STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

DE 12-262

2013-2014 CORE Electric Energy Efficiency Programs

and

Natural Gas Energy Efficiency Programs

DIRECT TESTIMONY

OF

JAMES J. CUNNINGHAM, JR. AND AL-AZAD IQBAL

Date: December 4, 2012

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I. Introduction and Purpose of Testimony

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

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

Q. Please summarize your educational and professional background.

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

Q. What is the purpose of your joint testimony?

A. Our testimony addresses the proposed changes for the 2013-2014 CORE programs. We also review the overall budgets, planned savings and cost effectiveness of the programs.

Q. With respect to proposed changes for 2013 and 2014, please provide a summary of these proposed changes.

A. The proposed changes for the 2013-2014 Core programs are as follows:

1. Incorporation of additional funds from RGGI programs, pursuant to the passage of House Bill 1490 and Commission Order No. 25,425;
2. Expansion of Fuel-Neutral Programs, including (1) implementation of the fuel-neutral Home Performance with Energy Star (HPwES) program; and (2) conversion of the Energy Star Appliance Program, Large and Small Business Energy Solutions program to a fuel-neutral program;
3. Addition of a “deep-dive” component to the HPwES program that doubles the rebates from a cap of $4,000 to a cap of $8,000 for gas customers.

4. Addition of three new pilot programs: (1) UES's Combined Heat and Power (CHP) program, (2) the gas companies' Early Retirement of Boilers Pilot and (3) the gas companies' WIFI Thermostats Pilot;
5. Transition of the pilot C&I RFP Program to a permanent program;
6. Increase in funding for NHEC's and UES's on-bill financing.

Alongside of our review of each of the above items, we provide recommendations for Commission consideration.

II. Proposed Changes

II.A. House Bill 1490 – RGGI Changes

Q. What amount of RGGI funding is proposed for the 2013-2014 electric Core programs?

A. On page 6 of the filing, the utilities summarize the amount of proposed funding for Core programs –i.e., $6 million in RGGI funding for 2013 and 2014. This additional funding is authorized by House Bill 1490.[1]

Q. Please describe how the amount of $6 million in RGGI funding for Core programs was derived?

A. The proposed RGGI funding for 2013 and 2014 Core programs reflects the provisions of House Bill 1490 which requires that all amounts in excess of the threshold price of $1 for any allowance shall be rebated to default service customers; with the remaining proceeds, net of administrative fees, allocated as an additional source of funding to electric distribution companies for Core energy efficiency programs funded by SBC funds. In addition, the 2013 RGGI amount incorporates any unobligated RGGI funds remaining at the end of 2012 and carried over to 2013. Staff believes the proposed amounts are reasonable and properly reflect the provisions of House Bill 1490.

[1] One June 23, 2012 Chapter 281 of the Laws of 2012 (HP 1490) became law.

With respect to 2014, the electric utilities are estimating that RGGI funds will be approximately the same as 2013, or $6 million. We recommend that the utilities re-visit their estimate for 2014 when they file their updates for the 2014 program year.

Q. How will the utilities account for the RGGI funds?

A. The utilities will separately account for RGGI funds, similar to the way the utilities currently account for ISO-NE Forward Capacity Market (FCM) funds. With respect to RGGI program measurements (i.e., program participation, planned savings, or any other metric), the utilities propose to budget, track and report these measurements based on an allocation methodology. Specifically, a percent relationship will be determined that measures the percent relationship between estimated RGGI funds and total SBC/RGGI funds. The following provides an illustration for 2013:

Estimated RGGI funds	$ 6.0 million
Estimated SBC/RGGI funds	$27.4 million
Allocation Percent	21.8%

The above allocation percentage will be used to estimate the portion of the overall Core goals that pertain to the RGGI program.[2]

Q. Do you recommend this methodology for estimating the program measurements related to RGGI funds?

A. Yes, we recommend this methodology for estimating the program measurements related to RGGI funds. We note that RGGI funds will be separately accounted for by the electric utilities, similar to the way the utilities account for ISO-NE FCM funds; and, RGGI expenditures will be estimated based on the illustrated allocation methodology noted above.

II.B. Expansion of HPwES Fuel-Neutral Program

Q. Please summarize the proposed expansion of the HPwES fuel-neutral program.

[2] Reference: Staff 1-002 (Appendix C-1).

A. Commission Order No. 25,402 approved the fuel-neutral weatherization program. The electric companies propose to expand the HPwES program as follows:

1. NHEC and Liberty Utilities (electric) are joining with PSNH and UES to offer the fuel-neutral HPwES program (filing at p. 26);
2. The HPwES program is expanded to include a new measure for replacement of air conditioning equipment (central air conditioners, air source heat pumps, mini split systems) (filing at page 15, 26);
3. The HPwES program is expanded to include a new "deep-dive" component and an increase in the cap on rebates for gas customers – i.e. gas companies will provide the primary or basic rebate of 50% up to $4,000 for weatherization measures and deep-dive measures; and, after the $4,000 is reached, the electric companies will provide an additional rebate of 50% up to $4,000 for deep dive measures (filing at page 27). The additional rebate would apply after the gas customers reach the $4,000 maximum from their gas company.

Q. What is your recommendation with respect to the proposed expansion of the HPwES program to include NHEC and Liberty Utilities (Electric) customers?

A. Staff recommends that the Commission approve the proposed change to expand the HPwES program to include NHEC and Liberty Utilities (electric). We believe this change is consistent with Commission Order No. 25,402 wherein the Commission approved implementation of a state-wide HPwES program.

Q. What is your recommendation with respect to the proposed enhancement to the HPwES program to include replacement of air conditioning equipment?

A. Staff recommends that the Commission approve the proposed enhancement to the HPwES program to expand the measures to include a measure for the replacement of air conditioning equipment. This change is consistent with Commission Order No. 25,402 wherein it directed the parties and Staff to begin to develop cost-effective energy efficiency programs to reduce air conditioning load.[3]

Q. What is your recommendation with respect to the new "deep-dive" component and the additional rebate of 50% up to $4,000 for "deep dive" measures?

A. Staff does not recommend approval of the additional deep-dive component and additional rebates associated with the deep-dive component. Staff recommends that the electric and gas companies continue to offer the HPwES program as approved in Order No. 25,402.

Q. Could Staff elaborate on why it does not recommend the additional deep-dive measures and the associated rebates for "deep-dive" measures at this time?

A. There is insufficient information to provide a recommendation.

The filing provides two reasons for the additional rebates for the deep-dive measures: (1) to provide gas customers with an opportunity for deeper savings and (2) to allow gas customers to take advantage of their paying into the electric SBC fund.[4]

With respect to the first reason, the proposal does not adequately address the cost effectiveness of the planned deep-dive measures. Until this additional information is reviewed, Staff recommends that the existing Commission approved program, with rebates of 50% up to $4,000 be retained. Staff notes that budget monies proposed for the deep-dive measures could be transferred to other cost effective residential programs, or retained in the HPwES program to increase the number of participants.

As for the second reason, the filing proposes an increase in the rebate cap from $4,000 to $8,000 in recognition that gas customers pay twice but receive only one benefit – i.e., paying energy efficiency charges in the electric SBC fund, as well as paying energy efficiency charges in the LDAC fund, while receiving only one HPwES weatherization program (filing at page 27). In technical sessions, the utilities explained that this doubling of the rebate addresses a "fairness issue" which is an issue Staff advanced in the HPwES hearings in the last CORE docket, Docket

[3] Reference: Order No. 25,402, at page 25.
[4] Reference: Filing, at page 27.

No. DE 10-188. The utilities opposed Staff's argument then and Staff is unclear what changes have transpired that have caused the utilities to change their position in the present CORE docket.

II. C. Expansion of Fuel-Neutral Concept to Other Programs for 2013-2014

Q. Are the utilities proposing new fuel-neutral programs, in addition to the HPwES program?

A. Yes. In addition to proposing an expansion to the HPwES program, as noted above, the electric utilities[5] are proposing several new fuel-neutral programs as follows:

1. The Energy Star® Appliance program is expanded to include rebates on certain measures for gas, liquid propane and oil equipment.[6]
2. The electric Large C&I Business Solutions for all electric utilities is expanded to include rebates on a fuel-neutral basis for customers installing high efficiency heating, cooling, hot water systems and controls.[7]
3. The Small C&I Business Solutions program for all electric utilities is modified to offer incentives on a fuel-neutral basis, with electric utilities providing incentives on electric, oil and liquid propane systems.[8]

Q. What does Staff recommend with respect to the new fuel-neutral programs for the electric companies?

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[5] The gas utilities are not proposing any fuel-neutral programs.

[6] Reference: Filing at page 30 provides a summary of equipment and related rebates as follows: (1) up to $500 for tankless water heaters, or other types of high efficiency water heating equipment; (2) up to $1,200 for high efficiency furnaces and boilers; (3) up to $900 for air source heat pump split systems; (4) up to $200 for central air-conditioning; (5) up to $225 for boiler reset controls; (6) up to $25 for thermostats.

[7] Reference: Filling at page 38 provides a summary of the fuel-neutral rebates as follows: (1) new construction projects offer prescriptive and custom rebates designed to cover the lesser of a one-year payback or up to 75% of the incremental costs, and; (2) retrofit projects offer prescriptive and custom rebates designed to cover the lesser of a one year payback or up to 35% of equipment and installation costs.

[8] Reference: Filing at page 40 provides a summary of fuel-neutral rebates as follows: (1) the program offers prescriptive and custom rebates designed to cover the lesser of a one year payback or up to 75% of the incremental costs for new construction, major renovation, failed equipment replacement and customers operating aging, inefficient equipment and systems:, and; (2) the program offers prescriptive and custom rebates for retrofit projects, designed to cover the lesser of a one year payback or up to 35% of equipment and installation costs (50% for gas utilities for both Small C&I and Large C&I due to current low price of natural gas).

A. Staff recommends that the Commission approve the new fuel-neutral programs, as proposed. The new programs fall within the purview of the Commission Order No. 25,402 which approved the fuel-neutral model for the HPwES program.

Q. Does Staff have any other observations about the proposed expansion of fuel-neutral programs?

A. Yes. The electric companies are proposing to significantly ramp up fuel neutral programs with the following impacts:

1. The percentage of proposed spending on fuel-neutral programs is now 80 percent of all electric utility programs for 2013, as compared to only 34 percent for 2011 (see Appendix B, Table 1). At the same time, the majority of savings from residential fuel neutral programs are non-electric savings; and, a fast-growing percentage of savings from C&I fuel neutral programs are also non-electric savings.[9]
2. Overall expenditures for 2013 energy efficiency programs are up by 37% from 2011,[10] while lifetime MWH savings are down by 19 percent (see Appendix B, Table 2).
3. Costs per MWH saved are increasing by 68%[11] from $24.51 per MWH in 2011 to $41.28 per MWH in 2013 due to higher level of overall Core funding and lower level of overall electric savings[12] (see Appendix B, Table 3).
4. Given that MWH savings are used by ISO to determine FCM revenues, the 19% reduction in lifetime MWH savings will depress the level of ISO-FCM revenues that NH will receive in future years. The impact could be close to $400,000 annually.[13]

II. D. New Pilot Programs

[9] Reference: The non-electric benefits vs. total benefits can be found in the filing at pages 85, 100, 110 and 120 for "Total Benefits" (first column) vs. "Non-Electric Benefits" (last column).
[10] Reference Table 1: Actual 2011 spending was $18.5 million, versus proposed 2013 spending of $25.4 million.
[11] Reference Table 3: Actual 2011 cost per MWH $24.51, versus proposed 2013 cost per MWH of $41.28.
[12] Higher level of funding is due to RGGI funding; and, lower level of electric MWH savings is due to the expansion of fuel-neutral programs.
[13] Based on actual ISO-FCM revenues received in 2011 as follows: $2,013,480 x 19% = $382,561.

Q. What new pilot programs are proposed for the 2013-2014 Core filing?

A. The filing contains three new pilot programs. The gas companies are proposing two new pilot programs (filing at page 32): a pilot to test the viability of early retirement of gas boilers and a WIFI Thermostat pilot program. Unitil (electric) is proposing a pilot program to test the viability of a Combined Heat and Power (CHP) program.

Q. What is your recommendation pertaining to these gas and electric pilot programs?

A. Staff supports the development of the pilot programs for the gas companies; however, with respect to the CHP program, Staff believes the Commission would benefit from additional details of the program. Unitil has indicated to Staff that it would be agreeable to further discussions and prefers to withdraw its CHP proposal pending further discussions. Staff believes that such discussions could be fruitful and could take place in the context of the 2013 quarterly Core team meetings.

II. E. C&I RFP Program

Q. Has Staff reviewed this program and, if so, what are the results of your review?

A. Yes, Staff has reviewed the program. This program was proposed as a pilot in prior years; and the filing appears to include a proposal to convert it to a permanent program for 2013-2014.

Q. Does Staff have any comment on this program?

A Staff takes no position on this program. However, we offer the following comments and suggestions. We note that the filing indicates the purpose of the program is to assess the degree to which a project requires an incentive, garners competition among the energy service companies, etc. This program also has a different methodology of selecting projects or participants compared to the process used in other Core programs (first come, first serve versus RFP). Over the last ten years, Staff notes 34 projects were submitted and that the company selected 28 projects. Six customers submitted projects more than once and the company selected projects from these customers more than once. Staff concludes that, this program has not garnered enough interest in the target customer group to be competitive. It is not clear if any useful information was gained from this program and used for improving C&I Core programs during the pilot period. Staff believes that the program should have more detail including a draft of the RFP with a schedule of the RFP process, selection criteria and weighting, etc. As this is a unique utility-specific program, an annual report would be useful for other utilities and parties. Staff believes that a yearly report focusing on participation (each step of the program) and selection process, assessment of the program and how the results could be used in future Core C&I programs is essential. These suggestions, if incorporated, would better serve the purpose of the program if the Commission approves the program.

II. F. On-Bill Financing

Q. Have you reviewed the proposals for on-bill financing and, if so, what are the results of your review?

A. Yes, we have reviewed the proposals for on-bill financing. NHEC is seeking SBC funds of $100,000 for its existing on-bill financing program for residential loan programs (filing at page 99).

UES is seeking SBC funds of $65,000 for its existing residential on-bill financing, and $50,000 for C&I on-bill financing program (filing at page 119).

Q. Do you recommend that the Commission approve the proposals for on-bill financing for NHEC and UES?

A. Yes; however, we believe the tariffs for NHEC and UES need to be updated to reflect the SBC as a source of funding.[14] In addition, we recommend that NHEC and UES separately account for the SBC funds that are utilized for on-bill financing.

II-G. Performance Incentives (PI)

Q. Please provide a summary of the activities of the PI Working Group.

A. **T**he PI Working Group has been meeting in technical sessions to review the formula for calculating performance incentives for the electric and gas companies. We held two technical sessions (one in July 2012 and another in October). We expect to have a report to the Commission by June 2013. In the meantime, we are continuing to use the existing Commission-approved PI guidelines.

III. Expenditures, Planned Savings, and Cost Effectiveness

III. A. Utility Expenditures

Q. Has Staff reviewed utility proposed expenditures and, if so, what are the results of your review?

A. Staff has reviewed proposed expenditures for both electric and gas programs. We believe the proposed expenditures are reasonable, if modified to transfer certain monies to other cost effective programs. Specifically, we recommend that the monies for the deep-dive component of the HPwES program be transferred to other cost effective residential programs; and we recommend that monies for the proposed CHP pilot program be transferred to other cost effective C&I programs.

[14] Reference: For information pertaining to NHEC and UES tariffs, please refer to Staff 1-015 (attached) (Appendix C-3).

Q. Do you have any other comments about the proposed utility expenditures?

A. Yes, we have two comments.

First, for electric and gas companies, the 2013-2014 filing proposes a number of changes. The utilities' filing addresses the changes in various sections; and the utilities provided an oral summary of the proposed changes at our October 24, 2012 technical session. However, we believe it would be helpful for Staff, the Commission, and other parties if, on a going-forward basis, the utilities provide a summary of the proposed changes as part of the introductory portion of the filing. The changes that we believe should be included are as follows: changes in funding sources (such as the proposed increase in RGGI funding); program design changes (such as the proposed expansion of the HPwES program); addition of new measures (such as the proposed addition of air conditioning measures and deep dive measures to the HPwES program); changes in rebates (such as the proposed doubling of rebates for the HPwES program); new pilot programs (such as the proposed three new pilot programs); program evolutions (such as the proposed transition of the C&I RFP program from a pilot to a permanent program); proposed changes to savings assumptions (such as the proposed implementation of the IECC 2009 Energy Code).

Second, the utilities propose to allocate expenditures related to HPwES expenditures to electric and non-electric portions based on rebates to electric and non-electric customers. Specifically, the electric companies indicate that the non-electric cost of the HPwES program are calculated by summing the customer rebates associated with the non-electric measures installed and that this methodology will be uniform for all electric companies.[15] We believe that this methodology could be improved and simplified by utilizing percentages of savings.[16] The kWh and MMBtu savings data provide a good indicator of costs incurred versus savings achieved. Also, the data is

[15] Reference: Staff 1-001 (attached) (Appendix C-4).

[16] Reference: Filing at pages 142-184 which summarizes planned savings for all companies for all programs. The Company also tracks this data on an actual basis.

readily available. Also, this methodology is the same methodology proposed by the utilities to estimate RGGI savings[17], thereby achieving consistency of methodology in relations to savings and cost. Please refer to Appendix B, Table 4 for an illustration of Staff's recommendation.

III. B. Planned Savings

Q. Have you reviewed the planned savings for the electric and gas companies and what are the results of your review?

A. Yes, we reviewed the proposed planned savings for electric and gas companies. Our objective is to ensure that planned savings for 2013 are reasonable and not too easily attainable. Our analysis reconciles proposed planned savings for 2013 to actual savings in 2011, the most recent full year of program activity.[18]

Overall, we believe the planned savings are reasonable; however, based on our review, we identified a number of significant variances as follows:

1. Unitil (gas), Small Business Energy Solutions program: In 2011, Unitil (gas) achieved lifetime savings per participant of 10,140 MMBtu. However, in 2013, the planned lifetime savings per participant is only 779 MMBtu, a 92% reduction. Unitil's reconciliation indicates that this reduction is due, in part, to multi-family projects – i.e., it had 7 multi-family projects in 2011; however, in 2013, Unitil does not anticipate any multi-family projects.[19]
2. Liberty Utilities (gas), Overall C&I Programs: Planned lifetime savings per participant for Liberty Utilities (gas) for the overall C&I programs are 3,899 MMBtu per participant

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[17] Reference: Staff-1-002 (Appendix C-1). Specifically, percent RGGI costs to total RGGI/SBC costs are used to calculate percentage of RGGI savings to total savings. Our MMBtu/kWh methodology is the same methodology in reverse – i.e., percentage of non-electric MMBtu savings to total MMBtu/kWh savings is used to calculate percentage of MMBtu costs.
[18] Our analysis focuses on Year 2013 planned savings. It is our understanding that Year 2014 utilizes the same savings input assumptions for the most part.
[19] Reference: Staff 01-021-RV01 (Appendix C-5).

in 2011. However, in 2013, the planned savings are only 1,347 per participant, a 65% reduction. Liberty Utility (gas) reconciliation indicates that this reduction is due, in part, to lower average project MMBtu savings expected for custom new equipment installations.[20]

3. Liberty Utilities (electric), Large Business Energy Solutions program: Planned lifetime savings per participant for Liberty Utilities (Electric) for the Large Business Energy Solutions Program for 2011 is 1,628,058 kWh per participant. However, in 2013, the planned lifetime savings per participant is only 592,225 kWh per participant, a 64% reduction. Liberty Utility (Electric) reconciliation indicates that this reduction is due, in part, to lower per participant kWh savings in 2013 for both the new equipment & construction projects as well as retrofit projects.[21]
4. PSNH, Small Business Energy Solutions program: Planned lifetime savings per participant for PSNH's Small Business Energy Solutions program for 2011 is 214,689 kWh per participant. However, in 2013, the planned lifetime savings per participant is only 66,699 kWh per participant, a 69% reduction. PSNH explains this reduction, in part, due to an increase in the number of smaller projects in the 2013 plan which contributes to a lower per participant kWh savings.[22]
5. NHEC, Home Energy Assistance program: Planned lifetime savings per participant for NHEC's Home Energy Assistance weatherization program utilizes a measure life of only 10.9 years, as compared to 20 years for Liberty Utilities (electric), PSNH and UES. Therefore, NHEC's lifetime MMBtu savings appears to be understated by 50%.[23]
6. Unitil (electric), Home Energy Assistance program: Planned lifetime kWh savings per participant for UES for the Home Energy Assistance (HEA) weatherization program is

[20] Reference Staff 01-019 (Appendix C-6).
[21] Reference: Staff 01-024 (Appendix C-7).
[22] Reference: Staff 01-23 (Appendix C-8).
[23] Reference: Filing at page 155 (NHEC); page 163 (PSNH); page 150, Liberty Utilities (electric); page 172, UES.

36,345 kWh per participant in 2011. However, in 2013, the planned lifetime kWh savings is only 19,455 kWh per participant, a 47% reduction.[24]

The magnitude of these variances is a concern to Staff. Specifically, we are concerned that these planned savings might reflect an overly conservative forecast of planned savings – i.e., too low. We recommend that the companies re-visit the planned savings for these programs to ensure that planned savings are appropriate – i.e., not too conservative.

Q. If any changes are made to planned savings, how will the utilities incorporate these changes in the filing?

A. When the Companies provide their updated filing in December, any changes to planned savings could be incorporated at that time.

Q. Are you aware of any other changes that the utilities agreed to incorporate in updated schedules they will be filing in December, prior to the hearing?

A. Yes. During the discovery phase of this proceeding, the utilities identified several changes that they will incorporate in the December updated filing as follows: (1) changes to the number of participants served in the HEA Program;[25] (2) changes to measures lives used by NHEC in the HPwES Program;[26] (3) changes to 2014 non-electric resource benefits projected by PSNH for the Energy Star Lighting Program;[27] and, changes to fossil savings per unit used by NHEC in the Energy Star Appliance program.[28]

Q. Do you have any recommendations that could facilitate the review of planned savings?

A. Yes. One improvement we recommend is to ensure that data is tracked on an "apples-to-apples" basis. The gas utilities propose to change the definition of participation from "number of customers" used in 2011 to "number of pieces of equipment" in 2013 for the Small Business

[24] Reference: Fourth Quarter Report for 2011 at page 4 of 47; and, Filing at page 172 for 2013.
[25] Reference: TWH 01-001 - 004 (Appendix C-9).
[26] Reference: Staff 01-013 (Appendix C-10) and Staff 01-014 (Appendix C-11)
[27] Reference: Filing, page 115.
[28] Reference: Filing, page 159.

Energy Solutions program.[29] We believe that the gas utilities' change complicates the analysis of planned savings. Given that other programs run by the gas utilities utilize number of customers for participation, we recommend continuation of the use of number of customers to define participation.

Staff also recommends that the electric and gas utilities budget, track and report lifetime and annual kWh savings for budgets and actual data. Currently, this data is not provided across the board for electric and gas utilities on an actual basis. We note that Staff receives requests from the Legislature for this annual data; also, we note that ISO-NE utilizes this annual data in its model to forecast kWh savings.

In addition, due to the implementation of the fuel-neutral HPwES state-wide, we recommend that the utilities should strive to use consistent savings assumptions across the board for fossil savings. The Energy Star Appliance program appears to contain inconsistent savings assumptions for NHEC, as compared to PSNH and UES. Specifically, NHEC's attachments show annual savings of 70.33 MMBtu per unit for an oil boiler with forced hot water with 85% efficiency.[30] PSNH and UES's attachments show annual savings of only 5.4 MMBtu per unit.[31] NHEC has reviewed its data and advises that it will adjust it to reflect the same annual savings as PSNH and UES.

III. C. Cost Effectiveness

Q. Have you reviewed the cost effectiveness of the programs and what are the results of your review?

A. Yes, we have reviewed cost effectiveness and determined that all electric and gas programs, except for PSNH's Customer Engagement Pilot (CEP) program, are above the required threshold of 1.0 benefit/cost ratio. The CEP program B/C ratio is 0.70 in 2013 and 0.97 in 2014.

[29] Reference: Staff 01-021 Revised (Appendix C-5).
[30] Reference: Filing at page 159.
[31] Reference: Filing at page 167 (PSNH) and page 175 (UES).

Q. Why is the CEP program below the required 1.0 benefit/cost ratio?

A. In 2013, there is a ramp-up period before the personalized energy savings reports have an impact on energy savings. In 2014, the B/C ratio is higher due to lower overall costs and higher energy savings. PSNH does not expect the program B/C ratio to remain below 1.0 in future years.[32] Based on the close to 1.0 B/C ratio in year 2014 and PSNH's expectation that the program will not remain below the 1.0 B/C in future years, we recommend that the Commission approve the CEP program. We note that this recommendation is particular to the facts and circumstances of this particular program and any future programs must be judged on their own merits.

Summary of Conclusions and Recommendations

Q. Please summarize your recommendations.

A. Following is a summary of our recommendations:

House Bill 1490 – RGGI Changes: With respect to the additional RGGI funding, Staff believes the proposed amounts for 2013 are reasonable and reflect the provisions of House Bill 1490. Also, we believe the proposed methodology separately accounts for RGGI funds and is appropriate. For 2014, we recommend that the utilities re-visit their estimate of RGGI funds when they file their updates for the 2014 program year.

Expansion of HPwES: Staff recommends that the Commission approve the proposed change to expand the HPwES program to include NHEC and Liberty Utilities (electric); and to expand the program to include a measure for the replacement of air conditioning equipment. However, Staff recommends that the Commission not approve the additional deep-dive component. Staff

[32] Reference: Staff 01-017 (Appendix C-12).

believes the utilities should continue transfer the budget monies to other cost effective residential programs.

Expansion of Fuel-Neutral Concept to Other Programs: The electric utilities are proposing to expand the fuel-neutral concept to three other programs: the Energy Star® Appliance program, the Large C&I Business Solutions and the Small C&I Business Solutions program. These programs will offer incentives for heating, hot water and controls measures on a fuel-neutral basis related to oil and liquid propane systems. Staff recommends that the Commission approve the expansion of the fuel-neutral concept for these programs.

New Pilot Programs: The filing contains three new pilot programs: early retirement of gas boilers (gas companies only), WIFI Thermostat (gas companies only), and a Combined Heat and Power (CHP) program (UES). Staff is supportive of proceeding with the development of the pilot programs for the gas companies; however, Staff believes further discussions in the context of the 2013 quarterly Core team meeting would provide additional information about the CHP program. UES indicated to Staff that it will withdraw its CHP proposal, pending further discussions. The budget monies could be transferred to other cost effective C&I programs.

C&I RFP Program: This program was proposed as a pilot in prior years. However, for 2013-2014, the program is proposed as a permanent program. Staff provides comments and suggestions but defers to the Commission for a decision on this program.

On-Bill Financing: NHEC and UES are seeking SBC funds to augment existing funds from other sources for on-bill financing. We support the filing; but, we believe the tariffs for NHEC and UES need to be updated to reflect the new SBC funding source. In addition, we recommend that NHEC and UES separately account for these SBC funds.

Utility Expenditures: We recommend that the Commission approve the proposed utility budgets, modified to exclude the proposed costs for the deep dive component of the HPwES program and to exclude the Pilot C&I CHP program. We believe the proposed costs for HPwES could be retained within the HPwES program to serve more customers or re-allocated to other residential cost effective programs. The proposed costs for the C&I CHP program could be retained within the respective Small and/or Large C&I Business Solutions programs. Also, we recommend that, for purposes of calculating non-electric savings for the HPwES program, we recommend that the electric companies use MWH savings as the basis for the calculation. Table 4 provides an illustration of our recommendation.

Planned Savings: We recommend that the Companies re-visit their proposed levels of planned savings for certain programs, as noted in our testimony. We believe the Company can provide changes in updated planned savings when they submit their updated filing in December. These changes can be added to the changes that the utilities already identified during the course of discovery in this case. In addition, our testimony suggests several improvements related to tracking planned savings.

Costs Effectiveness: PSNH's Customer Engagement Pilot (CEP) program is below the required threshold of 1.0 benefit/cost ratio – i.e., with a B/C ratio of 0.70 in 2013 and 0.97 in 2014. During the course of discovery, PSNH indicated that it expects the program will not remain below the 1.0 B/C ratio, and we recommend that the Commission approve the CEP program.

Ramp-up in Fuel-Neutral Programs: Fuel-neutral programs now account for 80 percent of all electric utility programs for 2013. MWH savings are significantly lower than actually achieved in 2001 and costs per MWH are significantly higher than 2011. Table 1, Table 2 and Table 3 summarize the results.