STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: October 6, 2016 **AT (OFFICE):** NHPUC

FROM: Anthony Leone, Examiner

SUBJECT: Liberty Utilities (Energy North Natural Gas) Corp.

DE 14-216 2015 CORE FINAL Audit Report

TO: Tom Frantz, Director, NH PUC Electric Division

Steve Frink, Assistant Director, NH PUC Gas/Water Division Les Stachow, Assistant Director, NH PUC Electric Division

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Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2015. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), PSNH d/b/a Eversource, New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and Energy North (ENG) filed a joint petition for the program years 2015 through 2016. Each utility was audited individually.

In accordance with Commission Order #24,630 in Docket DG 06-036, ENG provided the Commission with monthly summaries of expenses and recoveries related to the energy efficiency programs. For the 2014 program year, the monthly summaries were properly filed in the instant docket, DE 14-216.

Audit appreciates the assistance of Eric Stanley, Tina Poirier, Sue-Ellen Billeci, Heather Tebbetts, Jim Bonner and Cynthia Trottier from Liberty Utilities. The Company provided access to all supporting documentation requested by Audit.

Approved 2015 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/12/2014 for the program years 2015 through 2016 and a joint Settlement Agreement on 12/11/2014. The Commission then approved the 2015 programs by Order #25,747 on 12/31/2014. As found in the joint Settlement Agreement filed 12/11/2014, the ENG programs for program year 2015 were approved as follows:

Residential - Income Qualified

Home Energy Assistance Program (weatherization program)

Residential – Non-Income Qualified

Home Performance with Energy Star (HPwES- weatherization program)

Energy Star (New) Homes

Energy Star Products -heating, hot water equipment and controls

Commercial & Industrial

Large Business Energy Solutions Program

Small Business Energy Solutions Program

Educational Programs

Energy Code Training

Commercial Energy Auditing Class

C&I Customer Education

Energy Education for Students

Home Energy Ratings for New Homebuilders

Utility Specific Programs

Third Party Financing- Liberty Utilities offers a Third Part Financing Pilot program for the second year in a row. This program is essentially designed to encourage residential participation in the HPwES and Energy Star Products programs by offering low interest financing through local, third party creditors. In this program, Liberty secures the ability to buy down a loan from a stated rate of 6.99% or below to 2%. Refer to the expense portion of this report for further information.

Home Energy Reports (HER) Pilot- Liberty Utilities will continue the HER behavioral pilot program whereby a paper report is delivered to a randomly selected group of residential natural gas customers with the intent on saving and reducing overall consumption of natural gas. The methods used are detailed in the joint settlement agreement on page 90.

<u>Early Boiler Replacement Program</u>- Liberty will continue this pilot program of encouraging residential customers to replace old, inefficient, but still operating natural gas appliances with new, high-efficiency Energy Star rated equipment.

Significant Changes or Updates to the Gas Programs

The <u>Home Energy Assistance</u> Program was updated to include a new overall percentage to be reached by the utilities, 15.5% rather than 15%. The program budget per household was updated from \$5,000 to \$8,000 to match the Home Energy Assistance program offered by the NH Electric Utilities.

The <u>Energy Star Appliance</u> and the <u>Energy Star Lighting</u> programs were combined into one Energy Star Products program.

The <u>Municipal Programs</u> within the Small and Large Business Programs now include cost-effective weatherization services for buildings heated with oil, electricity and propane.

Mid-Year Adjustments

The Company notified the Commission of the following transfers throughout the year as indicated.

Program Energy Star Products Energy Star Homes	Budget \$828,043 \$ 60,800	20% Cap \$165,609 \$ 12,160	Amount \$(12,160) \$ 12,160	% (1.6%) 20%	<u>Date</u> 4/29/2015
HPwES	\$730,157	\$146,031	\$(14,564)	(2.0%)	11/4/2015
Energy Star Homes	\$ 60,800	\$ 12,160	\$ 14,564	24%	
HPwES	\$730,157	\$146,031	\$(72,000)	(9.9%)	11/4/2015
Energy Star Products	\$828,043	\$165,609	\$ 72,000	8.7%	
Large Business Small Business	\$1,445,300 \$1,032,710	\$289,060 \$206,542	\$(149,000) \$ 149,000	(10.3%) 14.4%	11/4/2015

Filing Summary

Expenses

Demand Side Management (DSM) expenses for the year ending December 31, 2015 as reported in the shareholder incentive on 5/31/2015 were \$5,177,245. Audit reviewed Table 8 of the shareholder incentive report and noted the totals of the Residential and Commercial, Industrial & Municipal corresponded to the totals found in the rest of the Filing, the Shareholder Incentive calculation and to the GL Activity of EnergyNorth.

Audit reviewed the overall initial and revised budget totals by program and compared the reported actual expenses. As detailed below there were no exceptions.

Program	2015 Filed Budget per Stlmt Agrmt	Revised Budget m Transfers	Actual Spending From Filing	Actual Spent as % of revised Budget
EnergyStar Products	\$ 828,043	\$ 887,883	\$ 899,814	101.3%
EnergyStar Homes	\$ 60,800	\$ 87,524	\$ 84,958	97.1%
Home Energy Assistance	\$ 921,250	\$ 921,250	\$ 919,751	99.8%
HPwES	\$ 730,157	\$ 643,593	\$ 619,873	96.3%
Residential Building Practices	\$ 293,550	\$ 293,550	\$ 298,542	101.7%
Subtotal Residential	\$ 2,833,800	\$ 2,833,800	\$ 2,822,938	99.6%
C&I Education	\$ 15,000	\$ 15,000	\$ 11,503	76.7%
Large Business	\$ 1,445,300	\$ 1,296,300	\$ 1,213,707	93.6%
Small Business	\$ 1,032,710	\$ 1,181,710	\$ 1,129,098	95.5%
Subtotal C&I	\$ 2,493,010	\$ 2,493,010	\$ 2,354,308	94.4%
Grand Total	\$ 5,326,810	\$ 5,326,810	\$ 5,177,246	97.2%
Planned PI	\$ 426,145			
Matches Settlement Agreement	\$ 5,752,955			

The overall actual expenses reported were 97% of the adjusted budgeted total. The supporting spreadsheets provided to Audit agree with the reported total expenses identified in the updated shareholder incentive calculation.

The reported actual Income Qualified Home Energy Assistance figure of \$919,751 represents 18% of the total expenses, excluding the performance incentive.

The shareholder incentive report indicated the calculated incentives for 2015 were \$201,559 for the C&I sector, and \$288,781 for the Residential sector, for a total of \$490,340. Audit recalculated each of the reported incentives and found a total variance of \$100. This difference is immaterial to the overall Incentive and re-filing is not needed.

General Ledger Detail (gl)

Audit verified the 2015 Rolling Fund Balance from the <u>monthly reports</u> filed in docket DE 14-216 to:

1/1/2015 Beginning Balance	\$ 3,468,356 agrees with gl recon prior audit
2015 Revenue Collected	\$(9,176,131)
2015 Expenses	\$ 5,059,723
2014 Incentive True-Up	\$ 196,757
2015 Estimated Incentive	\$ 319,609
2015 Interest	\$ 21,249
2015 Reclass & Misc. (Net)	\$ 3,147
12/31/2015 Balance reconciliation	\$ (107,290) over-collection at year-end

GL 8840-2-0000-10-1163-1755 12/31/2015 \$ (107,290)

Audit was provided with the Energy North Gas Company Account Reconciliation for account 8840-2-0000-10-1163-1755, Deferred Peak Reserve DSM, which reflects the ending balance for 2015 \$(107,290). The Wennsoft Financial Reporting system is a system report by project code. Wennsoft is the basis for the expenses reported. If manual journal entries are made to the general ledger (known as Microsoft Dynamics GP 2010), there may not be the necessary system code associated with it. The Company has reconciled each month's reported information to the general ledger, resulting in the report to the Commission agreeing with the ending general ledger.

The reconciliation of the general ledger to the shareholder incentive expense figure is comprised of:

Expenses per GL	\$5	,058,768
Remaining 2014 Expenses recorded in 2015	\$	18,818
2015 Expenses recorded in 2016	\$	87,898
Reclass Labor Expenses	\$	11,761
Total 2015 reported SHI Expenses	\$5.	,177,245

Performance Incentive

The incentive totals included in the overall ending balance are comprised of:

Booke	ed in year	True-up booked	Activity in general
refe	renced	<u>in 2015</u>	ledger during 2015
2014	\$196,074	\$196,074	\$196,074
2015	\$319,609	\$ 0	\$319,609
		\$196,074	\$515,683

The true up for the previous calendar year is always booked in the following year due to timing. Therefore the 2014 true up of \$196,074 was booked in 2015 and the 2015 true up will be booked to the general ledger and subsequent reconciliation and reflected in the regulatory report in calendar year 2016. The 2015 incentive calculated in the Shareholder Incentive report submitted in May 2016 was \$490,340. Therefore, the true-up for the 2015 program year booked in 2016 should be:

$$$490,340 - $319,609 = $170,731$$

Revenue - \$9,176,131

Audit reviewed the monthly reports provided to the Commission in the instant docket and noted therm sales by Residential sector, therm sales by C&I sector and a combined report. Audit noted the accurate reflection of the approved Energy Efficiency rates as authorized by the Commission in the last four Cost of Gas Dockets and subsequent Orders. Audit notes that the

usage and derived revenue files submitted contained past billings at appropriate past EE rates; however the amounts included were not material to the overall revenue for the month of June and such transactions are part of the normal course of business. The Energy Efficiency (EE) and Low Income (LI) rates indicated in the Revenue files submitted by Liberty included the following:

Docket DG 12-265, Order #25,435 issued for 11/1/2012 – 10/31/2013						
Customer	Environ.	Energy	Low	Rate	Total	
Class	Rate	Efficiency	Income	Case	LDAC	
Residential	\$0.0011	\$0.0147	\$0.0073	\$0.0027	\$0.0258	
Comm/Ind	\$0.0011	\$0.0076	\$0.0073	\$0.0027	\$0.0187	
Docke	et DG 13-251, C	Order #25,591	issued for 11/1/	2013 - 10/31	/2014	
Customer	Environ.	Energy	Low	Rate	Total	
Class	Rate	Efficiency	Income	Case	LDAC	
Residential	\$0.0018	\$0.0197	\$0.0075	\$0.0000	\$0.0290	
Comm/Ind	\$0.0018	\$0.0264	\$0.0075	\$0.0000	\$0.0357	
Docke	et DG 14-220, (Order #25,730	issued for 11/1/	2014 - 10/31	/2015	
Customer	Environ.	Energy	Low	Rate	Total	
Class	Rate	Efficiency	Income	Case	LDAC	
Residential	\$0.0055	\$0.0646	\$0.0071	\$0.0000	\$0.0772	
Comm/Ind	\$0.0055	\$0.0502	\$0.0071	\$0.0000	\$0.0628	
Docke	et DG 15-353, (Order #25,833	issued for 11/1/	2015 - 10/31	/2016	
Customer	Environ.	Energy	Low	Rate	Total	
Class	Rate	Efficiency	Income	Case	LDAC	
Residential	\$0.0144	\$0.0585	\$0.0145	\$0.0140	\$0.1014	
Comm/Ind	\$0.0144	\$0.0256	\$0.0145	\$0.0140	\$0.0685	

Per the Company, the Cogsdale billing system calculates customer invoices which are processed and printed from Fiserv, the Company's billing service provider. Audit requested and was provided with a summary revenue consumption file for the month of June 2015. The summary reflected fixed revenue, therms, cost of gas, LDAC, as well as other sources such as Gas Supply charges, Base Revenue charges and Fixed Revenue charges. Transportation customers' revenue, which is booked to general ledger account 8840-2-0000-40-4460-4893, was summarized in one section, and the non-transportation residential and commercial/industrial customers' revenue was separately summarized. Those revenues are booked to general ledger account 8840-2-0000-40-4295-4800 and 4810.

Audit verified that the combined C&I and Residential June therm usage was 8,011,062 which agreed with the monthly reports filed in the instant docket. The information supplied broke down the therm usage by Rate Class. The monthly LDAC revenue was calculated at \$533,808 and the energy efficiency revenue portion being verified at \$432,981. The Company

provided a detailed revenue and consumption table file titled "CCx 2015" which had a 2015 total revenue figure of \$9,191,543. Audit requested details on the variance between this figure and the GL Reconciliation and Shareholder Incentive Filing figure of \$9,176,131 and Liberty stated that the difference is mainly due to Mr. Occupant billings.

Liberty has described Mr. Occupant billings as locations which are listed "vacant" in their system, but once the meter usage reaches a certain threshold a bill is triggered and sent to the address. On the accounting side, Liberty states they back out the revenue from Mr. Occupant billings until such time as deemed uncollectable or the new owner/tenant pays the bills. This also helps to explain the reason for having bills in the current revenue report with non-current (past) LDAC rates as they are collected after the fact.

Accounts on Hold (see prior report for Audit Issue)

The 2014 Audit report contained an issue and discussion focusing on accounts that were marked with "stays" or "holds". These accounts had not been issued bills for a period of 2014 and subsequently the LDAC revenue that should have been recorded had not been. The prior Audit report, however, did mention that the PUC had worked with Liberty and that as of June 2015 the number of "stays" or "hold" had been significantly reduced and the issue was considered closed.

Audit requested if accounts with "stays/holds" had once again become an issue and Liberty stated that they have not had any accounts with bills on hold for longer than 60 days since September 2015. Looking at the timeframe of when the issue was considered closed in June 2015 Audit does not consider this is an issue for 2015 year.

Interest - \$21,249

Audit reviewed the rolling monthly summary for the period ended 12/2015 filed in the instant docket. The reported interest was properly calculated at 3.25% on the average monthly balance, including interest from the previous month. Specifically, EnergyNorth calculates the interest using the average of the beginning and ending balances divided by 365 then multiplied by the actual number of days in that month.

According to the GL Reconciliation, Liberty had an ongoing under-collection for most of the year. However during the last two months of 2015 Liberty collected more than was spent resulting in an over-collection but the net interest charge was still an expense. Audit recalculated the interest and worked with the Company to identify a variance that took place in four of the twelve months of 2015. Audit notes the total variance found was \$636, meaning the interest submitted in the Filing was \$636 less than what it should have been. The company noted that the difference would be included as part of the incentive true-up entry after this report is finalized.

EXPENSE REVIEW

Expenses were verified to the summary of expenses provided in the detailed Excel spreadsheet. Expenses are debited to general ledger account #8840-2-0000-69-5390-9080 and credited to the balance sheet #8840-2-0000-10-1163-1755.

Residential Programs	Ev	aluation	Int	. Admin	In	t. Impl.	M	arketing	F	Rebates		Total
ENERGY STAR Appliances	\$	19,736	\$	3,442	\$	51,614	\$	14,361	\$	810,661	\$	899,814
ENERGY STAR Homes	\$	2,028	\$	35	\$	24,726	\$	1,189	\$	56,980	\$	84,958
Home Energy Assistance	\$	22,360	\$	3,422	\$	64,874	\$	471	\$	828,624	\$	919,751
Home Performance with ENERGY STAR	\$	17,704	\$	7,105	\$	75,874	\$	11,891	\$	507,299	\$	619,873
Res. Building Practices & Demonstration	\$	7,229	\$	16,925	\$	13,376	\$	4,255	\$	256,756	\$	298,542
Total Residential	\$	69,057	\$	30,929	\$2	230,463	\$	32,166	\$	2,460,321	\$2	2,822,937
% of Total Program Spending		2%		1%		8%		1%		87%		100%
Commercial/Industrial Programs												
C&I Education	\$	-	\$	-	\$	-	\$	506	\$	10,997	\$	11,503
Large Business Energy Solutions	\$	55,824	\$	5,986	\$:	125,761	\$	12,914	\$:	1,013,223	\$:	1,213,707
Small Business Energy Solutions	\$	25,026	\$	4,159	\$	69,510	\$	9,603	\$:	1,020,800	\$:	1,129,098
Total C&I	\$	80,850	\$	10,145	\$:	195,271	\$	23,023	\$	2,045,020	\$2	2,354,308
% of Total Program Spending		3%		0%		8%		1%		87%		100%
Grand Total	\$	149,907	\$	41,073	\$4	425,735	\$	55,189	\$	4,505,341	\$!	5,177,245

Audit selected a sample of the expenses for detailed review. Those results are summarized below. Expenses which are allocated among energy efficiency programs and between EnergyNorth and Granite State Electric are based on budget percentages.

Selected Allocated Expenses

Audit reviewed a detailed Excel listing of entries which were allocated to <u>Internal Administration and Internal Implementation</u>, which as reported, sum to \$476,873 and matched the reported totals for the same categories of expenses in the Reconciliation Filing.

	Internal	Internal
	Administration	Implementation
Journal entries-labor	\$ -0-	\$ 12,122
Margaret Curran	\$ -0-	\$ 141
Graphix Plus	\$ -0-	\$ 34
Robert McLean	\$ -0-	\$ 1,770
Matthew Minghella	\$ -0-	\$ 460
Tina Poirier	\$ -0-	\$ 43
Bob Reals	\$ 1,117	\$ 236
Eric Stanley	\$ 1,135	\$ -0-
John Shore	\$ -0-	\$ 377
True Tech Tools LTD	\$ -0-	\$ 448
CORE Team labor	\$38,821	\$410,104
Total	\$41,073	\$425,735

The <u>journal entries-labor</u> figure of \$12,122 represents the net activity for the year of labor cost accruals and reversals plus bonus pay and pay rate increases during the year. All of the individuals listed in the above table are Liberty employees who work in the EE Group or provide support to the group.

The Company paid <u>ANB Enterprises</u> to provide the software used to track the energy efficiency programs. The costs were allocated between ENG and GSE with ENG having \$85,124. Liberty has stated that the charges from ANB are allocated on an invoice basis and in doing so Liberty attempts to more precisely match the actual charges to the programs which it impacted and only those programs. The total costs allocated to ENG were expensed as evaluation, and were spread among the programs as follows:

C&I Large Business - Evaluation	\$ 23,161
C&I Small Business - Evaluation	\$ 16,550
Residential Appliance - Evaluation	\$ 13,270
Residential Low Income - Evaluation	\$ 14,764
Residential ES Home - Evaluation	\$ 974
Residential Tech Demo - Evaluation	\$ 4,704
Residential HPwES - Evaluation	\$ 11,701
Total ANB Enterprises	\$ 85,124

The Company paid Northeast Energy Efficiency Partnership Inc. a total of \$14,950. Audit requested a breakdown of the expenses to include workshops and membership fees and dues. As is the case with ANB, Liberty allocates NEEP charges on a per invoice basis to more precisely match the expense to the correct program. The company indicated the following: Liberty, Unitil, New Hampshire Electric Cooperative and Eversource were noted among the program sponsors. Refer to those individual audit reports for more information. ENG allocated the costs among the programs as follows:

C&I Small Business	Evaluation	\$ 2,825
C&I Large Business	Evaluation	\$ 4,010
Residential ES Homes	Evaluation	\$ 183
Residential HEA	Evaluation	\$ 2,553
Residential HPwES	Evaluation	\$ 2,097
Residential Appliances	Evaluation	\$ 2,370
Res. Building Practices	Evaluation	\$ 912
ENG total		\$ 14,950

The Company has indicated that <u>Esource</u> is a subscription based membership service which provides Liberty with research, evaluation, and technical support relating to the energy efficiency programs. The Company indicated the amount allocated to ENG was \$17,338 with that total being allocated to the following programs:

C&I Large Business	Evaluation	\$ 4,718
C&I Small Business	Evaluation	\$ 3,372
Residential Appliance	Evaluation	\$ 2,704
Res. Building Practices	Evaluation	\$ 957
Residential ES Homes	Evaluation	\$ 197
Res. HPwES	Evaluation	\$ 2,382
Res. HEA	Evaluation	\$ 3,008
Total Horizon		\$17,338

Program Rebate & Service Expense Review

The total expenses for the year were \$5,177,245 with 87% of that total, \$4,505,341 accounting for Rebates and Services to customers and beneficiaries of energy efficiency improvements. Audit has reviewed and included selected invoices in the summaries below. Each program is listed separately and contains a description of the invoice(s) reviewed.

C&I Education \$11,503

Audit reviewed one invoice from Lakes Region Community College (LRCC) in the amount of \$1,480. Liberty stated that the cost was to cover tuition for the BOC Certification Course offered at LRCC. The course materials submitted indicated it meets for 8 consecutive Fridays and results in the student receiving their Building Operator Certification. This certificate qualifies certain individuals as being able to help large building operators find cost-effective ways to reduce their energy usage. Topics include building maintenance, energy benchmarking, efficient lighting, HVAC controls and operations, air quality, electrical systems and emergency management planning. Liberty indicated they covered two individuals 50% of their tuition, or \$740 each.

Audit reviewed a second invoice for a rebate given to the Town of Hanover, NH. The rebate of \$2,700 was for energy efficiency in installing a new compressed air system at the town water department facility. Audit requested clarification on this invoice and Liberty stated they had recorded the expense to the Gas program in error. Additionally, on 10/30/2015 it was corrected by crediting the Gas Education Expense and debiting the Electric Rebates expense. Audit concurs with this correction.

Large Business Energy Solutions Program \$1,213,707

The first invoice reviewed by Audit was for a custom, new construction job at Concord Hospital. The Hospital installed a new boiler stack economizer and received a rebate of \$84,300. The base cost of the addition was described at \$387,496 and the proposed cost of upgrading to a more energy efficient one \$510,200. The incremental cost therefore was \$122,704. With custom new construction, customers are eligible for rebates of up to 75% of the incremental cost and the Hospital received a rebate of 69%. The measures were indicated as completed in January 2015.

The second invoice reviewed was a rebate for energy efficiency measures at an apartment complex in Nashua, NH. Specifically, Liberty stated that 26 new units were completed and that they all had energy efficiency measures installed such as 1" insulation on exterior walls, low-e windows, radiant flooring, spray foam insulation, heat recovery units and blown in cellulose completed by various vendors. The documentation indicated Liberty paid 20% or \$91,516 of the \$452,021 total cost of those specific measures.

Small Business Energy Solutions Program \$1,129,098

The first invoice reviewed by Audit was for energy efficiency measures completed at Manchester Memorial High School. The documents indicated the School had the following installed on existing buildings: DDC System Setback and CHU controls, DDC Exhaust Fan and Air sealing of Exterior doors. The documents also stated the cost of these measures at \$98,221 with the School receiving \$47,772 or a 48% rebate.

The second invoice was from Energy Federation Inc. (EFI) for processing of mail-in customer rebates. EFI has been used in years past and is also used by other utilities for similar processing of rebates. This specific invoice indicated customers sought rebates for Boiler/Furnaces, Infrared Heaters and water heaters. The rebates totaled \$66,350, service fees totaled \$869.50 for a grand total of \$67,219.50.

Residential Home Performance with Energy Star (HPwES) \$619,873

The first invoice reviewed was issued from Lightec, Inc. The invoice indicated Lightec installed Aerators, Showerheads, insulation and performed air sealing measures at a multi-family unit in Manchester, NH. The total cost of the measured was detailed at \$138,435 with a utility rebate of \$58,411 or 42%.

The second invoice reviewed was sent from Horizon Residential Energy Service, LLC for services performed at various addresses within the Liberty service area. Liberty forwarded a detailed invoice which totaled \$25,272. The invoice indicated Horizon contracted with various sub-contractors such as, Shakes to Singles, Newell & Crathern, Mill City Energy and Yankee Thermal Imaging, Inc. who completed the weatherization services. The highest cost was noted at \$4,000 and the lowest at \$1,292. Liberty also forwarded an OTTER printout with details on the types of measures installed and services performed. OTTER is the system which tracks the HPwES and HEA weatherization improvements and is also used to ensure uniform billing from all contractors for the qualifying measures.

Audit reviewed the purchase order for Horizon for the 2015 year and notes that some of the services Horizon was contracted to perform include plan, coordinate, oversee and collaborate on program with Liberty Program Analyst; customer intake and screening, assignment of qualifying customers to contractors, review and approve paperwork and applications, data management and tracking, approving invoices for payment, complaint resolution. Quality

assurance inspections (audits of measures installed) uploading information into ETRACK for tracking purposes and issuing IRS Form 1099 for contractors at years end.

Residential Energy Star Appliance/Products Program \$899,814

The first invoice reviewed was issued by EFI. The invoice indicated mail-in rebates were processed for Furnace/Boilers, Combination Units, Thermostats, and Water Heaters. The cost of the rebates was \$141,044, the fees totaled \$3,511.95 and a grand total of \$144,555.95.

The second invoice was sent from Horizon Residential Energy Services, LLC. Horizon billed Liberty for the replacement of 5 boilers under the early boiler replacement program. The total cost was \$13,800 and was billed as all rebates.

Residential Home Energy Assistance Program \$919,751

The invoice reviewed by Audit was sent from Southern NH Services, the Community Action Program covering Hillsborough and Rockingham Counties. As per the Settlement Agreement, the CAPs are given first right for Low Income residents who are approved for weatherization updates. The CAPs conduct then facilitate and coordinate with contractors to perform the services. The invoice submitted by Liberty was printed from OTTER, discussed earlier, and broke the cost down between Admin, Rebate, Credit and total cost. All of the costs in the OTTER system are standardized therefore no matter the contractor performing the work, the Core Program is paying the same fee for the weatherization provided. The total of this invoice was \$155,380.75

Residential Energy Star Homes - New Construction \$84,958

The first invoice reviewed was sent by GDS Associates, Inc. The invoice indicated GDS had performed a mid-inspection and plans analysis of new energy efficient, energy star qualified homes. All of the inspections were documented as being performed during the month of January 2015 with the specific address of the location being inspected. The mid-inspection fee was noted at \$420 and the plans analysis fee was noted at \$435. The invoice totaled \$22,980.

The second invoice was paid to Havenwood Heritage Heights. The rebate form indicated a new building was constructed that was below the threshold HERS rating and therefore qualified for the \$1000 incentive. The final inspection was completed in February. This invoice is related to the mid-inspection performed by GDS in January in the above referenced invoice.

Residential Building Practices and Demonstrations \$298,542

Audit reviewed three invoices under this program for a total of \$237,050. All of the invoices were for services provided by OPower, who is currently contracted to provide services

for the Home Energy Reports Pilot Program discussed earlier in the report. The three invoices were \$10,000, \$59,000 and \$59,500 for a total of \$129,000. Liberty stated that \$113,000 as Data Analytics fees and \$16,000 for Mail and Print fees associated with the signing of the execution of the multi-year extension which was signed by Liberty Utilities on 8/30/2015.

Third Party Financing Program \$19,706

As found in the 4th Quarter Report files by Eversource, EnergyNorth bought down the interest rate on 24 projects at a cost of \$19,706. Liberty started the year with \$27,996 and less the amount used had a remaining balance of \$8,290 available to buy down interest rates as of 1/1/2016 before any additional funding. EnergyNorth also indicated the interest rate was bought down from an average of 6.37% to the Agreed upon 2%.

Audit requested the results of the current program, details regarding the lenders with whom the interest rate buy downs (IRB) were negotiated, loan limits, the number of customers, the amount of the loans, and the total of the IRB included as an expense in 2015. The IRB is paid in full, up front, and buys the interest rate down to 2% for the customer.

The Company indicated that the lenders do not report loan defaults. The Company provided a summary of the terms of the loans with the various banks and credit unions. These terms included the following general repayment schedule:

Loan Amount	Maximum Repay	ment Term
\$1,000 up to \$2,000	for up to 2 years	(24 months)
\$2,001 up to \$4,000	for up to 3 years	(36 months)
\$4,001 up to \$6,000	for up to 4 years	(48 months)
\$6,001 up to \$9,000	for up to 5 years	(60 months)
\$9,001 up to \$12,000	for up to 6 years	(72 months)
\$12,001 up to \$15,000	for up to 7 years	(84 months)

The detailed spreadsheet provided by the company contained dates, location, loan amount and term, related 2% IRB, the total of any related HPwES, Boiler, or EBR rebate, any customer co-pay, the total investment, total rebate, project type, and contractor. For 2015, there were a total of 24 customers who borrowed \$240,052. Sixteen of the loans originated through Merrimack County Savings Bank, five through Northeast Credit Union, two through Merrimack Valley Savings Bank and one through Granite State Credit Union.

Liberty contracted with Horizon to ensure that the buy-down of the loan from the total present value to 2% interest rate was paid to the issuing bank within a five day window. Audit requested clarification of the verification process used by ENG to ensure the "subsidy disbursement (interest rate buy-down) is properly calculated. The Company indicated that an interest buy down spreadsheet is used (Microsoft Excel amortization and present value calculation). The buy down calculation is compared to the figure prepared by the bank, and the lower of the two amounts is paid.

Audit requested the IRB calculations and accompanying invoice for three customers. The calculations reviewed indicated the bank was paid the present value (PV) of the difference of the monthly payments calculated using the banks rate (5.99% or 6.49%) and the discounted rate 2.00%). All calculations were reviewed and any variances were immaterial.

In the previous Audit, the Company detailed the process used to ensure that the payment made by Horizon to the participating bank is made within the contracted five day timeframe. The Company stated that the same process is still in place. That process was detailed in the following explanation: "Liberty Utilities' Program Administrator (PA) receives an email from the bank with the detailed invoice and required documents attached. Within two business days the PA reviews the documents and emails the documents to HorizonRES for payment to the specific bank. The email states the bank name and payment amount. HoizonRES then pays the bank and emails a confirmation to the PA when the payment was made." Horizon charges Liberty (in quarter hour installments) \$60 per hour to process the 2% buy-downs. Audit requested clarification of the use of Horizon vs. processing the checks internally, and was told that the internal processing for expedited checks is not cost effective.

Summary of 2015 Activity

Audit reviewed the Filing, reported revenues, expenses and incentive earned by the Company and found no material exceptions to the information filed. Any and all true-up entries will be included in the 2016 GL, Reconciliation and Filing totals. The current true-up is a total of \$171,367 (\$636 of interest and \$170,731 of PI). The ending Filed over-collected figure of \$107,290 was properly supported by the Company by all Filings and Audit requests.

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STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: November 8, 2016 **AT (OFFICE):** NHPUC

FROM:

Anthony Leone, Examiner

SUBJECT:

Northern Utilities, Inc. DE 14-216-2015 CORE FINAL Audit Report

TO:

Tom Frantz, Director Electric Division NHPUC Steve Frink, Assistant Director, Gas/Water Division NHPUC Les Stachow, Assistant Director, Electric Division NHPUC Jim Cunningham, Analyst IV, Electric Division NHPUC

Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2015. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire (PSNH), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and Energy North filed a joint petition for the program years 2015 through 2016. Each utility was audited individually.

In accordance with Commission Order #24,630 in Docket DG 06-036, Northern was directed to provide the Commission with monthly summaries of expenses and recoveries related to the energy efficiency programs in effect as well as a final report and to file those summaries in the most current docket; in this case DE 14-216. Audit thanks Karen Daniell and Travis Cilley for their timely assistance throughout the audit process.

Summary

The participating utilities submitted a joint energy proposal to the Commission on 9/12/2014 for the program years 2015 through 2016 and a joint Settlement Agreement on 12/11/2014. The Commission then approved the 2015 programs by Order #25,747 on 12/31/2014. As found in the joint Settlement Agreement filed 12/11/2014, the Northern Utilities programs for program year 2015 were approved as follows:

Residential

Home Energy Assistance Program (weatherization program)

NH Home Performance with Energy Star (HPwES) Energy Star Homes Energy Star Appliance Program (Gas Networks) Residential Education Residential Loan Buydown / Third Party Financing

Commercial and Industrial

Large Business Energy Solutions Program Small Business Energy Solutions Program Codes, Audits & Educational Programs

Significant Changes or Updates to the Gas Programs

The Agreement, its attachments and the Order also included the following significant changes for the gas companies as appropriate:

- o Increase the minimum percentage of the NH CORE Utilities program budgets allocated to the HEA Program to 15.5% (from 15.0%).
- o Increase the NH Gas Utilities per-customer spending cap from \$5,000 to \$8,000 for basic program services to be consistent with the NH Electric Utilities.

Mid-Year Adjustments

Northern Utilities did not report any budget transfers to report in calendar year 2015.

Program Year 2015 Activity

Northern provided a reconciliation as part of the Annual Report and Performance Incentive package on June 1, 2016 which noted an ending balance of \$197,308 before the adjustment for the Actual PI earned. While working with Northern on this report it came to light that the adjustment noted on Line 7 of the Reconciliation of the Shareholder Incentive Filing was double what it should be, \$41,897 rather than \$20,994.

2014	Ending Balance	\$	(202,468)	
2014	PI True-up in 2015	\$	(20,994)	
2015	Beginning Balance	\$	(223,462)	Over-Collection
2015	Collections	\$((1,387,489)	
2015	Interest	\$	(18,986)	
		\$((1,406,475)	
2015	Program Expenses	\$	1,341,468	
2015	Estimated Incentive	\$	112,154	
		\$	1,453,622	
2015	Ending Balance	\$	(176,315)	Over-Collection

When that figure is changed the ending balance before the Actual earned PI adjustment of \$3,969 agrees with the table below. Audit has verified that the GL and the Accounting Model both contain the correct True-Up figure of \$20,994 and that the only error is in the Reconciliation of the Filing. **Audit Issue #1.**

The program activity reported was verified to the accounting model used by the Unitil Accounting Department as well as to the General Ledger accounts identified as the reconciling mechanisms. Audit verified the rolling over / under calculations of balances, revenues, expenses, and interest at 3.25% to the monthly reports required per the latest Settlement Agreement in DE 14-216. Audit verified each monthly summary and identified immaterial rounding variances; there were no material exceptions noted.

The Core Programs are a non-profit generating activity; therefore any collections above and beyond the incurred expenses factor into the ending over/under collected balance at year end and are tracked by Residential and C&I sectors individually. The ending 2015 over-collection was verified to the following Energy Efficiency (EE) Residential and Commercial & Industrial GL Balance Sheet accounts without exception:

	12/31/2014	12/31/2015
#173-41-02 Accrued Revenue EE-R-NH	\$(113,266)	\$ (90,233)
#173-41-06 Accrued Revenue EE-C&I-NH	\$ (89,203)	\$ (86,081)
	\$(202,469)	

The total of \$176,314 reflected in the above chart of accounts is accurate as of 12/31/15 due to the use of the estimated Performance Incentive of \$112,154. The Shareholder Incentive package submitted on June 1, 2016 indicated an earned Incentive of \$116,124 which Audit was able to recalculate without exception. As is customary, a true-up of the Accrued Revenue account balances using the actual Performance Incentive is usually done after this report becomes final bringing the balance of the over/under accounts to a different balance than noted above. The use of true-up entries in this manner is consistent with historical practice.

Budget vs. Actual Expenses

Audit also compared the budgeted and actual expenses as presented in the 4th Quarter Energy Efficiency Report in DE 14-216 filed on February 24, 2016 and the 2015 Annual Report & Performance Incentive Calculation filed by the Company on June 1, 2016. The following tables display the overall figures for the Residential and Commercial & Industrial sectors as well as by individual program.

	Actual	Budgeted	% of Budget
Residential	\$ 812,898	\$ 845,994	96.1%
Com / Ind.	\$ 528,570	\$ 555,936	95.1%
	\$ 1,341,468	\$ 1,401,930	95.7%

^{**}Actuals figures from GL and SHI Report and do not include PI

		Actual	Budgeted	% of
GL Name	Program Name	Expenses	Expenses	Budget
Res New Construction	EnergyStar Homes	\$ 78,324	\$ 80,000	98%
Residential Retrofit	HPWES	\$ 99,622	\$110,000	91%
Residential Gas Equip	EnergyStar Appliances	\$382,505	\$421,695	91%
Low Income Retrofit	Home Energy Assist.	\$246,875	\$217,299	114%
Education & Energy Code TNG	Residential Education	\$ 5,572	\$ 17,000	33%
Large Business Energy Solutions		\$291,700	\$313,214	93%
Small Business energy Solutions		\$234,948	\$231,722	101%
C&I Education		\$ 1,922	\$ 11,000	17%

HEA/LI Expenses

As found in Commission Order #25,717 and the Agreement, 15.5% of the overall budget shall be apportioned to the HEA/LI weatherization program. At the end of 2015, Northern had appropriated \$246,875 or 18.4% of the actual expenses to HEA/LI weatherization program, as compared to \$201,214 or 17.25% of actual expenses in the prior year.

Revenue

The CORE Gas programs are funded from a portion of the Local Delivery Adjustment Clause (LDAC). Audit requested and Northern provided a printout from the "HTE" customer information system, showing therms delivered and revenue earned for the month of June 2015. The report, HTRS 19B-Gas Service Revenues and Purchased Power-All Consumers, reflected therms sold, which agreed with the monthly filing from Northern. Specifically the residential sector sold 528,117 therms and multiplied by the current LDAC rate of \$.0350 was \$18,484.

^{**}Budget amounts are from the Jt Settlement for DE 14-216

This figure is within \$8 of the Unitil Accounting Model used to track the therms and revenue for the program.

Interest

The Energy Efficiency Program Monthly Report shows that interest is calculated based on the average (over)/under recovery balance multiplied by the prime rate, divided by 365, then multiplied by the number of actual days in the respective month. The month-end (over)/under recovery balance including interest is used as the beginning balance for the following month. Total interest for 2015 was reported as \$18,986 without exception. Audit verified the interest rates reported correspond to the prime rates of the Federal Reserve that were in effect on the first day of the month prior to the quarter start, all of which were 3.25%.

Expenses

Audit reviewed the monthly reports as filed and verified that the expenses in total for the calendar year agree with the Annual Report and Performance Incentive filing as well as the general ledger accounts noted in the tables below.

The table below represents all incurred expenses listed by General Ledger account, which does vary from Program Name. All figures exclude the performance incentive. The GL account numbers provide information relative to that specific program and the expense type is indicated by the numbers included in each column heading. The GL accounts are then translated into the appropriate Program Tracking Activity as found in the Joint Settlement Agreement Budgets.

Total Expenses by GL Account Number & Name excluding Performance Incentive

2015	Store Settle and the			3rd Party		3rd Party 8	3rd Party	Reg &	Prog	
		Audits	Rebates	M&E	M&E	Various	Admin	General	Admin	TOTAL by
GL Name	GL Account #	41	40	31	30	21	14	13	10	PROGRAM
Low Income Retrofit	30-49-02-72-908-01-	\$ 4,050	\$180,677	\$ 1,663	\$ 628	\$ 1,250	\$ 17,788	\$ 13,694	\$ 27,126	\$ 246,876
Residential Retrofit	30-49-02-72-908-25-	\$ 5,570	\$ 48,126	\$ 781	\$ 295		\$ 9,584	\$ 6,444	\$ 25,087	\$ 95,887
Residential Gas Equip	30-49-02-72-908-29-		\$276,255	\$ 2,836	\$1,070	\$ 7,982	\$ 16,812	\$ 23,360	\$ 54,191	\$ 382,505
Res + C&I Code Edu	30-49-02-72-908-43-					\$ 8,640				\$ 8,640
Res New Construction	30-49-02-72-908-47-	\$17,715	\$ 36,000	\$ 684	\$ 258		\$ 7,551	\$ 5,639	\$ 10,478	\$ 78,324
Res Energy Code Tng	30-49-02-72-908-48					\$ 2,589				\$ 2,589
Lg C&I Gas Networks	30-49-02-72-908-34	\$ 612	\$ 27,700	\$ 411	\$ 148	\$ 2,065	\$ 18,419	\$ 3,222	\$ 2,876	\$ 55,453
Sm C&I Retrofit	30-49-02-72-908-49-		\$131,750	\$ 1,464	\$ 554	\$ 8,369	\$ 6,282	\$ 12,083	\$ 10,842	\$ 171,343
Lg C&I New Construction	30-49-02-72-908-50-	\$ 5,352	\$170,111	\$ 1,644	\$ 628		\$ 11,650	\$ 13,694	\$ 33,169	\$ 236,247
Sm C&I	30-49-02-72-908-51-	\$ 4,630	\$ 30,513	\$ 298	\$ 111		\$ 583	\$ 2,417	\$ 25,055	\$ 63,606
		\$37,929	\$901,131	\$ 9,781	\$3,692	\$ 30,894	\$ 88,669	\$ 80,551	\$ 188,823	\$ 1,341,469
		2.8%	67.2%	0.7%	0.3%	2.39	6.6%	6.0%	14.1%	100.0%
Various GL Accounts:	21, 22, 26-28 & 35									

Third Party Financing Pilot Program

According to the 4th Quarter Report filed by Eversource on 2/24/16 covering the 2015 Program Year, 4 Northern Utilities customers took advantage of the Third-Party Financing Pilot

program. The total cost of the projects completed was detailed as \$66,025.80, total amount of money loans \$46,174.24 and \$3,734.60 being the total amount that was used to buy down the loans to the 2%.

Audit reviewed the buy down calculations submitted and verified the amount paid to the bank. Specifically, the amount is derived from the present value of the difference between the lender's rate offered to the customer and 2%. Audit has included two examples showing the use of the present value and the resulting smaller payment to the lender.

Interest Rate Buy Down Calculation							
	Len	ders Rate	2	% Rate	Difference		
Purchase Price	\$	17,900	\$	17,900			
Rebate	\$	2,900	\$	2,900			
Loan Amount	\$	15,000	\$	15,000			
Annual Rate		5.99%		2.00%	3.99%		
Term of Loan (Months)		48	414	48			
Monthly Payment		\$352.21		\$325.43	\$26.78		
Total of payments	\$:	16,905.92	\$1	5,620.49	\$1,285.43		
			\$:	1,140.52	PV		
Difference between PV	and	"Simple" I	Met	hods:	\$144.92		

Interest Rate	е В	uy Down	Ca	lculat	ion
	Lei	nders Rate	29	% Rate	Difference
Purchase Price	\$	7,276	\$	7,276	
Rebate	\$	3,916	\$	3,916	
Loan Amount	\$	3,360	\$	3,360	
Annual Rate	TO	6.99%		2.00%	4.99%
Term of Loan (Months)		36		36	
Monthly Payment		\$103.73		\$96.24	\$7.49
Total of payments		\$3,734.34	\$3,	464.61	\$269.73
			\$	242.70	PV
Difference between PV	and	"Simple"	Met	hods:	\$27.04

In both of these cases, the payment amount made by Northern was the present value of the difference in the monthly payments resulting in the smaller of the two possible payments to the lender. This method is the same seen by the other Natural Gas utility, EnergyNorth.

Home Energy Assistance – Low Income Weatherization GL Accounts: Residential LI/HEA Weatherization—Audits & Rebates 30-49-02-72-908-01-40 and 30-49-02-72-908-01-xx

The documentation indicated Southern NH Services sought reimbursement for costs related to weatherizing homes. This specific reimbursement check was for \$95,256.78. Northern allocated \$2,670 to the Audit expense, \$5,632.43 to the 3rd Party Admin and the remainder, \$62,063.86 to the Rebates expense code. A similar pattern of Rebate and Audit expenses was seen in other invoices from Southern NH Services and other similar organizations.

Energy Star Products

GL Account: Residential HPwES—3rd Party Marketing #30-49-02-72-908-29-21

Audit requested 1 invoice for review from this program. The invoice indicated CLEAResult was paid for Marketing the NH Gas Networks program to prospective customers. The invoice contained the time frame, March 1- March 31, 2015 Field Rep Labor charges, mileage reimbursement as well as a Monthly Management Fee. From the website of CLEAResult, they "work alongside our utility clients, we maximize residential customer satisfaction and program participation". Northern provided additional information that indicated CLEAResult actually worked with Northern and Liberty Utilities (EnergyNorth Natural Gas) visiting every single Home Depot and Lowes in the State of NH setting up information tables for rebate marketing and education of rebates available to residents of NH.

Residential HPwES—Rebates #30-49-02-72-908-25-40

The invoice reviewed by Audit was paid to Yankee Thermal Imaging in the amount of \$8,469.16. Services were performed for three customers who received weatherization measures. Northern allocated \$690 (\$230 each) for Audit expense, \$707.20 to 3rd Party Admin and the remainder \$7,071.96 to the Rebates expense code. This program uses the same system (OTTER) as the Low Income Weatherization to track what measures are installed. The OTTER system tracks the specific measures installed and provides a system for generating a quote, but the final cost can vary depending on what and how much of the measures are actually installed. During the course of the various Core Audits, Audit notes that most contractors use the OTTER system to not only generate the quote but the actual invoice sent to the utility for the job.

Energy Star Products program / Gas Networks

GL Account: Residential Gas Equipment—Rebates #30-49-02-72-908-29-40

Audit selected one entry and the documentation provided by Northern indicated the rebate was paid to Energy Federation, Inc. (EFI) in the amount of \$44,304.91 for various residential EnergyStar appliance rebates in the month of February 2015. Northern allocated \$765.55 to the 3rd Party Admin expense and the remainder, \$44,304.91 to the Rebates expense code. Northern also included a printout from EFI detailing exactly which appliances were submitted and the corresponding rebate. Such examples include, Hot Water Boilers, Boiler Reset controls, Boiler/Hot Water Combination products, Furnaces, Water Heaters, and Thermostats. Audit noted no exceptions.

Energy Star Homes

GL Account: Residential New Construction--Rebates #30-49-02-72-908-47-40

Audit selected one entry and the documentation provided by Northern indicated the rebate was paid to Orion UNH Eagle LLC for energy efficiency measures installed at new construction in the town of Durham, NH. The documents indicated 36 units received measures such as refrigerators, clothes washers and dish washers. Even though the application states that the value of the energy savings qualifies for a total rebate of \$62,100, each unit is capped at \$1,000 and therefore the rebate check that was paid totaled \$36,000.

Energy Star Homes

GL Account: Residential New Construction--Rebates #30-49-02-72-908-47-41

Audit selected one entry and the documentation provided by Northern indicated the rebate was paid to GDS Associates, Inc. for plans review and site visits at two locations. One location was the Emerald Estates and the other was the Orion UNH Housing facility described above. Audit noted no exceptions.

Residential Education -- 3rd Party Admin #30-49-02-72-908-43-26

Audit requested one invoice paid to Culver Company in the amount of \$2,675. The amount was actually part of a larger invoice totaling \$51,500. The \$51,500 invoice indicates Unitil purchased 185 Safety World DVDs, 155 Kato- Natalie and Gus Video DV's, and as part of the Unitil 2015 School Safety Outreach program includes a 1 year license to the e-Smartkids website. This website contains basic and detailed information on Energy Efficiency and Electrical Safety, including what is electricity and what to do with and around down power lines. The invoice total was split 26% to Energy Efficiency and 74% to the UES Storm Fund GL Account. A portion was also expensed to the Fitchburg business of Unitil. The EE portion was further broken down as follows:

51% \$6,829 to UES 20% \$2,678 to Northern Utilities 19% \$2,545 to Fitchburg Electric 10% \$1,338 to Fitchburg Gas.

Northern stated that the EE charge, \$2,678, covered the EE portion of the Schools Safety Outreach Program which includes the e-Smartkids website which includes information on Energy Efficiency.

Small Business Energy Solutions

GL Account: Small Commercial and Industrial Retrofit--Rebates #30-49-02-72-908-49-40
Audit reviewed one invoice paid to EFI in February 2015 in the amount of \$27,750, of which \$27,300 was for rebates discussed here and the remaining \$450 expensed to the Small C&I Admin account. Northern provided documentation for mail-in rebates associated with Furnace/ Boilers and water heaters. Further documentation broke down the number of appliances. Audit noted no exceptions.

Large Business Energy Solutions

GL Account: Large C&I Gas Networks --3rd Party Marketing #30-49-02-72-908-34-21

Audit requested one invoice paid to Lockheed Martin Corp in the amount of \$812.38.

The actual invoice was \$1,055.04 but a portion was split to the Fitchburg Gas and Electric division of Unitil. The invoice contained detailed timesheets for work performed associated with the Large C&I program in the area of Account Leads, Field Managers and Program Managers. Audit noted no exceptions.

Large Business Energy Solutions

GL Account: Large Commercial and Industrial Gas Networks -- Rebates #30-49-02-72-908-34-40

The invoice reviewed from this category indicated Smuttynose Brewery was reimbursed \$7,500 or 17% of the \$43,380 cost for installing new condensing boilers. Audit reviewed the submitted application as well as a quote from the installation vendor for the price indicated and noted no exceptions.

Large Business Energy Solutions

GL Account: Large Commercial and Industrial Gas Networks -- Audits #30-49-02-72-908-34-41

The invoice reviewed from this category indicated GDS performed services for various expense codes. Specifically, GDS and its associates were noted as performing outreach, contact/customer support, savings analysis measures review and others during the month of July 2015. The total invoice was \$4,267 and Northern allocated the expenses across a variety of accounting codes with the Audit expense having \$612 of that total. The remaining portion was expensed to other Gas programs and Unitil electric programs as appropriate.

Large Business Energy Solutions

GL Account: Large C&I New Construction--Rebates #30-49-02-72-908-50-40

Audit selected one invoice for review that was paid to Lindt Chocolate in Stratham, NH in the amount of \$123,903. According to the documents submitted, Lindt Chocolate installed a new chocolate line (manufacturing line) and worked closely with Northern, GDS and their contractors to make the new project energy efficient. Among other duties, GDS completed the efficiency review for Northern detailing the measures installed including what parameters were used as baseline measurements and their computations for the energy savings.

Large Business Energy Solutions

GL Account: Large C&I New Construction -- Audits #30-49-02-72-908-50-41

Audit reviewed one invoice that was paid to GDS Associates, Inc. The invoice contains supporting documentation, in part, showing the work performed by GDS in analyzing the savings obtained from projects and following up on other projects. The supporting documentation indicates the work was done over a two week period in September 2015. All 11.50 hours of work were billed at the hourly rate of \$153 recalculated with no exceptions.

Large Business Energy Solutions

GL Account: Large C&I New Construction -- Audits #30-49-02-72-908-51-40

Audit reviewed one invoice that was paid to the Portsmouth School Department. The supporting materials indicate that EEI of Merrimack, NH performed three types of measures costing a total of \$58,500 which qualified for a rebate of \$25,500. Installation of EMS controls in all spaces, Installation of kitchen hood VFD controls and weatherization and building envelope improvements. Together these measures were calculated to save 10,200 therms annually. Northern also included the actual invoice, detailing the final cost of \$58,500.

Large Business Energy Solutions

GL Account: Large C&I New Construction -- Audits #30-49-02-72-908-51-41

Audit reviewed one invoice from Rise Engineering in the amount of \$4,630. The supporting documentation indicated Rise engineering conducted energy efficiency audits at several facilities during 2015 and charged Northern for that service. Audit obtained two of the

audits and notes the reports were prepared by Rise Engineering, discuss energy efficiency measures, energy and electricity savings, costs and rebates. No exceptions noted.

Summary

Audit reviewed the Filing, revenues, expenses and incentive earned by the Company and found the ending balance of the Reconciliation in the Filing to be the only exception. As explained below, UES is aware of the issue and will refile once this report is made Final. The only true-up entry that should be recorded on the books of Northern is to account for the difference in the estimated and actual incentive of \$3,969 which will be included in the 2016 GL, Reconciliation and Filing totals. The ending General Ledger over-collected balance of \$176,315 was properly supported by the Company by all Filings and Audit requests. Based on the specific information reviewed, Audit believes the reported information is complete and accurate.

Audit Issue #1 Shareholder Filing Ending Balance

Background

As part of the NH Core Programs administered by the NH Utilities, each Utility is required to file an Annual Report detailing the revenues, expenses, and other required information.

Issue

The Annual Report filed by Northern Utilities contained an error in the Reconciliation, which is a calculation of the over/under running balance. Specifically, Northern double counted the 2014 Performance Incentive True-Up resulting in the Reconciliation expenses being \$20,994 less than it should have been, and the resulting ending over collected balance \$20,994 more than it should have been; \$197,308 rather than the correct \$176,315 recorded in the company's accounting records.

Recommendation

The discrepancy was realized during the audit and Northern has been made aware of the requirement to re-file any incorrect pages in the Annual Report.

Company Comment

The Company agrees; the correct 2014 Performance Incentive True-up was recorded in our accounting records, however, there was a reporting error in the filing submitted to the Commission. The Company will file a revised reconciliation no later than 15 business days after the final issuance of this report.

Audit Comment

Audit concurs with the Company's comment.

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STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: December 19, 2016 **AT (OFFICE):** NHPUC

FROM: Anthony Leone, Examiner

SUBJECT: Liberty Utilities (Granite State Electric) Corp.

DE 14-216 - 2015 CORE Program

FINAL Audit Report

TO: Tom Frantz, Director NH PUC Electric Division

Les Stachow, Assistant Director, NH PUC Electric Division

James Cunningham, NH PUC Analyst IV

Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2015. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource, New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and Energy North (ENG) filed a joint petition for the program years 2015 through 2016. Each utility was audited individually.

Audit appreciates the assistance of Eric Stanley, Tina Poirier, Sue-Ellen Billeci, Heather Tebbetts, Jim Bonner, and Cynthia Trottier from Liberty Utilities.

Approved 2015 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/12/2014 for the program years 2015 through 2016 and a joint Settlement Agreement on 12/11/2014. The Commission then approved the 2015 programs by Order #25,747 on 12/31/2014. As found in the joint Settlement Agreement the following programs were approved for 2015:

Residential

Home Energy Assistance Program (Low Income weatherization program)
Home Performance with Energy Star (HPwES- weatherizing existing homes)
Energy Star Homes (weatherizing new homes)
Energy Star Products (appliances and lighting)

Commercial & Industrial

Large Business Energy Solutions Program
Small Business Energy Solutions Program

Municipal Program

Educational Programs
Energy Code Training
Commercial Energy Auditing Class
C&I Customer Education
Energy Education for Students
Home Energy Ratings for New Homebuilders

Utility Specific Programs

Third Party Financing Pilot- Liberty Utilities contracts with third party lenders to offer a special 2% annual rate to customers for certain EE measures installed.

Significant Updates for 2015

Attachment M of the Settlement Agreement contains a summary of material changes; however some of the most significant material changes are listed below.

According to the change in NH RSA 125-O:23 enacted by SB 268, Regional Greenhouse Gas Initiative (RGGI) funds are to be used for the following programs: Low Income Weatherization first, then the Municipal Programs, then to an all fuels, comprehensive program.

Further, the Joint Settlement agreement increased the overall funding to the Low Income Weatherization program from 15% to 15.5% of the overall SBC budget.

Mid-Year Adjustments

GSE notified the Commission of the following transfers:

ES Products \$ 413,897 \$ 82,779 \$ (25,970) -7% 7/20/201 ES Homes \$ 129,850 \$ 25,970 \$ 25,970 20% ES Products \$ 413,897 \$ 82,779 \$ (32,000) -8% 7/30/201	
	15
ES Products \$ 413,897 \$ 82,779 \$(32,000) -8% 7/30/201	
	15
HPwES \$ 267,816 \$ 53,563 \$ 32,000 12%	
**Transfer was reversed on 12/30/2015 by Liberty Utilities	
HPwES \$ 267,816 \$ 53,563 \$(28,000) -11% 12/30/20)15
ES Products \$413,897 \$82,779 \$28,000 7%	
Large Business \$ 986,517 \$ 197,303 \$(200,000) -20% 11/4/201	5
Small Business \$ 539,501 \$ 107,900 \$ 200,000 37%	

Program Activity

2015 Carry Forward Balance

The 2015 beginning balance noted in table 5 of the Annual Report noted a balance of \$1,014,263, which was \$5,946 more than the 2014 ending balance noted in the prior report. Audit found the difference due to the final earned PI and the estimated PI used within the prior filing. Using an estimated PI is considered an acceptable practice as the final PI is not known until after year end and the Audit report is finalized.

The funding total of \$2,125,712 before interest found on line 8, page 9 of the GSE 2015 Core Annual Report Filing directly corresponds to the same amount as found in submitted GL Reconciliations to PUC Audit. Once the net interest is considered, the total funding for the Core Program increases to \$2,162,701. The expenses of \$3,056,149 include the actual Performance Incentive of \$267,320. The ending balance of \$120,815 matches the ending balance in table 5 of the same amount.

Carry-forward Balance- 2015 Over Collection	\$ 120,815
Actual Expenses	\$ (3,056,149)
2015 Performance Incentive	\$ (267,320)
Program Expenses	\$(2,788,829)
Actual Collections	\$ 2,162,701
2015 Cumulative Interest	\$ 36,989
RGGI Proceeds	\$ 235,229
FCM Revenue	\$ 214,027
SBC Funding	\$ 1,676,456
2015 Beginning Balance - Over Collection	\$ 1,014,263
2014 PI True-Up	\$ 5,946
2014 Audited Ending Balance- Over Collection	\$ 1,008,617

Budget vs Actual

GSE reported in their annual Report they spent 93% of their projected total budget. Audit confirms the number and also breaks down the various programs. Of note is that GSE did not over spend in any category; rather, they under spent in the C&I Education and the Low Income Weatherization Programs 71% and 81% respectively.

Electric		otal	Вι	ıdget	% of Budget	
C&I Education	\$	10,940	\$	15,414	71%	
C&I Large Business	\$	758,943	\$	786,517	96%	
C&I Small Business	\$	681,255	\$	739,501	92%	
C&I Municipal	\$	157,291	\$	168,757	93%	
Resi - Products	\$	413,643	\$	415,927	99%	
Resi - ES Homes	\$	149,953	\$	155,820	96%	
Resi - HEA - Low Income	\$	378,874	\$	465,549	81%	
Resi - HPwES	\$	213,206	\$	239,816	89%	
Grand Total	\$2	2,764,106	\$:	2,987,301	93%	

System Benefits Charge (SBC)

The SBC is the primary funding method for the Core programs. From the material submitted to Audit, GSE initially indicated total SBC funding of \$1,636,335. This figure was derived from the GL reconciliation for account 8830-2-0000-20-2142-2423. GSE also indicated an adjustment in the amount of \$40,121. During the course of this audit GSE explained that per the EAP Audit for the period of October 2014-September 2015, there was a discrepancy found in the reconciliation of kWh sold and revenue reported. GSE further explained that the \$40,121 adjustment audit originally reported in the GL reconciliation mentioned above is the result of rereconciling the kWh sold to the derived revenue for the Core Program for 2015. This resulted in total SBC funding of \$1,676,456. Audit tested the December 2015 and found the following:

Core Portion-\$.0018/ 54.5%	\$ 139,970
Total SBC Funding	\$ 256,611
SBC Rate	\$ 0.0033
kWh Sold-December 2015- GSE Customer	s 77,760,896

The GL reconciliation which supported the \$1,676,456 total lists \$139,999 as the total funding for December. Audit inquired about the small \$29 difference and GSE noted that the kWh total noted in the table above is only a simple calculation and does not account for any voided or rebilled transactions and therefore will be slightly different. Audit concurs that the kWh and reported revenue appear to be accurate and the controls put in place as a result of the EAP Audit mentioned above to be resulting in accurate information.

ISO Forward Capacity Market

GSE reported total funding from the ISO of \$214,027 excluding ISO expenses. The expenses were verified to GL account 8830-2-0000-69-5010-9080 and then booked to GL account 8830-2-0000-20-2142-2423 without exception. As was found in previous years, the inclusion of the ISO Expenses in the PI calculation is allowed.

RGGI Quarterly Auction Proceeds

The PUC Business Office records indicate a total of \$235,230 was paid to Liberty Utilities. This exact amount was traced to the GL reconciliation of account 8830-2-0000-20-2142-2423 provided to Audit for this report. Specifically, Liberty recorded the following payments:

Description	Amount
1st Qtr Payment	\$ 55,603
Supplemental Pmt	\$ 8,313
2nd Quarter Pmt	\$ 63,499
3rd Quarter Pmt	\$ 82,361
4th Quarter Pmt	\$ 25,454
	\$235,230

Interest

The Reconciliation Filing, page 9, states \$36,989 and the GL Reconciliation states \$33,812 a \$3,177 difference. GSE gave the following explanation for the difference: The interest on the core filing is calculated on the spreadsheets in the filing for the activity per month. The GL calculates the interest the same way but timing issues will make them different. There were also items in the EE GL account that were placed in error and removed but the interest would have been affected based on this movement. After the core has been audited an adjustment is usually made for the Incentive and the interest to True up the account, this will also affect the interest calculation in the GL due to timing. As with the PI, having an interest true-up after the fact is necessary and acceptable in this manner.

Performance Incentive Calculation

GSE's Annual Report for the 2015 Core indicates they earned a performance incentive (PI) of \$267,320. The specific amounts are broken down between C&I \$162,264 and Residential \$105,055. Using the ratios and amounts from the Filing, Audit has verified that the Filed PI was calculated correctly.

Low Income Weatherization Program

As stipulated in NH RSA 125-O:23, certain amounts of funding need to be allocated to this program before others. The total funding received from the RGGI program was \$235,230. 15% of that amount is to be directed to the Low Income Weatherization program and for 2015 that is \$35,285. Additionally, 15.5% of the SBC and ISO (\$1,890,483) should be directed to the same program and for 2015 that is \$293,025. Combined, the budget for the Low Income Weatherization program should have been no less than \$328,310. The actual amount of money spent on this program was \$378,874.

Expense Test Summary

Expenses for the year ending December 31, 2015 as reported on 6/1/2016 in the shareholder incentive filing were reported to be \$2,764,106. The total does not include the expenses associated with the Forward Capacity Market (ISO). Liberty submitted the following Excel spreadsheet of expenses to

Audit indicating a total of \$2,764,106. This figure, along with the total ISO expenses of \$24,723 directly matches the total reported in the Filing of \$2,788,829.

Electric		aluation	Internal Admin.		Internal imp.		Marketing		Rebates / Services		Total	
C&I Education						117.111	\$	6	\$	10,933	\$	10,940
C&I Large Business	\$	36,516	\$	7,310	\$	134,635	\$	5,755	\$	574,727	\$	758,943
C&I Small Business	\$	14,828	\$	4,752	\$	66,546	\$	13,661	\$	581,467	\$	681,255
C&I Municipal	\$	4,683	\$	404	\$	19,648	\$	996	\$	131,560	\$	157,291
Resi - Products	\$	10,357	\$	3,153	\$	52,195	\$	18,610	\$	329,328	\$	413,643
Resi - ES Homes	\$	3,478	\$	441	\$	25,640	\$	2,471	\$	117,922	\$	149,953
Resi - HEA - Low Income	\$	11,893	\$	3,949	\$	42,633	\$	242	\$	320,157	\$	378,874
Resi - HPwES	\$	6,776	\$	3,518	\$	39,808	\$	3,932	\$	159,172	\$	213,206
Grand Total	\$	88,531	\$	23,527	\$	381,105	\$	45,675	\$	2,225,267	\$2	,764,106

Expenses were verified to the summary of expenses provided in the detailed Excel pivot table provide to Audit. Expenses are debited to general ledger account #8830-2-0000-69-5390-9080 and credited to the balance sheet #8830-2-0000-20-2142-2423

Audit selected a sample of the expenses for detailed review.

C&I Education

The filing summarized the educational programs for residential and commercial customers as an integral part of raising awareness of energy efficiency. Specifically identified were Energy Code Training for all stakeholders; Commercial Energy Auditing classes which provide training to facility managers; C&I Customer Education includes training sessions for C&I customers and professionals; Energy Education for Students provides support for programs available to students from kindergarten through high school.

During 2015, GSE reported \$10,940 of expenses associated with the C&I Education program. Audit reviewed one invoice for \$2,534 that was used to sponsor the 2015 LES (Local Energy Solutions) Annual Conference held at the Grappone Center in Concord, NH. The other invoice reviewed was paid to the Plymouth Area Renewable Energy Initiative and the Button Up NH workshops they hold throughout the state. The Liberty portion for those conferences came to \$1,915.08. Audit noted no exceptions to the invoices.

Large Business Energy Solutions Program

The Large Business Energy Solutions Program, as noted in the Filing, targets electric customers with an average monthly maximum kilowatt (kW) demand of 200 kW or more over a twelve month period. Rebate amounts for retrofit projects are authorized to be the lesser of a one year payback or up to 35% of the equipment and installation costs. For new projects, the rebate can be the lesser of one year payback or up to 75% of incremental costs. Additional specifics regarding the rebates can be found in the Joint Settlement Agreement for 2015-2016.

The first invoice reviewed by Audit indicated New England Industries Stamping (NEIS) installed four pieces of new equipment in place of three aging, near end of life equipment and one failed piece of equipment. Specifically, the contractor, Compressor Energy Services, LLC installed two new Air

Compressors, a cycling dryer and an oil mist eliminator in place of three air compressors and one cycling dryer.

The contractor, Compressor Energy Services, LLC provided two quotes to GSE. The first was to simply replace the current equipment at a cost of \$64,822. The second quote was the cost of replacing the current equipment with energy efficient equipment at a cost of \$197,994 leaving the incremental cost at \$133,172. Combined with a rebate of \$79,584 the final cost to NEIS was quoted at \$118,410.

The second invoice reviewed was a retrofit of the outdoor parking lot lighting at the Dartmouth Hitchcock Facility in Lebanon, NH. In this case, GSE used a "Retrofit Lighting Incentive Worksheet" to calculate the rebate amount. The package sent over from GSE to Audit was similar to other files which included: quotes from vendor, calculation of rebates, verification of project completion by Franklin Energy, pictures of the final installed product(s) and others. Audit reviewed the sheet and found the rebate of \$76,840 properly supported. The final price came to \$372,510 and after the rebate of 21%, the final price was \$295,670.

Small Business Energy Solutions Program

Noted within the filing this program is designed for electric customers having an average monthly maximum kilowatt (kW) demand less than 200kW over a twelve month period. Similar to the Large Business Energy Solutions program, this program is intended for new or retrofit projects. The rebate amount for new projects is the lesser of 75% or a one year payback, and for retrofit projects is the lesser of 50% for gas customers and 35% for electric customers, or a one year payback.

The first invoice reviewed was issued to the Hanover, NH Food Coop for installation of two new chillers and associated equipment. The package sent over from GSE to Audit was similar to other files which included: quotes from vendor, calculation of rebates, verification of project completion by Franklin Energy, pictures of the final installed product(s) and others. The invoice for the installation labor was \$13,391 and the chillers were invoiced at \$92,272, but the incremental cost compared to similar, but non-energy efficient equipment was quoted at \$56,739. The Hanover Food Co-Op was given a rebate of \$42,554 or 75% of the incremental costs of the new chillers.

The second invoice reviewed was a retrofit of the lighting at Timberwood Commons located in Lebanon, NH. The package sent over from GSE to Audit was similar to other files which included: quotes from vendor, calculation of rebates, verification of project completion by Franklin Energy, pictures of the final installed product(s) and others. Audit reviewed the sheet and found the rebate of \$31,496 properly supported. The final price came to \$135,413 and after the rebate of 23% the final price was \$103,917.

Municipal Program

Page 45 of the 2015 Joint Settlement Agreement continued the Municipal program from prior years. Specifically, the program was designed with the following: "In accordance with RSA 123-O:23, the Municipal and Local Government Program is available to all municipal and local government customers of the NH Electric Utilities and to the five communities in New

Hampshire that have their own municipal utilities (collectively these customers and five communities are referred to through the remainder of this document as "municipal customers").

Municipal customers face barriers similar to other commercial and industrial customers, but they also have unique challenges. More frequent leadership changes, budgeting processes that require city/town representative approval and/or voter approval, and the level of local energy efficiency knowledge and project management expertise are all factors that can impact the ability of a municipality to cost-effectively implement energy efficiency projects. In addition, the technical assistance needs may vary widely from one city/town to another.

The program targets municipal customers with new construction projects, major renovation projects, failed equipment that needs replacement and those operating aging, inefficient equipment and systems. For new equipment and new construction projects, the program offers prescriptive and custom incentives designed to cover the lesser of a one year simple payback or up to 75% of the incremental cost (100% for public schools) of higher efficiency products up to the customer's incentive cap. Incentives are also available for electric, oil and liquid propane heating, cooling and hot water systems.

Audit reviewed one invoice from the Municipal program. The rebate was issued to the Richmond Middle School for a lighting upgrade throughout the building. As was seen in the Large C&I program, a retrofit lighting incentive worksheet was used to calculate the incentive. The package sent over from GSE to Audit was similar to other files which included: quotes from vendor, calculation of rebates, verification of project completion by Franklin Energy, pictures of the final installed product(s) and others. The invoice from the installing vendor, Energy Efficient Investments, Inc. indicated a total cost of \$270,000 and \$54,299 (20%) was paid for by the rebate leaving the final bill for the schools lighting upgrade at \$215,701.

Residential Energy Star Homes Program

As noted on in the filing, this program is fuel neutral designed to encourage homeowners and builders to build homes that are at least 15% more efficient than homes built to the 2009 International Energy Conservation Code (IECC). The program provides home builders with technical assistance, financial incentives, and instruction relating to compliance with Energy Star standards. New single family and multi-family projects are eligible, as are complete rehabilitations of existing structures. Project rebates are based on a sliding scale of Home Energy Rating System (HERS) results. The electric and gas utilities will coordinate to provide rebates for high efficiency gas HVAC equipment.

The first invoice reviewed was sent by a vendor named ANB Enterprises, Inc. One of their products is eTrack, a comprehensive data tracking and reporting system. eTrack is used by Liberty for both GSE and EnergyNorth's Core programs. Audit notes that eTrack reference numbers can be seen on various documents submitted for this Audit. As such, the total invoice is allocated between the Electric (GSE) and the Natural Gas (EnergyNorth) expense accounts. No exceptions noted. The specific invoice provided totaled \$37,500. This amount was allocated over ALL (GSE and EnergyNorth) Core Programs, and the portion of this invoice that was expensed to the EnergyStar New Homes program was \$587.83.

The second invoice was sent from Quail IV LP and consisted of an EnergyStar Rebate form that was based upon a review and rating report by GDS Associates for an EnergyStar audit and review of a new senior living facility in Lebanon, NH. The housing unit consisted of 62 units and based upon the measures installed (energy efficient refrigerators and dishwashers), was approved for a rebate of \$86,100. However, since the program caps the rebate at \$1,000 per unit, a rebate of \$62,000 was processed to Quail IV LP.

Residential Home Performance with Energy Star (HPwES)

Noted in the filing, regarding the HPwES program, the electric utilities will continue to provide fuel neutral weatherization services, and "the gas utilities will continue to serve their customers. Gas customers participating in the HPwES program can receive an incentive of 50% up to \$4,000 from their electric company in addition to the \$4,000 incentive from their gas company. This would apply after they reach their \$4,000 maximum from their gas company. The goal is to provide gas customers with an opportunity for deeper savings and to allow gas customers to take advantage of their paying into the electric SBC fund. This would also allow the gas and electric utilities to determine customer interest in doing "deep retrofits".

The first invoice reviewed by Audit was sent from Horizon Residential Energy Services NH, LLC in the amount of \$15,000. The invoice indicated it was for prepayment of electric efficiency rebates. Audit asked how the prepayments with Horizon work and they indicated, "As done historically, Liberty Utilities will issue prepayment funds at the beginning of the program year to Horizon Residential for HPwES – Electric rebates. Horizon Residential will draw on this initial prepayment amount to pay the weatherization contractors in a timely manner when the HPwES projects have been approved and completed. Horizon Residential maintains an accounting spreadsheet of the completed weatherization jobs along with the payments from Liberty Utilities. As additional funding is needed, Horizon will issue an invoice to Liberty Utilities and Liberty Utilities will process the request accordingly. An initial prepayment allotment for 2015 in the amount of \$15,000 was processed to Horizon on 1/14/2015."

The second invoice was sent from LighTec, Inc. for weatherization services performed at a multi-family complex in Hanover, NH. The installing vendor was "Shakes to Shingles" who installed weatherization enhancements, thermostats, and energy efficient lighting measures at a cost of \$67,933. The invoice reviewed was for a rebate for the energy efficient measures installed. Additionally, GSE provided a list of homeowners to ensure the \$4,000 cap was enforced. Audit found no exceptions to the information provided.

Residential Energy Star Products Program

The focus of the ENERGY STAR Products program is to increase consumer awareness of the benefits of purchasing ENERGY STAR-qualified lighting, appliances, space/water heating and cooling products and to expand their usage and availability. This program is also the result of combining the formerly separate EnergyStar Lighting and EnergyStar Appliance programs.

The first invoice reviewed was issued to Energy Federation Inc. (EFI) for services related to the LED rebate program offered to GSE customers. The package sent over from GSE to Audit contained an

invoice for December 2015 markdowns totaling \$73,982. The invoice was further broken down into Incentives Paid of \$59,400; Trace and Report Fee of \$1,336.50, C.O.M Fee of \$445.50 and shipping costs of \$12,800. Backup information provided by GSE labeled the \$59,400 charge as a combination of three MOU line items, \$19,800; \$16,200 and \$23,400 with the MOU labeled as TECHNIART". GSE stated that this invoice was for a special promotion conducted at the Rockingham Mall in Salem, NH which sold out. TECHNIART designed, packaged and sold packs of 6 LED lights for \$18. Two of the MOU's were for promotions at the Rockingham Mall while the other was for an on-line portion. GSE reported that all 3,300 bulbs were sold.

The second invoice reviewed by Audit was for services performed by CLEAResult. The invoice totaled \$3,293.42 for the month of April 2015. The invoice detailed the amount of hours worked, the rate, program and administration totals, as well as mileage, Administration and miscellaneous fees and expenses. GSE also provided a backup sheet with more detail on the hours worked by CLEAResult. This backup indicated that the vendor performed work for all Core Utilities and billed GSE at the agreed upon rate of 11.55% of the expenses incurred for the Appliance and Lighting programs.

Residential Home Energy Assistance Program

The original filing and Order stated that "income qualified customers are eligible to receive up to \$8,000 for insulation, weatherization, cost effective appliance and lighting upgrades, and appropriate health and safety measures."

Actual reported expenses for 2015 represent 13.5% of the total reported actual expenses of \$2,788,829.

Audit selected two invoices to review and GSE supplied OTTER printouts detailing basic customer information, cost of the improvements and the amount paid by the Utility. None of the customer projects noted on the invoices was above the \$8,000 threshold. OTTER is the system used by all Utilities in the State of NH to track the measures installed through the HPwES and Low Income Weatherization programs and generate payment invoices if the installing vendor chooses to do so. One of the invoices reviewed was remitted by Tri-County Community Action in the amount of \$37,264.41 and the other was sent from Southern NH Services in the amount of \$24,869.44. Both invoices were generated by OTTER and can be traced to the actual measures installed. Additionally, both invoices contained a list of customers who received the weatherization and related services. Audit noted no exceptions to the invoices reviewed.

RGGI Revolving Loan Fund (RLF)

On August 19, 2009, a \$7,646,020 grant, identified as Re-CORE, was approved by the Governor and Council. The grant, among other things, established the Revolving Loan Funds (RLF) administered by the Core Electric Utilities.

GSE received \$303,000 from the Re-CORE grant to establish a revolving loan fund. Audit reviewed the activity and balances at 12/31/2015, summarized within the 4th quarterly report and supplemental information submitted to PUC Audit which is detailed below:

Original Re-CORE RLF funding	\$ 303,000
Cumulative Loans issued as of 12/31/2015	\$(458,354)
Cumulative Repayments as of 12/31/2015	\$ 179,603
Available to lend 12/31/2015	\$ 24,249

Additionally, GSE submitted the balance for Acct 8830-2-0000-10-1160-1438, which is used to track the balance of loans still outstanding. This figure was \$250,251 and after accounting for loans billed but not yet paid (\$5,748) and funds committed to loans not yet booked to the GL (\$22,753) the account matches the difference between the cumulative loans and repayments to-date of \$278,751.

Third Party Financing Program

As found in the 4th Quarter Report filed by Eversource, GSE bought down the interest rate on two projects. The total cost of the projects was \$16,090 and the total of the interest rate buy downs was \$460. GSE started the year with \$7,648 and less the amount had a remaining balance of \$7,188 available to buy down rates as of 1/1/2016 before any additional funding. GSE also indicated the interest rate was bought down from an average of 6.24% to the agreed upon 2%.

Audit requested the results of the current program, details regarding the lenders with whom the interest rate buy downs (IRB) were negotiated, loan limits, the number of customers, the amount of the loans, and the total of the IRB included as an expense in 2015. The IRB is paid in full, up front, and buys the interest rate down to 2% for the customer. The IRB payments themselves are charged to the appropriate Rebates / Services expense codes, primarily the HPwES program account of 8830-2-0000-69-5390-9080.

The Company indicated that the lenders do not report loan defaults. The Company provided a summary of the terms of the loans with the various banks and credit unions. These terms included the following general repayment schedule:

Loan Amount	Maximum Repayment Term								
\$1,000 up to \$2,000	for up to 2 years	(24 months)							
\$2,001 up to \$4,000	for up to 3 years	(36 months)							
\$4,001 up to \$6,000	for up to 4 years	(48 months)							
\$6,001 up to \$9,000	for up to 5 years	(60 months)							
\$9,001 up to \$12,000	for up to 6 years	(72 months)							
\$12,001 up to \$15,000	for up to 7 years	(84 months)							

Audit requested details on the process used to ensure the IRB is properly calculated. The Company indicated an interest buy down spreadsheet is used (Microsoft Excel amortization and present value calculation). The buy down is compared to the figure prepared by the bank, and the lower of the two amounts is paid. The calculations reviewed indicated the bank was paid the present value (PV) of the difference of the monthly payments calculated using the bank's rate (5.99% or 6.49%) and the discounted rate 2.00%). All calculations were reviewed and any variances were immaterial.

In the previous Audit, the Company detailed the process used to ensure that this payment was then made within the contracted five day timeframe. The Company stated that the same process is still in place. That process was detailed in the following explanation: "Liberty Utilities' Program Administrator (PA) receives an email from the bank with the detailed invoice and required documents attached. Within two business days the PA reviews the documents and emails the documents to HorizonRES (contracted to make the payments) for payment to the specific bank. The email states the bank name and payment amount. HoizonRES then pays the bank and emails a confirmation to the PA when the payment was made." Horizon charges Liberty (in quarter hour installments) \$60 per hour to process the 2% buy-downs. Audit requested clarification of the use of Horizon vs. processing the checks internally, and was told that the internal processing for expedited checks is not cost effective.

Below are two examples showing the use of the present value and the resulting payment to the lender. Audit notes that by using the present value, a smaller payment is made to the lender. Audit recalculated two of the subsidy payments and found that the payment did not match the payments to the bank. Specifically, a payment for \$355.06 was made as well as a payment for \$105.10. Audit asked GSE to verify the details and they stated the loan terms are correct, but the loan subsidy calculation and payment submitted by the bank was not correct, and therefore the payment to the bank was \$105.23 less than what it should have been, \$105.10 instead of \$210.33. Audit Issue #1.

		ders Rate	29	% Rate	Difference
Purchase Price	\$	7,220	\$	7,220	
Rebate	\$	4,000	\$	4,000	
Loan Amount	\$	3,220	\$	3,220	
Annual Rate		6.49%		2.00%	4.49%
Term of Loan (Months)		36		36	
Monthly Payment		\$98.68		\$92.23	\$6.45
Total of payments		3,552.30	\$3	3,320.25	\$232.06
				\$210.35	PV
Difference between PV	and	"Simple" I	Met	hods:	\$21.71

Interest Rat	e Bı	ıy Down	Ca	ilculat	ion
	Len	ders Rate	29	6 Rate	Difference
Purchase Price	\$	8,670	\$	8,670	
Rebate	\$	4,000	\$	4,000	
Loan Amount	\$	4,670	\$	4,670	
Annual Rate		5.99%		2.00%	3.999
Term of Loan (Months)	1	48		48	
Monthly Payment	To	\$109.65	\$	101.32	\$8.34
Total of payments	!	5,263.38	\$4,	863.18	\$400.20
			\$	355.08	PV
Difference between PV	and	"Simple" I	Vlet	hods:	\$45.12

Summary of 2015 Activity

Audit reviewed the Filing, reported revenues, expenses and incentive earned by the Company and found no material exceptions to the information filed. Any and all true-up entries will be included in the 2016 GL, Reconciliation and Filing totals. The current true-up is a total of \$147,345 (\$3,178 of interest and \$144,167 of PI). The ending Filed over-collected figure of \$120,815 was properly supported by the Company by all Filings and Audit requests.

Audit Issue #1 Third Party Financing Program

Background

In order to facilitate greater participation in the Core Programs, the Utilities offer the chance for rate-payers to pay for the services and or products received with a loan from a local bank at 2%. The 2% is made possible by the Utility making a one-time payment to the lender to buy-down the interest rate to the reduced rate of 2%.

Issue

Liberty currently relies on the Lender to perform the calculation of the difference between the Lender's current rate and the 2% offered and submit that for payment. In one case, the calculation was not properly verified resulting in an under-payment to the bank in the amount of \$105.23. Liberty has already confirmed with the Lender in this case that the customer's loan term and monthly payment were not impacted by the under-payment to the Lender by Liberty and that the Lender would not be seeking restitution from either Liberty or the customer.

Audit Recommendation

Liberty must ensure that the loan buy-down calculation and subsequent payment is accurate so the true costs of the program can be recorded and the true cost effectiveness can be reported as part of the Annual Report prepared by all regulated Utilities taking part in the NH Core Programs.

Company Response

Liberty has deployed an online portal process via its eTrack system for its lender partners to submit customer third party loan applications to Liberty for review and approval. The new online portal process will allow for improved verification of customer loan buy down calculations, as well as improved tracking and communication between the lender partners and Liberty.

Audit Comment

Audit concurs that Liberty is improving the process and looks forward to reviewing the changes in the next audit.

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STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: February 17, 2017 **AT (OFFICE):** NHPUC

FROM: Anthony Leone, Examiner

SUBJECT: Unitil Energy Systems, Inc.

DE 14-216 – 2015 CORE FINAL Audit Report

TO: Tom Frantz, Director, Electric Division, NHPUC

Les Stachow, Assistant Director, Electric Division, NHPUC Jim Cunningham, Analyst IV, Electric Division, NHPUC

Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2015. The four participating electric utilities, Unitil Energy Systems, Inc. (Unitil or UES), Eversource Energy (Eversource), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and Energy North filed a joint petition for the program year 2015. Each utility was audited individually.

Audit thanks Karen Daniell, Travis Cilley and the Energy Efficiency Group staff at Unitil for their assistance during the audit process.

Approved 2015 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/12/2014 for the program years 2015 through 2016 and a joint Settlement Agreement on 12/11/2014. The Commission then approved the 2015 programs by Order #25,747 on 12/31/2014. As found in the joint Settlement Agreement filed 12/11/2014, the UES programs for calendar year 2015 were approved as follows:

Residential Whole House Programs

Home Energy Assistance - weatherization program (HEA) Home Performance with Energy Star – weatherization program (HPwES) Energy Star Homes – New Construction (ESH)

Residential Energy Star Products - Lighting & Appliances

Commercial and Industrial

Large Business Energy Solutions Program Small Business Energy Solutions Program

Municipal Program

Educational Programs
Energy Code training
Commercial Energy Auditing Class
C&I Customer Education
Energy Education for Students
Home Energy Ratings for New Builders

In addition, Unitil offered the following programs:

- 1- Combined Heat and Power Pilot measure (CHP or Pilot) for the Commercial, Industrial and Municipal customers only.
- 2- Third Party Finance Pilot. In this program HPwES measures installed are financed through a third party bank and the only use of Energy Efficiency funds is to buy down the interest rate on the loan from the current lender's rate to 2%.
- 3- On bill financing- UES will continue to use the revolving loan fund to provide loans that pay for installed measures and recoup that cost from additional billings on customer statements.

Significant Updates for 2015

Attachment M of the Settlement Agreement contains a summary of material changes; however some of the most significant material changes are listed below.

According to the change in NH RSA 125-O:23 enacted by SB 268, Regional Greenhouse Gas Initiative (RGGI) funds are to be used for the following programs: Low Income Weatherization first, then the Municipal Programs, then to an all fuels, comprehensive program.

Further, the Joint Settlement agreement increased the overall funding to the Low Income Weatherization program from 15% to 15.5% of the overall SBC budget.

Mid-Year Adjustments

On September 25, 2014 the NH PUC received a letter from UES requesting to transfer funds between programs within the Residential sector. Specifically, UES requested to transfer a total of \$60,000 to the HPwES program from the EnergyStar Products program.

Program Activity

2015 Carry Forward Balance

The reconciliation of program year activity to the general ledger year end posting was noted in the June 2016 Performance Incentive Filing (Filing). According to the Filing for program year 2015, the ending balance was an over-collection of \$993,937.

2014 Ending Balance- Over Collection	\$ 803,932
2014 PI True-Up	\$ 44,253
2015 Beginning Balance - Over Collection	\$ 848,186
SBC Funding	\$ 2,185,706
FCM Revenue	\$ 284,289
RGGI Proceeds	\$ 277,410
2015 Cumulative Interest	\$ 32,067
Actual Collections	\$ 2,779,472
Program Expenses**	\$ (2,411,322)
2015 Est. Performance Incentive	\$ (222,399)
Actual Expenses	\$ (2,633,721)
Carry-forward Balance- 2015 Over Collection	\$ 993,937
**Includes ISO Expenses of \$21,900	u zau

The 2015 ending over-collection was verified to the following Energy Efficiency (EE) Residential and Commercial & Industrial General Ledger (GL) Balance Sheet accounts noted below without exception. In the Reconciliation on page 8 of the Shareholder Incentive Filing, UES has included the actual PI resulting in a reduction to the over-collected balance of \$(3,206) and a final ending over-collected balance of \$990,731. Any true-up entry would not be made until the conclusion of this audit and therefore is not reflected in the current GL totals.

GL Account #	2014	2015
10-20-00-00-173-13-01 Residential Non-Low Income	\$(411,941)	\$(337,745)
10-20-00-00-173-13-02 Residential Low Income	\$ (94,633)	\$ (65,704)
10-20-00-00-173-13-03 Commercial and Industrial	\$(341,611)	\$ (590,488)
Net Over-collection per General Ledger	\$ (848,185)	\$ (993,937)

*Numbers in "()" represent an over-collection.

Quarterly Filings

Audit verified the rolling over/under calculations of balances, revenues, expenses, and interest at 3.25% to the monthly reports filed with the Commission. Audit verified each quarterly summary and identified immaterial rounding variances; there were no material exceptions noted.

Budgeted vs. Actual Performance

According to the Order and found in the Filing, the Utilities shall not exceed 5% of their prescribed budget by sector without Commission approval. The table below details the Actual

amounts of expenses vs. the Budgeted figures as found in the 2015 Joint Settlement Agreement and the 4th Quarter 2015 Report submitted by PSNH d/b/a Eversource Energy.

	R	esidential							C&I	
		Budgeted		Actual	Variance		APA GARAGEMAN	Budgeted	Actual	Variance
EnergyStar Homes	\$	175,000	\$	180,414	103%		Large Business	\$792,418	\$526,131	66%
EnergyStar Products**	\$	305,000	\$	334,786	110%		Small Business	\$500,000	\$471,603	94%
HPWES	\$	382,990	\$	316,629	83%		Municipal	\$222,574	\$142,709	64%
HEA	\$	459,624	\$	389,541	85%		C&I Education	\$63,936	\$14,624	23%
Edu & Codes	\$	62,776	\$	32,792	52%			\$1,578,928	\$63,936 \$14,624 \$1,578,928 \$1,155,067	73%
	\$	1,385,390	\$1	,254,162	91%	4175				

**The budget figures in	clu	de the \$60,0	000 r	nid-year	transfer					

Home Energy Assistance Budget

The Home Energy Assistance (HEA) Core program is designed to provide weatherization services to qualifying customers in the State of NH at no charge to the customer. This is accomplished by reducing and managing their energy usage through the weatherization services and providing specific energy efficient appliances where necessary and appropriate. The HEA budget is set at a minimum percentage from at least two different funding sources. The first source of funding is set within the Settlement Agreement at a percentage of the estimated total Core expenses for the calendar year, and the second source is at least 15% of the RGGI Auction Proceeds per NH RSA 125-O:23. In order to meet these funding requirements, the Joint Settlement Agreement stipulates 15.5% of the Core budgets are reserved for the HEA programs, inclusive of the estimated RGGI Proceeds. According to the Settlement Agreement, UES' 2015 estimated expenses were \$2,965,320 including the spending of the estimated RGGI Proceeds of \$294,860. Therefore the 2015 HEA budget would be:

The total reported expenses relating to the HEA program were \$389,541 or 13% of the total budget of \$2,965,320.

Program Funding

The CORE program is comprised of funding from the Energy Efficiency portion of the System Benefits Charge (SBC), a portion of the Regional Greenhouse Gas Initiative (RGGI) Auction Proceeds (Proceeds), the Forward Capacity Market (FCM) revenue and expenses, and interest on the CORE activity over/under collected balance. The 2015 program funding actual totals mentioned above were verified to the Unitil GL and PUC Business Office records.

SBC

The total kWh sales for the first 9 months of 2015 of 943,951,002 reported by Unitil in their Accounting Model spreadsheet was verified to the Capital and Seacoast divisions' kWh sales reports in the Energy Assistance Program (EAP) Audit also performed by the Commission.

Audit tested the revenue from these reported kWh sales and the corresponding Core revenue reported by UES for the first 9 months and found the revenue calculated properly. Specifically, a variance of \$118 was found but is not considered significant or material to warrant a refile or an adjustment. The Revenue is then recorded in proper GL accounts 10.29.01.21.44x.xx.xx.

RGGI Quarterly Auction Proceeds

Pursuant to House Bill 1490, passed into NH Law on June 23, 2012, a portion of the RGGI Auction Proceeds (Auction Proceeds/ Proceeds) was to be combined with the SBC Funded Energy Efficiency programs administered by the Core Electric Utilities. Further, according to SB268, and codified in NH RSA 125-O:23, the RGGI auction proceeds that are directed to the Core Energy Efficiency Programs were specifically directed over the following three programs in this order:

- 1- At least 15% to the Low Income weatherization program;
- 2- Up to \$2,000,000 Annually to Municipal and Local Government energy efficiency projects, this amount will roll over and accumulate until May of program year 2017 when, meeting certain requirements, the unused portions (if available) of the funds may be released to other C&I customers.
- 3- The remainder to an All Fuels, comprehensive energy efficiency program administered by qualified parties which may include electric distribution companies as selected through a competitive bid process.

According to PUC Business Office information, for 2015, Unitil was awarded \$300,078 from the Quarterly RGGI Auctions but was only paid \$277,410 during the year due to the timing of the receipt of the funds. Therefore UES has indicated the 4TH quarter 2015 payment of \$33,661 will be recorded as a funding source for 2016. The remaining three auction proceed amounts received during 2015 were \$84,523, \$83,972, and \$108,915.

As found in the PUC Audit report for the 2015 RGGI Program, the PUC issued an RFP to administer the C&I portion of the All Fuels program as stated in item #3 above. That RFP resulted in a \$1.2 million grant approved by the Governor and Council effective with the 2016 program year. NH Electric Utilities, jointly, with Eversource Energy designated the administrator, were the winner of the bid to administer the All-fuels program; the grant runs for 2016, 2017 and 2018. The \$1.2 million is the total funding over the three years, with an estimated \$400,000 per year.

UES, like all four of the electric utilities in the State of NH received a "Supplemental Payment" in April 2015. This supplemental payment was noted as being each electric utility's portion of the \$100,000 that was withheld from the March 2015 auction proceeds that was to be allocated to the various electric utilities for use in the All-fuels program as recorded in the NH RSA. The UES portion of that amount was an additional \$10,994. Audit notes that the payouts were made due to the contract for the All-fuels program was not in place therefore leaving each

utility to hold the funds until the contract was in place. The All-fuels program was not scheduled to begin until program year 2016.

As discussed above, starting with the 2014 RGGI Auction Proceeds, up to \$2 million of the Quarterly RGGI Auction Proceeds shall be set aside for municipal and local government energy efficiency projects, including projects by local governments that have their own municipal utilities. As found in the Joint Settlement Agreement for 2015, page 54, the forecasted 2015 RGGI Auction proceeds were \$2.641 million. Out of that amount, \$2.15 million was set aside as the municipal portion. In order to ensure the municipalities had access to the full \$2 Million, an additional \$.15 million was included to mirror the estimated PI earned by the electric utilities on the SBC funds. The RGGI money was divided between the four electric utilities and municipalities that have their own electric utilities based upon gross 2013 kWh sales figures as filed with the PUC.

According to UES, the 2014 Municipal portion of their RGGI Auction Proceeds was \$279,227, but this figure adds in a portion of the 4th Quarter 2013 proceeds. The 4th Quarter 2013 proceeds should have been assigned to all programs rather than just the Low Income, Municipal and All-Fuels Programs. According to page 59 of the 2014 Joint Settlement Agreement, UES' allocation of the 2014 Quarterly RGGI Auction Funds is \$220,748. The allocation is important to follow since NH RSA 125-O:23 specifically states that **up to** \$2 million shall be appropriated from the Quarterly Auction Proceeds. In order to ensure that NH Law is followed, the NH Electric Utilities are not allowed to spend more than their specific appropriation; in this case UES was appropriated no more than \$220,748 with any unused portion rolling into the 2015 year.

Supported by PUC Business Office records, the following table looks back at the actual amount of Quarterly RGGI Auctions proceeds as awarded on a calendar basis (regardless of when the proceeds were received); the actual amount of money spent on the program; any PI taken and the roll-over amounts. Audit notes that in 2014, any PI earned on the spent RGGI Funds was deducted from the overall SBC monies as evidenced by the Shareholder Performance Incentive Filings. In 2015, to mirror the SBC, an estimated 7.5% PI was added into the \$2 Million to ensure the Municipal projects could fully utilize the \$2 Million. Lastly, the roll-over amounts in the table reflect only the 7.5% estimated PI and not the actual PI earned by any of the electric utilities specifically; as attributing a specific portion of the PI to any one program rather than the sectors as a whole would not be feasible or a prudent use of the program's finite resources.

There were two points of facts in 2014. The first, Eversource set aside 7.5% of the roll-over to not overspend in 2015. Second, the NHEC made an error in their roll-over amount and are simply correcting the figure. Neither of these are an exception. Audit did not find any exceptions to the UES or Liberty PI amounts.

2014	PSNH			NHEC		E	UE	S	Totals		
Core Portion of 2014 Quarterly RGGI Auction Proceeds	\$ 2,085	5,156	\$	217,391	\$	243,685	\$	321,396	\$	2,867,629	
Municipal Portion of Core Qtrly RGGI Auction Proceeds	\$ 1,454	4,508	\$	157,407	\$	167,337	\$	220,748	\$	2,000,000	
Actual \$\$ Spent on Muni Program	\$ (1,08	1,378)	\$	(98,708)	\$	(168,932)	\$	(121,364)	\$	(1,470,382)	
Roll-Over w/o PI	\$ 373	3,130	\$	58,699	\$	(1,595)	\$	99,384	\$	529,618	
Performance Incentive on Roll-Over Only	\$ (26	5,032)	\$	(18,246)	\$	-	\$		\$	(44,278)	
Roll-Over w/ PI	\$ 347	7,098	\$	40,453	\$	(1,595)	\$	99,384	\$	485,340	
			-			······		E ANTEN		Danie	
2015	PSNH		NHEC		GS	SE .	UES		Totals		
Core Portion of 2015 Quarterly RGGI Auction Proceeds	\$ 1,983	3,624	\$	218,897	\$	226,916	\$	300,077	\$	2,729,514	
Municipal Portion of Core Qrtrly RGGI Auction Proceeds	\$ 1,559	9,070	\$	170,250	\$	181,410	\$	239,270	\$	2,150,000	
Total 2014 Roll-Over Amounts	\$ 34	7,098	\$	40,453	\$	(1,595)	\$	99,384	\$	485,340	
2015 Allocation & 2014 Rollover	\$ 1,90	6,168	\$	210,703	\$	179,815	\$	338,654	\$	2,635,340	
2015 Actual \$\$ Spent	\$ (1,79	8,133)	\$	(217,200)	\$	(157,291)	\$	(142,709)	\$	(2,315,333	
Roll-Over w/o PI	\$ 10	8,035	\$	(6,497)	\$	22,524	\$	195,945	\$	320,007	
Estimsted PI @ 7.5% of 2015 Allocation	\$ (11	6,930)	\$	(12,769)	\$	(13,606)	\$	(17,945)	\$	(161,250	
Roll-Over w/ PI	\$ (8	8,895)	\$	(19,266)	\$	8,918	\$	178,000	\$	158,757	

Forward Capacity Market

UES reflected \$284,289 in revenue and \$21,900 in expenses related to ISO activities. The FCM revenue was verified to the general ledger account 10-29-02-21-456-80-00 at \$284,289 and the FCM expenses were verified to the following general ledger accounts:

	GL Acc	ount #: 10-29	9-02-21-9	08-	
80-01	Residential Internal Admin	\$10,294	80-04	C&I Internal Admin	\$ 4,205
80-02	Residential External Admin	\$ 2,292	80-05	C&I External Admin	\$ 5,347
80-03	Residential Non-Admin	\$ (72)	80-06	C&I Non-Admin	\$ (167)
Total Residential		\$12,514		Total C&I	\$ 9,385
	Total FCM Expenses:	\$21.899			

Interest

The CORE interest rate used is the Federal Reserve's prime rate as of the first of the month for which interest is calculated. Audit verified the rate as set by the Federal Reserve at 3.25% for the entirety of 2015. The total interest reported for 2015 was net revenue of \$32,067, using the following interest formula:

Monthly Charge = (((((Beg Bal + End Bal)/2)*.0325)/365)*Actual # of days in month)

Program Expenses

Audit reviewed the quarterly reports as filed with the Commission and verified that the expenses in total for the calendar year agree with the Performance Incentive Package as well as the General Ledger accounts detailed in the tables below. The 2015 expenses have been divided

into the following groups for ease of tracking: Residential, Commercial & Industrial and ISO/Education. Additionally, each group was further broken down by expense class for greater transparency. Pictured below is a summary of those expenses incurred, sourced from the General Ledger of Unitil without the Performance Incentive. Any differences in program totals are due to rounding and are considered immaterial.

Total Program Expenses

Residential	C&I	ISO 8	Education	Pro	ogram total
\$1,223,008	\$1,140,445	\$	47,873	\$	2,411,326
Program Tota	al differs fron	n Filing	due to rou	ndir	ıg

Residential Expenses – by GL Acct #

				residen	CHO	WI LIAN	VI.	1000	<u> </u>	ODI	100	00 11									
2015 Residentia	Expenses in	1\$:			3	rd Party			31	rd Party	3	rd Party		Reg &		Prog					
	GL Acct #		Audits	Rebates		M&E		M&E	M	arketing	Admin		G	General		Admin		Total by			
GL Name	10-29-02		41	40	31			30		21		14		14		13		10		Program	
Res Lighting	21-908-28	\$		\$ 87,891	\$	3,057	\$	330	\$	6,941	\$	40,144	\$	14,182	\$	29,758	\$	182,303			
Res Low Income	21-908-41	\$	10,690	\$ 251,106	\$	6,452	\$	696	\$	1,250	\$	28,729	\$	30,384	\$	60,233	\$	389,540			
Res New Const	21-908-47	\$	36,480	\$ 101,664	\$	2,380	\$	257	\$		\$	4,996	\$	11,990	\$	22,648	\$	180,415			
Res Products	21-908-40	\$	•	\$ 97,240	\$	1,870	\$	187	\$	3,919	\$	31,895	\$	3,039	\$	14,334	\$	152,484			
Res Retrofit	21-908-26	\$	12,233	\$ 202,673	\$	4,257	\$	472	\$	1,637	\$	23,288	\$	20,453	\$	53,253	\$	318,266			
		Ś	59.403	\$ 740,574	Ś	18.016	Ś	1.942	Ś	13.747	Ś	129.052	\$	80.048	\$	180.226	\$	1.223.008			

Does not include the ISO or Education expenses.

Commercial & Industrial Expenses – by GL Acct #

2015 C&I Expe	nses in \$:			3rd Party		All	3rd Party	Reg & Gen	Prog	
	GL Acct #	Audits	Rebates	M&E	M&E	Mkting	Admin	& Eng Scvs	Admin	Total by
GL Name	10-29-02	41	40	31	30	21 & 20	14	13 & 11	10	Program
Large Const.	21-908-33	\$ -	\$ 396,558	\$ 8,189	\$ 770	\$ -	\$ 23,514	\$ 33,116	\$ 63,984	\$ 526,131
Small Const.	21-908-51	\$ 2,816	\$ 365,31	\$ 7,110	\$ 696	\$ -	\$ 4,655	\$ 29,939	\$ 61,072	\$ 471,603
Municipal	21-908-51	\$ 11,701	\$ 74,950	\$ 2,682	\$ 257	\$ 472	\$ 21,137	\$ 11,030	\$ 20,482	\$ 142,711
		\$ 14,517	\$ 836,82	\$ 17,981	\$ 1,723	\$ 472	\$ 49,306	\$ 74,085	\$145,538	\$1,140,445

Does not include the ISO or Education expenses.

Education and ISO

2015 Other /		Code	3rc	Party	3r	d Party	Reg &	3rc	Party	ISO	11-56/15
Shared Expenses		Training	Adr	min-C&I	Ad	min-Res	General	Ex	pense	Admin	Total by
GL Name	GL Account #	28		27		26	13		11	01 06	Program
Codes Education	10-29-02-21-908-43		\$	5,238	\$	16,757				Mar I	\$21,995
ISO Admin	10-29-02-21-908-80						noona and a second		No de la	\$21,899	\$21,899
Codes Tng/Website	10-29-02-21-908-48	\$ 2,439					\$1,082	\$	457		\$ 3,978
		\$ 2,439	\$	5,238	\$	16,757	\$1,082	\$	457	\$21,899	\$47,872

Expense Test Summary

Audit requested and reviewed 22 invoices totaling \$567,070 or 24% of total expenses. Selected invoices are discussed below.

HPwES--10-29-02-21-908-26

The documentation submitted indicated Mill City Energy performed the following services at a condominium complex in Concord, NH: installed R38 Blown cellulose, seal and insulate duct work, and treat attic hatches and platforms.

The second invoice reviewed by Audit indicated Mill City Energy performed custom LED lighting and low flow device upgrades at a cost of \$30,540. UES then broke down the cost to \$26,197 of LED upgrade costs, \$738 of low flow upgrade costs and \$3,605 Administration fee to Mill City.

HEA--10-29-02-21-908-41

The documentation indicated the Community Action Program for Belknap & Merrimack Counties Inc. sought reimbursement for costs related to removing and replacing a furnace in a mobile home. The cost of the services and the reimbursement was \$2,795.54. Removing and replacing heating systems is an authorized procedure under this program and conducted when necessary to provide energy efficiency and lower the overall energy use of the home owner.

The second invoice reviewed by Audit was paid to Southern NH Services in the amount of \$61,167.45. UES provided a list of customers with the cost per customer. UES also broke down the cost between Audits, Rebates and Admin Fees. No exceptions noted.

EnergyStar Products (formerly Residential Appliances) – 10-29-02-21-908-40

The documentation indicated that Unitil contracted with EFI (Energy Federation Inc.) to process mail-in rebates. The invoice from EFI detailed the amount of mail-in rebates, specific processing fees based on the appliance being rebated and the cost of the rebate per appliance. Unitil also submitted customer lists verifying the eligibility of the location of the customer. In this case, the cost of the invoice, \$9,303 was split between the Rebates and Services expense (code 40), \$9,135, and the 3rd Party Admin expense (code 14), \$168. EFI is used by multiple utilities in the State of NH.

EnergyStar Products (formerly Residential Lighting)--10-29-02-21-908-28

The documentation indicated the vendor Energy Federation, Inc. performed fulfillment and processing work of lighting and lighting equipment rebates under the Lighting program, a subset of the EnergyStar Products Program, for customers of Unitil during the month of September 2015. The vendor bill totaled \$5,697.96 and Unitil further broke down the cost between the Rebate (908-28-40) and 3rd Party Administration (908-28-14) expense codes. The

invoice was further marked as "NH Home Depot Mrkdwn". Audit reviewed one other invoice from EFI for December 2015.

EnergyStar Homes -10-29-02-21-908-47

The documentation submitted indicated a contractor had recently completed the construction of new condominiums in Bow, NH. Specifically, 16 units were constructed that met the HERS rating that was projected for each project. The rebate for each unit was \$2,375 or \$2,475 and the total check was \$38,400. The invoice indicates the rebate was paid to the contractor care of CATCH (Concord Area Trust for Community Housing). The calculation for the rebate indicated each unit had an EnergyStar Refrigerator, Dish Washer, Qualifying Fixtures (lighting and water) and base rebate for a final HERS Rating below the threshold of 65.

The second invoice indicated a company completed construction of condominiums with multiple energy efficiency measures. UES provided information that 39 units were completed with various measures that amounted to a calculated rebate of \$60,450. However, since the rebate is capped at \$1,000 per unit, the total rebate paid was \$39,000.

Residential Codes Education – 10-22-02-21-908-43

The documentation provided indicated Unitil contracted with Culver Company to facilitate a school outreach program. This program included renewal of e-SMARTkids website, and streaming video license for one year. In addition, the contract stated additional services such as developing a list of schools and teachers (to contact), design, produce, and deliver to educators an offer of free safety educational materials for use in classrooms, fulfill those requests, track the progress of the program and provide a final audit-ready program summary. The invoice submitted was \$3,123.75 and was part of a larger invoice billed to Unitil. UES paid a total of \$6,821 of the \$51,500 contracted for the Outreach Program. This invoice was also reviewed as part of the Northern Utilities 2015 Core Audit with no exceptions.

Small Commercial Retrofit--10-29-02-21-908-51

The first invoice indicated the vendor; Prism Energy Services performed various energy efficiency measures at small businesses within the Unitil electric territory. Most of the installations indicated Prism installed LEDs or other energy efficiency lights, dimmers, sensors and lighting controls at multiple businesses. Each line item was supported by the measures installed and the cost.

A second invoice reviewed was paid to R&T Electric of Concord, NH. The information supplied indicated various LED and fixtures were installed at Ross Express in Boscawen, NH. A quote was provided with the documentation to support the cost and the electrical savings. The total cost was quoted at \$36,287 and a rebate of 50% or \$18,143.50.

Large Commercial --10-29-02-21-908-52

The first invoice indicated a rebate was paid to U.S. Foods in the amount of \$165,000. The information indicated a new refrigerated warehouse was constructed at their Seabrook, NH

facility and a new refrigeration system and controls were installed in that new warehouse. The Energy Efficiency Rebate form indicated a total estimated project cost of over \$1 Million.

A second invoice reviewed was for the North Atlantic Hockey Group and their Exeter, NH facility. The information indicated a contractor installed new energy efficiency lighting systems at an initial cost of \$90,657 and with a rebate of \$27,240 or 30%.

A third invoice was reviewed by Audit, paid to Methuen Construction for installation of energy efficiency lighting. The quote provided indicates the estimated cost of \$55,900 with a rebate of \$11,900 or 21%. Additional information provided discussed the technical specifications of the efficiency of the LED lights and the estimated savings.

Municipal – 10-29-02-21-908-54

Audit reviewed one invoice with a rebate issued to the City of Concord, NH. The City installed new energy efficient lighting at the City Auditorium at a cost of \$104,893 and with a rebate of \$50,000 or 47%, the total cost to the City was \$54,893. Additional information supplied discussed the estimated kWh savings of the project, technical specifications of the lights and invoices from the installers.

The second invoice reviewed was for new lighting at various schools in SAU (School Administration Unit) #16, which covers various schools in the towns of Brentwood, Exeter, East Kingston, Kensington, Newfields, Stratham and Exeter Region Cooperative School Districts. UES provided a calculation for the estimated kWh savings per location and an overall lifetime savings for the towns. The total combined cost of the lights and associated measures was indicated as \$93,533 and a rebate of \$17,222.15 or 18% of the cost.

C&I Code Education – 10-29-02-21-908-43

Audit reviewed one invoice in the amount of \$446.99 paid to the NH Electric Cooperative. The invoice was labeled for "cost sharing for 2015 commercial workshops".

Performance Incentive for 2015

According to the Settlement Agreement, approved by the Commission by Order #25,189, dated 12/30/2010, a performance incentive based on the actual expenditures, rather than budgeted expenditures, was authorized. The 2015 earned incentive filed summed to \$225,605. The estimated incentive noted in the same report was \$222,399 with a true-up entry of \$3,206 scheduled to be booked to the program expenses in 2016 to account for the variance between the estimated and the actual earned figures. Audit recalculated the PI and noted no exceptions.

RGGI Revolving Loan Fund (RLF)

On August 19, 2009, a \$7,646,020 grant identified as Re-CORE was approved by the Governor and Council which among other things established the Revolving Loan Funds

administered by the Core Electric Utilities. Specifically, each utility initially received the following amount:

Total:	\$1	L,727,077
UES	\$	725,000
PSNH	\$	500,000
NHEC	\$	200,000
GSE	\$	302,077

Approved in the settlement Agreement covering the 2013/2014 CORE Programs, Unitil added \$115,000 to the available to loan balance. For additional information regarding the RGGI Re-CORE grant refer to the Final PUC Audit Report of the Re-CORE issued on June 24, 2011 or to the previous audit report.

The following table shows the annual RLF activity. As found in the 4th Quarter Report UES reports that as of 12/31/2015 \$1,140,217 had been loaned, \$513,641 had been repaid, resulting in \$229,131 available to lend. The specific consumer loan and loan repayment amounts were also verified to their specific GL Accounts as noted below the table.

Loan Activity	H	2015
Grants Received & Additions to Fund	\$	
Consumer Loans (net of buydowns)	\$	(54,567)
Loan Repayment (net of defaults)	\$	154,168
Consumer Loan Admin Costs	\$	-
Net Loan Activity per year (not cumulative)	\$	99,601

The Consumer Loans, net of buy-downs were verified to the following GL Accounts:

		\$ 54,567.00
10-29-02-44-908-43-22	RES RGGI RLF - LOAN - BUYDOWN	\$ 54,567.00
10-29-02-44-908-43-14	C&I RGGI RLF - LOAN - BUYDOWN	\$ Land I

The loan repayments, net of defaults, were verified to the following GL Accounts:

		\$ 154,168
10-29-02-44-456-02-01	LOAN PAYBACK - RGGI - CI	\$ 52,857
10-29-02-44-456-00-01	LOAN PAYBACK - RGGI - RES	\$ 101,311

The GL balance at 12/31/2015 was \$191,233 and Audit asked for a reconciliation to match the 4th quarter report balance of \$229,131. UES provided the reconciliation showing that accounting for the Net adjustment of \$37,906, the reported balance is correct.

	\$ 229,139
egis in the lateral file step in some microscope in some	\$ 37,906
Less: Unspent Admin Allocation	\$ (27,094)
Plus: Additional RGGI funds in EE model at 12/31/2015	\$ 65,000
	\$ 191,233
10.20.00.44.173.03.00 C&I	\$ 75,465
10.20.00.44.173.02.00 Residential Low Income	\$ (4,488)
10.20.00.44.173.01.00 Residential Non Low Income	\$120,256

Audit requested clarification about subtracting the unspent admin allocation and UES stated that, "The remaining ~\$27k was not actually spent and it will not get added to the available to lend balance next year. The ~\$41k [not pictured] represents the amount that was allocated to Admin. expense to cover costs incurred over the life of the loan fund [emphasis added]. It is not an annual budget amount. In terms of what was recorded, ~\$10k in 2010 and ~\$5k in 2011. We have not recorded any Admin. expenses over the past 4 years". In other words, the \$27,094 is held to the side to pay for loan administration costs as incurred rather than possible loans. Audit concurs with this treatment.

Third Party Financing Program

As found in the 4th Quarter Report filed by Eversource, UES bought down the interest rate on three projects. The total cost of the projects was \$28,823 with buy downs of \$1,637. Unitil started the year with \$20,000 and less the amount used had a remaining balance of \$18,363 as of 1/1/2016.

Audit requested the results of the current program, details regarding the lenders with whom the interest rate buy downs (IRB) were negotiated, loan limits, the number of customers, the amount of the loans, and the total of the IRB included as an expense in 2015. The IRB is paid in full, up front, and buys the interest rate down to 2% for the customer.

The Company indicated that the lenders do not report loan defaults. The Company provided a summary of the terms of the loans with the various banks and credit unions. These terms included the following general repayment schedule:

Loan Amount_	Maximum Repay	ment Term
\$1,000 up to \$2,000	for up to 2 years	(24 months)
\$2,001 up to \$4,000	for up to 3 years	(36 months)
\$4,001 up to \$6,000	for up to 4 years	(48 months)
\$6,001 up to \$9,000	for up to 5 years	(60 months)
\$9,001 up to \$12,000	for up to 6 years	(72 months)
\$12,001 up to \$15,000	for up to 7 years	(84 months)

Audit reviewed the buy down calculations submitted and verified the amount paid to the bank. Specifically, the amount is derived from the present value (PV) of the difference between

the lenders rate offered to the customer and 2%. Audit has included two examples showing the use of the PV and the resulting payment. It should be noted that use of the PV resulted in a smaller payment to the lender when compared to the simple difference. In one instance however the calculation was not correct and resulted in an overpayment of \$225.51 to the lender. Audit has already discussed the discrepancy with the Company which has indicated they will seek a refund of the overpayment. Audit Issue #1.

Interest Rat	е В	uy Dowr	ı C	alculati	ion
	Lenders Rate 2% Rate		% Rate	Difference	
Purchase Price	\$	10,633	\$	10,633	
Rebate	\$	4,000	\$	4,000	
Loan Amount	\$	6,633	\$	6,633	
Annual Rate	MAG	5.99%		2.00%	3.99%
Term of Loan (Months)		60		60	
Monthly Payment		\$128.20		\$116.26	\$11.94
Total of payments	9	7,692.22	\$1	5,975.70	\$716.52
	-			\$617.86	PV
Difference between PV	and	"Simple" I	Met	hods:	\$98.66

Interest Rate			_		
	Len	ders Rate	2	% Rate	Difference
Purchase Price	\$	10,180	\$	10,180	
Rebate	\$	4,000	\$	4,000	
Loan Amount	\$	6,180	\$	6,180	
Annual Rate		5.99%		2.00%	3.99%
Term of Loan (Months)		60		60	
Monthly Payment		\$119.45	,	108.32	\$11.13
Total of payments	!	\$7,166.88	\$6	,499.29	\$667.59
	-		-	\$575.66	PV
Difference between PV	and	"Simple"	Me	thods:	\$91.93

Audit Issue #1 Third Party Financing Program

Background

In order to facilitate greater participation in the Core Programs, the Utilities offer the chance for rate-payers to pay for the services and or products received with a loan from a local bank at 2%. The 2% is made possible by the Utility making a one-time payment to the lender to buy-down the interest rate to the reduced rate of 2%.

Issue

Unitil currently relies on the Lender to perform the calculation of the difference between the Lender's current rate and the 2% offered and submit that for payment. In one case, the calculation was not properly verified resulting in an over-payment to the bank in the amount of \$225.51. Unitil has already confirmed with Audit that the Lender would be issuing a refund to be credited back to the UES Core Program balance.

Audit Recommendation

Unitil must ensure that the loan buy-down calculation and subsequent payment is accurate so the true costs of the program can be recorded and the true cost effectiveness can be reported as part of the Annual Report prepared by all regulated Utilities taking part in the NH Core Programs.

Company Response

The Company has strengthened its review of lender calculations to ensure that the amount invoiced by the lender for interest subsidy is accurate.

Audit Comment

Audit appreciates the Company taking steps to ensure the accuracy of the financial transactions in question and looks forward to reviewing the results in the next audit.

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STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: February 17, 2017 **AT (OFFICE):** NHPUC

FROM: Anthony Leone, Examiner

SUBJECT: Public Service Company of New Hampshire d/b/a Eversource Energy

DE 14-216 - 2015 CORE **FINAL** Audit Report

TO: Tom Frantz, Director NH PUC Electric Division

Les Stachow, Assistant Director, NH PUC Electric Division

James Cunningham, NH PUC Analyst IV

Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2015. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service Company of New Hampshire d/b/a/ Eversource Energy (Eversource), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and EnergyNorth (ENG) filed a joint petition for the program years 2015 through 2016. Each utility was audited individually.

Audit appreciates the assistance of Tom Belair, Manager; Rhonda Bisson, Manager; Issa Ansara, Tracey Lengyel-Krechko, Senior Analyst; and Harold Altobello, Supervisor.

Approved 2015 Programs

The participating utilities submitted a joint Energy Efficiency Plan to the Commission on 9/12/2014 for the program years 2015 through 2016 and a Joint Settlement Agreement (JSA) on 12/11/2014. The Commission then approved the 2015 programs by Order #25,747 on 12/31/2014. The following summarize Eversource's 2015 energy efficiency programs:

Residential

Home Energy Assistance (HEA)
Home Performance with Energy Star (HPwES)
Energy Star Homes (includes Geothermal)
Energy Star Products
Home Energy Reports
Customer Engagement Platform

Commercial and Industrial
Large Business Energy Solutions
Small Business Energy Solutions
Municipal and Local Government
Educational
C&I RFP Energy Rewards
C&I Partnerships
Customer Engagement Platform
Smart Start

PSNH Changes Name to Eversource Energy

In February 2015, PSNH underwent a name change to Eversource Energy. The PSNH name has been kept in limited use only for historical information purposes where appropriate; all other references to PSNH have been updated to Eversource or Eversource Energy.

Significant Program Updates for 2015

Attachment M of the Settlement Agreement contains a summary of material changes; however some of the most significant material changes are listed below.

According to the change in NH RSA 125-O:23 enacted by SB 268, Regional Greenhouse Gas Initiative (RGGI) funds are to be used for the following programs: Low Income Weatherization first, then the Municipal Programs, then to an all fuels, comprehensive program.

Further, the Joint Settlement agreement increased the overall funding to the Low Income Weatherization program from 15% to 15.5% of the overall SBC budget.

Mid-Year Adjustments

On 9/11/2015 Order 25,812 authorized transfer of \$1,119,009 out of the \$1,255,828 left over from 2014 to the 2015 program year. Specifically, Eversource requested to carryover the remaining municipal funds of \$373,131 to the 2015 municipal year; \$300,663 to the HPwES Program, \$445,215 to the Small Business Program; and 15.5% of the funds, \$136,818, to the 2016 HEA. Due to the nature of these transactions, they are classified as budget increases rather than transfers and Eversource is not required to file a formal request based upon any certain percentage.

RGGI Revolving Loan Fund (RLF)

The following information was submitted by Eversource on page 24 in their 4th Qtr 2015 Energy Efficiency CORE Report and verified to the RGGI RLF Reconciliation provided by Eversource during the audit and the activity within general ledger account 242RG0 for both expenses and revenues. All activity was verified to the work order RLFRGGI and 06RRLF00 as appropriate. It should be noted that the "Loans in Process" were described by Eversource as customers who have been through the application process and have signed a contract to have work completed; but the work is either not complete, not initiated or not scheduled.

2015 Cumulative Loan Activity

Description	1	Amount
Grant Money received-RLF	\$	690,000
Consumer Loans (all years)	\$(1,408,744)
Loan Repayment (all years)	\$	815,348
Current Balance	\$	96,604
Loans in Process	\$	(22,500)
Available to Lend	\$	74,104

The RLF was part of a sustainable energy grant approved by the Governor and Council in August 2009. The original term of the grant was through June 30, 2010, with an approved extension to December 31, 2010. Specifically, of the \$7,016,982 grant received by the Utilities, \$1,728,000 was used to establish Revolving Loan Funds. Eversource was named as the general grantee, and as such, issued invoices for services to the Sustainable Energy Division and distributed allocated amounts to GSE, NHEC, and UES. Refer to the Final PUC Audit Report of the RE-CORE issued on June 24, 2011 for additional information. Eversource was initially granted \$500,000 and by Secretarial Letter added \$190,000 during the 2013 program year bringing it to \$690,000.

Customers are able to use the loan fund to pay for the customer portion of an energy efficiency measure completed in connection with the HPwES program. Loan amounts range from \$500 to \$7,500 (not to exceed the actual customer cost), with terms up to seven years. There is no interest or administrative fee charged, and the customer may repay the loan early without penalty. The repayment occurs through an additional charge on the customer's monthly electric bill.

Any implementation expenses associated with the RGGI RLF are minimal and post to the implementation activity within the Home Performance with Energy Star program. While the RLF is an ongoing funding source for customers, Eversource considers the RGGI grant and thus the RGGI (RE-CORE) work order closed. Audit concurs with this accounting treatment.

CORE Programs

Funding

The Core programs are funded through various sources, specifically, the SBC, a portion of the Quarterly RGGI Auction Proceeds, a portion of the Forward Capacity Payments to the Utility net of administrative expenses, and depending on the over/under balance of the Fund itself, interest.

(SBC) System Benefits Charge

The System Benefits Charge is the primary means of funding the Core Programs. In 2015, the rate was set at \$.0033 for every kWh sold where \$.0015 is appropriated to the Electric Assistance Program (EAP) and the remaining \$.0018 is directed to the Core Programs. Audit compared the gross kWh sales as found in the EAP Audit for first 9 months of 2015 and

compared them to the annual kWh sales provided by Eversource in their summary detail of Large Power Billings (LPB) Report "Current Monthly Summary of Delivery Service by Rate and Class" plus the C2 "Delivery Sales and Revenue by Class, Rate and Component" for reasonableness. Audit also tested the month of December and the Annual totals as found in the C2 and LPB Reports to the filed information as evidenced in the table below.

December Eversource SBC Fu	unding
December EAP KWH Sales	613,964,537
Core Funding Rate @ \$.0018/ kWh	\$ 0.0018
Calculated December Core Funding	\$ 1,105,136
Submitted December Core Funding	\$ 1,105,133

Annual Eversource SBC Fur	nding
Annual EAP KWH Sales	7,929,989,602
Core Funding Rate @ \$.0018/ kWh	\$ 0.0018
Calculated Annual Core Funding	\$14,273,981
Submitted December Core Funding	\$14,273,972

Forward Capacity Market

Audit reviewed the Eversource work order activity NHISO which reflected labor and overhead associated with the FCM, as well as annual certification.

2015 ISO In	formation
ISO Revenue	\$2,306,444
ISO Expenses	\$ (105,948)
Net Revenue	\$2,200,496

2015 RGGI Auction Proceeds

Eversource indicated they received a total of \$2,056,297 from the quarterly RGGI auctions. This figure matches records on file with the PUC Business Office and was verified to the Eversource accounts 242RG7CL, 242RG1QJ and 242RG0. Audit notes the \$558,732 listed below is a combination of the 1st quarter payment of \$486,059 and the supplemental payment of \$72,673. Due to the timing of the receipt of the funds from the dates of the auctions, the 2015 4th quarter payment of \$222,509 was substituted by the 2014 4th quarter payment of \$470,354 and therefore the GL recorded \$2,304,142 rather than the \$2,056,297 that was generated from the calendar year 2015 auctions.

2015 RGGI Auction	Proceeds
1st Quarter	\$558,732
2nd Quarter	\$555,084
3rd Quarter	\$719,971
4th Quarter	\$222,509
Total RGGI Proceeds	\$2,056,296

Interest

Interest of \$95,326 represents the combination of both the CORE and the 2% RSA 125-O set aside amounts of \$95,050 and \$276 respectively. Due to the Core Balance being overfunded, the Interest is added into the CORE as a funding source. Audit verified the interest rate used was the Federal Reserve's prime rate as of the first of the month for which interest is calculated which is also sent to all utilities by the Director of the Gas/Water Division of the NHPUC. The interest rate did not change throughout the calculated year from the 3.25% published. Specifically, Eversource uses the formula described below:

Monthly Charge = (((Beg Bal + End Bal/2)*.0325)/12)

2% Set-aside 125-O:5

NH RSA 125-O:25 sets forth the parameters allowing PSNH to utilize some of the SBC funds collected for the Core Program for energy efficiency improvements at PSNH owned facilities. As outlined in the NH RSA, PSNH filed their Report on the use of NH RSA 125-O:25 Funds on June 1, 2016. This report noted that \$591,540 had been transferred out and used for the Customer Engagement Platform (CEP) as approved and noted in the Joint Settlement Agreement for program years 2015 and 2016. As described in past Audit reports, there is a cap of \$600,000 on the set aside balance, over which any monies would be returned back to the CORE. There were no projects completed during the year but with the transfer of funds for use in the CEP, Eversource did add \$35,513 to the set aside balance.

\$600,000	2014 Ending Balance
\$35,513	2% Set Aside
\$-	Cost of Projects at PSNH Facilities
\$(591,540)	Transfer to 2015 & 2016 Core Programs
\$43,973	2015 Ending Balance

The funding is part of the net over collection, with a reconciling memo indicating what the reserve balance is. The general ledger reconciliation represents all net activity in the Conservation and Load Management programs, maintained in balance sheet account 254P90. Audit understands that any plant in service, funded through the RSA 125-O:5 reserve, will be considered as a Contribution in Aid of Construction.

Expenses

Budget vs Actual

The following information depicts the budgeted expenses vs the actual expenses as found in 4th Quarter 2015 Energy Efficiency CORE Report. The table includes the mid-year budget additions to the Municipal, HPwES and the HEA programs as discussed earlier. Audit notes that the "Actual" figures as presented in the 4th Quarter Report are rounded and may not represent to the dollar, the actual money spent in the program category.

Program	Budgeted		Actual	% of Goal
EnergyStar Homes	\$ 1,006,	619 \$	1,000,670	99%
EnergyStar Appliances	\$ 2,397,	437 \$	2,159,066	90%
HPwES	\$ 2,203,	269 \$	2,349,224	107%
HEA	\$ 2,661,	464 \$	2,602,622	98%
Customer Engagement	\$ 550,	270 \$	107,221	19%
Home Energy Reports	\$ 280,	402 \$	316,754	113%
Large Business	\$ 4,858,	387 \$	4,674,280	96%
Small Business	\$ 2,729,	373 \$	3,071,429	113%
Municipal	\$ 1,797,	394 \$	1,786,700	99%
Education	\$ 216,	829 \$	106,841	49%
C&I RFP	\$ 532,	143 \$	537,929	101%
C&I Partnerships	\$ 19,	856 \$		0%
Smart Start	\$ 52,	000 \$	35,493	68%
	\$19,305,	443 \$	18,748,229	97%

Performance Incentive

Eversource submitted their Revised Annual Report and Performance Incentive Calculation on June 1, 2016. That report included a calculation resulting in Eversource earning \$1,643,075, of which \$1,595,708 was booked in the 2015 year with the difference as a true-up entry after this report has been finalized. The Performance Incentive Calculation was recently revised in Order# 25,569 dated September 6, 2013. Among other items, the new calculation has a cap on each sector and allows the FCM expenses to be included as part of total incurred expenses. Audit verified that the total expenses included in the PI calculation do not include expenses associated with the Smart Start Loan Program which has its own PI calculation. Audit recalculated the PI using the numbers as presented in the Annual Report Filing and resulted in \$1,641,805, which was \$1,270 less than the submitted figure. After reviewing the excel spreadsheet used by Eversource, the Annual Filing, and discussion with Staff, the difference is caused by rounding. Specifically, the figures as presented in the Annual Report use a Benefit/Cost Ratio rounded to two places past the decimal. However, due to determinations by Staff that the PI should be as precise as possible, the excel spreadsheet formula used by Eversource contains a Benefit/Cost Ratio that is more than 2 decimal places. Therefore the figures as presented in the Annual Report will not equate to the submitted PI. No exceptions noted.

Program Expenses

A summary of the program expenses incurred by Eversource is found in the tables below. The last rows of each table details the % of total expenses for which each specific activity accounted. Following the table is a summary of the invoices reviewed for each program. Additionally, according to Eversource, some expenses are not recorded until as late as the following February due to invoices being received from projects that were completed before the year ended. Audit reviewed the GL Account 254P90 along with a reconciliation provided by Eversource that materially matched the expenses reported by Eversource in the Performance Incentive Filing.

			Residenti	al Programs				2 140 1
	Internal	External		Rebates	Internal			Total by
Program Name	Admin	Admin	Audits	& Services	Impl.	Marketing	M & E	Program
EnergyStar Lighting	\$ 26,251	\$ -	\$ -	\$ 821,380	\$ 30,062	\$ 24,156	\$ 24,482	\$ 926,331
EnergyStar Products	\$ 44,705	\$ -	\$ -	\$1,073,105	\$ 32,747	\$ 36,140	\$ 46,037	\$ 1,232,734
EnergyStar Homes	\$ 22,873	\$ -	\$ -	\$ 808,030	\$136,717	\$ 6,945	\$ 16,370	\$ 990,935
EnergyStar Geothermal	\$ 6,550	\$ -	\$ -	\$ -	\$ 470	\$ -	\$ 2,716	\$ 9,736
HEA	\$ 77,871	\$ -	\$ -	\$2,363,120	\$105,286	\$ -	\$ 56,346	\$ 2,602,623
CEP	\$ -	\$ -	\$ -	\$ 42,554	\$ 260	\$ -	\$ 74	\$ 42,888
HPWES	\$ 55,466	\$ 64	\$ -	\$2,008,923	\$211,232	\$ 3,470	\$ 70,069	\$ 2,349,224
Home Energy Reports	\$ 8,213	\$ -	\$ -	\$ 227,080	\$ 5,892	\$ -	\$ 75,569	\$ 316,754
Total	\$241,929	\$ 64	\$ -	\$7,344,192	\$522,666	\$ 70,711	\$291,663	\$ 8,471,225
Expenses as % of total Res	.: 3%	0%	0%	87%	6%	1%	3%	100%

		Com	mercial, Inc	dustrial & Mun	icipal			
	Internal	External		Rebates	Internal			Total by
Program Name	Admin	Admin	Audits	& Services	Impl.	Marketing	M&E	Program
C&I New	\$ 59,001	\$ -	\$ 74,148	\$ 1,598,264	\$ 228,090	\$ -	\$ 66,931	\$ 2,026,434
Large	\$ 88,423	\$ -	\$ 289,187	\$ 1,858,550	\$ 303,778	\$ 11,554	\$ 96,355	\$ 2,647,847
Small	\$ 70,281	\$ -	\$ 18,282	\$ 2,564,688	\$ 354,520	\$ 5,910	\$ 46,314	\$ 3,059,995
Municipal Solutions	\$ 44,030	\$ -	\$ 66,031	\$ 1,628,881	\$ 41,365	\$ 5,054	\$ 12,773	\$ 1,798,134
Education Programs	\$ -	\$ -	\$ -	\$.86,267	\$ 19,057	\$ -	\$ 1,518	\$ 106,842
C&I RFP Pilot	\$ 16,167	\$ -	\$ 27,244	\$ 463,934	\$ 16,503	\$ 287	\$ 13,794	\$ 537,929
Customer Partnerships	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Smart Start*	\$ -	\$ -	\$ -	\$ -	\$ 35,493	\$ -	\$ -	\$ 43,266
CEP	\$ -	\$ -	\$ -	\$ 63,831	\$ 390	\$ -	\$ 111	\$ 64,332
Total	\$277,902	\$ -	\$474,892	\$ 8,264,415	\$ 999,196	\$ 22,805	\$237,796	\$10,284,779
Expenes as % of total C&I:	3%	0%	5%	80%	10%	0%	2%	100%

^{*}The Smart Start program incurred bad debt of \$(38,867) and repayments of \$46,640, adding a NET \$7,773 to the \$35,493 of Internal Implementation Expenses incurred.

Total C&I	\$277,902	\$ -	\$474,892	\$ 8,264,415	\$ 999,196	\$ 22,805	\$237,796	\$10,284,779
Total Res.	\$ 241,929	\$ 64	\$ -	\$ 7,344,192	\$ 522,666	\$ 70,711	\$291,663	\$ 8,471,225
Total Res. and C&I	\$519,831	\$ 64	\$474.892	\$ 15,608,607	\$ 1.521.862	\$ 93.516	\$ 529,459	\$ 18,756,004

Audit notes the total of the above tables, \$18,756,000 is not materially different than the expenses for the same programs as found in the 4th Quarter report submitted by Eversource. Additionally, since the 4th Quarter report does not contain final figures, it is prudent to have the final figures and the 4th Quarter figures vary.

Allocated and Direct Expenses

Eversource submitted documents indicating \$561,231 of expenses classified as Allocated Charges that were spread among the various Core programs. Eversource further indicated the Allocation Charges consist of group wide costs that are shared among all programs that cannot be easily tracked to any specific program such as management and supervision fees and membership fees. All Allocated Charges were booked to the Internal Administration category of the Core Expense listing and allocated using a table representative of each programs percentage of the overall Core budget.

Eversource also indicated they incurred \$1.8,194,772 of Direct Charges excluding the Net Smart Start loan payments and repayments. These charges were spread across all program activity expense listings according to the definitions included in the 2015/2016 Energy Efficiency Plan approved by the NHPUC.

In addition to the Outside Services and Fees and Payment component that makes up the bulk of the Direct Charges, there was also listed Labor and Labor Overhead. The combined Labor for all programs was \$1,313,345; the combined Labor Overhead was \$811,371; and the combination of the two was \$2,124,716.

Eversource has indicated that the Energy Efficiency "Core" Program is classified as a Corporate / Subsidiary classification for overhead (OH) purposes. The 2015 OH rates were 15.76% for Non-productive Time and 38.76% for Payroll Benefits.

Accounting for Costs

Audit notes that with certain programs, mainly the HEA, HPwES, and the EnergyStar Programs, the external administration costs and audit costs have been included in the Rebates and Services expense listing. Audit notes this because not all of the NH Electric Utilities group these costs in the Rebates and Services expense listing; rather they are broken out and listed in the External Administration expense listings.

Residential EnergyStar Lighting Program - \$1,449,718

As noted in the Filing this program will continue to increase the use and availability of energy efficient lighting products in New Hampshire. The program is open to all residential customers and will (1) offer rebates for interior and exterior ENERGY STAR labeled bulbs and fixtures, (2) promote the efficiency and environmental benefits of the latest lighting technologies, and (3) leverage the ENERGY STAR branding across three programs - Lighting, Homes, and Appliances.

Audit reviewed an invoice from Energy Federation, Inc. (EFI) concerning their relationship with the NH Home Depot Lighting Program. The invoice indicated Standard and Specialty CFL's and LED's. Each item had a specific quantity and rebate associated with it. The overall invoice also contained the .75% C.O.M. Fee and the 2.25% Track and Report Fee per the contract between EFI and Eversource. Of note is that EFI also handles mail in rebates for the

EnergyStar Appliance program and similar programs for at least one other NH Electric Utility. This allows the NH Electric Utilities to share and therefore lower the overall cost of the program.

Residential EnergyStar Appliance Program - \$1,815,516

Noted in the Filing is a description of the specific electric and gas rebates for itemized appliances. Rebates range from \$10 through \$1,500.

Audit reviewed an invoice from Jaco Environmental Services for services related to the EnergyStar Appliance program. This specific invoice was for units picked up and rebates for the month of July 2015. Jaco is a recycling company that picks up appliances, mainly refrigerators. In this case, they picked up 73 appliances and each had a \$30 incentive and \$90.50 implementation fee, for a total of \$8,796.50 for the month of July.

Residential EnergyStar Homes Program - \$976,955

As noted in the Filing, this program is fuel neutral designed to encourage homeowners and builders to build homes that are at least 15% more efficient than homes built to the 2009 International Energy Conservation Code (IECC). The program provides home builders with technical assistance, financial incentives, and instruction relating to compliance with Energy Star standards. New single family and multi-family projects are eligible, as are complete rehabilitations of existing structures. Project rebates are based on a sliding scale of Home Energy Rating System (HERS) results. The electric and gas utilities will coordinate to provide rebates for high efficiency gas HVAC equipment.

The first invoice reviewed indicated a new 36-unit housing complex was completed in Bedford, NH. The GDS report indicated the housing complex satisfied the requirements to be labeled as an EnergyStar home. The rebate calculation sheet indicated the facility qualified for the following rebates which were recalculated without exception:

36	Refrigerators	@ \$25 rebate	\$	900
36	Dishwashers	@ \$25 rebate=	\$	900
HERS	Index meeting and exceeding	@ \$800 rebate =	\$28	,800
		Total Rebate	\$30	,600

The second invoice reviewed was for a rebate on a new energy efficient home built in the State of NH. Eversource provided a worksheet detailing the EE measures installed, such as, EE Refrigerator, EE Clothes Washer, 17 EnergyStar lights and 2 EnergyStar Thermostats. In total the home qualified for a rebate of \$3,025. As required by the program parameters, a qualified third party, in this case GDS, performed and audit to ensure the building actually contained the EE measures and that it was a new structure that met or exceeded the targeted HERS Index for that home.

Residential Home Performance with EnergyStar (HPwES) - \$2,280,383

Noted in the Filing, regarding the HPwES program, the electric utilities will continue to provide fuel neutral weatherization services similar to those found in the HEA program. The HPwES program uses the same contractor billing rates in order to ensure contractor adherence to the established statewide rates.

The first invoice reviewed was paid to Newell & Crathern. The invoice was a direct print out from the OTTER system detailing the customer, and the costs associated with the measures installed. As per the HPwES guidelines, no project was over the \$4,000 limit. Because the invoices were from OTTER it is ensured that the measures installed adhere to the statewide established rates.

Residential Home Energy Assistance Program - \$2,805,621

Income qualified customers are eligible to receive up to \$8,000 for insulation, weatherization, cost effective appliance and lighting upgrades, appropriate health and safety measures and possible heating system replacement. Coordination between the Community Action Agencies and the participation of eligible customers enrolled in the SBC funded Electric Assistance Program helps to enroll the vulnerable population.

The Filing and Order indicate that 15.5% of the total budget, regardless of funding source, should be allocated to the HEA program. In addition, at least the first 15% of the Quarterly RGGI Auction Proceeds shall be reserved for the HEA Program. Based on the budgets presented in the Filing, including the mid-year addition of \$1,119,009 to the Core Program, the 15.5% threshold of all expenses comes to \$2,919,816. After reconciling the actual expenses for the 2015 Core Program, Eversource indicated they spent \$2,602,622 or 13.4% of the total budget on the HEA program which amounts to 89% of their goal for the HEA Program.

HEA Program	1
Total Budgeted Expenses	\$19,465,443
HEA @ 15%	\$ 2,919,816
HEA Additions	\$ -
Total Expected HEA	\$ -
Total Actual HEA	\$ 2,602,622
% of Goal	89%

As found on page 36 of the Settlement Agreement for the 2015 and 2016 program years approved by Order 25,747 on 12/31/2014, in order to maintain consistent pricing of the improvements for both the HPwES and the HEA programs, any vendor or energy service provider who performs work must do so at established statewide rates. These rates are established in a joint informal bidding process conducted every fall and Audit was informed that the result is an "all in" price the vendor would charge for the service being performed.

Concerning the availability of heating system replacements for HEA customers, Audit requested and Eversource provided this explanation about the tracking of those costs in the 2013 program year report which is still the policy today: "We do track the cost and energy savings in

OTTER. A heating system replacement is modelled in TREAT like any other measure and included in the OTTER measure package. Because the cost for the system is not supposed to fall under the rebate cap, the system gets listed as an "other funding measure" and invoiced separately outside of OTTER. There is no fixed price list for heating systems; each system is priced individually on a case by case basis based on the specific needs of the home."

Audit reviewed several invoices from various Community Action Agencies for compliance. Each invoice contained the standard Admin and Rebate fees and due to the fixed pricing of the measures found in the OTTER system, as long as the vendor uses the OTTER print-out as the invoice, the fees will be uniform across utility, vendor and customer throughout the state. There were no exceptions noted.

Large Business Energy Solutions Program - \$5,023,031

Noted in the Filing, this program is designed for electric customers with an average monthly maximum kilowatt (kW) demand of 200 kW. Program customers will receive rebates for new construction, major renovations, failed equipment replacement, and replacement of inefficient equipment. The program offers prescriptive and custom incentives for new construction and retrofit projects. Custom incentive amounts for new construction are the lesser of 75% of incremental costs or a one year payback; and for retrofit projects, the lesser of 35% or a one year payback. In this case incremental costs represent the difference of energy efficient equipment and non-energy efficient equipment.

The first invoice reviewed was for installation of a new chiller at the Brady Sullivan Plaza at 1000 Elm Street in Manchester, NH. Invoices from the installing vendor indicated a total cost of \$219,500. Additionally, Eversource's rebate sheet indicated an incremental cost of \$14,160 and a rebate of 75% of that cost or \$10,620. According to the Joint Settlement Agreement, new construction is eligible for up to 75% of the incremental cost of the project. No exceptions noted.

The second invoice reviewed was for construction and retrofit work done at the Craft Brew Alliance facility in Portsmouth, NH. Eversource provided a quote and the final invoices detailing the cost and the HVAC work that was performed at the facility. The total cost was billed at \$46,383 and the customer received a rebate of 35% or 16,234 per the settlement guidelines for retrofit work. No exceptions noted.

The third invoice was paid to Lindt Chocolate for the installation of new chillers at their Stratham, NH facility. Eversource provided the analysis which showed a base cost for the chillers at \$340,025 and as proposed using high efficiency equipment at \$626,002 for an incremental cost \$285,977. The rebate was therefore based upon this difference. Even though the project qualified for up to 75% off the incremental cost, the rebate was limited to \$150,000 as per the guidelines for Large C&I Rebates from the Joint Settlement Agreement. Audit also reviewed invoices and check stubs and rebate calculation sheets. No exceptions noted.

Small Business Energy Solutions Program - \$2,604,476

Noted within the Filing (pages 40-41) this program is designed for business customers using less than a twelve month average of 200kW. Similar to the Large Business Energy Solutions the program offers prescriptive and custom incentives for new construction and retrofit projects. Custom incentive amounts for new construction are the lesser of 75% of incremental costs or a one year payback, for retrofit projects, the lesser of 35% or a one year payback. Prescriptive incentives offer a fixed dollar amount per measure, independent of project costs. A third option, referred to as "turn-key", allows for up to a 50% rebate.

The first invoice reviewed indicated a business in Windham, NH installed new, high efficient lights at a cost of \$31,113 and the business was given a rebate of \$15,557 or 50%. Audit reviewed a quality control and project summary form that described the kWh savings and the paybacks. No exceptions noted.

The second invoice reviewed by Audit was for Rokon International for a lighting retrofit at their Rochester, NH facility. Eversource provided the invoice from the installing vendor and the total cost at \$20,258 and the rebate calculation form showing the resulting rebate of \$6,220 or 30%. Audit notes the 35% is a cap rather than a set amount, and the rebate may be any amount up to the cap depending on different factors of the project, the measurements installed, the base cost and the overall Core budget. No exceptions noted.

Municipal Program - \$1,081,378

As found on page 32 of the 2014 Filing, a Municipal program was offered to municipal and local government energy projects. The program targets municipal customers with new construction projects, major renovation projects, failed equipment that needs replacement and those operating aging, inefficient equipment and systems. Rebates vary depending on the type of project from 35% to 100% for schools.

The first invoice reviewed by Audit was a lighting upgrade installed at Central High School in Manchester, NH. The lighting rebate worksheet indicates the vendor installed 2,572 new lights and light fixtures. The total cost of the replacement was \$282,449 and a rebate of \$46,221 or 16% was awarded. After receiving the upgrade the customer co-pay for the project was funded through the Smart Start Program, whereby the school would repay the utility for the upgrades through on-bill financing at a cost no greater than the savings on a per bill basis. No exceptions noted.

The second invoice reviewed by Audit was a lighting, lighting fixture, controls, and television studio lighting upgrade installed at the Hudson Community TV station in Hudson, NH. The rebate worksheet indicated annual savings of approximately 50,937 kWh, and a 1-year payback of \$42,759. This amount was compared to the total cost of the replacement of \$48,196 and a rebate of \$36,147 or 75% was awarded. No exceptions noted.

Additionally, according to NH RSA 125-O:23-III-B, up to \$2 million of the annual RGGI Auction Proceeds shall be set aside for municipal and local government energy efficiency

projects, including projects by local governments that have their own municipal utilities. As found on Page 54 of the 2015/16 Energy Efficiency Plan for the 2015 Program year, the forecasted 2015 RGGI Auction proceeds were \$2.641 million. After accounting for administration expenses, \$2.15 million was set aside as the municipal portion. The \$.15 million, or 7.5% of \$2 million, was set aside to mirror the estimated Performance Incentive (PI) used with the SBC Funds. Specifically, Audit notes the PI calculation in the Joint Settlement Agreement uses the same 7.5% on the SBC and other funding sources, and once the actual PI is known a true-up entry accounts for the difference among the 7.5% and the actual earned %. The RGGI money was divided between the four electric utilities and municipalities that have their own electric utilities based upon the gross 2013 kWh sales figures as filed with the PUC. As can be seen in the table below, Eversource spent the entire 2015 Allocation and 2014 carry-over when using the actual PI rate of 8.16% as filed in the 2015 Annual Report rather than the estimated rate of 7.5%.

Supported by PUC Business Office records, the following table looks back at the actual amount of Quarterly RGGI Auctions proceeds as awarded on a calendar basis (regardless of when the proceeds were received); the actual amount of money spent on the program; any PI taken and the roll-over amounts. Audit notes that in 2014, any PI earned on the spent RGGI Funds was deducted from the overall SBC monies as evidenced by the Performance Incentive Filings. In 2015, to mirror the SBC, an estimated 7.5% PI was added into the \$2 Million to ensure the Municipal projects could fully utilize the \$2 Million. Lastly, the roll-over amounts in the table reflect only the 7.5% estimated PI and not the actual PI earned by any of the electric utilities specifically as attributing a specific portion of the PI to any one program rather than the sectors as a whole would not be feasible or a prudent use of the programs finite resources.

There were two points of facts in 2014. The first, Eversource set aside 7.5% of the roll-over to not overspend in 2015. Second, the NHEC made an error in their roll-over amount and are simply correcting the figure. Neither of these are an exception. Audit did not find any exceptions to the UES or Liberty PI amounts.

2014	PS	NH	N	HEC	GSI	E	UE	S	To	tals
Core Portion of 2014 Quarterly RGGI Auction Proceeds	\$	2,085,156	\$	217,391	\$	243,685	\$	321,396	\$	2,867,629
Municipal Portion of Core Qtrly RGGI Auction Proceeds	\$	1,454,508	\$	157,407	\$	167,337	\$	220,748	\$	2,000,000
Actual \$\$ Spent on Muni Program	\$	(1,081,378)	\$	(98,708)	\$	(168,932)	\$	(121,364)	\$	(1,470,382)
Roll-Over w/o PI	\$	373,130	\$	58,699	\$	(1,595)	\$	99,384	\$	529,618
Performance Incentive on Roll-Over Only	\$	(26,032)	\$	(18,246)	\$		\$		\$	(44,278)
Roll-Over w/ PI	\$	347,098	\$	40,453	\$	(1,595)	\$	99,384	\$	485,340
2015	D	SNH	N	HEC	GS	: E	11	ES	T	otals
Core Portion of 2015 Quarterly RGGI Auction Proceeds	-	1,983,624	-	218,897	\$	226,916		300,077	_	2,729,514
Municipal Portion of Core Ortrly RGGI Auction Proceeds	-			170,250	\$	181,410	}	239,270		2,150,000
Total 2014 Roll-Over Amounts	\$		\$		\$	(1,595)	\$		\$	485,340
2015 Allocation & 2014 Rollover	\$	1,906,168	_	210,703	\$	179,815	\$	338,654	\$	2,635,340
2015 Actual \$\$ Spent	\$	(1,798,133)	\$	(217,200)	\$	(157,291)	\$	(142,709)	\$	(2,315,333)
Roll-Over w/o Pl	\$	108,035	\$			22,524	-	195,945	\$	320,007
Estimsted PI @ 7.5% of 2015 Allocation	\$	(116,930)	\$	(12,769)	\$	(13,606)	\$	(17,945)	\$	(161,250)
							7		3 .	

Smart Start for Municipalities

NHEC and Eversource were authorized by Order #23,851 (issued 11/29/2001) to offer on-bill financing, presently referenced as Smart Start. Establishment of this \$2 million fund was originally through the SBC. NHEC currently offers the funding option to all commercial customers, while Eversource offers it to municipalities only. Audit notes that Eversource also has a different on-bill financing program for residential customers, the RGGI Revolving Loan Fund, RLF. Under both programs, the cost of the improvements are paid entirely by the Utility and the customer repays the Utility through on-bill financing payments calculated at no more than the monthly savings obtained. Details regarding the balances can be found on page 25 of the 4th Quarter report filed in docket DE 14-216. Eversource indicated they spent \$35,443 between Labor and Labor Overhead for the Smart Start Program. Additionally, Audit verified the 6% PI to the amount of loan payments received as seen in the table below.

Smart Start Loans 201	5 Only
Loan Repayments-2015	\$777,342
6% of Repayments	\$ 46,641
PSNH Filed smart Start PI	\$ 46,640
	\$ 1

General Ledger Year-end Balance

As noted in the shareholder incentive package, Attachment F page 7 of 7, the Eversource 2015 General Ledger Transactions vs. Energy Efficiency Program Transactions page reflects the general ledger activity:

Beginning balance \$2

\$2,083,665

Ending balance

\$ 362,322 for a net change during the year of \$(1,721,343)

Audit verified the reported beginning balance to the ending balance in the previous report. Audit also verified the reported ending balance to the December 2015 monthly reconciliation of account 254P90 and the proceeds from the 2015 quarterly RGGI auctions which are posted to account 242RG0.

Carry-forward Balance

The carry-forward balance represents the availability of funds at each utility with anticipated expenses that have not yet posted to the general ledger but which have already been "reserved" for future use, and are thus considered not available. The reconciliation of program year activity to the GL year end was noted in the Performance Incentive filing. Concerning the ending 2014 balance, On September 11, 2015, the Commission issued Order 25,812 approving the transfer of the entire balance of \$1,255,828 to the 2015 and 2016 Core Program years. Of that amount \$1,119,009 was moved to the 2015 Program year, with the remaining \$138,819 added to the 2016 HEA Program. The ending balance of \$0 agrees with the Eversource Filing.

Ending balance 2014 Audit report	\$ 1,255,828
2015 Funding:	
System Benefits Charge funding	\$14,273,972
Forward Capacity revenue	\$ 2,306,444
Forward Capacity expenses	\$ (105,948)
RGGI quarterly auction proceeds	\$ 2,056,297
CORE interest	\$ 95,050
RSA 125-O interest	\$ 276
RSA 125-O transfer	\$ 591,540
Total funding for program year 2015	\$19,217,631
2015 Expenses:	
CORE expenses January – December 2015	\$(18,794,870)
2015 estimated incentive	\$ (1,643,075)
Sub-total 2015 expenses	\$(20,437,945)
2015 use of 2% RSA 125-O set aside	\$ (35,513)
Total expenses for program year 2015	<u>\$(20,473,458)</u>
Net 2015 carry-forward balance	\$ -0-

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STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: February 24, 2017 AT (OFFICE): NHPUC

FROM:

Anthony Leone, Examiner

SUBJECT: New Hampshire Electric Cooperative (NHEC)

DE 14-216 - 2015 CORE FINAL Audit Report

TO:

Tom Frantz, Director NH PUC Electric Division

Les Stachow, Assistant Director, NH PUC Electric Division

James Cunningham, NH PUC Analyst IV

Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2015. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire (PSNH), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and Energy North (ENG) filed a joint petition for the program years 2015 through 2016. Each utility was audited individually.

Audit appreciates the assistance of Carol Woods, Energy Solutions Executive.

Approved 2015 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/12/2014 for the program years 2015 through 2016 and a joint Settlement Agreement on 12/11/2014. The Commission then approved the 2015 programs by Order #25,747 on 12/31/2014. As found in the Joint Settlement Agreement (JSA) filed 12/11/2014, the NHEC programs for calendar year 2015 were approved as follows:

Residential

Home Energy Assistance Program (HEA) Energy Star Homes Program-fuel neutral NH Home Performance with Energy Star Program (HPwES) Energy Star Products Program (Appliances & Lighting) Energy Efficiency Loan Program - Revolving Loan Fund

Commercial, Industrial and Municipal

Large Business Energy Solutions Program Small Business Energy Solutions Program

Municipal Program -see update below-Educational Programs Smart Start

Significant Program Updates for 2015

Attachment M of the Settlement Agreement contains a summary of material changes; however some of the most significant material changes are listed below.

According to the change in NH RSA 125-O:23 enacted by SB 268, Regional Greenhouse Gas Initiative (RGGI) funds are to be used for the following programs: Low Income Weatherization first, then the Municipal Programs, then to an all fuels, comprehensive program.

Further, the Joint Settlement agreement increased the overall funding to the Low Income Weatherization program from 15% to 15.5% of the overall SBC budget.

Mid-Year Adjustments

There were no mid-year adjustments during 2015.

RGGI Revolving Loan Fund

The RGGI Revolving Loan Fund (RLF) was established on August 19, 2009, by the Governor and Council. Known as the Re-CORE, \$1,728,000 was dedicated to establish the RLF. NHEC initially received \$200,000 and added \$100,000 for the 2013 program year, bringing the total funding of the RLF to \$300,000. During 2015 NHEC made the decision to write off one loan, lowering the overall balance of available funds to \$296,997.

Audit reviewed the NHEC activity within general ledger account #242.86 for both expenses and revenues. A reconciliation of the Loans System data within that GL Account was provided for the period ending 12/31/2015 detailed in the following table without exception.

Available to Lend 12/31/15	\$ (82,201)
Payments Received during 2015	\$ (84,681)
Loans made during 2015	\$ 55,320
Available to Lend 12/31/14	\$ (52,840)

SBC CORE Filing Summary

NHEC filed their Performance Incentive report on June 3, 2016. The filed 2015 beginning balance matches the filed 2014 ending balance. There were no audit issues in 2014 but during 2015 it became aware that the wrong amount of PI had been booked as discussed in the prior report. NHEC adjusted for this by adding back the incorrect PI as a funding source

(\$69,854) and subtracting the correct PI as an expense (\$159,125). Audit tied all relevant

balances to their equivalents in the GL.

2015 Beginning Balance	\$ 192,520
SBC Funding	\$ 1,369,339
FCM Revenue	\$ 56,511
RGGI Proceeds	\$ 227,017
2014 Incentive Correction	\$ 69,854
2015 Cumulative Interest	\$ 10,902
Actual Collections	\$ 1,733,623
Program Expenses	\$ (1,610,944)
2014 Performance Incentive	\$ (159,125)
2015 Performance Incentive	\$ (150,418)
Actual Expenses	\$ (1,920,487)
2015 Ending Balance	\$ 5,656

The filed and calculated ending over collected balance for the NHEC 2015 Core Programs was \$5,656. The amount reflected in the respective GL Account 254.40, was \$156,074. The difference from the GL ending balance and the Filed balance is \$150,418 due to NHEC not booking the PI until it this report is finalized.

Budget vs. Actual

According to the Order and found in the Filing, the Utilities shall not exceed 5% of their prescribed budget without Commission approval. The tables below detail the budgeted and actual expenses by sector as submitted to Audit. Overall, when factoring in the FCM/ISO expenses, NHEC was at 98% of their budget. However, the Residential sector as a whole was slightly over the 5% limit per the JSA mainly due to the variance in the Low Income Weatherization program.

RESIDENTIAL

	De	tail Total	Bu	dgeted	Variance	%
E-Star Homes	\$	99,070	\$	186,042	\$ 86,972	
E-Star Lighting	\$	191,792	\$	181,483	\$(10,309)	
E-Star Appliance	\$	119,142	\$	180,767	\$ 61,625	
HPwES	\$	281,646	\$	272,233	\$ (9,413)	
HEA	\$	313,005	\$	254,857	\$(58,148)	
Edu	\$	24,530	\$	30,500	\$ 5,970	
	\$1	1,029,185	\$1	1,105,882	\$ 76,697	107%

COMMERCIAL, INDUSTRIAL & MUNICIPAL

	De	tail Total	Bu	dgeted	Va	%	
Large Business	\$	172,179	\$	188,981	\$	16,802	
Small Business	\$	175,187	\$	170,507	\$	(4,680)	
Municipal	\$	217,200	\$	198,800	\$1	(18,400)	
Smart Start	\$	1,242	\$	5,000	\$	3,758	
	\$	565,808	\$	563,288	\$	(2,520)	100%

As required by the most recent JSA, 15.5% of the overall Core expenses in any one year must be used for the Low Income Weatherization Program (HEA). The table below verifies that NHEC actually spent 19% of the 2015 expenses on this program.

E	nergy Efficiency	Re	quired 15.5%	Actual HEA	Actual HEA			
	Expenses		of total	Expenses	%			
1	\$ 1,610,947	\$	249,696.79	\$ 313,005	19%			

Revenue

The total of the funding sources for the 2015 calendar year found in the Performance Incentive report were verified to the NHEC general ledger as presented in the following table:

Total Recognized Funding	\$:	\$1,733,623			
Interest	\$	10,902			
Incentive True-Up	\$	69,854			
FCM Revenue	\$	56,511			
RGGI Auction Proceeds	\$	227,017			
SBC Funds	\$:	\$1,369,339			

System Benefits Charge

KWH sales were verified to the information in the Energy Assistance Program (EAP) Audit performed by the Commission for the first nine months of 2015 as well as the unaudited kWh sold for the last 3 months of 2015. In the EAP Report, kWh sales are verified to revenue reports and GL verifications. SBC revenues were also verified to the SBC Reconciliation Report provided by NHEC and to the GL accounts associated with the Demand Side Management (DSM) listed in the following table. NHEC submitted a report to Audit that detailed kWh sales for 2015 totaling 760,915,990. The EAP reports contain a kWh sold of 760,861,431. When asked about the difference NHEC stated that the EAP Reports exclude the Group Net Metering (GNM) sales and the Core EE kWh reports include the GNM sales. Audit notes that the total difference in funding came to an immaterial \$99.

Sector	Account #	Туре	Amount				
Residential	44040	DSM Recovery	\$	839,623			
Commercial	44240	DSM Recovery	\$	223,358			
Industrial	44245	DSM Recovery	\$	156,324			
PG<1000kva	44241	DSM Recovery	\$	51,539			
PG>1000kva	44243	DSM Recovery	\$	47,376			
Ski	44244	DSM Recovery	\$	49,507			
Light	44415	DSM Recovery	\$	1,922			
Total	\$:	1,369,649					

2015 RGGI Auction Proceeds

According to the 2015 End of Year Reconciliation provided in the incentive package, the filed amount of 2015 Quarterly RGGI Auction Proceeds of \$227,017 includes all four quarters' payments of 2015 and the supplemental payment. Audit verified the quarterly payments reported by NHEC to the receipts and payments by the PUC Business Office.

FCM Revenue

Audit verified that the net amount of the FCM/ISO capacity payments of \$56,511 were recorded on the books of NHEC under Account 415.26 Activity Code 134.

Incentive True-Up

As discussed above, NHEC recorded the wrong 2014 PI in 2015, but corrected the issue by canceling out the incorrect PI and inserting the correct one. Audit has reviewed the transaction without exception.

Interest

Interest was properly calculated at 3.25% on the average monthly balance, including interest from the previous month. Specifically, NHEC uses the formula mentioned below. The rate was verified to the quarterly interest rate letters issued to all utilities by the Director of the NH PUC Gas/Water division.

Monthly Charge = (((Beg Bal + End Bal/2)*.0325)/365)*Actual # of days in month

Expenses

Performance Incentive

NHEC indicated they earned a Performance Incentive of \$150,418. This figure was based on total expenses of \$1,609,701. Audit verified the total Expenses included in the PI Calculation represent the total included in the Filing summary on page 3 of \$1,610,944 less \$1,242 incurred as part of the Smart Start program.

Indirect Expenses

Payroll related expenses were verified to the following general ledger accounts noted in the tables for 2015. Indirect payroll is spread among employees' assigned activity codes, and as the weekly timesheet database is updated, the indirect allocation is calculated using the hourly payroll rate divided by 2,080 hours, with the result applied to the number of hours input by the employee. Sick time is tied to activity codes and general ledger accounts and spread only as time is reported as used within the week. Audit noted no exceptions to the allocation methods and figures.

Indirec	t Payroll
Acct #	Amount
#24.416.35	\$216,751
Sick	Time
Acct #	Amount
#24.416.47	\$625
Taxes and	d Benefits
Acct #	Amount
#24.416.48	\$158,551
Total	\$375,927

Transportation charged to account #24.416.52 represents Internal Administrative transportation to such things as PUC meetings and hearings, and Account #24.416.54 represents Internal Implementation activities such as site visits. Each account can include mileage costs for Company or personal vehicle reimbursement. Company car usage includes an aggregated monthly cost for the vehicle (maintenance, registration, gas, depreciation, overhead for garage, etc.) which is then allocated based on miles driven. Personal vehicle use includes only mileage reimbursed at the IRS rate.

In addition, Audit reviewed the payroll activity for five employees. The payroll report showed a breakdown of the hours by employees and the labor amount. The report totaled 115.25 hours and \$4,588 in pay with no exceptions noted.

Expense Test Summary

NHEC tracks all SBC Core related expenses in the 24.416.xx GL account numbers and by a unique Activity Code. Activity Codes can be applied to multiple 24.416.xx accounts where appropriate. NHEC sent Excel Spreadsheets of the total expenses which Audit reviewed and verified as matching the total expenses filed with the Commission in the Performance Incentive report. Audit has included a review of selected invoices from the Excel Spreadsheet as well as a table sourced from the information submitted by NHEC to Audit.

Activity	Program	Internal	E	External	Se	ervices &	- Ir	nternal						
Code	Title	Admin	,	Admim	ı	Rebates		Impl.	M	arketing	Ev	aluation	De	tail Total
141	E-Star Homes	\$ 4,377	\$	5,987	\$	43,329	\$	44,117	\$	298	\$	962	\$	99,070
116	E-Star Lighting	\$ 8,974	\$	12,273	\$	105,974	\$	57,551	\$	5,048	\$	1,972	\$	191,792
140	E-Star Appliance	\$ 5,601	\$	7,661	\$	68,419	\$	34,289	\$	1,941	\$	1,231	\$	119,142
143	HPWES	\$ 13,607	\$	22,413	\$	178,199	\$	60,982	\$	925	\$	5,520	\$	281,646
117	HEA	\$ 15,925	\$	23,520	\$	239,361	\$	27,087	\$	1,083	\$	6,029	\$	313,005
129	Edu	\$ 1,209	\$	1,653	\$	18,061	\$	3,250	\$	91	\$	266	\$	24,530
128 & 149	Large Business	\$ 8,298	\$	11,350	\$	110,612	\$	31,046	\$	625	\$	10,248	\$	172,179
127 & 148	Small Business	\$ 8,084	\$	11,056	\$	102,586	\$	51,075	\$	609	\$	1,777	\$	175,187
120	Municipal	\$ 10,307	\$	14,097	\$	139,730	\$	48,525	\$	2,276	\$	2,265	\$	217,200
185	Smart Start	\$ 42	\$	58	\$	-	\$	1,130	\$	3	\$	9	\$	1,242
134	ISO/FCM	\$ 5,598	\$	7.5 h.	\$		\$		\$	-	\$	10,356	\$	15,954
		\$ 82,022	\$	110,068	\$	1,006,271	\$	359,052	\$	12,899	\$	40,635	\$:	1,610,947
		5%		7%		62%		22%		1%		3%		100%

Large Business Energy Solutions Program

Account #24.416.xx Activity Code #128 and 149 -- \$172,179

Noted in the filing this program is designed for electric customers having an average monthly maximum kilowatt (kW) demand of 200 kW or more over a twelve month period. Program customers will receive rebates for new construction, major renovations, failed equipment replacement, replacement of inefficient equipment. Rebate amounts for new construction are the lesser of 75% of incremental costs or a one year payback, and for retrofit projects, the lesser of 35% or a one year payback.

Audit reviewed one invoice to retrofit a lumber mill with energy efficient LED fixtures. The total cost of the project was \$76,696 with a rebate of \$15,000, or 19.5% of the total cost. The remaining cost of \$61,696 was financed through the Smart Start program offered by NHEC. The Smart Start financed portion was removed from account #416.19 on March 31, 2015 resulting in only the \$15,000 rebate portion being charged to this account. As stated in the Smart Start section, the funds used for the loan are NHEC funds and are not part of this Audit.

The second invoice reviewed was paid to Freudenberg for installing a new 100 ton air cooler chiller. The rebate total was \$5,772 with \$1,924 being the base rebate and \$3,848 being the max performance rebate based upon the final efficiency of the machine. All calculations used to determine the rebate amounts were reviewed by Audit with no exceptions.

Small Business Energy Solutions Program

Account #24.416.xx Activity Code #127 and 148 -- \$175,187

Noted within the filing this program is designed for electric customers having an average monthly maximum kilowatt (kW) demand less than 200 kW over a twelve-month period. Similar to the Large Business Energy Solutions program, this program is intended for new or retrofit projects. The rebate amount for new projects is the lesser of 75% of incremental costs or a one year payback and for retrofit projects is the lesser of 35% for electric customers or a one year payback. The program also has a "Turnkey Solution" as described in the Settlement Agreement that still must adhere to the above mentioned 75%/35% caps.

Audit reviewed an invoice from Sanborn Electric for a retrofit project at the Lodge at Lincoln Station. The common area and parking lots lighting was upgraded to energy efficient LED fixtures. The total project cost was \$49,210 with \$7,500 in incentives (\$6,000 for interior lighting and \$1,500 for exterior lighting) resulting in a total cost to the Station of \$41,710. This full amount was funded through the Smart Start program. Audit reviewed the general ledger and verified the \$41,710 was removed from account #416.19 and moved to the appropriate account on October 31, 2015. Account 416.19 is used for rebates and is the initial account where the rebate is recorded then moved to a non-Core funded account.

Municipal and Local Government Energy Program Account #24.416.xx Activity Code #120 -- \$217,200

According to the updated Filing, this program is available to all municipal and local government customers of the NH Electric Utilities and to the five communities in New Hampshire that have their own municipal utilities as they face barriers and unique challenges in implementing cost-effective energy efficiency measures.

The program targets municipal customers with new construction projects, major renovation projects, failed equipment that needs replacement and those operating aging, inefficient equipment and systems with varying levels of rebates available depending on different factors.

Audit reviewed one invoice paid to the Alton Central School for retrofitting their lighting system with a new energy efficient lighting system. The total cost from the installation vendor was \$78,463. The rebate issued by NHEC was \$15,000 bringing the cost to the school down to \$63,463. Documents in the file indicated the incremental cost, the cost of energy efficient lights over conventional lights at \$17,975. Under the Municipal program, schools are eligible for up to 100% of the incremental costs up to their incentive cap, and in this case the Alton school received 84% of the incremental cost as their rebate.

According to NH RSA 125-O:23-III (b), up to \$2 million from the Quarterly RGGI Auction proceeds shall be allocated to a Municipal program, with any unused amounts rolling over to the next year's budget. This shall remain in effect for program years 2014, 2015, 2016 and beginning in 2017 the funds may be used for other C&I purposes after a set period of time.

Supported by PUC Business Office records, the following table looks back at the actual amount of Quarterly RGGI Auctions proceeds as awarded on a calendar basis (regardless of when the proceeds were received); the actual amount of money spent on the program; any PI taken and the roll-over amounts. Audit notes that in 2014, any PI earned on the spent RGGI Funds was deducted from the overall SBC monies as evidenced by the Shareholder Performance Incentive Filings. In 2015, to mirror the SBC, an estimated 7.5% PI was added into the \$2 Million to ensure the Municipal projects could fully utilize the \$2 Million. Lastly, the roll-over amounts in the table reflect only the 7.5% estimated PI and not the actual PI earned by any of the electric utilities specifically as attributing a specific portion of the PI to any one program rather than the sectors as a whole would not be feasible or a prudent use of the programs finite resources.

2014	PS	NH	NI	HEC	GS	E	UE	S	To	tals
Core Portion of 2014 Quarterly RGGI Auction Proceeds	\$	2,085,156	\$	217,391	\$	243,685	\$	321,396	\$	2,867,629
Municipal Portion of Core Qtrly RGGI Auction Proceeds	\$	1,454,508	\$	157,407	\$	167,337	\$	220,748	\$	2,000,000
Actual \$\$ Spent on Muni Program	\$	(1,081,378)	\$	(98,708)	\$	(168,932)	\$	(121, 364)	\$	(1,470,382)
Roll-Over w/o Pl	\$	373,130	\$	58,699	\$	(1,595)	\$	99,384	\$	529,618
Performance Incentive on Roll-Over Only	\$	(26,032)	\$	(18,246)	\$	-	\$		\$	(44,278)
Roll-Over w/ Pl	\$	347,098	\$	40,453	\$	(1,595)	\$	99,384	\$	485,340
		Second.						and Seri		yrkinin
2015	PS	PSNH		HEC	G	SE	UES		T	otals
Core Portion of 2015 Quarterly RGGI Auction Proceeds	\$	1,983,624	\$	218,897	\$	226,916	\$	300,077	\$	2,729,514
Municipal Portion of Core Ortrly RGGI Auction Proceeds	\$	1,559,070	\$	170,250	\$	181,410	\$	239,270	\$	2,150,000
Total 2014 Roll-Over Amounts	\$	347,098	\$	40,453	\$	(1,595)	\$	99,384	\$	485,340
2015 Allocation & 2014 Rollover	\$	1,906,168	\$	210,703	\$	179,815	\$	338,654	\$	2,635,340
2015 Actual \$\$ Spent	\$	(1,798,133)	\$	(217,200)	\$	(157,291)	\$	(142,709)	\$	(2,315,333)
Roll-Over w/o PI	\$	108,035	\$	(6,497)	\$	22,524	\$	195,945	\$	320,007
Estimsted PI @ 7.5% of 2015 Allocation	\$	(116,930)	\$	(12,769)	\$	(13,606)	\$	(17,945)	\$	(161,250)
Roll-Over w/ PI	\$	(8,895)	\$	(19,266)	\$	8,918	\$	178,000	\$	158,757

Residential Energy Star Homes Program

Account #24.416.xx Activity Code #141 -- \$99,070

As noted in the filing, The ENERGY STAR Homes Program is designed to be a market driven program, encouraging both builders and homebuyers to build new homes with energy efficiency in mind. It is aligned with a national effort developed by the U.S. Environmental Protection Agency (EPA). Incentives are provided in the form of rebates and services to partially offset the increased cost of building a home to higher energy efficiency standards using the Home Energy Rating System (HERS) and the energy efficient lighting, appliances and HVAC equipment installed.

The first invoice reviewed indicated a new home was built in Woodstock, NH according to the EnergyStar 3.0 Specification. The documents included the rebate calculation showing the HERS final rating of 44 and supporting documentation about the energy efficient materials and products used to achieve that rating. The incentive was calculated by meeting the minimum HERS index of 60 (\$1,000) and then adding \$100 for each point below that threshold 60 - 44 = 16 * 100 = \$1,600). In addition, the homeowner was given rebates for energy efficient appliances and lights. The total rebate to the customer was \$2,650 out of a possible \$4,000.

The second invoice reviewed indicated the vendor, Horizon Residential Energy Services NH, LLC was performing the following types of EnergyStar Homes inspections; preliminary plans as well as mid and final construction inspections during the month of December 2015 to ensure construction to the applicable EnergyStar specification. The invoice listed the addresses of the homes or plans inspected, invoice #'s, hours worked and rates applied. The total invoice came to \$1,990.

Residential Energy Star Appliance Program

Account #24.416.xx Activity Code #140 -- \$119,142

Noted in the filing, the EnergyStar Appliance and Lighting programs have been merged into the EnergyStar Products. At this time most NH Electric Utilities still report the programs separately due to the set-up of their financial tracking and accounting systems.

The program design is centered on offering in-store and mail-in rebate incentives aimed to encourage consumers to make purchases of qualifying, ENERGY STAR-rated products. In addition, product markdowns may be utilized with retailers for specific products. The usage of product markdowns can result in greater control over program expenditures and allow for the program to be easily scaled up or down as needed. At this time most NH Electric Utilities still report the programs separate due to the set-up of their financial tracking and accounting systems.

Audit reviewed one invoice from Jaco Environmental for the pick-up and recycling of old refrigerators in the month of May. The vendor picked up 30 refrigerators at \$90.50 each and issued 30 customer incentives at \$30 each for an invoice total of \$3,615.

Residential Energy Star Lighting Program

Account #24.416.xx Activity Code #116 -- \$191,972

Noted in the filing, the EnergyStar Appliance and Lighting programs have been merged into the EnergyStar Products. At this time most NH Electric Utilities still report the programs separately due to the set-up of their financial tracking and accounting systems. The program design is centered on offering in-store and mail-in rebate incentives aimed to encourage consumers to make purchases of qualifying, ENERGY STAR-rated products. In addition, product markdowns may be utilized with retailers for specific products. The usage of product markdowns can result in greater control over program expenditures and allow for the program to be easily scaled up or down as needed.

Audit reviewed two invoices from EFI for mail-in lighting rebates. EFI is a contractor used by various utilities for similar services. This specific invoice was for Home Depot markdowns for the month of December 2015. Supporting documents showed the types of bulbs purchased at each store throughout the State of NH, and the specific rebate each of those types receives. The total cost was \$10,853.11. \$10,537 in rebates, \$237.08 for the 2.25% Track and Report Fee and \$79.03 for the C.O.M Fee (Cost of Money). EFI charges a COM Fee due to fronting the cost of the rebate and the having to collect that rebate from the Core Program Utilities after the fact.

Residential Home Performance with EnergyStar (HPwES)

Account #24.416.xx Activity Code #143 -- \$281,646

Noted in the filing, The Home Performance with ENERGY STAR Program is designed to encourage customers to improve the efficiency of their homes. Customers who qualify can receive an incentive of approximately 50% of the cost of weatherization services up to a \$4,000 cap. Natural gas customers who qualify can receive an incentive from both the electric company

and the gas company, provided the customer first reaches the \$4,000 cap from the gas company. This provides natural gas customers with an opportunity to achieve deeper energy savings. It also recognizes that natural gas customers contribute to both the System Benefits Charge on their electric bill and the Local Distribution Adjustment Charge on their natural gas bill; providing access to both the electric and gas programs.

Audit reviewed two invoices; both for weatherization improvements and an appliance replacement of a refrigerator. Detailed reports generated in OTTER show the first weatherization job totaled \$6,995. The customer co-pay was \$3,624 and the Core program paid the remaining \$3,370. The cost to the Core program was noted as going towards the weatherization services themselves and a refrigerator rebate of \$275. A second weatherization job on the same invoice totaled \$4,426. The customer co-pay was noted as \$2,163 and the rebate was noted as \$2,262.

Residential Home Energy Assistance Program

Account #24.416.xx Activity Code #117 -- \$313,005

Income qualified customers are eligible to receive up to \$8,000 for insulation, weatherization, cost effective appliance and lighting upgrades, and appropriate health and safety measures. Approved by Secretarial Letter on July 26, 2013, HEA funds became eligible to replace hot water/space heating systems at a cost above and beyond the \$8,000 total. Additionally the Commission directed the Core Electric utilities to strive to limit the amount of funds used for heating systems to 25% of the overall HEA budget.

Coordination between the Community Action Agencies and the participation of eligible customers enrolled in the SBC funded Electric Assistance Program helps to ensure enrollment of the most vulnerable population.

The Filing and Order indicate that 15.5% of the total budget, regardless of funding source, should be allocated to the HEA. As is discussed on page 4 of this report, 19% of the 2015 budget was allocated to the 2015 HEA program.

The Low Income Weatherization program uses the same OTTER system to track the measures installed and generate invoices if the vendor chooses to utilize that system.

The first invoice reviewed indicated weatherization improvements were completed at a total cost of \$6,250. The invoice from OTTER indicated Admin Cost of \$777.26, Rebates of \$5,472.63 with no credits. In addition, this customer received a new furnace at a total cost of \$8,205 with \$3,300 charged to the SBC and the \$4,905 coming from other funding sources.

The second invoice reviewed indicated weatherization improvements were completed at a total cost of \$2,599. This amount was split with Admin Cost of \$445.36, and Rebates of \$2,153.60.

NHEC Specific Programs

The following program was offered specifically by NHEC and is included in the overall program expense total of \$1,610,947.

Smart Start Program

Account #24.416.xx Activity Code #185 -- \$1,242

According to the Joint Settlement Agreement this program provides C&I members with an opportunity to install energy efficient measures with no up-front costs, and pay for them over time with the savings obtained from the lower energy costs. NHEC has indicated the source of the funds is NHEC company funds and SBC funds are only used to pay for the implementation and administration of the program. For the 2015 program year, NHEC estimated spending \$5,000 administering the program but indicated they spent only \$1,242. According to the 4th Quarter Energy Efficiency Report filed February 24, 2016 in Docket DE 14-216, NHEC financed 5 projects at a cost of \$140,571. Because NHEC uses their own funds to finance the Smart Start loans, the NH PUC does not review the specific loan files.

Conclusion

Audit has concluded that the information contained in the Filing is substantially supported by documents, materials, invoices and statements from NHEC and that the information as presented in the Filing is materially accurate to the books and records of NHEC as presented to PUC Audit.