

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

DE 10-188
2012 CORE Electric Energy Efficiency Programs
and
Natural Gas Energy Efficiency Programs

DIRECT TESTIMONY
OF
JAMES J. CUNNINGHAM, JR. AND AL-AZAD IQBAL

Date: November 10, 2011

1 **Table of Contents**

2	<u>Description</u>	<u>Page</u>
3		
4	Introduction and Purpose of Testimony	3
5	Home Performance w Energy Star (HPwES)	3
6	HPwES Policy Issue of Fairness	4
7	Commission Guidelines on Fairness Issue	6
8	Does HPwES Contradict Fairness Issue	7
9	Resolution of Fairness Issue	8
10	Discussion of Changes in Rebates for HPwES	9
11	Discussion of Changes in PI for HPwES	13
12	Discussion of Electric vs. Non-Electric Savings in Fuel-Neutral Programs	17
13	Budget Changes for 2012	19
14	2011-2012 Performance Incentives – Impact on 2010 Unspent Budgets	21
15	Cost Effectiveness of 2012 Programs	23
16	Appendix A – Educational and Professional Background	24

17

18

19

20

21

22

23

1 **Q. Please state your names, current positions and business address.**

2 A. Our names are James J. Cunningham, Jr. and Al-Azad Iqbal and we are employed
3 by the New Hampshire Public Utilities Commission (Commission) as Utility
4 Analysts. Our business address is 21 S. Fruit Street, Suite 10, Concord New
5 Hampshire, 03301.

6 **Q. Please summarize your educational and professional background.**

7 A. Our educational and professional backgrounds are summarized in Appendix A.

8 **Q. What is the purpose of your joint testimony?**

9 A. Our joint testimony addresses the proposed change by PSNH and UES to
10 implement a full scale fuel-neutral Home Performance with Energy Star (HPwES)
11 program, proposed budget changes for program year 2012, treatment of 2010
12 unspent budgets for purposes of calculating 2011-2012 performance incentives,
13 and proposed cost effectiveness of the 2012 programs. The major portion of our
14 testimony focuses on the proposal by PSNH and UES to implement a full scale
15 fuel-neutral HPwES program.¹

16

17 **Home Performance with Energy Star (HPwES) Program**

18

19 **Q. What are the issues you want to address pertaining to the proposal by PSNH
20 and UES to implement a full-scale fuel-neutral HPwES program?**

21 A. We will be discussing a policy issue which might have implications on how the
22 CORE energy efficiency programs are funded and how the CORE budgets are

¹ Although PSNH and UES are the only electric utilities proposing to implement a full scale fuel-neutral HPwES program, it is our understanding that all utilities plan to offer this fuel-neutral program in 2012 and future years.

1 allocated. In addition, we will be discussing how proposed shareholder incentives
2 pertaining to the HPwES program need to be modified and how shareholder
3 incentives pertaining to other fuel neutral programs for 2013 and beyond might
4 need to be updated in the context of the changing characteristics of the proposed
5 residential programs.

6 **Q. Please describe the policy issue pertaining to full-scale implementation of**
7 **HPwES.**

8 A. We believe that implementing the HPwES full-scale fuel neutral program creates
9 an important policy issue for the Commission. The issue is fairness – i.e. whether
10 it is fair that one group of customers (Group 1: electric/natural gas heat
11 customers) should pay significantly more (i.e. pay energy efficiency (EE) charges
12 on 100 percent of their energy use) and receive the same benefit or same
13 programs as another group of customers (Group 2: oil, liquid propane, kerosene
14 and wood heating customers) who are paying only partially (i.e. pay EE charges
15 on an estimated 25 percent of their household energy use).²

16 **Q. Isn't it true that the Commission approved fuel neutral-programs under CORE**
17 **programs in the past? How is this different for HPwES?**

18 A. Yes, the Commission did approve fuel-neutral programs to achieve certain policy goals.
19 For example, to serve the low income group, the Commission made an exception by
20 making it a fuel-neutral program; but, the Commission also created an exception in its
21 funding mechanism by allocating “C&I revenue” for this “residential” program.

² Group 1 customers pay for energy use related to heating and non-heating usage (i.e. est. of 28,355 kWh per year). Group 2 customers pay for energy use related only to non-heating usage (i.e. est. of 7,200 kWh/year).

1 The EnergyStar® Home program was introduced to encourage building the new housing
2 stock with EE measures. In a new construction program, heating system selection might
3 be made after knowing the EE opportunity; so, it is reasonable to keep the EnergyStar®
4 program open to all fuel thus leaving the heating option to the builders or customers to
5 decide.

6 With respect to the HPwES program, the situation is different. The proposed program is
7 changing a targeted program (for electric/gas heat) by opening it up for everyone to
8 participate. This is the exact opposite of what the Commission approved for the other
9 two fuel neutral programs. Also, the fuel-neutral HPwES program will change the make-
10 up of the CORE residential EE programs in two ways: 1) it will increase the budget
11 allocation for fuel-neutral programs from 49% to 70% of CORE residential budgets³,
12 and; 2) it will decrease the electric savings as a percentage of overall savings, with the
13 electric savings portion of the the HPwES program saving only 2 percent⁴ to 12 percent⁵
14 electricity compared to overall program savings.

15 **Q. How does fairness relate to the fuel-neutral HPwES program?**

16 A. Previously, Group 1 customers, as defined above, paid more and received an
17 exclusive program in which only they could participate – i.e. the electric heat or
18 natural gas heat customer could participate in the Home Energy Services program
19 (HES), the predecessor of the HPwES program. As that exclusive program is
20 now open to all customers, it is unfair for them as they are still paying more but
21 now are losing their exclusive program.

³ Source: Table 2. In 2012, HPwES + HEA + E/S Homes Programs account for 70 percent of the combined residential budgets for PSNH and UES.

⁴ Source: Table 3. PSNH savings for HPwES program is 98% non-electric and 2 percent electric.

⁵ Source: Table 4. UES savings for HPwES program is 88% non-electric and 12 percent electric.

1 **Q. Please explain how Group 1 customers (electric/gas heat customers) are**
2 **paying more compared to Group 2 (oil, liquid propane, kerosene and wood**
3 **heating customers).**

4 A. Group 1 customers use electricity, or electricity and natural gas, for all their
5 household energy use. They pay the energy efficiency charge for 100 percent of
6 their household energy usage as part of the SBC and Local Distribution
7 Adjustment Clause (LDAC). On the other hand, Group 2 customers are not
8 subject to the energy efficiency charge for a majority of their energy usage (i.e.
9 est. 75%) and contribute proportionately much less in overall residential energy
10 efficiency cost per household.

11 **Q. Why is fairness an important issue in the context of CORE energy efficiency**
12 **programs?**

13 A. Fairness has always been an important issue when it comes to budgeting and
14 designing energy efficiency (EE) programs and the Commission is always very
15 particular about it.

16 The Commission follows guidelines that EE revenue collected from a customer
17 group would be spent on that group so that any group would not subsidize another
18 group; or, the EE budget would not be transferred from one customer group to
19 another group. The Commission has implemented this guideline at several levels:

- 20 • Sector Level: Each sector budget is determined by the amount of EE
21 revenue collected from that sector. The commission gave specific
22 direction that Residential and C&I EE revenue should be spent on the

1 respective Residential and C&I sector (with the exception of the CORE
2 Low Income EE program).⁶

3 • Utility Level: Although CORE is a statewide program, the Commission
4 has, from the start, approved each EE budget based on the amount of EE
5 revenue collected from the corresponding utility customers; i.e. there has
6 never been an example in which the Commission approved a shifting of
7 budgets from one utility to another. When there was a budget shortfall for
8 one utility, the Commission did not even consider a budget shift from
9 another utility; rather, the Commission tried to find other sources of
10 funding.

11 • Fuel level: The Commission has never shifted EE budgets from electric to
12 natural gas EE programs, or visa versa, thus making sure electric EE revenue is
13 used for electric EE programs and natural gas EE revenue is used for natural gas
14 EE programs.

15 **Q. How does the proposed full-scale fuel-neutral HPwES contradict the fairness**
16 **approach?**

17 A. In this case, the Commission would be allowing the use of electric and gas EE
18 revenue to implement non-electric/natural gas EE programs. From a practical
19 standpoint, this would require electric/natural gas revenue to finance EE measures
20 for customers whose vast majority of energy use comes from oil, liquid propane,
21 kerosene, and wood fuels. If the Commission entertained such subsidization, it
22 would open up other issues such as shifting residential sector EE budgets to C&I

⁶ Source: Order No. 23,172, page 6, Docket DR 98-174.

1 sector budgets or visa versa, shifting EE budgets from one utility to another and
2 subsidizing natural gas EE programs with electric EE revenue or visa versa.

3 **Q. How could this fairness issued be resolved?**

4 A. Since the Commission cannot introduce the surcharge mechanism – i.e. the
5 electric SBC or the natural gas LDAC – for oil, liquid propane, kerosene or wood
6 customers for their usage of those fuels (which would eliminate the difference in
7 contribution to EE programs), the Commission could resolve this issue several
8 ways: 1) keep the program fuel-specific – i.e. for electric/natural gas heat – as it
9 was under the predecessor Home Energy Solutions (HES) program; 2) support the
10 fuel-neutral program by other revenue sources, or; 3) change the program to retain
11 the exclusivity for Group 1 customers by changing the customer rebate levels.

12 **Q. Please describe the option 1 (i.e. keep the program fuel specific)**

13 A. In this option, the utilities would serve the electric/natural gas customers, or target
14 electric/natural gas savings, as they did under the predecessor HES program in
15 previous years. Thus exclusivity of this program will be retained and the question
16 of fairness would not be an issue.

17 **Q. Please describe the option 2 (i.e. support the fuel-neutral program by other
18 revenue sources)**

19 A. In this option, the electric/natural gas customers will be served by the
20 electric/natural gas HPwES program which is funded by EE charge portion of the
21 SBC and by the LDAC. Other heat customers will be served by a fuel neutral
22 program funded by sources other than the EE charge (i.e. such as the Regional
23 Greenhouse Gas Initiative (RGGI); thus, avoiding fairness issue. Presently,

1 RGGI is funding Re-CORE programs which are an extension of CORE programs.
2 Fuel neutrality is suitable for the program goals under Re-CORE programs; and,
3 the Commission might consider recommending Re-CORE programs to focus on
4 fuel-neutral programs. Also, legislation could be enacted to assess a surcharge on
5 other fuels (i.e. oil, liquid propane, kerosene and wood) to support EE programs
6 such as HPwES.

7 **Q. Why do you think option 3 might be reasonable (i.e. change the program to**
8 **retain the exclusivity for Group 1 customers by changing the customer**
9 **rebate levels)**

10 A. The main reason stated behind the fuel-neutral HPwES program was that utilities
11 could no longer find electrically heated homes as all “low hanging fruits” had
12 been served. In the first two years of limited implementation of the full-neutral
13 HPwES program as a pilot program, the utilities found opportunities to save
14 electricity. So Staff believes there are ample opportunities in saving electricity
15 with the current level of customer rebates for electric savings under the HPwES
16 program, even though the low hanging fruits may have already been served. It is
17 our understanding that oil, propane, kerosene and wood heat customers were not
18 served by similar programs in the past, so all the low hanging fruits are there to be
19 served for a larger customer base, approximately 10 times larger than the electric
20 heat customer base.⁷ Therefore, it is obvious that, to influence the “low hanging
21 fruit” of oil, liquid propane, kerosene and wood heat customers and the high

⁷ <http://quickfacts.census.gov/qfd/states/33000.html>

1 hanging electric or gas heat customers, the same level of rebates will not be
2 required to incent participation in EE programs.

3 **Q. If a change to customer rebate levels were made, what change do you believe**
4 **would be appropriate?**

5 A. The proposed rebate is 50 percent, up to \$4,000. We believe a reduction in the
6 rebate to 25% up to \$2,000 would be appropriate.

7 **Q. Why do you believe that a 50 percent reduction in rebates for other heating**
8 **customers?**

9 A. We believe that a 50 percent reduction in rebates for other heating customers for
10 equity reasons – i.e. to properly align the energy efficiency benefits received by
11 other heating customers with the costs paid by other heating customers. Other
12 heating customers refer to customers that heat with oil, liquid propane, kerosene
13 and wood.

14 **Q. Customers that use other heating fuels – i.e. oil, liquid propane, kerosene and**
15 **wood – also use electricity. Why do you believe that a reduction in rebates is**
16 **appropriate if these customers are paying a portion of the surcharge for**
17 **energy efficiency?**

18 A. This question addresses the issue of equity. That is, is it equitable for customers
19 who pay only half of the surcharge to get 100 percent of the benefits? We believe the
20 answer is no.

21 **Q. With respect to any reduction in rebates for other heating customers, would**
22 **that be consistent with other Commission precedents that align benefits with**
23 **costs?**

1 A. Yes. As noted above, the Commission currently requires the electric Utilities to
2 allocate SBC funds to the Residential and C&I sectors based on the split of SBC
3 collections from the Residential and C&I sectors. This ensures that benefits are
4 delivered to customers in proportion to the payments received by customers.

5 **Q. You believe that a 50 percent reduction in rebates for other heating**
6 **customers – i.e. oil, liquid propane, kerosene and wood fuel customers –**
7 **might be appropriate. How did you determine this reduction?**

8 A. As noted above, we looked at the estimated usage for a non-heating and heating –
9 i.e. 600 kWh for non-heating usage and 21,156 kWh for heating. These usage
10 statistics represent a “micro” analysis.

11 In addition we developed a “macro” analysis based on usage across New
12 Hampshire as a whole. We used data from the US Census Bureau and the DOE to
13 determine the number of New Hampshire households that use other heating fuels
14 – i.e. oil, liquid propane, kerosene and wood. We used the typical usage of
15 electricity for non-heating purposes – i.e. lighting, appliances, air conditioning,
16 etc. – to determine electricity usage. Then, we applied the SBC surcharge rate of
17 \$0.0018 per kWh to calculate the estimated payment from other heating fuel
18 customers and compared that estimate to the total payments to determine the
19 percent payments made by other heating fuel customers. A summary of our
20 calculation is as follows:

21
22
23
24
25
26
27
28

Table 1
Est. EE Surcharge Paid by Others⁸

	Number of New Hampshire Households ⁹	600,090
	Percent using “other” heating fuels ¹⁰	74%
	Number of other heating households	444,067
	Est. kWh Usage per household per year	7,200
	Annual kWh Usage	3,197,282,400
	SBC Surcharge Per kWh	\$ 0.0018
	SBC Surcharge paid by “other” customers	\$ 5,755,108
	Total Surcharge Payments ¹¹	\$ 15,503,361
	Percent “other” to total	37%

Based on the above, we estimate that other customers are paying 37 percent of the total surcharge. Therefore, the rebate to other customers could be reduced to 37 percent of the proposed level. However, to be conservative, we adjust the rebate to 50 percent – i.e. 25% up to \$2,000.

Q. A 37 percent reduction in HPwES rebates reduces the budget. Do you have any suggestions about how to offset this reduction?

A. Staff is not taking a position on what other programs could be implemented with the savings from any reduction in rebates. However, Staff believes that funds should remain in the Residential sector and notes that the 2009 GDS Study could be a useful resource to identify electric savings opportunities for the Residential sector.

⁸ “Others” represent customers that heat by oil, liquid propane, kerosene and wood.

⁹ <http://quickfacts.census.gov/qfd/states/33000.html>

¹⁰ <http://apps1.eere.energy.gov/states/residential.cfm/state=NH>

¹¹ Based on the proposed 2012 budgets (incl. PI) for Residential Sector as a proxy: Electric \$10,546,417 + Energy North of \$4,293,158 + Northern of \$663,786 = \$15,503,361.

1 **Q. To summarize, is it your testimony that it is not equitable for other**
2 **customers who are paying only 37 percent of the surcharge to be receiving**
3 **100 percent of the benefits?**

4 A. Yes, or to say it another way, it is more equitable for other customers who are
5 paying only 37 percent of the surcharge for energy efficiency to receive only 37
6 percent of the benefits – i.e. rebates. To be conservative, we adjust the rebate
7 upward so that other customers receive 50 percent of the benefits, or 25% up to
8 \$2,000. An added benefit is that more customers could be served.

9 **Q. Please explain your recommendation to modify the proposed performance**
10 **incentive (PI) formula for the full-scale HPwES.**

11 A. PSNH and UES are proposing a formula to calculate performance incentives that
12 is based on the cost to achieve both electric and non-electric savings. Our
13 testimony recommends a “limited” performance incentive – i.e. one that is based
14 only on the cost to achieve electric savings. Our recommendation is consistent
15 with the existing Commission approved formula for the pilot fuel-neutral HPwES
16 program.

17 **Q. Does your recommended modification to PI apply to all electric and gas**
18 **utilities?**

19 A. Yes, since all Companies are eventually planning to offer the HPwES fuel-neutral
20 program, our recommended modification applies to all electric and natural
21 utilities.

22 **Q. Could you provide an illustration of your recommendation to reduce PI for**
23 **the HPwES program?**

1 A. Yes. Let us use the HPwES program as proposed by PSNH to illustrate our
2 recommendation. PSNH is proposing to calculate PI based on the cost to achieve
3 both electric and non-electric savings, i.e. \$1.6 million. The baseline PI is 8
4 percent. Therefore, PSNH is proposing to earn baseline PI of \$128 thousand (i.e.
5 \$1.6 million x 8%).
6 Staff recommends that PSNH earn 8 percent of the cost to achieve electric
7 savings. Approximately 2 percent of the savings of the HPwES program are
8 electric savings. If we assume costs are allocated based on savings, then 2 percent
9 of the cost pertains to electric savings¹² and PSNH's baseline earnings would of
10 \$3 thousand.¹³ However, electric savings could be a lot higher. As we noted
11 earlier in our testimony (p. 18), there are ample opportunities for electric savings,
12 as were demonstrated in the earlier years of limited implementation of the fuel-
13 neutral pilot HPwES program.

14 **Q. Is your recommendation consistent with any prior action taken by the**
15 **Commission?**

16 A. Yes. In the pilot fuel-neutral HPwES program, the Commission required PSNH
17 and UES to calculate performance incentives using a formula that was based only
18 on the cost to achieve electric savings.
19 We believe there is essentially no difference between the pilot program and the
20 full-scale program – i.e. both are fuel-neutral. Therefore, we recommend

¹² Source: Filing at page 24: Total Benefits = \$4,933,405; Non-Electric Benefits = \$4,854,831.

¹³ A similar calculation could be performed for UES. Approximately 9 percent of their savings is electric savings. Filing at page 29: Total Benefits – 431,835; Non-Electric Benefits = \$389,611.

1 continuation of the same formula approved by the Commission for the fuel-
2 neutral pilot HPwES program.¹⁴

3 **Q. Why do you believe that it is important to use a limited PI formula for**
4 **HPwES that is based only on the cost to achieve electric savings?**

5 A. We believe that there are two important reasons to use a PI formula that is based
6 only on the cost to achieve electric savings. Both reasons focus on electric
7 savings. The first reason pertains to “double benefits” of energy efficiency
8 programs. Double benefits were addressed in Commission Order No. 20,362
9 wherein it stated, “One consequence of C&LM as a resource option is that
10 customers who participate directly in C&LM programs not only share in the
11 system benefits these programs provide, but also benefit directly through their
12 individual participation.”¹⁵ The second reason pertains to the PI formula
13 approved by the Commission that focuses on electric kWh savings.¹⁶

14 However, PSNH and UES are proposing to calculate PI for the HPwES programs
15 that deliver mostly non-electric benefits. Therefore, to be consistent with the
16 “double benefits” and the focus on electric kWh savings in the Commission-
17 approved PI formula, the companies should limit PI to only electric savings.

18 **Q. What percentage of PSNH’s and UES’ 2012 Residential budgets is**
19 **represented by the fuel-neutral HPwES program?**

¹⁴ Source: DE 08-120, Order No. 24,974 at page 6 provided for a limited PI by requiring that PI formula to be calculated based on the cost to achieve electric-only savings.

¹⁵ Source: Docket No. DR 91-128, Order No. 20,362.

¹⁶ Source: Report to the New Hampshire Public Utilities Commission On Ratepayer-Funded Energy Efficiency Issues in New Hampshire, Docket No. DR 96-150, From the New Hampshire Energy Efficiency Working Group, Submitted on July 6, 1999, at page A-68.

1 A. The fuel-neutral HPwES program is program is 24 percent of PSNH’s total
2 Residential budget and 33 percent of UES’ Residential budget.¹⁷

3 **Q. For PSNH and UES, what percentage of their proposed 2012 HPwES**
4 **program savings pertains to non-electric savings?**

5 A. For PSNH, 98 percent of the savings are non-electric savings. For UES, 88
6 percent of the savings are non-electric.¹⁸

7 **Q. Does your recommendation pertain only to the proposed full-scale HPwES**
8 **program for all electric and natural gas companies?**

9 A. Yes. Our recommendation applies to the HPwES program for all electric and
10 natural gas companies. Although only PSNH and UES are formally requesting
11 approval of this program, Staff believes that all other electric and natural gas
12 companies will implement this same fuel-neutral program in the future.
13 Therefore, our recommendation applies to all companies.¹⁹

14 **Q. Does your recommendation of a limited PI require any additional**
15 **administrative burden?**

16 A. No. The utilities currently track electric and non-electric savings by fuel source –
17 i.e. electric, natural gas, oil, liquid propane, kerosene and wood. Also, the utilities
18 currently report “total benefits” and “non-electric resource benefits”.²⁰ Therefore,
19 there is no additional administrative cost to implement the limited PI formula.

20 **Q. Why do you believe that your recommendation to “limit” PI based on the**
21 **full-scale HPwES program is reasonable?**

¹⁷ Source: Table 6.

¹⁸ Source: Table 7 and Table 8.

¹⁹ Two references in the filing and in discovery indicate that all companies will be implementing the HPwES program: Reference filing at page 2, and PSNH response to data request Staff 3-30.

²⁰ Source: Filing at p. 23 and 24 for total resource and non-electric resource benefits respectively.

1 A. We believe our recommendation to limit PI to reflect only the cost to achieve
 2 electric kWh savings is reasonable because it is consistent with current
 3 Commission practice which limits PI in the fuel-neutral pilot program. Also, it is
 4 focused on kWh savings and “double benefits”, two long-standing components of
 5 Commission orders approving energy efficiency programs and related PI. Also,
 6 the limited PI avoids awarding utilities maximum PI while, at the same time,
 7 delivering little electric savings.

8 **Q. Do you have any other comments pertaining to PI for fuel-neutral residential**
 9 **programs?**

10 A. Yes. We believe we might be reaching a decision point wherein the current PI
 11 formula is no longer appropriate for fuel-neutral residential programs and it might
 12 be appropriate to consider a limited PI for fuel neutral programs going forward.
 13 Table 2 indicates that the percentage of fuel-neutral programs in 2012 for PSNH
 14 and UES is now approximately 70 percent of their total residential budgets.²¹

15
 16 **Table 2**
 17 **PSNH and UES Proposed Fuel-Neutral Programs for 2012**
 18 **% Fuel Neutral vs. Total Residential Sector**

<u>Description</u>	<u>Utility Costs (Millions)</u>		
	<u>PSNH</u>	<u>UES</u>	<u>Total</u>
HPwES	\$1.7	\$0.3	\$ 2.0
HEA	\$2.2	\$0.4	\$ 2.6
E/S Homes	<u>\$1.0</u>	<u>\$0.2</u>	<u>\$ 1.2</u>
Fuel-Neutral Tot.	<u>\$4.9</u>	<u>\$0.9</u>	<u>\$5.8</u>
Res. Sector Tot.	<u>\$7.0</u>	<u>\$1.3</u>	<u>\$8.3</u>
% Fuel Neutral	<u>70%</u>	<u>75%</u>	<u>70%</u>

21 Based on combining three programs (i.e. HPwES, Home Energy Assistance and EnergyStar® Homes).

1 This table indicates that fuel-neutral programs account for 70 percent (combined)
 2 of the mix of residential programs, with UES (stand alone) at 75 percent of the
 3 mix.

4 Table 3 indicates that PSNH’s fuel neutral programs are generating 90 percent
 5 non-electric savings – with only 10 percent electric.

6 **Table 3**
 7 **PSNH Proposed Fuel-Neutral Programs for 2012**
 8 **% Non-Electric Savings vs. Total Residential Sector Savings**

<u>Description</u>	<u>Lifetime Benefits Dollars (Millions)</u>		
	<u>Non-Electric</u>	<u>Total</u>	<u>%</u>
HPwES	\$ 4.8	\$ 4.9	98%
HEA	\$ 4.1	\$ 4.8	86%
E/S Homes	<u>\$ 5.9</u>	<u>\$ 6.8</u>	<u>87%</u>
Total	<u>\$14.8</u>	<u>\$16.4</u>	<u>90%</u>

19
 20 The following Table 4 indicates that UES’s fuel neutral programs are generating
 21 87 percent non-electric savings – with only 13 percent electric.

22
 23 **Table 4**
 24 **UES Proposed Fuel-Neutral Programs for 2012**
 25 **% Non-Electric Savings vs. Total Residential Sector Savings**

<u>Description</u>	<u>Lifetime Benefits Dollars (Millions)</u>		
	<u>Non-Electric</u>	<u>Total</u>	<u>%</u>
HPwES	\$ 0.38	\$ 0.43	88%
HEA	\$ 1.04	\$ 1.12	93%
E/S Homes	<u>\$ 0.83</u>	<u>\$ 1.04</u>	<u>80%</u>
Total	<u>\$ 2.25</u>	<u>\$ 2.59</u>	<u>87%</u>

26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36 Based on the above, when we consider the significant increase in fuel-neutral
 37 program mix coupled with the low level of electric savings, we might be reaching
 38 the decision point wherein the current PI formula is no longer appropriate to use
 39 for Residential fuel-neutral programs. For 2013, we recommend that the

1 performance incentive working group consider whether or not a limited PI
2 formula should be used for the HEA and EnergyStar® programs. Staff believes
3 that the high level of non-electric savings and budget allocations change the
4 scenario and raise more issues such as whether the electric and non-electric
5 savings merit the same level of PI from the perspective of an electric energy
6 efficiency program. Staff thinks that these issues should be fully analyzed before
7 the Commission decides to change the PI for HPwES from the current approved
8 limited formula (i.e. based only on the cost to achieve electric savings).

9

10 **Budget Changes for 2012**

11

12 **Q. With respect to the budget changes for 2012, PSNH is proposing a “customer**
13 **engagement pilot program” (filing at page 1 and page 7). What is your**
14 **recommendation?**

15 A. This “customer engagement pilot program” is estimated to be only marginally
16 cost effective, with program costs of \$250 thousand and estimated benefits of
17 \$251 thousand (filing at page 23). In discovery, PSNH indicates that it is in the
18 process of evaluating alternatives and negotiating with a number of vendors. As
19 such, program details are still being worked out.²²
20 Staff has some questions about this program including whether this program has
21 been offered in other jurisdictions, what have been the results thus far, what are
22 the costs, what savings are anticipated, will the savings be electric savings or non-
23 electric savings, etc., etc.

²² Source: Staff 3-6.

1 Since these questions need to be addressed in more detail in technical sessions,
2 Staff prefers to reserve judgment on this pilot program at this time.

3 **Q. Was the Energy Star® Homes Program included in the proposed 2012**
4 **program changes?**

5 A. Yes. Northern agreed to re-consider its decision and is now planning to offer the
6 Energy Star® Homes in 2012. In discovery, the Company indicated that it
7 initially determined it would not offer the Energy Star® Homes program in 2011
8 and would focus resources on the Home Performance with Energy Star (HPwES)
9 and the High Efficiency Heating Water Heating and Controls (HEHE) program.
10 However, since demand for the HEHE program has leveled off in 2011, the
11 Company believes it could offer the Energy Star® Homes program as well as the
12 HPwES programs and the HEHE program in 2012. Accordingly, the Company
13 has included \$80,000 for the Energy Star® Homes program in 2012.

14 **Q. Are you aware of any budget changes that might result from the change in**
15 **rebates for the HPwES program?**

16 A. Yes. We believe our suggestions about the HPwES program could result in
17 reduced rebates. Therefore, budget changes to residential programs might have to
18 be made to offset those reductions.

19 **Q. In addition to the proposed changes, are you aware of any other changes for**
20 **year 2012?**

21 A. At the time of preparing this testimony, there are several topics that are under
22 review.

1 At the technical session on November 3, 2011, the parties discussed some
2 potential changes to the September 30, 2011 and the Utilities indicated they
3 would file updated pages, as appropriate.

4 Another potential change might pertain to public school programs. The electric
5 utilities provided energy efficiency programs to public schools in 2010 and 2011,
6 pursuant to RSA 374-F:4, VIII-a. The Electric Companies should update the
7 2012 filing to describe the 2012 public school programs.

8 In addition, the Natural Gas Companies are currently reviewing potential changes
9 to 2012 proposed programs and related budgets. Specifically, the Natural Gas
10 Companies are currently reviewing their 2011 under spending to determine what
11 amount might be carried forward to 2012 spending. To the extent there is a carry
12 forward to 2012, then budgets and related schedules would change for 2012.

13

14 **2011-2012 Performance Incentives – Impact on 2010 Unspent Budgets**

15

16 **Q. Please explain how unspent 2010 budget funds are treated for purposes of**
17 **calculating performance incentives.**

18 A. For 2011-2012 programs, the Commission approved a change in the formula to
19 calculate performance incentives from “budget” to “actual”. In 2010, the baseline
20 PI was determined by multiplying budget spending by 8 percent. However, in
21 2011 and going forward, the baseline PI is determined by multiplying actual
22 spending by 8 percent. Because of the possibility of inadvertently counting
23 unspent “budgets” in 2010 and again in “actual” in 2011-2012, the Commission

1 directed the utilities to identify any unspent 2010 budgets and refrain from
2 calculating PI funds on these amounts in 2011-2012.²³

3 **Q. What are the unspent funds that were budgeted for 2010 and carried**
4 **forward?**

5 A. The unspent funds that were budgeted for 2010 and carried forward are
6 \$1,247,149. For all electric and natural gas utilities combined, the Residential
7 portion is \$275,749 and the C&I portion is \$2,242,386.

8 **Q. Please explain how you determined the 2010 unspent budgets and how this**
9 **amount was treated for purposes of calculating 2010 performance incentives**
10 **(PI).**

11 A. We compared the difference between 2010 budgets approved by the Commission
12 and the 2010 actual expenditures for each company.²⁴ Since the PI formula is
13 applied by sector, we developed the under the spent amount for Residential and
14 C&I sectors.

15 For purposes of calculating 2010 PI, Staff included the full amount of 2010
16 budget spending. Staff will track the unspent budget amounts to ensure that such
17 amounts are excluded from PI calculations going forward.

18 At the time of preparation of this testimony, we are still in the process of
19 determining whether the companies have excluded the 2010 unspent budget
20 amounts from the calculation of 2011-2012 PI.

21

22

²³ Order No. 25,189, Docket DE 10-188, December 30, 2010.

²⁴ The amounts for budget and actual were taken from the PI filings provided by each company in June/July 2011.

1 **Cost Effectiveness of Proposed 2012 Programs**

2 **Q. Are the programs for 2012 cost effective – i.e. greater than 1.0 Benefit/Cost**
3 **(B/C) ratio?**

4 A. All programs are cost effective except the Home Energy Assistance (HEA)
5 program for EnergyNorth. This program has a B/C ratio of .82. At the time this
6 testimony was prepared, EnergyNorth was reviewing the HEA program details to
7 determine what changes might be made to increase the B/C ratio to 1.0 or higher.

8 **Q. Does that complete your testimony?**

9 A. Yes, it does, thank you.

10

11

12

13

14

15

16

17

18

19

20

21

22

23