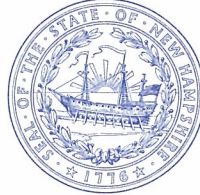


THE STATE OF NEW HAMPSHIRE

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April 30, 2009

Debra Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301



Re: DE 08-120 2009 CORE Energy Efficiency Programs
Fuel Neutral Home Energy Solutions Pilot Program Petition and Proposal

Dear Ms. Howland:

In response to Order No. 24,930, Public Service of New Hampshire (PSNH) and Unutil Energy Systems, Inc.(UES) (collectively Companies) have petitioned the Commission to modify their originally filed CORE Home Energy Solutions (HES) Program by replacing their originally filed HES programs with their respective company-specific HES fuel neutral pilot programs (Pilots). The proposed Pilots would be the only HES programs offered by PSNH and UES and would provide services to qualified PSNH and UES customers regardless of heating fuel and will run until the end of 2010 with an impact evaluation conducted prior to the approval of the 2011 CORE Programs. The Companies' budgets assume the Pilots are approved no later than April 1, 2009.¹

The purpose of this letter is to provide Staff comments on the Companies' proposals.

Recommendation

In keeping with the "System" (emphasis added) Benefit Charge (SBC), Staff recommends that the Commission not approve the PSNH and UES Pilots. Staff believes that system benefits are not adequately captured by the proposed fuel neutral Pilots and hence are not in keeping with the SBC or with past Commission findings pertaining to benefits attributable to cost effective energy efficiency programs:

¹ Although the Companies' Petition assumes that Pilots are approved no later than April 1, 2009, the petition was not filed until April 9, 2009; hence, the budgets may have to be adjusted.

“One consequence of Conservation and Load Management (C&LM) as a resource option is that customers who participate directly in C&LM programs not only share in the system benefits these programs provide, but also benefit directly through their individual participation.” (Docket No. DR 91-128, Order No. 20,362).

The double benefits that always flowed to electric participants and the electric system are reduced significantly in the proposed PSNH and UES Pilots. With respect to the reduction in electric benefits, PSNH’s proposed Pilot incorporates electric-related savings of only 6.3 percent of the total energy savings² and UES’ proposed Pilot incorporates electric-related savings of only 11.5 percent of the total energy savings.³ By way of comparison, other Commission approved programs such as Energy Star Lighting Program incorporated 100 percent electric-related savings; and, the Energy Star Appliances Program incorporated virtually all electric- related savings.

In addition to the above, Staff offers the following for your consideration:

1. Staff recommends that the proposed PSNH and UES Pilots not be undertaken and that the Pilot budgets be reallocated to other non-low income programs.⁴ With respect to PSNH’s Pilot, the Benefit/Cost (B/C) ratio is below 1.0. However, Staff believes that the B/C ratio will fall even lower after reasonable administrative costs are added. Specifically, Staff believes that additional costs for evaluation, Energy Star Certification and Marketing should be added. With respect to UES’ Pilot, the B/C ratio is slightly above 1.0. However, Staff believes that the B/C ratio will fall below 1.0 after reasonable administrative costs, as noted above, are added. Staff notes that an increase of only \$15 thousand in administrative costs will render UES’ Pilot not cost effective. See attached Schedule 1 for a summary of B/C ratios.
2. With respect to performance incentives,⁵ Staff recommends that, if the Commission decides to approve the Pilots, then Pilot performance incentives should be modified to reflect a calculation that incorporates only the budget for electric-related benefits.

² Source: Pilot Proposal at page 2. Non-electric MMBtu savings of 144,401 x 293 conversion factor = 42,309,493 kWh’s; electric kWh savings of 2,843,135; total savings of 45,152,628. Hence, electric savings is 6.3 percent of total savings (i.e. 2,843,135 kWh’s divided by 45,152,628 kWh’s = 6.3 percent.).

³ Source: Pilot Proposal at page 2. Non-electric MMBtu savings of 21,307 x 293 = 6,242,951 kWh’s; electric kWh savings of 812,283 kWh’s; total savings of 7,055,234 kWh’s. Hence, electric savings is 11.5 percent of total savings (i.e. 812,283 kWh’s divided by 7,055,234 kWh’s = 11.5 percent.

⁴ The low-income Home Energy Assistance budget allocation for 2009 was already approved by the Commission.

⁵ Reference Commission Order No. 24,930, Questions Meriting Further Consideration, Question No. 11.

3. Staff believes that the Pilot proposals lack adequate supporting narrative related to the required evaluation plans. If the Commission decides to approve the programs, Staff provides a brief outline of a possible evaluation plan.
4. If the Commission decides to approve the Pilots, Staff believes that a survey should be incorporated into the Pilot to ascertain income data of those who choose to participate (and those that choose not to participate, if possible). This would help determine if there is a “middle income” barrier because of the inability to afford the up-front 25 percent.⁶ Also, Staff believes that if there is a “middle income” barrier, a financing program that offers an “on-bill” payment of the up-front costs might help overcome this barrier.

B/C Ratio

Staff examined whether or not the proposed Pilots are cost effective and made certain adjustments. Staff calculates a B/C ratio for PSNH’s Pilot is less than the proposed 1.09.⁷ The proposed B/C ratio does not appear to be calculated in accordance with the Commission’s Total Resource Cost (TRC) Test, resulting in an overstatement of the proposed B/C ratio.⁸ Specifically, the performance incentive amount should have been included in the “cost” for purposes of calculating the B/C ratio.⁹ Staff adds approximately \$134 thousand for the cost of performance incentives.

Second, Staff believes that both PSNH’s and UES’ proposed administrative costs appear to be low by comparison to actual administrative costs incurred for the HES Program in 2008. Actual administrative costs in 2008, as a percentage of rebate costs, were 35 percent and 75 percent for PSNH and UES respectively; however, the budgeted administrative costs for the Pilot are only 26 percent and 55 percent respectively for PSNH and UES. Staff substitutes the actual percentages incurred in 2008. See attached Schedule 1.

Third, although Staff did not increase the proposed costs, staff believes that PSNH’s and UES’s costs for certain required evaluation activities and EPA certification activities may not have been fully incorporated in the proposal.

Comment on Evaluation: Staff believes that it is the responsibility of the Companies to specify the details of its evaluation plan up front so that the Commission can review the goals

⁶ Staff interprets the proposal, at page 5, as requiring an up-front payment by the participating customer, equivalent to 25% of the project cost, with the balance of 75%, up to \$4,000, representing an incentive offered to the customer.

⁷ Reference proposed Pilot, Attachment F, page 1 of 4.

⁸ Performance Incentive amounts appear to have been missed. This condition pertains only to PSNH’s Pilot – UES included cost of performance incentives in the cost component of the B/C ratio.

⁹ Reference proposed Pilot, Attachment F, Revised March 26, 2009, Lines 5 and 14.

and how the goals will be measured and verified.¹⁰ Staff believes that the proposed Pilot budget of approximately \$1.8 million is a significant expenditure of System Benefit Charge (SBC) funds; and, an expenditure of this magnitude requires a detailed evaluation plan. Of particular concern to staff is non-electric savings. What is the current baseline for non-electric measure savings? How will non-electric savings be determined? How will non-electric savings be verified if the non-electric savings are not displayed on the electric bill? How will actual non-electric results be incorporated in any full-scale program? The Pilot proposal contains no criteria by which the non-electric goals and objectives will be measured and verified. The Pilot proposal simply states that “working with the Commission Staff, the Utilities will develop an impact evaluation plan for the Fuel Neutral Pilot Program...”¹¹

Staff recommends that, if the Commission approves the fuel-neutral Pilot, PSNH and UES should be required to file an evaluation plan so that the Commission can review it for appropriateness before the Pilots commence. In this regard, Staff recommends the following outline of an evaluation plan:

1. Identify near-term objectives and long-term goals
2. Determine how these objectives and goals will be measured
3. Determine the baseline for measurement purposes (electric and non-electric)
4. Measure energy usage after program implementation (electric and non-electric)

Staff recommends that PSNH and UES also file updated budgets to reflect the cost of the proposed evaluation plan. Staff believes that such cost, particularly the cost of measuring and verifying non-electric usage “before” and “after” the Pilot may be costly. Staff believes that such evaluation costs are likely to be “new” costs, i.e. over and above the \$1.8 million in costs included in the Pilot proposals.

Comment on EPA Certification Costs: Design of the Pilot will be based on the standards established for the national Home Performance with Energy Star (HPwES).¹² While PSNH and UES are confident that their current programs meet or exceed these standards, the programs are not yet certified. Both Utilities will submit this program design to the national HPwES program oversight group for review and certification in 2009. There may be additional costs to meet certification. Staff believes that there could be additional costs associated with the certification and that such costs could be “new” costs, i.e. over and above the \$1.8 million in costs included in the Pilot proposal.

Comment on Marketing Costs: Staff calculates administrative costs, including marketing, based on the actual administrative costs incurred by the HES program in 2008. The marketing cost component, included in the 2008 actual costs, was only \$750.

¹⁰ Staff views evaluation plans are important as they pertain to establishment of baselines for measuring and verifying electric and particularly *non-electric* goals because non-electric savings are not displayed on the electric bill.

¹¹ Reference proposed Pilot at page 5.

¹² Reference proposed Pilot at page 2.

for PSNH and \$2,800 for UES. Therefore, by using 2008 actual administrative costs in its computation of cost for purposes of the B/C ratio, Staff believes that it is overly conservative and likely understating the true marketing costs for a new Pilot program. Therefore, by using 2008 actual administrative costs in its computation of cost for purposes of the B/C ratio, staff believes that it is conservative and likely understating the true marketing cost for a new Pilot program. Staff estimates that an additional expenditure of less than \$15 thousand would render the UES program not cost effective.

Performance Incentives

If the Commission were to decide to approve the PSNH and UES Pilots, Staff would recommend that the performance incentive formula be modified. Staff offers three reasons to support its recommendation:

1. Significant wealth transfer from ratepayers to shareholders
2. Loss of double benefits from electric-related energy efficiency
3. Loss of Forward Capacity Market (FCM) Payments

Significant wealth transfer from ratepayers to shareholders: If the Commission were to approve the fuel neutral Pilots, a significant portion of the SBC funds would be transferred from electric energy efficiency measures for ratepayers to performance incentive awards for shareholders. Pilot performance incentives for electric-related energy efficiency measures would generate approximately \$10 thousand for performance incentives under current guidelines. However, under the proposed Pilot, performance incentives for electric and non-electric energy efficiency measures would generate approximately \$144 thousand. Therefore, approximately \$134 thousand of SBC funds would be transferred to shareholders in the form of performance incentives and would not be available for ratepayer energy efficiency programs. Further, if the Commission were to decide to approve a full-scale fuel neutral program, serving an estimated 500 thousand New Hampshire households, the performance incentives for electric energy efficiency measures would generate approximately \$7 million for performance incentives.¹³ However, performance incentives for electric and non-electric energy efficiency measures would generate approximately \$100 million. Therefore, approximately \$93 million in SBC funds would be transferred to shareholders in the form of performance incentives and would not be available for ratepayer energy efficiency programs. See attached Schedule 2.

Loss of double benefits from electric-related energy efficiency: The Commission has found that electric customer benefits attributable to cost effective energy efficiency programs are twofold: “One consequence of Conservation and Load Management (C&LM) as a

¹³ Based on implementation for an estimated 500,000 New Hampshire households.

resource option is that customers who participate directly in C&LM programs not only share in the system benefits these programs provide, but also benefit directly through their individual participation.” (Docket No. DR 91-128, Order No. 20,362). The double benefits that always flowed to electric participants and the electric system are reduced significantly in the proposed PSNH and UES Pilots. With respect to the reduction in electric benefits, PSNH’s proposed Pilot incorporates electric-related savings of only 6.3 percent of the total energy savings¹⁴ and UES’ proposed Pilot incorporates electric-related savings of only 11.5 percent of the total energy savings.¹⁵ By way of comparison, other previously approved Energy Star Lighting Program incorporated 100 percent electric-related savings; and, the previously approved Energy Star Appliances Program incorporated virtually all electric- related savings.¹⁶

Loss of Forward Capacity Market (FCM) Payments: Staff estimates that a significant amount of Forward Capacity Market payments (FCM) will be lost due to the fuel-neutral Pilot. In 2008, the FCM proceeds augmented the SBC funding by approximately \$1.2 million for electric-related savings. However, the Pilots are fuel neutral and most of the savings is non-electric (i.e. 94 percent non-electric savings for PSNH and 88 percent for UES). Since the non-electric savings component is not counted in the calculation of FCM proceeds, the amount that will augment the SBC funds will be decreased as a result of the fuel-neutral Pilot. Based on actual 2008 FCM proceeds, Staff estimates that the FCM proceeds that could be lost annually due to the fuel-neutral Pilot could be approximately \$78 thousand. Further, if the Commission were to decide to approve a full-scale fuel neutral program, Staff estimates that the FCM payments that could be lost due to the fuel-neutral Pilot could be approximately \$55 million. See attached Schedule 4.

Based on the above, if the Commission were to decide to approve fuel neutral Pilots, then Staff would recommend that performance incentives be calculated based on the electric-only component.

Other Comments

If the Commission were to decide to approve the Pilots, Staff believes that a survey should be incorporated into the Pilot to ascertain income data of those who choose to participate (and, if possible, those who choose not to participate). This would help

¹⁴ Source: Pilot Proposal at page 2. Non-electric MMBtu savings of 144,401 x 293 conversion factor = 42,309,493 kWh’s; electric kWh savings of 2,843,135; total savings of 45,152,628 kWh’s. Hence, electric savings is 6.3 percent of total savings (i.e. 2,843,135 kWh’s divided by 45,152,628 kWh’s = 6.3 percent.).

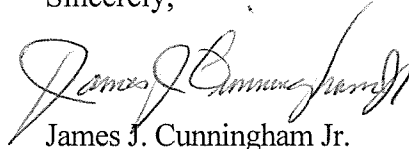
¹⁵ Source: Pilot Proposal at page 2. Non-electric MMBtu savings of 21,307 x 293 = 6,242,951 kWh’s; electric kWh savings of 812,283 kWh’s; total savings of 7,055,234 kWh’s. Hence, electric savings is 11.5 percent of total savings (i.e. 812,283 kWh’s divided by 7,055,234 kWh’s = 11.5%).

¹⁶ Source: CORE 2008 Annual Report.

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determine if there is a “middle income” barrier because of the inability to afford the up-front 25 percent. Also, Staff believes that if there is a “middle income” barrier, an on-bill financing program could overcome this barrier.

Sincerely,

A handwritten signature in cursive script, appearing to read "James J. Cunningham Jr.", written in black ink.

James J. Cunningham Jr.
Utility Analyst IV

Cost Effectiveness Test

	Pilot Proposals		Staff Recommendation	
	PSNH	UES	PSNH	UES
Benefits	\$ 2,125,786	\$ 335,600	\$ 2,125,786	\$ 335,600
Costs				
Number of Participants	617	97	617	97
Rebate Cost Per Participant	\$ 2,005	\$ 1,556	\$ 2,005	\$ 1,556
Rebate/Service Costs (1)	\$ 1,237,151	\$ 150,913	\$ 1,237,151	\$ 150,913
Plus: Admin. Costs (2)	\$ 323,349	\$ 84,272	\$ 437,629	\$ 113,108
Sub-Total	\$ 1,560,500	\$ 235,185	\$ 1,674,780	\$ 264,021
Plus: Performance Incentives at 8% baseline	missed	\$ 18,815	\$ 133,982	\$ 21,122
Total Utility Costs	\$ 1,560,500	\$ 254,000	\$ 1,808,762	\$ 285,142
Plus: Participant Costs				
Participant Cost Before Tax Credit				
Less Tax Credit				
Net Participant Cost	\$ 389,500	\$ 35,990	\$ 389,500	\$ 35,990
Total Costs	\$ 1,950,000	\$ 289,990	\$ 2,198,262	\$ 321,132
B/C Ratio	1.09	1.16	0.967	1.045

footnotes:

(1) Staff uses Rebate/Service Costs as proposed by PSNH and UES (ref. NH CORE Energy Efficiency Program - 2009 Budget Details).
Rebate/Service Costs per Participant are calculated as follows:
PSNH: Cost of Rebates/Services of \$1,237,151 / 617 Participants = \$2,005.
UES: Cost of Rebates/Services of \$150,913 / 97 = \$1,555.

(2) Staff recommendation is based on final 2008 CORE Report for PSNH and UES for Administrative Costs (i.e. Int Admin, Ext Admin, Int Implem, Marketing, Evaluation) as compared to Rebate/Service Costs as follows:

	Pilot Proposal		Actual 2008 HES Costs	
	PSNH	UES	PSNH	UES
Administration	\$ 323,349	\$ 83,358	\$ 268,281	\$ 52,567
Rebates/Services	\$ 1,237,131	\$ 150,913	\$ 758,415	\$ 70,137
% Admin. Cost To Rebate Costs	26%	55%	35%	75%

Performance Incentives (PI)

	Proposed (1)		
	Electric and Non Electric		
	PSNH	UES	Total
Performance Incentive - Pilot Customers Only:			
Pilot Budget	\$ 1,560,462	\$ 234,270	
Percent Electric Savings:			
Electric Savings	2,843,135	812,283	
Non-Electric Savings:			
MMBtu's	144,401	21,307	
Conversion Factor	293	293	
kWh Savings	42,309,493	6,242,951	
Total Savings	45,152,628	7,055,234	
Percent Electric Savings	n/a	n/a	
Pilot Budget - Electric Portion Only	n/a	n/a	
Performance Incentive			
Baseline Percent	8.0%	8.0%	
Performance Incentive	\$ 124,837	\$ 18,742	\$ 143,579

Staff Recommendation		
Based on Electric-Only Savings		
PSNH	UES	Total
\$ 1,560,462	\$ 234,270	
2,843,135	812,283	
144,401	21,307	
293	293	
42,309,493	6,242,951	
45,152,628	7,055,234	
6.3%	11.5%	
\$ 98,258	\$ 26,972	
8.0%	8.0%	
\$ 7,861	\$ 2,158	\$ 10,018
\$ 98,258	\$ 26,972	\$ 125,230
617	97	714
		\$ 175
		500,000
		\$ 87,696,012
		8%
		\$ 7,015,681

Performance Incentives - Full Scale Implementation (est. 500,000 NH Households):

Budget Pilot Costs for PI Calculation	\$ 1,560,462	\$ 234,270	\$ 1,794,732
Budget Pilot Participants	617	97	714
Budget Cost per Participant			\$ 2,514
Number of NH Households			500,000
Estimated Budget for NH Households			\$1,256,815,126
Performance Incentives			
Percent Baseline at 8%			8%
Performance Incentive Amount			\$ 100,545,210

footnotes:
(1) Pilot Proposal at page 2.

Forward Capacity Payments (FCM)

Actual 2008 FCM Proceeds	Actual 2008
FCM Proceeds, net of expenses	\$ 1,203,168 (1)
Electric-Related kWh Savings	749,773,432 (1)
Calculated FCM Proceeds per kWh	<u>\$ 0.0016</u>

Projected Annual FCM Proceeds Lost due to Non-Electric kWh Savings:

Non-Electric kWh Savings that don't qualify for FCM Proceeds:

PSNH - Pilot Non-Electric MMBtu Savings	144,401 (2)
UES - Pilot Non-Electric MMBtu Savings	21,307 (2)
Total MMBtu's	<u>165,708</u>
Conversion Factor (kWh's/MMBtu)	293
Annual Pilot Non-Electric kWh Savings	<u>48,552,444</u>
FCM Proceeds per kWh (2008 per above)	<u>\$ 0.0016</u>
Estimated Annual FCM Proceeds Lost	<u><u>\$ 77,913</u></u>

Projected State-Wide FCM Proceeds Lost due to Non-Electric kWh savings:

Annual Pilot Non-Electric kWh Savings, per above	48,552,444
Number of PSNH Households in Pilot	617 (2)
Number of UES Households in Pilot	97 (2)
Total Number of Households in Pilot	<u>714</u>
Non-Electric kWh savings per Pilot Household	68,001
Estimated number of NH Households to be served	500,000
Estimated total NH non-electric kWh savings	34,000,310,924
FCM Proceeds per kWh (2008 actual per above)	\$ 0.0016
Estimated State-Wide FCM Proceeds Lost	<u><u>\$ 54,560,597</u></u>

footnotes:

(1) Source: Annual 2008 CORE Report: "NH CORE Energy Efficiency FCM Budget" and "CORE" NH Program Highlights"

(2) Source: Pilot Proposal at page 2