Systems Development's "Surveyor" and "Treat" audit tools for 2012. The Surveyor audit tool has been updated with prescriptive energy savings recommended by Cadmus based on the impact evaluation. These updates took effect on January 1, 2012 and will be used on a going forward basis. UES will continue to use the TREAT modeling tool and will review estimated energy savings and adjust with the auditor as necessary per Cadmus' evaluation. The Companies will continue to review new auditing software products and will evaluate converting to a common

unit based or modeling audit tool. [Cadmus Process Evaluation, Table E-l, Page 4, Second Recommendation. Also Cadmus Impact Evaluation, first, second and third bullets on page 37].

3. On Bill Financing: The Companies now offer on-bill financing (OBF) made available via the RGGI grant. The utilities will monitor the market response to on-bill financing of energy efficiency measures to determine if it should be offered in future program years. In 2011, 60% of UES' HPwES participants have used the Company's OBF option to help pay for measures installed through the program. Approximately 25% of PSNH customers have sought loans; however, PSNH has exhausted its revolving loan fund and new loans can only be made as older loans are repaid. [Cadmus Process Evaluation, Table E- 1, Page 4, Third Recommendation].

4. Fine Tuning with Contractors: Cadmus found that CFLs were being left for the homeowner to install, and recommended that they be installed by the auditor/contractor. The Companies have instructed contractors on the importance of installing CFLs to achieve the expected savings. In addition, the Quality Assurance Contractor has been notified of this directive and will assist with ensuring the CFLs are installed as well. [Cadmus Process Evaluation, Table E-1, Page 4, Fourth Recommendation].

5. Customer Upgrade Choices: The Companies have considered the option of allowing customers to pay the difference for energy efficiency products that might better suit their needs or preferences (e.g., installing spray polyurethane foam to seal and insulate large open areas rather than using other more cost-effective measures like blown-in cellulose). For example, the Companies will allow customers to pay the incremental cost of polyurethane foam as a separate charge. [Cadmus Process Evaluation, Table E-1, Page 4, Fifth Recommendation].

6. Marketing and Customer Testimonials: The Home Performance with

ENERGY STAR brochure has been updated to summarize customer feedback in the highlighted Section "Benefits of Home Performance with ENERGY STAR". In addition, the Companies plan to develop more case studies and place them with customer comments and testimonials on the NHSaves web site throughout the year. As noted on page 22 of the Cadmus Process Evaluation, about a quarter of both participants and non-participants heard about this program via word of mouth by satisfied customers. The Companies expect that word of mouth will continue to be a big part of the marketing success of the program. [Cadmus Process Evaluation, Table E-1, Page 4, Sixth Recommendation].

7. Cost-Effectiveness: The Companies filed the 2012 plan with the new energy savings resulting from the Cadmus Impact and Process Evaluation. These new energy savings were used along with the new Synapse developed Avoided Energy Supply Costs to determine cost effectiveness.

Q. Why are the evaluations important to the issues being considered in this portion of the proceeding?

A. The Commission has ruled that the HPwES program should remain a pilot program until results of the evaluations are known. Those results are now known. The evaluations have been positive, UES and PSNH have adopted the recommendations for improvements, and as a result, the Companies are ready to move to a full scale, fuel neutral program.

Q, In addition to the above, has the HPwES pilot program been evaluated by any other organizations?

A. Yes. In early 2011, the U.S. Environmental Protection Agency evaluated the program along with many others across the country. Upon completion of their review, the EPA awarded its ENERGY STAR Emerging Markets Excellence Award to New Hampshire's HPwES Program. While many states around the country have been implementing their version of the "Home Performance with

ENERGY STAR Program", last April New Hampshire's Program was recognized as one of the best in the country.

Other Relevant Information Regarding the HPwES Program

Q. One of the Commission's concerns in 2009 was whether customers could afford their share of the project cost and the upfront payment of 25% of the project cost. Recognizing that the proposal before the Commission provides only a 50% rebate, how have the companies addressed that issue?

A, The OBF loan program allows customers to borrow up to $7,500 for up to 7 years. The loan is designed to cover the customer's co-payment. The loans are interest free. The customer pays a separate loan payment in their monthly utility bill; however, service to the customer will not be terminated for failure to make the loan payment.

Q. Are there any New Hampshire sources of support for a fuel blind HPwES program?

A. Yes. The HPwES program directly supports the State's energy policy goals. In August of 2006, Governor John Lynch announced the State of New Hampshire's 25 x '25 Renewable Energy Initiative, which set a goal for New Hampshire to obtain 25% of its energy from clean, renewable sources by the year 2025 and directed the Office of Energy and Planning and the Department of Environmental Services to develop a plan to meet this goal. In order to reach this goal, it was noted by the Office of Energy and Planning that it will be easier to meet the overall goal for renewable energy if demand for energy is reduced by means of energy efficiency and conservation.

The New Hampshire Climate Change Policy Task Force was assembled and the report entitled "The New Hampshire Climate Action Plan" was issued by the Department of Environmental Services in March 2009. The Task Force recommended 10 overarching strategies to comprehensively address the causes

and the impacts of climate change; the first of which is maximizing energy efficiency in buildings. Specifically, the Task Force noted that the state can realize substantial reductions in its energy consumption for heating buildings and power utilized by buildings by maximizing the thermal and electrical efficiency of all future buildings and extensively retrofitting existing residential, commercial, industrial and municipal buildings.

In the residential sector, a goal was set to retrofit 30,000 homes annually in order to reduce their net energy consumption by 60%. To meet this goal, the Task Force recommended utilizing a program that includes the following elements: 1) building shell and window upgrades, including instrumented air sealing and thermographic inspections; 2) space conditioning equipment upgrades/replacements, including ductwork and duct sealing; 3) domestic hot water system upgrades; 4) ENERGY STAR lighting; 5) water saving measures; 6) ENERGY STAR appliances; and 7) use of renewable energy systems.

Program elements one through six[7] are currently offered to residential customers in the Home Performance with ENERGY STAR Program. In addition to recommending program elements, the Task Force identified several market barriers, including the high initial investment cost of energy efficiency measures and the potential lack of consumer financial resources to implement recommended energy efficiency improvements. The Home Performance with ENERGY STAR Program reduces these market barriers by including rebates on both the electric and non-electric energy efficiency measures and by offering on-bill-financing. Finally, the Task Force identified New Hampshire utilities and building owners as the parties responsible for program implementation. Based on the recommendations contained in the New Hampshire Climate Change Action Plan, the Home Performance with ENERGY STAR Program as currently designed and offered by PSNH and UES is well positioned to help the State of New Hampshire meet its energy policy objectives and goals.

[7] Based on program cost-effectiveness criteria, windows rarely qualify for incentives.

Q. Do utilities in other states operate residential programs which are fuel neutral?

A. Yes. Utilities in Massachusetts operate a residential program, similar to the Companies' Home Performance with ENERGY STAR Program, which is fuel neutral. The level of rebates offered through the programs are the same for electric energy efficiency measures and non-electric energy efficiency measures installed at each participating customer's residence. In addition, the utilities earn a performance incentive on all cost effective energy efficiency measures installed, whether those measures are associated with electric or non-electric energy savings. In Massachusetts, the program is designed to encourage residential customers to conserve energy associated with all fuel types and to encourage utilities to implement energy-efficiency programs that employ a strategy of finding, recommending and incenting customers to perform all cost effective energy efficiency measures, whether electric or non-electric.

Performance Incentive

Q. Are the Companies proposing to earn a performance incentive on the nonelectric measures installed?

A. Yes. The Companies are proposing that the incentive should be structured just as the electric incentives are structured; i.e. goals should be established for the amount of savings and whether those savings are cost effectively achieved (based upon a cost/benefit calculation). One of the Commission's twelve issues to be addressed was whether there should be different incentives for each company. Because UES and PSNH are offering the same service, the Companies ought to operate under the same incentive design. The Companies propose that the current performance incentive design remain in place.

Q. Why should the utilities earn a performance incentive on non-electric measures?

A. The Companies have long earned a performance incentive on non-electric measures in the low income Home Energy Assistance and ENERGY STAR Homes programs. There are societal benefits of making a low income residence as affordable as possible so that the Electric Assistance Program benefits and Low Income Home Energy Assistance Program benefits stretch as far as possible. ENERGY STAR Homes provide an opportunity to maximize cost effective measures when the home is in the design stage. There is no requirement that the heating source chosen for the ENERGY STAR Home will be electrical such as a heat pump. Those benefits of lower heating costs, captured during the design and construction of the home, will be realized for many years to come. There are societal benefits of improving the efficiency of the state's housing stock that go beyond the customers who have the measures installed in their homes. As discussed above concerning the New Hampshire Climate Action Plan, improving energy efficiency in buildings is a critical need in New Hampshire, not just for low income residents. The Companies not only desire to provides services to their customers, but the HPwES program may move the market, training more energy services companies and employees, giving them experience and expertise for the day when this market may thrive on its own.

"The purpose of the incentive is to motivate the utilities to aggressively pursue achievement of the performance goals of their energy efficiency programs." Energy Efficiency Working Group, Final Report at 20 (1999). The current proposal provides the strongest inventive for the Companies to maximize the cost effective energy savings produced with System Benefits Charge Funds. The two tests or formulas in the current incentive mechanism are: (1) amount of savings; and (2) cost effectiveness. The performance incentive focuses the Staff's and interested parties' attention on results in these two areas. Restricting the performance incentive to only electric savings diminishes this focus. With

aggressive but achievable goals and the possibility of an incentive to be earned, more homes will receive the service and more work will be done on each home.

Conclusion

Q. Why is approval of the HPwES program in the public interest?

A. In 2009, the Commission approved a pilot fuel-neutral full home energy efficiency program. Finding that "a fuel-blind proposal ha[s] some potential," the Commission encouraged the Companies to perform a complete evaluation of whether the "pilot is a cost effective program that merits continuation beyond 2009." Docket No. DE 08-120, Order No. 24,974 (June 4, 2009). Since then, the Commission approved the pilot for the 2010, 2011 and 2012 program years, to allow for expansion and further evaluation. Docket No. DE 09-170, Order No. 25,062 (Jan. 5, 2010); Docket No. DE 10-188, Order Nos. 25,189 (Dec. 30, 2010) and 25,315 (Jan. 9, 2012). Over the past two and a half years, the Companies, together with Staff and interested parties, have conducted a thorough evaluation of the HPwES program and have found it to be cost-effective, with extremely high rates of customer and contractor satisfaction. In fact, the top recommendation made by the program evaluator, The Cadmus Group, Inc., was to secure full and complete funding for HPwES.

As stated above, the Companies seek to further develop the market for home energy efficiency and weatherization in New Hampshire, and are meeting an identified need for this service throughout the State. As the Commission has already found, this award-winning program provides both direct and indirect benefits to all ratepayers. Docket No. DE 08-120, Order No. 24,930 (Jan. 5, 2009). Finally, approval does not provide the Companies with carte blanche approval for the HPwES program. HPwES, together with all of the CORE programs, will continue to be vetted via the CORE docket in future years. Extra scrutiny will be applied if all the program measures are eligible for a performance

incentive. For all of these reasons, approval of a full-fledged HPwES program is in the public's interest.

Q. Does this conclude your testimony?

A. Yes, though UES and PSNH expect to file rebuttal testimony to address issues raised by Staff and the parties in their testimony.