STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

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2011-2012 CORE ELECTRIC PROGRAMS AND NATURAL GAS ENERGY EFFICIENCY PROGRAMS

Order on Home Performance with Energy Star Program

O R D E R N O. 25,402

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I. PROCEDURAL HISTORY

On January 9, 2012, in Order No. 25,315, the Commission approved a Settlement Agreement regarding the CORE energy efficiency programs among: Granite State Electric Company, d/b/a National Grid (National Grid); New Hampshire Electric Cooperative, Inc. (NHEC); Public Service Company of New Hampshire (PSNH); Unitil Energy Systems, Inc. (UES) (collectively, Electric Utilities); EnergyNorth Natural Gas, Inc. d/b/a National Grid NH (National Grid NH); Northern Utilities, Inc. d/b/a Unitil (Northern) (collectively, Gas Utilities); Office of the Consumer Advocate (OCA), N.H. Office of Energy and Planning (OEP), New Hampshire Community Action Association (CAA); The Way Home; and Staff of the Commission (Staff) (all collectively, the Settling Parties). The 2011-2012 CORE Electric Energy Efficiency and Gas Energy Efficiency Programs were originally approved in this docket by Order No. 25,189 on December 30, 2010. The CORE energy efficiency programs for the electric utilities are generally funded by the system benefits charge (SBC) assessed on all electric utility customers pursuant to RSA 374-F:3, VI and by New England Forward Capacity Market (FCM) proceeds generated by the Independent System Operator-New England (ISO-NE) FCM auctions. To the extent efficiency measures installed as part of the CORE programs qualify to participate in the FCM auctions, FCM proceeds are put back into the CORE programs. The gas utility energy efficiency programs are funded through the Local Distribution Adjustment Charge (LDAC) assessed on all gas utility customers. Funding from the American Recovery and Reinvestment Act of 2009 (ARRA) and from the N.H. Community Development Financial Authority (CDFA) have also been used to fund energy efficiency programs in New Hampshire.

The Settling Parties agreed to extend the Home Performance with Energy Star (HPwES) pilot, unchanged, through 2012. Disagreement existed as to whether the HPwES pilot should be expanded and the Settling Parties agreed to litigate this issue separately. In Order No. 25,315, the Commission approved this separate litigation and noted that parties and Staff may address: whether the HPwES program should be continued under the present funding sources, fairness of the program as designed, and the issues raised in Order No. 24,930 at pages 19-22, with the exception of the legal authority to operate a fuel-blind program at all, which was resolved in *2009 CORE Energy Efficiency Programs,* 94 NH PUC 1, 11-12 (2009). The Settling Parties conducted discovery, held technical sessions, and filed testimony according to a procedural schedule approved by the Commission.

On February 15, 2012, PSNH filed Joint Testimony of Gilbert E. Gelineau, Jr., Manager of Marketing Support for PSNH, and Thomas Palma, Manager of Distributed Energy Resources, Planning and Design for Unitil Service Corp. on behalf of PSNH, UES, and Northern. On March

22, 2012, Staff filed the Direct Testimony of James J. Cunningham, Jr. and Al Azad Iqbal, Utility Analysts for the Staff. The OCA filed Testimony of Stephen R. Eckberg, Utility Analyst for the OCA, on March 23, 2012. The OEP filed Testimony of Eric Steltzer, Energy Policy Analyst for the OEP. On May 4, 2012, PSNH, UES, and Northern filed Joint Rebuttal Testimony of Gilbert E. Gelineau, Jr. and Thomas Palma; the OCA filed Rebuttal Testimony of Stephen R. Eckberg; and Staff filed Rebuttal Testimony of James J. Cunningham and Al-Azad Iqbal.

On April 20, 2012, PSNH filed amended tariff pages expanding the limits on the Residential Energy Efficiency Loan Program. Included with the Tariff Amendment filing were attachments describing a Collaboration Agreement between the CDFA and PSNH to administer a $10 million grant awarded to the OEP. The Collaboration Agreement explains that CDFA and PSNH will work together to weatherize 500 homes and how the associated costs will be allocated between BetterBuildings funds managed by CDFA, and CORE Program funds budgeted to the HPwES Program administered by PSNH. Under terms of the agreement, BetterBuildings funds would cover $1.5 million of the effort and $500,000 would come from the HPwES program budget.

On May 18, 2012, PSNH filed a letter and tariff revisions concerning the grant. PSNH described a meeting it had with Staff and the CDFA on May 14, 2012 and explained that the purpose of the grant was to gain experience implementing energy efficiency projects that went beyond the basics and to have these projects serve as examples of best practices for other communities to follow. The grant funds would be available to all residential customers across PSNH's service territory. Of the rebates associated with weatherizing 500 homes, PSNH explained that half of the rebates would come from BetterBuildings funds and half would come from HPwES. The grant agreement extends through April 2013, but PSNH acknowledged that the current HPwES pilot is only approved through December 31, 2012. PSNH committed to maintaining separate accounts for CORE and BetterBuildings funds. PSNH stated that for purposes of shareholder incentive calculations, it will include the energy savings and expenditures associated with the single family homes completed in 2012 up to a maximum of 562 homes; savings and expenditures over that will be excluded from the shareholder incentive calculation. On May 21, 2012, Staff filed a letter stating that it had reviewed the tariff changes and letter and that it recommended that the Commission not suspend the tariff. On May 21, 2012, the Commission issued a Secretarial Letter accepting the tariff and letting it become effective pursuant to RSA 378:3.

On June 15, 2012, UES filed a letter informing the Commission about a recent HPwES project, Parke Place, and requested that the Commission grant waivers to the extent necessary to allow the project under HPwES. UES stated that it screens such projects with its Home Heating Index (HHI) and that Parke Place did not meet HHI when modeled with the Targeted Retrofit Energy Analysis tool (TREAT) software. UES stated that notwithstanding not meeting the index, the project as a whole is very cost effective. UES stated that Parke Place is a 96-unit rental community consisting of fourteen separate structures, each housing either seven or eight townhouses. UES stated that energy use per square foot for multi-family facilities is often much lower than stand-alone residential projects due to common walls, ceilings, and basements. UES stated that to the extent Order Nos. 25,189 and 25,315 may be construed as establishing a cap of 100 HPwES homes for the 2012 HPwES program year, UES requested a waiver of that cap. UES also requested a waiver from applying the HHI to this project and requested a waiver of the current cap for electrically heated multi-family projects served under both the Better Buildings and HPwES programs for the remainder of 2012. UES stated that it intends to remain within the budgetary limitations for the HPwES program.

The Commission conducted hearings on the merits of the HPwES program on June 6, 18 and 22, 2012. The Commission received transcripts of the hearings on June 22, 25, and 28, 2012. On July 9, 2012, the OCA, Staff, PSNH, The Way Home, UES, and OEP filed closing statements.

On July 9, 2012, the Retail Merchants Association of NH (RMANH) filed a letter stating that it has operated an energy efficiency program with RGGI funding for the past three years and that the program has been a success among small and mid-sized businesses who undertake energy retrofits. The RMANH stated that its RGGI funding has been transferred to the CORE programs pursuant to House Bill 1490, 2012 Laws N.H. chapter 281. The RMANH stated that it did not participate in this docket because the transfer of the RGGI funds was not contemplated until late in the legislative process of House Bill 1490. Since there was no legislative hearing on this provision, the RMANH never had an opportunity to express its view. Given the impact of House Bill 1490, the RMANH stated that it might have been advisable to re-notice this proceeding and if the Commission chose to do so, the RMANH would participate in the proceeding.[1] The RMANH requested that the Commission limit the applicability of its decision to those CORE dollars derived from the SBC and leave to a new proceeding how to allocate the RGGI dollars.

On July 10, 2012, Staff filed a copy of House Bill 1490 and Liberty Utilities, Inc. (Liberty) filed an appearance on behalf of Granite State Electric Company and EnergyNorth Natural Gas, Inc. Also on July 10, 2012, Liberty filed a letter stating that it supported the closing statements filed by PSNH and UES. Liberty requested that the Commission approve the HPwES

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[1] On July 13, 2012 the Commission issued an order of notice in this docket to open a proceeding to consider the use of RGGI funds in the CORE programs.

program as a permanent program and that PSNH and UES be allowed to earn an incentive on all energy savings achieved through the HPwES program.

II. POSITIONS OF THE PARTIES AND STAFF

A. Public Service Company of New Hampshire

PSNH asked that the Commission to approve the HPwES program as a permanent CORE program. PSNH stated that in early 2009, the Commission determined that it was not legally precluded from approving SBC funds to pay for non-electric measures. PSNH stated in Order No. 24,930, the Commission recognized that RSA 374-F:3, VI allows SBC funds to be used to fund public benefits related to the provision of electricity. PSNH stated that its energy efficiency programs pre-date the Restructuring Law, RSA 374-F. The Commission found the HPwES program had some potential and encouraged PSNH to perform a complete evaluation of whether the pilot was a cost-effective program that merits continuation. The Cadmus Group, Inc. (Cadmus) evaluated the program and PSNH and UES incorporated many recommendations including having HPwES auditors install compact fluorescent light bulbs. In addition, through RGGI funds and the BetterBuildings program, customers may finance costs associated with installed measures.

PSNH stated that Staff's testimony is flawed in that Staff's Schedule 1 used other data sources and that PSNH's own unchallenged data should have been used because it is more reliable. *See*, Hearing Exhibit (Exh.) 35 at 33. According to PSNH, Staff used inherently unreliable figures reported by the gas utilities. PSNH stated that there is no justification for adding gas customers to Schedule 1 as there is no direct evidence or proposal before the Commission that gas utilities plan to operate a fuel-neutral program. Schedule 1 also does not include any gas benefits. Exh. 36 demonstrates that 98% of the therms sold are used for space heating and customers pay an energy efficiency surcharge as part of the LDAC for the therms sold. Gas utilities will have no problem finding gas heating customers who pay higher energy efficiency/LDAC revenues than gas customers who do not heat with gas. PSNH and UES testified that less than 2% of their customers are electric heating customers and that such customers do not respond in great numbers to marketing efforts.

In PSNH's view, it has become increasingly difficult to provide cost-effective electric measures on a stand-alone basis. The most successful programs have included electric and non-electric savings, attained with weatherization of the home. According to PSNH witness Gilbert Gelineau, "it's important that, if you're going to do a program, that you get the weatherization, because that is the thing that provides the cost-effectiveness. That's where all the energy savings are." Hearing Transcript of June 6, 2012, mid-afternoon session (Tr. 6/6/12 P.M.) at 25.

PSNH stated that ancillary savings are significant, but are not currently capable of estimation in order to claim savings for the performance incentive. Its filing included only savings which could be accurately estimated and verified. Ancillary savings from weatherization attributable to reduced operation of the furnace pumps or fans vary from Cadmus' 42 kilowatt-hours, to 70 kilowatt-hours in the Mass. Technical Reference Manual, to 393 kilowatt-hours estimated in the GDS study. If a home is weatherized after qualifying under the Home Heating Index, then PSNH can draw a logical inference that electric savings will result in a reduced operation of heating and cooling appliances.

PSNH stated that the Climate Action Plan, GDS study, and VEIC study lay out a clear path to several goals which benefit the public at large, not just the public as defined by the terms of the utility's tariff. Weatherizing low income customers' homes produces public benefits to all customers who pay into the SBC, but may not participate directly in the CORE programs.

PSNH stated that using RGGI funds for HPwES is no cure to the fairness argument. Customers heating with electricity pay more RGGI costs than electric customers who heat with fossil fuel. According to PSNH, RSA 378:10 does not require absolute uniformity. Electric space heating customers are not discriminated against under a fuel-neutral HPwES program because many of these customer locations have already been served by HPwES, the Home Energy Solutions program, and previous programs providing weatherization services. PSNH and UES will continue to search for, and market to, electric space heating customers. If weatherization services are restricted to electric space heating customers, a market barrier will be created, and an undue preference will be established on behalf of the electric space heating customers who make up 2% of all customers.

PSNH stated that its performance in Home Energy Assistance and EnergyStar® Homes programs allow it to earn an incentive on non-electric savings and the performance incentive is about saving all types of energy. Thus, the utilities should earn an incentive on all energy saved as is the case for all other CORE energy efficiency programs.

B. Unitil Energy Systems, Inc.

UES stated that the Commission has consistently facilitated and encouraged investment in the HPwES program. For three years, the parties have worked together to develop a successful and cost-effective program. Failing to move forward with the program at this juncture, UES said, could result in increased market barriers and in missing an important opportunity to secure energy efficiency for New Hampshire residents.

UES stated that the cost-effectiveness test includes quantified benefits from non-electric resources to determine whether an energy efficiency program is cost-effective. UES stated that the Commission has heard the cost-shifting arguments before in Docket No. DE 08-120 wherein

PSNH and UES requested approval for a fuel-neutral Home Energy Solutions program In that docket the Commission ruled the program was consistent with the purpose of RSA 374-F. There is no reason to depart from this Commission finding. The parties have invested significant time, effort, and money in the HPwES program over the past three years. The KEMA and Cadmus studies demonstrate program success and demonstrate the companies' willingness to make changes and improvements. The program meets identified needs in the residential energy efficiency market consistent with the VEIC report. Several other states have similar programs.

UES stated that Staff's fairness concerns are based on faulty logic and disputed data included in Staff's Schedule 1. UES also disputed some of the savings identified in the GDS report and stated that lighting savings are overstated because of changes in the lighting market over the past several years. UES stated that reliance on the GDS report is misguided as is Staff's use of natural gas energy efficiency programs in its fairness argument. UES stated that although ancillary savings are not fully understood and captured in CORE electric savings measurements, such savings are intrinsic to the HPwES program. UES welcomes further efforts to attract and prioritize electric savings via the HPwES program, including a commitment to work with CORE stakeholders to develop modifications to the HPwES program to permit multi-family electric heat projects to go forward without requiring a waiver request from the HHI. UES will continue to seek electric heat customers, but an energy efficiency program cannot be built on these customers alone. The market for the program does not distinguish between electric and non-electric measures and creating such an artificial distinction could itself create a market barrier.

UES argued that the current performance incentive should apply to the fuel-neutral HPwES program. The purpose of the incentive is to motivate utilities to aggressively pursue achievement of performance goals. UES earns an incentive on other fuel-neutral programs and HPwES should be treated the same as the other fuel-neutral programs.

C. Office of Energy and Planning

The OEP supported PSNH and UES's request to move the HPwES program from a pilot to a full program. OEP stated that for more than 10 years the Commission has approved SBC funds to capture non-electric energy savings related to the provision of electricity. These actions support state policies, reduce administrative costs of residential weatherization programs and ensure the programs support market transformation. The OEP stated that there are approximately 8,500 customers in PSNH's service territory who heat with electricity and notwithstanding direct marketing efforts, only 4% of those customers expressed an interest in participating in the HPwES program. PSNH expanded the program to be fuel-neutral; electric heating customers still remain about 4% of program participants, thus, the program expansion has not had a negative effect on the level of participation by electric heating customers.

The OEP argued that by expanding the program to be fuel-neutral, it becomes more cost effective to conduct marketing efforts. The OEP asserted that continuing the HPwES program is consistent with the recommendations noted in the GDS Associates, Inc. report, *Additional Opportunities for Energy Efficiency.* A fuel-neutral HPwES program also accomplishes a number of State objectives: N.H. Climate Action Plan, the Governor's 25 x 25 Initiative, and Better Buildings Program. The OEP took the position that it is fair to fund the HPwES program with the SBC because participants receiving electric and non-electric thermal savings from the program are the same customers who are contributing to the SBC. The OEP stated that it has been regarded as fair that all ratepayers contribute to the SBC even though there is not enough funding for all ratepayers to receive a direct benefit by participating in the CORE programs.

Because New Hampshire currently has no thermal SBC charge on heating fuels, the OEP posited that it would be fair to use the SBC for the fuel-neutral HPwES program and thereby provide immediate relief to electric ratepayers. Past precedent for using SBC funds for fuel-neutral programs include the Home Energy Assistance Program (HEAP). If SBC funds cannot be used for fuel-neutral programs, the OEP is concerned about the impact on weatherization assistance to low income customers through the HEAP. The OEP cited "Driving Demand for Home Energy Improvements," Lawrence Berkeley National Laboratory, September 2010, as well as the VEIC study as identifying that energy efficiency programs need to be easy for customers to participate in and understand. The OEP stated that funding the HPwES program with the SBC achieves these objectives. The OEP believes that having two separate programs depending on the fuel source would cause a market barrier by complicating the delivery of energy efficiency programs and would make it more administratively complex, and thus more expensive to achieve the same level of energy savings.

The OEP argued that Staff's analysis fell short of providing an accurate depiction of the benefits and costs to ratepayers. The OEP stated that there is no definition of customer classes within RSA 374-F and that N.H. Code of Admin. Rules PART Puc 308 makes no mention of an intra-class within the residential market. The OEP believes that establishing a class beyond commercial and residential is inappropriate, costly, and counter to market development. The OEP believes Staff's distinction within the residential class will be challenging for future CORE program design, implementation, measurement, and verification.

With respect to use of HB 1490 RGGI funds, the OEP asserted that these funds should be used in a fuel-neutral capacity to expand the CORE programs through new program offerings; the funds should not be used to fill in gaps in existing programs, such as funding non-electric savings in HPwES. The OEP suggested using the RGGI funds to include development of credit enhancement mechanisms to support private capital investment through on-bill financing, opportunities for thermal renewable energy, support for the building energy code roadmap, development of an energy labeling program for homes and businesses, and marketing support to centralize the messaging of energy efficiency awareness. The OEP stated that if funding from RGGI is unpredictable, it could present problems in program planning.

The OEP stated it was amenable to prioritizing high electric use customers in a fuel-neutral HPwES program, to ensure that funds are devoted to those customers first. To be effective, the utilities must have the flexibility to devote HPwES program funds to other electric ratepayers that heat with non-electric fuel sources and qualify under the HHI. The OEP also supported the utilities' stated commitment that they will work to direct-market high electric use customers to gain greater levels of participation in the HPwES program from this small group of residential ratepayers. The OEP also supported the utilities' efforts to gain a better understanding of the ancillary electric savings that occur from the weatherization of homes not heated with electricity.

D. New Hampshire Community Action Association

The CAA supported PSNH and UES's request to make the fuel-neutral HPwES program a fully implemented program. The CAA stated in its closing that the HPwES program was reducing energy burdens in the 25-35% range and that the former program only produced an energy burden reduction of less than 10%. The CAA stated that use of the SBC to fund HPwES is fair and legal and cited the Home Energy Assistance Program and Energy Star Homes programs as examples of other fuel-neutral programs the Commission has approved for SBC funding. The CAA expressed concern that if the fuel-neutral HPwES program was not approved, then it could impact other fuel-neutral programs. The CAA felt that the HPwES program had achieved numerous goals such as: large reductions in energy use by: addressing fossil fuel usage in addition to electric measures; addressing electric heated homes that apply and qualify and prioritizing these; performing whole house energy audits to include health and safety benefits for the client; requiring highly-trained and certified energy auditors; and increasing employment opportunities.

E. The Way Home

The Way Home supported PSNH and UES's request to make the fuel-neutral HPwES program a permanent CORE program. The Way Home disagreed with Staff that the HPwES program was unfair. It stated that the Commission has ruled that it is not precluded as a matter of law from authorizing the program and that the Commission found that electric efficiency measures ancillary to the HES program "relate to" the provision of electric service. The Way Home observed that the Commission stated that running programs that attempt to target a single fuel source may in itself be a market barrier when energy efficiency measures delivered as a comprehensive package may be the overall most cost-effective approach to achieve energy efficiency and conservation of all fuel sources.

The Way Home stated that Staff focuses on one policy of RSA 374-F:3, that is, benefits all consumers, but that RSA 374-F:3, VI also states that the SBC may be used to fund public benefits related to the provision of electricity. The legislature did not say the funds may be used solely to fund public benefits related to the provision of electricity. Furthermore, RSA 374-F:3, X says that restructuring should be designed to reduce market barriers to investment in energy efficiency. The legislature could have inserted the word "electric" before "energy efficiency" but it did not. If Staff's approach were adopted and HPwES were limited to electric savings only, cost-effective opportunities would be lost.

The Way Home stated Staff's focus is too narrow a reading of RSA 374-F:3 and that Staff failed to also consider that RSA 374-F:3, VIII, which states that increased competition in the electric industry should be implemented in a manner that "supports and furthers the goals of environmental improvement." The record shows that the HPwES program supports and furthers the goals set forth in the N.H. Climate Action Plan. The Way Home stated that RSA 374-F:3, VI ought to be read in conjunction with other Restructuring Principles so as to give effect to all the words that the legislature included in the chapter. Under such a reading, the HPwES program is not unfair. The HPwES program is an effective way of obtaining maximum energy savings and an effective way of targeting cost-effective opportunities that might otherwise be lost due to market barriers.

F. Office of the Consumer Advocate

In testimony of Stephen R. Eckberg, the OCA reviewed the issues identified in Order No. 24,930 that merit further consideration. Of the numerous issues, the OCA stated that rebate levels were an ongoing concern, but that program evaluations can help inform program administrators and stakeholders as to the most appropriate rebate levels as markets for energy efficiency products and services change and mature. As to which utility program should pay for energy efficiency measures, the OCA stated that it believed the primary deciding factor about which utility should pay for measures was determined by the customers' primary heating fuel.

The OCA supported the continuation of the HPwES program and recommended that the Commission approve PSNH and UES's request to implement a full, non-pilot version of the HPwES program. The OCA stated that customer response to the HPwES program has been strong. PSNH and UES have made program adjustments to the program in response to recommendations made in evaluations. The OCA noted that the Commission has approved fuel-blind programs in the past such as the low income program and Energy Star® Homes program. The OCA stated that it was no longer concerned with the benefit-cost ratio of the HPwES program since it had gone from a ratio of less than 1.0 when it was introduced as a pilot to 2.38 as of the 2012 CORE program update. The OCA agreed that PSNH and UES have shown that they do not have a sufficient number of electric heat households that have come forward for weatherization. The OCA noted that with increased use of air conditioning, weatherization helps reduce cooling costs. The OCA supports efforts to evaluate and quantify these savings.

The OCA stated that any HPwES program should be designed to be consistent with the EPA Home Performance with Energy Star standards because consistency with national standards will help the program take advantage of best practices. The OCA recommended that the Commission approve a performance incentive only on the electric savings portion of the HPwES program. It argued that there are reasonable policy questions outstanding about the appropriateness of rewarding electric utilities for capturing non-electric savings and, therefore, OCA recommended that the Commission direct the CORE program stakeholders to research and discuss the issue and report back to the Commission with recommendations. The OCA asserted that approving the HPwES program is consistent with several state policies, including the Climate Change Action Plan and VEIC's report, Independent Study of Energy Policy Issues.

The OCA disagreed with Staff's characterization of the Home Energy Solutions (HES) program as being an exclusive program for electrically-heated homes and the HPwES program as being open to all ratepayers. The OCA stated that the HES program is open to households with high electric use as well as electrically-heated homes and that the HPwES program eligibility is based on the HHI. The OCA also noted that the VEIC report recommends that the performance incentive be evaluated as a whole which is inconsistent, in OCA's view, with Staff's testimony that the VEIC report recommends changes to the performance incentive for HPwES and other fuel-neutral programs. The OCA stated that the time to determine the fairness of the HPwES program has long since passed. The OCA argued that when the Commission determined that HPwES was lawful and consistent with the public interest, it determined that the program was fair to ratepayers and, thus, the Commission has already resolved whether it is fair to use SBC funds for fuel-neutral programs such as HPwES.

With respect to UES's waiver request, the OCA disagreed with the timing of the request and stated that UES should have sought the waivers before beginning the project, though the OCA did not oppose UES' request. The OCA did, however, request that the Commission direct CORE participating utilities to address how projects like this will be handled going forward in the upcoming two-year CORE program filing.

G. Staff

In testimony, Staff evaluated the HPwES program in terms of who pays energy efficiency charges and who receives the benefits of the program, arguing that this was a concern expressed in the VEIC report. According to Staff, the VEIC report stated that using the SBC to fund energy efficiency services for unregulated fuels "raises the question of whether it is equitable to collect funds from electric and natural gas ratepayers to fund programs that serve oil, propane, and wood fuel customers." VEIC at 3-13. Staff argued that electric and natural gas customers who heat with electricity or gas pay energy efficiency charges on 100% of their household energy usage, either through the SBC or the LDAC. Staff contrasted this group (Group 1) with other ratepayers who heat with oil, liquid propane, kerosene and wood (Group 2) who pay an energy efficiency charge on only 25% of their overall household energy usage. Staff stated that the fairness issue arises in the context of limited energy efficiency funds from the SBC; thus, the Commission would have to make choices as to how to spend such limited funds. Staff stated the Commission has made these choices in the past when it decided not to use SBC funds for re-starting the natural gas energy efficiency programs. The Commission established a surcharge to fund natural gas programs through the LDAC. Under the LDAC, natural gas ratepayers pay for their own energy efficiency programs which include measures similar to the HPwES program.

Staff stated that in Order No. 24,930 the Commission provided guidance on what measures could be present in a fuel-neutral HPwES program. The order lists a number of electric efficiency measures ancillary to the HPwES program, such as the Energy Star appliance rebate and the Energy Star lighting program, and that these relate to the provision of electric service consistent with RSA 374-F:3, VI. Second, the Commission noted that weatherization measures can provide system benefits because homes that use air conditioning or fans for cooling will use less electricity, if run less often due to improved insulation. Third, the Commission noted that energy efficiency measures such as air sealing and improved insulation can often yield significant electric savings because oil, propane, and wood boilers and furnaces use electricity to power pumps and fans to circulate water and air. When Staff applied these guidelines, it determined d that the proposed ancillary electric savings were associated with the installation of only six compact fluorescent bulbs, and that the level of electric savings was so minor that it fell below the Commission's expectation of ancillary savings for the HPwES programs. In support of its scope of evaluation, Staff stated that RSA 374-F:3, VI requires that restructuring of the electric utility industry should be implemented in a manner that "benefits all consumers equitably" and does not benefit one customer class to the detriment of another and that costs should not be shifted unfairly among customers. Staff stated that contrary to RSA 374-F:3, VI the HPwES program shifts approximately $879,853 in costs from Group 2 customers to Group 1 customers.. Staff based this estimate on data from PSNH, the U.S. Census Bureau, and Department of Energy. Staff deemed the cost shift to be unfair and stated that limiting an analysis to just residential and commercial customer classes overlooks this disproportionate sharing of costs and benefits.

Staff stated that the N.H. Climate Change Action Plan listed the three primary sources of greenhouse gas emissions, in order of contribution: transportation, electricity generation, and buildings. Staff stated PSNH and UES could have focused their efforts on electricity generation rather than the fuel-neutral HPwES and still could have; (1) been consistent with RSA 374-F:3, and (2) have achieved greenhouse gas emissions under the Climate Change Action Plan. Staff noted that had the focus of PSNH and UES been on the benefits associated with reducing electricity consumption, their proposal would have been more aligned with the Commission-approved SBC which the Commission expected would provide "double benefits" – i.e. benefits of reducing electricity for ratepayers who participate in SBC funded energy efficiency programs, and the benefits to all ratepayers of meeting resource needs at lower costs. Further, Staff stated that, with respect to double savings, the effectiveness of the proposed HPwES program in reducing greenhouse gas emissions is reduced by the fact that the electric benefits of the HPwES program are only 1.5% of the total program benefits – a result much lower than PSNH's Energy Star® Appliance program where 63% of the program benefits are electric benefits. Also, with the addition of the proposed full-scale HPwES program fuel neutral programs in 2012 account for 70 percent of all residential programs, up from 43% of residential programs in 2011; and, the vast majority of savings from these fuel neutral programs are non-electric savings.

Staff stated that the issue of fairness was not decided when the Commission approved the low income fuel-neutral program because this program represented an exception due to its unique nature and funding– i.e. wherein a portion of the program funding comes from C&I revenues. Staff stated that the EnergyStar® Home program is another fuel-neutral exception that is reasonable to keep because it is open to all fuels so that the builder and customer can decide which fuel source to use. Staff explained that HPwES differs from these exceptions because the program is open to all residential customers; not just low income or new EnergyStar® homes. Staff also noted that the monies spent on HPwES would also significantly increase the percentage of the residential budget attributable to fuel-neutral programs and shrink the portion attributable to electric savings.

Staff suggested that the fairness issue could be resolved by continuing the predecessor Home Energy Solutions (HES) program which focuses on electric savings, along with other programs that focus on electric savings (Option 1); fund the fuel-neutral portion of HPwES out of non-SBC funds such as RGGI (Option 2); or fund HPwES with surcharges levied on other fuels (Option 3). With respect to Option 1, Staff stated that the GDS report shows that ample electric savings opportunities still exist; thus, it is reasonable to assume that the limited SBC funds could be used for their intended goal of conservation of electricity which has system-wide benefits (GDS Report at 27). With respect to Option 2, Staff stated RGGI funding is appropriate in that RGGI was formed to reduce greenhouse gas emissions; thus, by its character, RGGI is already fuel-neutral, and is funded by the same electric ratepayers who fund the SBC.

Staff stated that from an integrated resource planning perspective, the question arises as to whether funding fuel-neutral programs is the least cost option to customers. Staff noted that Commission Order No. 19,053 stated "the primary objective of an integrated least cost plan for

PSNH remains the same: namely to develop and implement an integrated resource plan that satisfies customer energy service needs at the lowest overall cost." Staff asserted that the utility cost to achieve electric savings in residential fuel-neutral programs is significantly higher than the utility cost to achieve electric savings in other residential energy efficiency programs.

Also, Staff suggested that some analysis should be done to determine whether fuel-blind programs are a least cost energy supply option. In addition, given the significant cost shifting from Group 2 to Group 1 customers, Staff suggested that a cost impact analysis should be performed to provide a better understanding of cost and benefit shifting. Staff testimony put forward a simple analysis for this purpose.

With respect to the performance incentive, Staff recommended that the Commission continue the limited incentive formula and not change the formula until the record is more fully developed. Staff stated that there were numerous issues identified in the VEIC report that require further review by the performance incentive working group.

With respect to UES's waiver request concerning Parke Place, Staff supported the request.

III. COMMISSION ANALYSIS

A. HPwES

In Order No. 25,315, we approved a settlement agreement and the continuation of the HPwES program as a pilot program during calendar year 2012, with an opportunity to adjudicate whether it should be continued as a permanent program. We directed Staff and the parties to "develop a proposed procedural schedule that allows Staff and the parties to file testimony and positions regarding whether to fully implement a HPwES program, …and allow the Commission time to render a decision on the matter prior to the filing of the 2013-2014 programs." Order No.

25,315 at 10. Having reviewed the testimony of the parties and Staff, and the evidence presented in three days of hearings, we find that the HPwES program should be continued and included in the 2013-2014 CORE program filings. Because there are a number of issues which need to be resolved, as discussed below, our approval of the continued HPwES program is conditional and will be revisited as more program data becomes available.

Energy efficiency programs have been funded through a variety of sources, including the SBC, LDAC, FCM proceeds, and RGGI. The funding sources for SBC, RGGI, and LDAC are governed respectively by RSA Chapter 374-F, *Electric Utility Restructuring*; RSA Chapter 125-O, *Multiple Pollutant Reduction Program*; and by Commission orders establishing the LDAC and the gas energy efficiency programs, *e.g. EnergyNorth Natural Gas d/b/a KeySpan Energy Delivery New England, Northern Utilities, Inc.*, Order No. 24,109, 87 NH PUC 892 (2002). These statutes and prior orders guide our oversight of the utility sponsored energy efficiency programs. Funding has also come from the ARRA and, as described above, PSNH recently collaborated with the CDFA to utilize $1.5 million of a $10 million grant.

RSA 374-F:3, VI states that "[a] nonbypassable and competitively neutral system benefits charge applied to the use of the distribution system may be used to fund public benefits related to the provision of electricity." RSA 374-F:3, X states that "[r]estructuring should be designed to reduce market barriers to investments in energy efficiency and provide incentives for appropriate demand-side management and not reduce cost-effective customer conservation. Utility sponsored energy efficiency programs should target cost-effective opportunities that may otherwise be lost due to market barriers." We have previously found that SBC revenues may be used to fund fuel neutral energy efficiency programs such as the HPwES pilot program. *2009 Core Energy Efficiency Programs*, Order No. 24,930, 94 NHPUC 1, 11 (2009).

The CORE programs were developed using ratepayer funds and, later, ratepayer funds collected through the SBC, to promote electric energy savings. The central tenet of these energy efficiency programs was that the electric savings of those who participated would cumulatively result in electric savings for all ratepayers by avoiding additional generation or power purchases, thereby lowering the marginal cost of electricity. The CORE programs have consistently demonstrated their cost-effectiveness by generating electric savings at a cost less than the cost of electricity that otherwise would have been produced.

In recent years, however, it has been harder to maintain a cost-effective program without broadening the program to include non-electric energy savings, which the pilot HPwES has done. HPwES has reduced overall energy use, primarily through reduction of heating oil and propane consumption, due to the high percentage of residential customers who heat with fuels other than electricity and, thus, has had a limited effect on lowering the marginal cost of electricity. There are, however, ancillary electrical savings associated with HPwES programs which are now only in the early stages of quantification.

Electric efficiency measures done in conjunction with HPwES weatherization, such as the Energy Star appliance rebate and Energy Star lighting programs, give rise to savings in electric consumption. However, as the dollar value of these savings is small compared to the savings on non-electric heat, ratepayers do not show much interest in pursuing them without including the weatherization option. Furthermore, weatherization of any home which uses air conditioning or fans for cooling provides system benefits by reducing electricity usage during times of peak summer electric loads which are coincident with maximum home cooling needs. 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 ancillary electric savings as well. 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. Programs that isolate and target energy efficiency to a single fuel source, such as electricity, have in recent years proved less cost-effective, compared to energy efficiency measures delivered as a comprehensive package which are the overall most cost-effective approach to achieving energy efficiency and conservation of all fuel sources.

We found in Order No. 24,930 that the Utilities could benefit from the experience of running a fuel-blind program to prepare for using RGGI funds to support more energy efficiency measures through the CORE program. With the passage of House Bill 1490, 2012 Laws NH Chapter 281, specifically requiring the use of RGGI funds in the CORE programs, the Utilities will be able to implement the benefits derived from this fuel-blind program experience.

We understand Staff's arguments regarding Group 1 and Group 2 customers, however, in our view the HPwES program does not "benefit one customer class to the detriment of another" as prohibited in RSA 374-F:3, VI. Staff divided customers within the residential class into two groups, but these groups do not constitute "classes" as referenced in RSA 374-F:3, VI.

As previously stated, energy efficiency programs for electric utilities have been funded through various sources. Residential use of other fuels, such as propane and oil, is usually associated with the use of electricity and therefore relates to the provision of electricity as required by RSA 374-F:3, VI. We understand that, the utilities have not provided specific estimates of electric savings associated with ancillary measures and that the level of electric savings can affect FCM proceeds and electric system benefits. Nonetheless, on balance, given the multiple funding sources, the many public policies driving energy efficiency programs, the success of the HPwES program, the difficulty of administering cost-effective CORE programs without fuel-neutral measures, and the demand for such a program by consumers in this State, we find that allowing the HPwES program to be included in the upcoming CORE energy efficiency program cycle is in the public interest and is consistent with the overall intent of RSA Chapter 374-F.

B. Other Electric Energy Efficiency Opportunities

We are faced today with changed circumstances from when the CORE programs were first created. The utilities testified that in order to maintain cost-effective programs, non-electric measures must be included. The easily accessible electric savings have been obtained and non-electric savings are now needed to get the utilities "in the door" with customers. Fuel-neutral measures have become the catalyst not only for non-electric savings but for electric savings as well.

The Staff disagreed, stating that there were plenty of opportunities for electric-only savings, such as geothermal hot water heaters. The measures suggested by Staff, however, require a large capital outlay, beyond the reach of most ratepayers. While theoretically possible, these do not strike us as realistic and this conclusion is supported by recent program experience. The number of customers who use electric heat is small, and the utilities testified that those who heat with electricity were reluctant to participate, even after direct contact by the utility. Cost-effective programs in the residential sector need large numbers of potential participants; given the testimony proffered in this case, that will require inclusion of fuel-neutral measures that bring about both electric and non-electric savings.

Though fuel-neutral measures were not what had initially been envisioned for SBC funded programs, it is important to note that non-electric savings such as those realized from weatherization do lead to electric savings. New Hampshire now reaches its peak electric usage in the summer; most of which is due to air conditioning load. Weatherization will reduce air conditioning demand during the peak demand hours of hot summer days. Wholesale electric prices are highest at these peak hours and, therefore, the system gains the maximum financial benefit for each kilowatt hour saved.

Given these realities, we direct the parties and Staff to study the drivers of the increasing air conditioning load in both residential and C&I customer classes and to begin to develop cost-effective energy efficiency programs to reduce this load. Included in this analysis should be window unit air conditioners and their installation, as well as central air conditioning systems. Because summer cooling load occurs at times of highest regional energy costs on a real time basis, we further direct the parties and Staff to further develop peak demand as a factor when calculating cost/benefit tests of proposed energy efficiency measures. We encourage the utilities to include additional measures or programs that target peak demand in the 2013-2014 CORE program filing

C. Ancillary Savings

PSNH and UES acknowledge that ancillary electric savings from non-electric energy efficiency measures have not been quantified sufficiently. Hearing Transcript of June 6, 2012, morning, (Tr. 6/6/12 A.M.) at 69-72. The estimates of electric savings vary among the Cadmus report, Mass Technical Reference Manual, and GDS study. The electric utilities state they are committed to resolving the seeming discrepancies among the sources and PSNH testified that it is in the process of obtaining additional data. *Id.* at 69-70. In order to better understand the relationship between electricity savings and other fuel savings, we direct the parties and Staff to determine such ancillary savings of electricity as part of the measurement and evaluation of the CORE programs going forward. We request that the electric utilities file ancillary savings data as well as a description of the reliability and accuracy of the data in the form of a report to be submitted with the 2013-2014 CORE program year filing. Once this information is available and given the shift towards fuel-neutral programs in recent years, this information should be useful, not only to the Commission, but to legislative and other policy leaders as they review the CORE programs.

D. Electrically Heated Homes and Parke Place

Notwithstanding our approval of the HPwES program and the program's associated non-electric savings, we remind the electric utilities that projects with non-electric savings should not supplant projects that produce electric savings. We direct the electric utilities to administer the HPwES program so as to provide outreach to electric heat customers and to give such electric heat customers priority. We suggest that the working group review the GDS Report in order to locate other potential electric savings and to give electric savings priority.

Consistent with this directive, we grant the requested waiver by Unitil for the Parke Place multi-family project which utilizes electric heat, but does not meet the HHI screening tests currently used for single family homes in the HPwES program. We instruct Unitil and the other electric utilities to develop cost/benefit tools to measure energy savings in multi-family buildings and to give priority for HPwES benefits to multi-unit buildings which utilize electric heat. To the extent that the number of units in multi-family buildings may cause a utility to exceed estimated CORE program caps for single family homes, we do not believe such caps should prevent use of HPwES benefits for electrically heated multi-family buildings when such projects, on the whole, are very cost effective. Accordingly, we waive such caps for the Parke Place project. Additionally, we instruct the parties to submit alternative cost benefit analysis for electrically heated multi-family projects as part of the 2013-2014 CORE filing.

E. Performance Incentive

Although we heard arguments from Staff and the parties regarding whether it was appropriate to allow the utilities to earn incentives on non-electric energy savings, the record is not sufficiently developed for the Commission to make a determination on an incentive methodology for such non-electric energy savings. Accordingly, we direct the parties to collaborate in a working group, to be convened immediately, for the purpose of developing a shareholder incentive proposal for non-electric savings. We suggest that the parties consider an approach that provides a lower incentive for non-electric savings than for electric savings and takes into account higher cost savings at times of peak demand. Such an incentive differential would reflect the underlying source of SBC funds (electric distribution customers) as well as the primary business of the utilities (electric distribution services). In this collaboration, in light of the recent passage of House Bill 1490 requiring the use of RGGI funds in the CORE programs, the parties should consider whether RGGI-funded portions of CORE programs should be used to fund any portion of the performance incentive developed for the CORE programs. Because a proposal may not be complete by the time the 2013-2014 CORE filing is made, we will continue the performance incentive now in place for HPwES and adjust it upon approval of any changed methodology.

Based upon the foregoing, it is hereby

ORDERED, the electric utilities shall include the HPwES program in the upcoming 2013-2014 CORE program; and it is

FURTHER ORDERED, that use of the Home Heating Index as a screening tool for the multi-family buildings at Parke Place is waived for purposes of implementing the HPwES program; and it is

FURTHER ORDERED, that use of the cap on the number of single family homes is waived for multi-family buildings for purposes of implementing the HPwES program; and it is

FURTHER ORDERED, that the electric utilities shall develop additional measures and programs to reduce air conditioning electric loads and shall present those proposals as part of the 2013-2014 CORE program filing; and it is

FURTHER ORDERED, that the electric utilities shall develop estimates for the ancillary electricity savings associated with non-electric savings of various measures used in the HPwES program and shall present those estimates in the form of a report as part of the 2013-2014 CORE program filing.

By order of the Public Utilities Commission of New Hampshire this twenty-third day of August, 2012.

Amy L. Ignatius Chairman	Michael D. Harrington Commissioner	Robert R. Scott Commissioner

Attested by:

Lori A. Davis
Assistant Secretary

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FILING INSTRUCTIONS:

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b) **Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.**

c) **Serve a written copy on each person on the service list not able to receive electronic mail.**

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