CHAIRMAN
Martin P. Honigberg

COMMISSIONER
Robert R. Scott
Kathryn M. Bailey

EXECUTIVE DIRECTOR
Debra A. Howland

STATE OF NEW HAMPSHIRE

TDD Access: Relay NH
1-800-735-2964

Tel. (603) 271-2431

FAX No. 271-3878

Website:
www.puc.nh.gov

PUBLIC UTILITIES COMMISSION
21 S. Fruit St., Suite 10
Concord, N.H. 03301-2429

March 28, 2019

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

Re: DE 14-216 Final Audit Reports of the 2017 NHSaves Gas and Electric Programs

Dear Ms Howland:

Enclosed for filing are Final Audit Reports of the 2017 NHSaves Gas and Electric Programs for:

Utility	Audit Report	Over/(Under)	Page Reference
Liberty Utilities (EnergyNorth Natural Gas) Corp.	10/08/2018	$ 392,559	4-24
Northern Utilities, Inc. (under-collection)	07/27/2018	$ (99,280)	25-41
Net Gas Utilities' Over-collection at 12/31/2017		$ 293,279	
Liberty Utilities (Granite State Electric) Corp.	12/17/2018	$ 163,024	42-63
Unitil Energy Systems, Inc.	12/21/2018	$ 902,211	64-88
PSNH d/b/a Eversource Energy	03/14/2019	$ (250,917)	89-116
New Hampshire Electric Cooperative *	12/31/2017	$ 171,913	117-133
Net Electric Utilities' Over-collection at 12/31/2017		$ 986,231	
Combined Net Over-collection at 12/31/2017		$ 1,279,510	

*The NHEC Member Incentive must be updated to reflect adjustments identified within the Final Audit Report. The estimated over-collection is $175,467 vs. the reported $171,913. The revision has not been provided as of March 28, 2019.

An original and seven copies of each this 2017 Combined Audit Report package have been provided to the Commission. Electronic copies have been provided to the service list. If you have any questions, please do not hesitate to contact me.

Sincerely,

/s/

Karen J. Moran
Chief Auditor
New Hampshire Public Utilities Commission

Enclosures
Cc: Service List

Service List-Email Addresses-DE 14-216

Pursuant to N.H. Admin Rule Puc 203.11(a)(1): Serve an electronic copy on each person identified on the service list.

1 Executive.Director@puc.nh.gov
2 al-azad.iqbal@puc.nh.gov
3 allen.desbiens@eversource.com
4 amanda.noonan@puc.nh.gov
5 bob.reals@libertyutilities.com
6 carroll@unitil.com
7 christopher.goulding@eversource.com
8 craig.wright@des.nh.gov
9 cynthia.trottier@libertyutilities.com
10 deandra.perruccio@puc.nh.gov
11 dlabbe@nhla.org
12 donald.kreis@oca.nh.gov
13 downesm@unitil.com
14 elizabeth.nixon@puc.nh.gov
15 epler@unitil.com
16 eric.stanley@libertyutilities.com
17 frank.melanson@eversource.com
18 heather.tebbetts@libertyutilities.com
19 james.brennan@oca.nh.gov
20 jarvis@unitil.com
21 jim.cunningham@puc.nh.gov
22 joseph.fontaine@des.nh.gov
23 joseph.swift@eversource.com
24 jvanrossum@clf.org
25 katherine.peters@eversource.com
26 kerry.holmes@nh.gov
27 kristi.davie@eversource.com
28 laurel.proulx@eversource.com
29 leszek.stachow@puc.nh.gov
30 marc.lemenager@eversource.com
31 matthew.fossum@eversource.com
32 maureen.karpf@libertyutilities.com
33 mbirchard@clf.org
34 mdean@mdeanlaw.net
35 michael.sheehan@libertyutilities.com
36 ocalitigation@oca.nh.gov
37 palma@unitil.com
38 paul.dexter@puc.nh.gov
39 pradip.chattopadhyay@oca.nh.gov
40 rclouthier@snhs.org
41 rhonda.bisson@eversource.com
42 robert.bersak@eversource.com
43 sgeiger@orr-reno.com
44 snowc@nhec.com
45 stephen.eckberg@puc.nh.gov
46 steve.frink@puc.nh.gov
47 steven.elliott@eversource.com
48 steven.mullen@libertyutilities.com
49 taylorp@unitil.com
50 thomas.belair@eversource.com
51 tlenahan@bm-cap.org
52 tom.frantz@puc.nh.gov
53 tomas.fuller@eversource.com
54 woodsca@nhec.com

FILING INSTRUCTIONS:

a) Pursuant to N.H. Admin Rule 203.02(a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents includeing cover letter with:

Debra A. Howland
Executive Director
NHPUC
21 S. Fruit Street, Suite 10
Concord, NH 03301-2429

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

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

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: October 8, 2018
AT (OFFICE): NHPUC

FROM: Karen Moran, Chief Auditor

SUBJECT: Liberty Utilities (EnergyNorth Natural Gas) Corp.
DE 14-216 2017 Energy Efficiency Program
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
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 Electric and Gas Energy Efficiency Programs for the calendar year 2017. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource (Eversource), New Hampshire Electric Cooperative (NHEC), and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (GSE or Liberty) and two gas utilities, Northern Utilities, Inc. (Northern) and Liberty Utilities (EnergyNorth Natural Gas) Corp. (ENG or Liberty) filed a joint petition for the program year 2017. Each utility was audited individually.

In accordance with Commission Order 25,958 ENG provided the Commission with monthly summaries of expenses and recoveries related to the energy efficiency programs. For the 2017 program year, the monthly summaries, with the exception of April 2017, were properly filed in this docket DE 14-216. Each monthly summary after April included the April actuals. No exception.

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

Approved 2017 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/23/2016 for the program year 2017. A joint Settlement Agreement and updated filing were presented to the Commission on 12/12/2016, and approved by Order 25,976 on 12/23/2016. EnergyNorth's programs for 2017 were approved as follows:

Residential
Home Energy Assistance Program (weatherization program) HEA
NH Home Performance with Energy Star (HPwES)
Energy Star Homes (ESH)
Energy Star Products Program (Gas Networks) ESP
Residential Loan Buy down / Third Party Financing
Home Energy Reports Program (HER)

Commercial and Industrial
Large Business Energy Solutions Program (Lg Bus,)
Small Business Energy Solutions Program (Sm Bus.)
Codes, Audits and Educational Programs (Edu)

Utility Specific Programs

Home Energy Reports (HER)- Liberty Utilities Gas will expand the participant count of its Home Energy Reports (HER) Behavioral Program from 25,000 to 38,000 residential gas customers. The HER Program is designed to engage residential natural gas customers into a long term conversation about how they can save energy and money on their utility bills. The program consists of sending paper and Web-based reports to a randomly selected group of residential customers. The Company created a dedicated program category for its Home Energy Reports Program, where the budget, program savings and cost effectiveness are aligning the LU-Gas with LU-Electric.

Third Party Financing-Liberty Utilities Gas will be modifying its low interest third party financing offer for its ENERGY STAR Products Program to create an either/or option for customers as a trial. Specifically, customers must choose between receiving a rebate for qualifying energy efficient space heating, water heating and thermostat systems, or receiving a low interest third party financing incentive for such systems; customers will no longer have the option of receiving both a rebate and the low interest third party financing incentive. Liberty Utilities is interested to see whether customers choose the low interest third party financing incentive on its own without also receiving the rebate offer, and to what degree.

Early Boiler Replacement Program- Liberty Utilities 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, and be eligible for a rebate as well as low interest third party loans.

Changes to the Plan for 2017

The Plan included the following changes for the 2017 program year, as they apply to EnergyNorth:

Design changes and Savings Assumptions

- Home Energy Assistance budget increased from 15.5% to 17% of the total program budget.
- EnergyStar Homes includes a Drive to Net Zero Competition to encourage and promote super high efficiency, zero net energy homes.

- HEA savings assumptions were updated to reflect current projects modeled by the Community Action Agencies, with updates made to project and measure lives.
- HPwES and ESH savings assumptions were updated to reflect current projects modeled in the program auditing software.

Demand Reduction Induced Price Effects (DRIPE) "*Beginning in 2017, the NH Utilities are including applicable electric and natural gas DRIPE avoided costs in their benefit-cost calculations.*" (Plan page 6 of 31)

The Lost Base Revenue (LBR) as approved by Order 25,932, restores "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31).

The 2017 Performance Incentive target of 5.5% of program expenditures, with a cap of 6.875% is a reduction of the previous electric cap of 10% and gas cap of 12%.

Funding changes

- 3rd party loan interest rate buy-downs (to 2% up to 7 years, up to $15,000) will no longer have NH CDFA available as a funding source. All utilities will continue to use program funds for this program.

Mid-Year Adjustments

The Company notified the Commission, on 12/22/2017, of the following transfers:

Program	Budget	20% Cap	To/ (From)	%
Energy Star Products	$815,220	$163,044	$ 163,000	+20%
HPwES	$729,200	$145,840	$(145,840)	-20%
Energy Star Homes	$136,000	$ 27,200	$(17,160)	-13%

Budget to Actual

Audit reviewed the Commission approved budget totals by program, after the mid-year adjustments noted above, and compared them to the reported actuals per the Shareholder Incentive filing received in May 2018 and adjusted in July 2018.

Program	Budget	Reported Actual	Actual as % of Budget
ES Products	$ 978,220	$ 989,619	101%
ES Homes	$ 118,840	$ 111,025	93%
HEA	$1,005,700	$ 826,371	82%
HPwES	$ 583,360	$ 354,067	61%
HER	$ 227,000	$ 224,350	99%
RESIDENTL	$2,913,120	$2,505,432	86%
C&I Edu	$ 64,500	$ 25,125	39%
Lg Bus.	$1,563,100	$1,118,670	72%
Sm Bus.	$1,373,000	$ 852,560	62%
C&I	$3,000,600	$1,996,355	
TOTAL	$5,913,720	$4,501,787	76%

The actual expenses were 76% of the budgeted totals. The reported actual Home Energy Assistance figure of $826,371 represents 18% of the total expenses, excluding the performance incentive (which is not reflected in the above totals).

Monthly Reporting Revenue and Expenses

In accordance with Commission Order 25,958 Liberty provided the Commission with monthly summaries of expenses and recoveries related to the energy efficiency programs in effect, to be filed in the instant docket DE 14-216. The April 2017 report was not included in the DE 14-216 docket book, but all others were. The final December report reflected actual revenues, expenses, incentives and interest from January 2016 through December 2017.

	Monthly
Beginning Balance (over)/under	$ (328,534)
Revenue-C&I, Residential, LI	$(4,858,395)
Adjustments	$ 495
Expenses-C&I	$ 1,895,756
Expenses-Residential	$ 1,692,377
Expenses-Low Income	$ 815,902
Subtotal Expenses	$ 4,404,035
Incentive 2016 true-up	$ 99,996
Incentive 2017 estimate	$ 325,255
Interest	$ (35,411)
Ending Balance (over)/under	$ (392,559)

Audit verified the beginning balance to the prior year's audit report and general ledger account number 8840-2-0000-10-1163-1755, Deferred Reserve EE.

The Shareholder Incentive, originally filed on 5/31/2018 and updated on 7/3/2018 reflected:

Expenses C&I	$1,996,355
Expenses Residential	$2,505,433
Total EE Expenses	$4,501,778

The Company reconciled the monthly total, which agreed with the general ledger, to the incentive total in the following manner:

Monthly and general ledger	$4,404,035
2016 Expenses booked in 2017	$ (282,589)
2017 Expenses booked in 2018	$ 379,971
Expense recorded in revenue	$ 371
2017 Incentive filed Expenses	$4,501,778

Audit verified the 2016 shareholder incentive true-up of $99,996 to the 2016 audit report. The figure was booked to the general ledger Deferred Reserve EE account in October 2017.

The estimated 2017 performance incentive was estimated to be $325,255 which was booked monthly to the Deferred Reserve EE general ledger account. The reported actual shareholder incentive included within the May and July 2018 filing was $237,145. The true-up required for 2017 is a credit to the Deferred Reserve EE account of $(88,110), as the actual achieved incentive was less than estimated.

The estimated 2017 incentive cap was based on 6.875% of estimated expenses. The annual true-up of the prior year incentive is not included within the expenses reported as actual, thus ensuring that the current incentive is not based on the prior year incentive expense.

General Ledger Detail

Audit verified the 2017 Rolling Fund Balance from the monthly reports filed in docket DE 14-216 to the following activity in account 8840-2-0000-10-1163-1755, Deferred Reserve EE.:

Beginning Balance (over) collection	$ (328,868)
2017 Revenue Collected	$(4,858,395)
2017 Expenses	$ 4,404,035
2016 Incentive True-Up	$ 99,996
2017 Estimated Incentive	$ 325,255
2016 Interest	$ (35,411)
12/31/2017 (over) collection	**$ (392,558)**

Audit was provided with the EnergyNorth Gas Company Account Reconciliation for account 8840-2-0000-10-1163-1755, Deferred Reserve EE, which reflects the ending credit balance for 2017 of $(392,448).

At the end of each quarter and year, if the balance in the deferred asset account is in a liability position, the amount is debited and credited to a current liability account, in this case 8840-2-0000-20-2142-1755, Current Regulatory Liability EE. The transaction is automatically reversed on the first of the subsequent month. The Company indicated that this type of transaction occurs for deferred accounts such as EE and Cost of Gas. Audit requested clarification of the FERC reasoning for the transactions and was told that it is done "*for balance sheet presentation purposes only*". **Audit Issue #1**

The Wennsoft Financial Reporting system (WS) is a system report by project code and is the basis for the expenses reported. All entries have an associated WS Job and WS Project number associated with them. Each WS Job and Project is linked to the general ledger (known as Microsoft Dynamics GP 2010). Any manual journal entries made to the general ledger will not have Wennsoft entries associated with it, such as cancel/rebills. The Company reconciles each month's reported information to the general ledger, resulting in the report to the Commission agreeing with the ending general ledger.

The pivot table of the general ledger reflected a cost code string 9080-0000-0001-0000 and an account number string of 8840-2-0000-1163-1755. Audit requested clarification and was told that in prior years, expenses were booked to account 8840-2-0000-69-5390-9080 and monthly the balance was moved from that 9080 account to the balance sheet 8840-2-0000-10-1163-1755. Beginning in 2017, the accounting debits hit the 1755 account directly, eliminating the need to clear the 9080 account each month.

For 2017, the WS Job numbers that correlate to the EE programs were:

4017-EEG0x-C&IED Education
4017-EEG01xC&I LBLarge Business
4017-EEG0x-C&ISB Small Business
4017-EEG0x-RESNC Residential New Construction
4017-EEG0x-RESAP Residential Appliances
4017-EEG0x-RESLI Residential Low Income (HEA)
4017-EEG0x-RESTD Residential Tech Demonstration (Home Energy Report)
8840-EEG0x-RESTD Residential Tech Demonstration (Home Energy Report)
4017-EEG0x-RESLG Residential Tech Demonstration (Home Energy Report)
8840-EEG0x-RESLG Residential Tech Demonstration (Home Energy Report)
4017-EEG0x-RESAW Residential Audit and Weatherization (HPwES)

The WS Job numbers are further detailed by:
EEG01 Evaluation, or External Administration
EEG03 Internal Administration
EE0G4 Internal Implementation
EEG05 Marketing
EEG06 Rebates and Services

Revenue - $(4,858,395)

Audit reviewed the monthly reports provided to the Commission in the instant docket and noted therm sales by Residential sector, C&I sector and a combined column.
The total EE revenue for the year agrees with the general ledger without exception.

Audit was informed by the Company that the EE and LRAM portions of the Local Distribution Adjustment Clause reconciling mechanism are credited to the Deferred Reserve EE 8840-2-0000-10-1163-1755 account. The LRAM portion is then debited to account 8840-2-0000-10-1163-1755 and credited to account 8840-2-0000-10-1163-1756.

The Company also provided the following clarification regarding the entirety of the LDAC: "*Per our Finance department, below is a breakdown of the accounting for the LDAC: There are four LDAC accounts that are in the billing matrix for customers.*

1. *Environmental – debit to AR and credit to the balance sheet (not a revenue account) 8840-2-0000-10-<u>1920-1863</u>*
2. *Energy Efficiency – debit to AR and credit to the balance sheet (not a revenue account) 8840-2-0000-10-<u>1163-1755</u>*
3. *Rate Case Recovery – debit to AR and credit to the balance sheet (not a revenue account) 8840-2-0000-10-<u>1930-1745</u>*
4. *RLIAP – debit to AR and credit to the balance sheet (not a revenue account) 8840-2-0000-10-<u>1169-1756</u>*

Since the company went to Cogsdale for billing, all billing components go to their respective accounts, with the exception of a portion of the gas supply goes directly to Gas Revenue and a manual journal record the value of this revenue as a credit to 1920-1740 or 1741 – COG Winter/Summer with the debit going to 52-5541-8042. Prior to Cogsdale a proration entry was done based on usage and a debit was done to revenue and a credit to the appropriate LDAC account (listed above).

For Lost base revenue – LRAM, the credits go into the EE account ending in 1755. Then a calculation is completed to determine what portion of these recoveries belong to LRAM. An entry is done to credit the LRAM account ending in 1756 and to debit the EE account ending in 1755."

Audit reviewed the tariff page relating to the LRAM and noted on Original page 34. The reference is to account 1920-1863. This is the Environmental Remediation account. The correct reference within the tariff should be to account -1163-1756. **Audit Issue #2**

Audit requested the summary revenue consumption file for the month of October 2017. Cogsdale is the billing system used by Liberty to calculate customer invoices. FiServ is the company that processes, prints, and mails the customer invoices. The Company provided the report and an update to the revenue accounting structure, implemented in late 2016. Specifically, revenue accounts are itemized by Fixed Revenue, Variable Revenue, and Energy Cost as follows:

8840-2-0000-40-4295-4801 Residential Sales-Fixed Portion
8840-2-0000-40-4295-4802 Residential Sales-Variable Portion
8840-2-0000-40-4295-4803 Residential Sales-Energy Cost
8840-2-0000-40-4295-4813 Commercial Sales-Fixed Portion
8840-2-0000-40-4295-4814 Commercial Sales-Variable Portion
8840-2-0000-40-4295-4815 Commercial Sales-Energy Cost
8840-2-0000-40-4295-4816 Industrial Sales-Fixed Portion
8840-2-0000-40-4295-4817 Industrial Sales-Variable Portion
8840-2-0000-40-4295-4818 Industrial Sales-Energy Cost
8840-2-0000-40-4460-4897 Metered Sales to Transportation-Fixed
8840-2-0000-40-4460-4898 Metered Sales to Transportation-Variable

8840-2-0000-40-4460-4899 Metered Sales to Transportation-Pass Through Gas

The October revenue detail of bills and volumes reflected the therm sales by rate class, and the general ledger accounts to which the revenue was booked for the month.
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, was summarized in one section, and the non-transportation residential and commercial/industrial customers' revenue was separately summarized.

Audit verified that the combined C&I and Residential October therm usage was 5,961,899 which agreed with the monthly reports filed in the instant docket. The total LDAC within the revenue detail was $294,053.67.

	Therms		LDAC
Commercial	1,810,427	$	81,472.74
Industrial	2,795,244	$	125,766.67
Residential	1,356,227	$	86,814.26
	5,961,898	$	294,053.67

Audit recalculated the straight LDAC using the Commission approved rate for implementation 1/1/2017 and the result was the revenue report reflected $678.17 less than the straight calculation. Due to cancel/rebills, this is not considered an issue. Manual adjusting entries to the general ledger are not reflected within the Cogsdale revenue report.

Audit reviewed the general ledger accounts associated with the revenue report. The Deferred Reserve EE is the subject of this audit. The RLIARP has not been audited. The Regulatory Asset-Environmental Materials is the subject of an annual Environmental audit conducted by the PUC Audit Staff. The rate case recovery expense, and resulting refund, was related to docket DG 14-180.

GL account #	Account title		Oct 2017 LDAC
8840-2-0000-10-1163-1755	Deferred Reserve EE	$	161,712.86
8840-2-0000-10-1169-1756	Deferred RLIARP	$	39,907.64
8840-2-0000-10-1920-1863	R/A-Environmental Materials	$	92,430.71
8840-2-0000-10-1930-1745	Rate Case Recovery	$	2.46
October Total LDAC		$	294,053.67

Audit verified the October Deferred Reserve figure of $161,712.86 to the EE reconciliation without exception.

Regarding the Lost Revenue Adjustment Mechanism (LRAM)

2017 is the first year in which the utilities are authorized to charge a per-therm rate to recover lost revenues due to energy efficiency measures. Audit requested the reconciliation of the over/under collection, as the LRAM rates were set based on estimates. As estimates and actuals are reconciled, a resulting over/under collection will result. The rates are set at the annual winter cost of gas hearings. For calendar year 2017, the rates were:

	1/1/17 – 10/31/17	11/1/17 – 10/31/18
Residential	$0.0016	$0.0019
Comm/Ind	$0.0009	$0.0021

Audit reviewed the overall monthly reconciliation which began January 2017 with a zero balance. Below presents the estimated lost revenues, the actual (calculated) collected LRAM and interest, both for the period ending October 2017 for use in the Cost of Gas docket, and the December 2017 for use in this EE audit. The detail relates to account 8840-2-0000-10-1163-1756:

Beginning 2017 Balance	$ -0-
Estimated LRAM 1/17 – 10/17	$ 170,534
LRAM Collections 1/17-10/17	$(130,290)
Interest on Deferral 1/17-10/17	$ 426
October 2017 Under Collection	$ 40,670 for Cost of Gas period ending 10/31/2017

Roll forward November and December 2017:

Estimated LRAM 11/17-12/17	$ 50,482
LRAM Collections 11/17-12/17	$ (52,675)
Interest on Deferral	$ 323
December 2017 Under Collection	$ 38,800 for EE period ending 12/31/2017

Interest was recalculated without exception.

The estimated lost revenue used in docket DG 16-814 to set the LRAM rate was noted on Schedule 19 LRAM page 2 of 2 and summed to $172,792 for January through October 2017, and related estimated interest of $2,750. The estimated interest was calculated at 3.5% across the ten-month period. Actual rates did change during that time.

The estimated lost revenue used in docket DG 17-135 to set the LRAM rate was also noted on Schedule 19 LRAM page 2 of 2. The schedule reflects estimates for November 2017 through October 2018, but does reflect an “estimated beginning balance” of $(39,021) for Residential and $(18,597) for Commercial and Industrial customers. Estimated interest was calculated at 4.25% across the year. Actual rates did change.

Within the DG 17-135 LRAM schedule 19 both the Residential and Commercial/Industrial sectors reflected an over collection of the LRAM at 12/31/2017. The schedule indicates the figures are estimates:

Residential	$(43,080)
Commercial/Industrial	$(34,140)
Over Collected Balance 12/17	$(77,220)

The beginning balances within the DG 17-135 Schedule 19 do not coincide with the estimated ending balances in the DG 16-814 Schedule 19, based on an estimated true-up. The schedules do not reflect the general ledger rolling balance, rather reflect estimates only. The general ledger balance at 12/31/2017 reflects an under collection of $38,800.

The shareholder incentive Table 10 shows the actual cumulative savings based on the measures installed in calendar year 2017. Because each month reflects the annualized savings, the lines must be divided by twelve to determine the monthly savings, then multiplied by the average distribution rate. Each month's calculation is rolled into the following month. Table 10 reflects a calculated actual loss of revenue due to installed efficiency measures of $129,610. Audit requested verification of the actual installed savings and was provided with a detailed pivot table, by month, which reflected the total savings associated with that month's installation. The detailed Excel file supporting the pivot was a download of the tracking mechanism of the eTRACK software system used by Liberty. The Commercial and industrial sector reflected over 500 installed measures, and the Residential sector reflected over 2,600 measures. The download identified the sector, specific measure, program, project code, installation date, month, monthly kWh savings, monthly therm savings, and annual therm savings. The Company indicated that the inputs to the database are spot-checked to ensure the integrity of the output. A screen shot of a C&I measure and a Residential measure was provided which supported the projects in "Status of Approved", which are those included in the Table 10 totals. The screen shots were specific to exact measures installed at individual customer locations. There were no exceptions noted.

The reconciliation of the Table 10 and the general ledger will be done after the conclusion of this audit. It is understood that the general ledger running balance will be impacted (generally) in the following manner:

Beginning Balance	$ -0- per general ledger reconciliation
Debit estimates of lost revenue	$ 221,016 per general ledger reconciliation
Reversal of estimated lost revenue	$(221,016) new entry to balance with Table 10
Calculated based on actual savings	$ 129,610 from Table 10 in shareholder incentive
Credit entries of collected LRAM	$(182,965) per general ledger reconciliation
Debit entries interest	$ 749 as booked to GL
12/31/2017 Ending Balance	$ (52,606) over-collection (depends on timing of entries)

Audit requested the LRAM journal entry and supporting calculation for October 2017. The detail provided included the credit of $6,314.70 to the EE general ledger account and offsetting debit to the LRAM general ledger account. The calculation is based on the consumption reflected within the Cogsdale (CCSM) revenue summary, using the CCSM bills and voids. Because the EE rate and the LRAM rate are set annually during the cost of gas dockets, the rates vary. The Company provided the consumption and related EE/LRAM rate on which the actual bills for the month of October were issued. Below demonstrates the total EE and LRAM revenue, and then the LRAM as calculated.

		Therms	October EE/LRAM	LRAM
DG 16-814 including LRAM C&I	$.0228	4,605,216	$104,999	$4,144.70
DG 16-814 including LRAM Res	$.0418	1,356,251	$ 56,691	$2,170.00
DG 16-814 prior to LRAM Res	$.0402	176	$ 7	$ -0-
DG 15-353 prior to LRAM Res	$.0585	266	$ 16	$ -0-
		5,961,909	$161,713	$6,314.70

Occupant Billings

Occupant billings were indicated to be a minor fraction of total billings due to the change in account termination. The "soft-opt" option, which allowed the gas service to remain on during a transition period between tenants, is no longer allowed (per Settlement Agreement in DG 14-180). Audit verified that within the Deferred Reserve EE/Residential rate class, a total of $2.49 Occupant LDAC was included, calculated on usage of 39 therms, based on the LDAC of $0.0640.

The Environmental portion of the Occupant was	$0.60	based on $0.0155	per therm
The EE portion of the Occupant was	$1.57	based on $0.0402	per therm
The RLIARP (Low Income) portion of Occupant	$0.26	based on $0.0067	per therm
The LRAM (Lost Base Revenue) portion of Occup	$0.06	based on $0.0016	per therm
	$2.49	$0.0640	

Audit notes that the usage and derived revenue files include past billings at appropriate past EE rates, due to cancel/rebills. The LDAC for the periods included are summarized below:

Docket DG 16-814, Order #25,958 issued for 11/1/2016 – 10/31/2017

Customer Class	Environ. Rate	Energy Efficiency	Low Income	Rate Case	Total LDAC through 12/31/16
Residential	$0.0155	$0.0402	$0.0067	$(0.0071)	$0.0553
Comm/Ind	$0.0155	$0.0219	$0.0067	$(0.0071)	$0.0370

Docket DG 16-814, Order #25,958 included an adjustment for 1/1/2017 – 10/31/2017

Customer Class	Env. Rate	Energy Effic.	Low Income	Rate Case	Lost Revenue	Total LDAC
Residential	$0.0155	$0.0402	$0.0067	$ -0-	$0.0016	$0.0640
Comm/Ind	$0.0155	$0.0219	$0.0067	$ -0-	$0.0009	$0.0450

Docket DG 17-135, Order #26,066 issued for 11/1/2017– 10/31/2018

Customer Class	Env. Rate	Energy Effic.	Low Income	Rate Case	Lost Revenue	Total LDAC
Residential	$0.0163	$0.0516	$0.0096	$ -0-	$0.0019	$0.0856
Comm/Ind	$0.0163	$0.0332	$0.0096	$ -0-	$0.0021	$0.0674

Interest - $(35,411)

Audit reviewed the rolling monthly summary for the period ended 12/2017 filed in the instant docket. During 2017 the net interest was a funding source for the Energy Efficiency programs. Specifically, EnergyNorth calculates the interest using the average of the beginning and ending balances, including the prior month's interest, divided by 365 then multiplied by the actual number of days in that month. The prime rates included on the monthly reports to the Commission were verified to the St. Louis Federal Reserve website https://www.fred.stlouisfed.org/data/PRIME.txt. Rates for calendar 2017 were:

January through February	3.75%
March through May	4.00%
June through November	4.25%
December	4.50%

Expense Review - $4,501,788

Expenses were verified to the summary of expenses provided in the detailed Excel spreadsheet and the reconciliation of the GL to the actual expenses. The Excel spreadsheet includes specific 2017 program costs. was provided for review. The 2016 program year expenses booked to the general ledger in 2017 were not included, and the 2017 program year expenses booked in 2018 were included. The detail identified each program and related expense type based on the Wennsoft (WS) Job Number, WS Job Name, WS Project Number, Cost Code String, and identifying transaction details. Audit reviewed the pivot table details which were based on the WS Job Numbers and WS Project Numbers. The detail listed on page 10 of the Shareholder Incentive reflects the pivot:

	Evaluation	Internal Admin.	Internal Implemt.	Marketing	Rebates/ Services	External Admin.	2017 Total
C&I Education	$0	$493	$0	$0	$24,633	$0	$25,125
C&I Large Business	$52,468	$18,930	$126,941	$36,700	$880,781	$2,849	$1,118,670
C&I Small Business	$46,528	$18,422	$111,889	$42,625	$630,593	$2,502	$852,560
Resi - ES Homes	$14,517	$3,721	$10,373	$3,935	$78,233	$248	$111,025
Resi - HEA - Low Income	$32,793	$12,990	$77,907	$27,789	$673,059	$1,833	$826,371
Resi - HPwES	$24,461	$7,275	$49,311	$24,830	$246,861	$1,329	$354,067
Resi - ES Products	$28,008	$10,846	$70,177	$22,526	$856,577	$1,486	$989,619
Resi - Home Energy Reports	$8,812	$5,720	$20,856	$6,272	$182,276	$414	$224,350
Grand Total	**$207,587**	**$78,396**	**$467,454**	**$164,677**	**$3,573,013**	**$10,661**	**$4,501,788**

Expenses which are allocated among energy efficiency programs and between EnergyNorth and Granite State Electric are based on budget percentages.

EVALUATION $207,587

Audit verified the reported total Evaluation to the download of the Wennsoft system. Specific entities from which invoices were received are summarized below:

EVALUATION

	C&I Large Bus.	C&I Small Bus.	Residential Appliance	Residential Low Inc.	Res ES Homes	Res Tech HER	Residential HPwES
ANB Enterprises	$ 27,539	$ 24,631	$ 14,345	$ 16,754	$ 2,393	$ 5,192	$ 12,832
Assoc of Energy Service Prof.	$ 385	$ 338	$ 201	$ 248	$ 34	$ 56	$ 180
Dodge Data and Analytics	$ 193	$ 169	$ 100	$ 124	$ 17	$ 28	$ 90
Esource Companies	$ 14,273	$ 12,537	$ 7,444	$ 9,183	$ 1,242	$ 2,073	$ 6,658
Energy Resource Sltns	$ -	$ -	$ -	$ -	$ 9,954	$ -	$ -
NH PUC	$ 4,820	$ 4,234	$ 2,514	$ 3,101	$ 419	$ 700	$ 2,249
NEEP	$ 4,460	$ 3,918	$ 2,326	$ 2,870	$ 388	$ 648	$ 2,081
Synapse	$ 798	$ 701	$ 416	$ 514	$ 69	$ 116	$ 372
Cadmus	$ -	$ -	$ 661	$ -	$ -	$ -	$ -
TOTAL EVALUATION	$ 52,468	$ 46,528	$ 28,007	$ 32,794	$14,516	$ 8,813	$ 24,462

ANB Enterprises, Inc. $103,686

The Company paid ANB Enterprises to provide the software used to track the energy efficiency programs. The costs were allocated between ENG and GSE. For 2017, ENG was allocated $103,686. Invoices from ANB are allocated on an invoice basis to try to match the actual charges to the programs which the invoice impacted.

An additional total of $11,149 was paid to ANB Enterprises and reflected among the seven programs as part of Rebates and Services.

Esource $53,510

Esource 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:

New Hampshire Public Utilities Commission $18,037
Vermont Energy Investment Corporation (VEIC) and Optimal Energy

Audit noted within the ENG general ledger seventy entries identified as NH PUC. A request for clarification of what those entries represented was made. Liberty responded with copies of invoices from the NH PUC which covered the costs associated with consulting firms Vermont Energy Investment Corporation, and Optimal Energy. VEIC was hired by the PUC and Optimal was hired by the Office of the Consumer Advocate. The total consulting costs for both were allocated by the NH PUC among both gas companies and the four jurisdictional electric utilities. According to the invoices supplied to Audit from the NH PUC Business Office, the total consultant costs were invoiced to the utilities as follows:

Vermont Energy Investment Corporation (VEIC)

	LU Gas	LU Electric	Unitil Gas	Unitil Electric	Eversource	NHEC	TOTAL
February 2017	$ 4,443	$ 1,742	$ 1,066	$ 2,574	$ 15,249	$ 1,269	$ 26,342
March 2017	$ 1,332	$ 522	$ 319	$ 772	$ 4,572	$ 380	$ 7,898
April 2017	$ 338	$ 132	$ 81	$ 196	$ 1,158	$ 96	$ 2,001
May 2017	$ 502	$ 197	$ 120	$ 291	$ 1,721	$ 143	$ 2,973
June 2017	$ 6,139	$ 2,406	$ 1,472	$ 3,556	$ 21,068	$ 1,753	$ 36,395
July 2017	$ 2,087	$ 818	$ 500	$ 1,209	$ 7,162	$ 596	$ 12,373
August 2017	$ 334	$ 131	$ 80	$ 193	$ 1,145	$ 95	$ 1,978
September 2017	$ 825	$ 323	$ 198	$ 478	$ 2,832	$ 236	$ 4,893
Total VEIC	$ 15,999	$ 6,271	$ 3,837	$ 9,268	$ 54,908	$ 4,570	$ 94,852

Optimal Energy (Optimal)

	LU Gas	LU Electric	Unitil Gas	Unitil Electric	Eversource	NHEC	Total
October 2017	$ 751	$ 294	$ 180	$ 435	$ 2,577	$ 214	$ 4,452
November 2017	$ 1,183	$ 464	$ 284	$ 686	$ 4,062	$ 338	$ 7,016
Total Optimal	$ 1,934	$ 758	$ 464	$ 1,121	$ 6,639	$ 553	$ 11,468

For Liberty Gas-ENG, the combined consultant costs of $17,933 was allocated among all residential and commercial/industrial programs as an evaluation expense.

The total per the Excel sheet which reflects the 2017 activity was $18,046.32, an immaterial variance $113.38.

INTERNAL ADMINISTRATION $78,396 and INTERNAL IMPLEMENTATION $467,454

Audit reviewed a detailed Excel listing of entries which were allocated to Internal Administration and Internal Implementation, the total of which matched the reported totals for the same categories of expenses in the Shareholder Incentive filing.

	Internal Administration	Internal Implementation
M. Curran	$ -0-	$ 463
D. Sylvester	$ -0-	$ 7
T. Poirier	$ -0-	$ 42
Robert McLean	$ -0-	$ 3,585
M. Minghella	$ -0-	$ 1,781
E. Stanley	$ 2,337	$ -0-
Journal Entries-Labor	$34,326	$ -0-
LUSC CORE Team labor	$39,148	$461,293
subtotal	$75,811	$467,171
Staples Advantage	$ -0-	$ 285
JPMorgan Chase Bank	$ 2,585	$ -0-
Totals	**$78,396**	**$467,456**

The journal entries-labor figure of $34,326 represents the net activity for the year of labor cost accruals and reversals plus bonus pay and pay rate increases during the year. All employees work for the Liberty Utilities Service Company (LUSC). Specific time charged is identified as LUSC CORE Team labor.

Large Business Energy Solutions $1,118,670

Rebates and Services of $880,781 represent 79% of the total Large Business Energy Solutions expense for the 2017 program year. Audit selected four specific Rebate or Service entries booked to the general ledger for detailed review. The four sum to $261,959 and represent 30% of the Rebates and Services total.

The first, a rebate to FW Webb in Londonderry in the amount of $100,000 on 11/1/2017 was for a condensing boiler with >90% thermal efficiency and a direct fired make up air system. The rebate was supported with a progress payment application from the subcontractor to the general contractor. The total scope of the work to be completed in Londonderry was based on a contract amount of $1,464,343. Retainage of 10% $138,233 was calculated based on the total completed as of the date of the application, 10/23/2017, $1,382,337.

The second entry, a rebate, booked on 6/28/2017 in the amount of $42,779 was paid to Velcro Corporation for installation of LED lighting in the parking lot. The total cost was $71,397. The rebate represents 60% of the incremental cost to the customer.
The third entry, a rebate, booked on 8/31/2017 in the amount of $92,928 was also paid to Velcro Corporation also for installation of 760 LED lighting fixtures which had an incremental cost of

$395,250. The rebate to the customer represents 24% of the incremental cost. The overall efficiency measures installed at Velcro cost $4,457,714 noted on the application and certificate for payment from Chapman Construction and Design. As of June 2017, the contract was 98% complete.

The fourth entry, a rebate, booked on 11/21/2017 in the amount of $26,252.54 was paid to Rise Engineering. The Company indicated that Rise is a service provider for both electric and gas commercial and industrial programs. The invoice provided to Audit reflected calculations of lifetime MMBtu savings at $0.15 for Small Business Gas $15,126.09 and Large Business Gas $26,252.54. The total invoice was $41,378.63.

Small Business Energy Solutions $852,560

Rebates and Services of $630,593 represent 74% of the total Small Business Energy Solutions expense for the 2017 program year. Marketing expenses of $42,625 represent 5% of the total for the year. Refer to the discussion in the Large Business Energy Solutions section above, regarding a rebate in the amount of $15,126.09 which was reviewed.

Audit selected one specific Marketing entry in the amount of $9,730 booked to the general ledger on 8/17/2017 for detailed review. The entry represents 23% of the Marketing total. Ram Marketing was paid for 278 hours making outbound telemarketing calls in the summer of 2017 regarding the Small Business Natural Gas Energy Efficiency Project.

Residential Home Performance with Energy Star (HPwES) $354,067

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. Horizon Residential Energy Services, Inc. continues to be contracted to plan, coordinate, oversee and collaborate on programs with the Liberty Program Manager; perform customer intake and screening, assign qualifying customers to contractors, review and approve paperwork and applications, perform data management and tracking, approve invoices for payment, and conduct complaint resolution. In addition, HRS ensures quality assurance inspections (audits of measures installed), uploading information into ETRACK for tracking purposes and issuing IRS Form 1099 for contractors at years' end. During 2017, Horizon was paid $263,749, included within the Rebates and Services expense type.

HPwES 56 payments summing to	$244,001
HEA 02 payments summing to	$ 636
ES App 02 payments summing to	$ 19,112
Total Horizon Rebates and Services	$263,749

Residential Home Energy Report $224,350

The Home Energy Report (HER) utility specific program is offered to residential customers, anticipating that the customer may be encouraged to participate in the HPwES. Audit requested clarification of the budget and was told that for 2017 the budget was $227,000. A review of the expenses showed the Rebates and Services $182,276 to be 81% of the 2017 total expenses. Within that, Audit verified that OPower was paid $182,000 in five increments:

January 2017	$ 48,000
February 2017	$ 87,500
April 2017	$ 15,500
July 2017	$ 15,500
October 2017	$ 15,500
	$182,500

Audit requested supporting documentation and was provided with an invoice dated 12/2/2016 for the Liberty NH renewal of the printing and mailing portion of the contract for the period January 2017 through March 2017. An invoice dated 1/25/2017 for $87,500 included $72,000 data analytic fee for the calendar year 2017, and $15,500 for the quarterly print and mail fee for the first quarter of 2017. OPower was contracted to oversee the Home Energy Report implementation. For the years 2015, 2016, and 2017 the service was used only for Liberty gas. In the upcoming 2018 year, they have been contracted for both gas and electric.

Residential Home Energy Assistance $826,371

Rebates and Services of $673,059 within the HEA program represent 81% of the total program expenses for 2017. Audit selected one rebate paid to Southern New Hampshire Community Action Services in September 2017 in the amount of $106,425.90. The OTTER invoice reflected 110 elderly housing units in Nashua in which weatherization measures such as air sealing, foamed and installed attic hatches, attic insulation, crawl space wall insulation, dense pack wall insulation, and pipe wrapping on 103 units. A straight administrative cost of $130 was applied to each housing unit, and $837.89 for supplies and installation on 103 of the units. Those units that did not require pipe wrap was assessed $831.89 for supplies and installation.

Third Party Financing Program $11,931

As found in the 4th Quarter Report filed by Eversource, EnergyNorth bought down the interest rate on 16 projects at a cost of $11,931.

Audit reviewed a detailed spreadsheet provided by the Company which contained dates, locations, loan amounts and terms, related 2% interest rate buy down amount, the total of any related HPwES, Boiler, or EBR rebate, any customer co-pay, the total investment, and project type.

Of the sixteen third party loan subsidy buy downs, seven related to weatherization services with rebates included within the HPwES program. Two of the sixteen related to early boiler replacements and reflected rebates of $3,000 each. Seven other interest rate buy downs related to loans for AFUE 90% or higher boiler or combined boiler systems.

Liberty contracts 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, within the five-day expedited payment terms detailed in prior audits.

The Company indicated that the lenders do not report loan defaults. The Company provided a summary of the terms of the loans with the Merrimack County Savings Bank, Northeast Credit Union, and Granite State Credit Union. 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)

For 2017, nine of the loans were through Granite State Credit Union and seven were through Merrimack County Savings Bank. On average, each customer saved $746 of interest charges over the life of the loan. All of the lending terms complied with the loan amounts and repayment terms noted above.

Audit recalculated the interest rate buy downs for all 16 loans. Three of the buy downs on the listing provided by the Company were $1 or less lower than the recalculation conducted by Audit. One loan, however, reflected an interest rate buy down of $1,124.86, while the recalculation done by Audit was $954.40, a variance of $170.46. **Audit Issue #3**

Audit Issue #1

Balance Sheet Presentation

Background

Liberty uses an asset account 8840-2-0000-10-1163-1755 to reflect the rolling balance of the EE program, inclusive of revenues, expenses, interest, shareholder incentive, etc.

Issue

At the end of 2016 and the end of 2017, the balance in account 8840-2-0000-10-1163-1755 was in a credit position. A journal entry at year end zeroed the asset account out with a debit to it, and credited Current Regulatory Liability EE account 8840-2-0000-20-2142-1755. The entry is then reversed on the first of the following month.

Recommendation

At period end, the balance sheet should present the actual balances within the accounts used throughout the year. By adjusting the balance sheet in the manner noted, the net asset and liability position is misrepresented.

Company Comment

Since the EE deferral account was in an over-collected or liability position as of December 31, 2016 and 2017, it was necessary to reflect the EE deferral account balance for financial reporting (US GAAP) purposes in a liability account and not as a credit balance in an asset account. As a result, the adjustment was made to reclassify the credit balance into the EE deferral liability account at both December 31, 2016 and 2017. The Company does not agree that this adjustment misrepresented the net asset and liability position for the EE deferral, as the over-collected balance is properly reflected in Current Regulatory Liability EE account 8840-2-0000-20-2142-1755 at the end of 2016 and 2017.

Audit Comment

Audit appreciates the Company comment. However, Liberty is reminded that the accounting records must comply with the Federal Energy Regulatory Commission Uniform System of Accounts, as outlined in Puc 507.08 Uniform System of Accounts.

Audit Issue #2

Tariff Page 34

Background

Reference within the Liberty tariff to the Lost Revenue Adjustment Mechanism, LRAM, can be found on original page 34.

Issue

Item #5 within the LRAM section of the tariff specifies that the "*Reconciliation Adjustment: Account 1920-1863 shall contain the cumulative difference between the Lost Revenue Adjustment Rate revenues collected and actual costs, plus carrying charges.*"

Recommendation

The account reference relates to the Environmental surcharge, rather than LRAM. The tariff page should be updated to reflect account -1163-1756.

Company Comment

The tariff page has been updated to reflect account 1163-1756 in the Company's October 1, 2018 compliance filing to Order No. 26,122 in Docket No. DG 17-048 which implements the revenue decoupling mechanism and weather normalization adjustment.

Audit Comment

Audit reviewed the tariff as filed on October 1, 2018. The portion applicable to the LRAM has been copied below:

Conservation Charges Allowable for LDAC.
1. Purpose: The purpose of this provision is to establish a procedure that allows the Company, subject to the jurisdiction of the NHPUC, to adjust, on an annual basis, the Conservation Charge, if and when applicable, to firm sales service and firm delivery service throughput in order to recover from firm customers' costs and lost margins associated with its energy efficiency management programs.
2. Applicability: A conservation charge shall be applied to therms sold or transported by the Company subject to the jurisdiction of the Commission as determined in accordance with the provision of this rate schedule. Such conservation charge shall be determined annually by the Company, separately for the Residential Heating, and Commercial/Industrial rate categories, subject to review and approval by the Commission as provided for in this rate schedule.

period reconciling adjustments shall be divided by therm sales as forecasted by the Company for the same annual period and rounded to the nearest hundredth of a cent. The resulting conservation charge shall be included in the Company's Local Distribution Adjustment Charge and applied to actual therms sold or transported for the following twelve (12) month period starting November 1, and ending October 31. NHPUC NO. 10 GAS First Revised Page 34 LIBERTY UTILITIES Superseding Original Page 34 3. Calculation of Conservation Charge: The Company will properly assign expenses for forecasted conservation expenditures to the applicable rate categories for a future twelve (12) month period commencing November 1 of each year. The total of such conservation expenditures plus any prior

ISSUED: October 01, 2018 ISSUED BY: /s/Susan L. Fleck Susan L. Fleck EFFECTIVE: November 01, 2018 TITLE: President Authorized by NHPUC Order No. 26,122 dated April 27, 2018, in Docket No. DG 17-048

4. Reporting: The Company shall submit annual reports to the Commission reconciling any difference between the actual conservation expenditures and actual revenues collected under this rate schedule. The difference whether positive or negative will be carried forward into the conservation charge for the next recovery period. Upon completion of the conservation program(s), any over or under collection may be credited or charged to the deferred Winter Period cost of gas account, subject to Commission approval.

5. Effective Date: On or before the first business day in September of each year, the Company shall file with the NHPUC for its consideration and approval, the Company's request for a change in the CC applicable to each Rate Category during the next subsequent twelve-month period commencing with the calendar month of November.

6. Reconciliation Adjustment: Account 1163-1755 shall contain the cumulative difference between the sum of the DSM expenditures incurred by the Company plus the sum of the DSM repayments and the revenues collected from customers. The Company shall file the reconciliation along with the COG filing on or before the first business day in September of each year.

D Revenue Decoupling Adjustment Clause.

1. Purpose: The purpose of the Revenue Decoupling Adjustment Clause ("RDAC") is to establish procedures that allow the Company, subject to the jurisdiction of the NHPUC, to adjust, on an annual basis, its rates for firm gas sales and firm transportation in order to reconcile Actual Base Revenue per Customer with Benchmark Based Revenue per Customer. The Company's RDAC eliminates the link between volumetric sales and Company revenue in order to align the interests of the Company and customers with respect to changing customer usage. The purpose of the NWA is to adjust each customer's bill for the difference in delivery charges caused by the variation in actual HDDs from normal HDDs during the Winter Period.

2. Effective Date: The RDAC and NWA shall take effect beginning on November 1, 2018, and replace the Lost Revenue Adjustment Mechanism (LRAM) established in Order No. 25,932 (Docket No. DE 15-137).

6.Calculation of the RDAC Reconciliation Adjustments

Account 1163-1756 shall contain the accumulated difference between annual revenues and the Revenue Decoupling Adjustment, as calculated by multiplying the RDAF times firm sales and transportation throughput, and the Revenue Decoupling Adjustment allowed revenues annually, plus carrying charges on the average monthly balance using the prime lending rate.

Audit Issue #3

Third Party Interest Rate Buy Down

Background

Liberty bought down the interest rate for sixteen customers' loans from third party lenders.

Issue

Audit recalculated the buy downs for all sixteen customers. One, identified on the listing provided as a 95% AFUE Combined Boiler, customer #6, reflected a buy down amount of $1,124.86. Audit recalculated the buy down to be $954.40, a variance of $170.46.

Recommendation

The Company should contact Merrimack County Savings Bank and request a return of the $170.46 overpayment.

Company Comment

Upon further review, the Company has verified there was a typo of the buy down amount on the original Excel file provided to the PUC Auditor. An updated Excel file along with a copy of the invoice from Merrimack County Savings Bank confirms the buy-down was only $954.40. No request needs to be submitted to Merrimack County Savings Bank since no actual overpayment was processed.

Audit Comment

Audit reviewed the updated Excel file, and all supporting documentation from Horizon Residential Energy Services NH, LLC, as well as Merrimack County Savings Bank. The documentation provided in response to the draft audit report does support the $954.40. The reader is reminded that the fourth quarterly report reflects the total $11,931, which is overstated by the $170.46. The reflection of the incorrect figure is immaterial.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: July 27, 2018
Updated: December 6, 2018
AT (OFFICE): NHPUC

FROM: Karen Moran, Chief Auditor

SUBJECT: Northern Utilities, Inc.
DE 14-216 2017 Energy Efficiency Program
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 Electric and Gas Energy Efficiency Programs for the calendar year 2017. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource (Eversource), New Hampshire Electric Cooperative (NHEC), and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (GSE or Liberty) and two gas utilities, Northern Utilities, Inc. (Northern) and Liberty Utilities (EnergyNorth Natural Gas) Corp. (ENG or Liberty) filed a joint petition for the program year 2017. Each utility was audited individually.

In accordance with Commission Order #24,630 in Docket DG 06-036, Northern provided the Commission with monthly summaries of expenses and recoveries related to the energy efficiency programs. For the 2017 program year, the monthly summaries were properly filed in this docket DE 14-216.

Audit thanks Karen Daniell, Travis Cilley, and Dan Main for their timely assistance throughout the audit process.

Approved 2017 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/23/2016 for the program year 2017. A joint Settlement Agreement and updated filing were presented to the Commission on 12/12/2016, and approved by Order #25,976 on 12/23/2016. Northern Utilities' programs for 2017 were approved as follows:

Residential
Home Energy Assistance Program (weatherization program)
NH Home Performance with Energy Star (HPwES)
Energy Star Homes (ESH)
Energy Star Appliance Program (GasNetworks)
Residential Education
Residential Loan Buydown / Third Party Financing

Commercial and Industrial
Large Business Energy Solutions Program
Small Business Energy Solutions Program
Codes, Audits and Educational Programs

Changes to the Plan for 2017

The Plan included the following changes for the 2017 program year, as they apply to Northern Utilities:

Design changes and Savings Assumptions

- Home Energy Assistance budget increased from 15.5% to 17% of the total program budget.
- EnergyStar Homes includes a Drive to Net Zero Competition to encourage and promote super high efficiency, zero net energy homes.
- HEA savings assumptions were updated to reflect current projects modeled by the Community Action Agencies, with updates made to project and measure lives.
- HPwES and ESH savings assumptions were updated to reflect current projects modeled in the program auditing software.

Demand Reduction Induced Price Effects (DRIPE) "*Beginning in 2017, the NH Utilities are including applicable electric and natural gas DRIPE avoided costs in their benefit-cost calculations.*" (Plan page 6 of 31)

The Lost Base Revenue (LBR) as approved by Order #25,932 restores "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31).

The 2017 Performance Incentive target of 5.5% of program expenditures, with a cap of 6.875% is a reduction of the previous electric cap of 10% and gas cap of 12%.

Funding changes

- 3rd party loan interest rate buy-downs (to 2% up to 7 years, up to $15,000) will no longer have NH CDFA available as a funding source. All utilities will continue to use program funds for this program.

Mid-Year Adjustments

Northern Utilities did not report any budget transfers in calendar year 2017. The Company did alert the Commission, on 12/22/2017, that the Residential Products (GasNetworks) program was expected to exceed the budget by approximately $45,000 or 21% of the budgeted figure of $210,047. The spending was offset by a credit received in February 2017 of $12,993 due to an overpayment to EFI in 2016. The net impact to the overall 2017 spending was anticipated to be a budget overage of approximately 15%.

Monthly Reporting Revenue and Expenses

In accordance with Commission Order #24,630 in Docket DG 06-036, Northern provided 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. Monthly summaries of the revenues and expenses were reviewed for compliance with this requirement, without exception. The final report reflected all revenues and expenses for calendar year 2017. Within the monthly report, the performance incentive is reflected within the Low-income expenses, rather than on individual lines. The Ending balance under-collected at 12/31/2017 per the monthly report does agree with the Accounting model and general ledger at year-end.

	Monthly	Model/GL	Variance
Beginning Balance Under	$ 38,274	$ 38,271	$ 3 immaterial rounding
Revenue Comm/Ind	$(762,383)	$(762,382)	$(1) immaterial rounding
Revenue Res/LI	$(616,031)	$(616,030)	$(1) immaterial rounding
Comml/Ind Expenses	$ 621,572	$ 621,572	$ -0-
Residential Expenses	$ 532,496	$ 532,497	$ (1)
Low-income Expenses	$ 292,671	$ 221,118	$ 71,553
Current year incentive est.	$	$ 78,000	$(78,000)
Prior year incentive true-up	$	$ (6,446)	$ 6,446
Interest	$ (7,317)	$ (7,320)	$ -0-
Ending Balance Undercollect	**$ 99,282**	**$ 99,280**	**$ 2(rounded)**

The Residential expenses include a credit of $12,993 due to an overpayment in 2016 to Energy Federation Inc. A refund in February 2017 was verified to two general ledger accounts:

30-49-02-50-908-29-40 Res HVAC Equip Rebates	$12,800
30-49-02-50-908-29-41 Res HVAC Equ Impsvcs/State-Ext	$ 193
Total refund posted 2/17/2017	$12,993

The 6/2018 incentive reconciliation reflected the $12,990 (rounded) as a 2017 true-up on page 8 of 8. This accurately reflects the 2017 activity, as the credit for the 2016 error was booked in 2017.

Program Year 2017 Activity

Northern provided a reconciliation of the running fund balance as part of the Annual Report and Performance Incentive package on June 1, 2018. The beginning balance was verified to the revised 2016 shareholder incentive package, provided to the Commission on 12/22/2017 as a result of the 2016 audit. Below is a representation of the 2017 reconciliation:

Beginning Balance under-collection	$ 25,281
EE Revenue	$(1,378,412)
Interest	$ (7,320)
Total funding	$(1,385,732)
Program Expenses	$ 1,375,186
Adjustment for 2016 credit posted 2/17	$ 12,990
Current year Incentive Estimate	$ 78,000
Prior Year incentive true-up	$ (6,446)
Total Expenses	$ 1,459,730
12/31/2017 Under-collection	**$ 99,279**
2017 adjustment in 2018	$ (772)
Sub-total Under-collection	$ 98,507
Difference between '17 PI estimate-actual	$ (2,320)
Adjusted 2017 Under-collection	$ 96,187

The program activity reported was verified to the Accounting Department working model.

The EE Revenue was verified to fifteen general ledger accounts #30-49-01-72-48X-XX-XX.

Interest was verified to the general ledger accounts 30-40-01-72-431-10-05 and 30-40-01-72-419-10-05 which net to the expense of $(7,320).

The estimate of $78,000 for the 2017 performance incentive reflects 5.5% of the budgeted figure of $1,418,175. The reported actual incentive of $75,680 is $2,320 less than the estimate, booked to the general ledger in 2018. The reported actual incentive represents 5.5% of the program expenses and adjustment.

Audit verified the prior year true-up of $(6,446) to the Accounting model was the correct figure based on the 2016 estimated incentive booked of $107,812 vs. the actual incentive per the revised 2016 incentive filing.

The ending 2015 over-collection, 2016 under-collection, and the 2017 net under-collection were reconciled to the following general ledger accounts:

	12/31/15	12/31/16	12/31/17
30-40-00-00-173-41-02 Accrued Rev EE-R-NH	$ (90,233)	$ 81,574	$77,804
30-40-00-00-173-41-06 Accrued Rev EE-CI-NH	$ (86,081)	$(43,303)	$21,476
Net (over)/under collection	$(176,314)	$ 38,271	**$99,280**

Audit verified that the January through June 2017 balances on the monthly report filed on 2/8/2018, in this docket, agree with those balances filed in the 2017-2018 Cost of Gas DG17-144 Schedule 16-EEC pages 3 of 4 and 4 of 4. The actuals in the Cost of Gas docket are reflected on the schedule from August 2016 through June 2017, and forecast from July 2017 through October 2018.

Budget vs. Actual Expenses

Audit reviewed the budgeted and actual expenses as presented in the 4th Quarter Energy Efficiency Report in DE 14-216, filed on March 29, 2018.

Northern Utilities per 4th Quarter Report

Program	Budget	Actual	%
HEA	$ 241,086	$ 221,119	92%
ESH	$ 160,496	$ 170,911	106%
HPwES	$ 136,849	$ 119,938	88%
ES Products	$ 210,047	$ 254,640	121%
LB Energy Solutions	$ 413,844	$ 376,625	91%
SB Energy Solutions	$ 241,453	$ 239,187	99%
Education	$ 14,400	$ 5,759	40%
	$1,418,175	$1,388,179	98%

The Actual total of $1,388,179 does not include a refund of $12,993 booked to the general ledger in February 2017, as that refund related to an overpayment to EFI in 2016. Audit concurs with the representation of $1,388,179 for expenses reported to have been incurred during calendar year 2017. The budget for the Residential sector sums to $748,478 with reported actual spending of $766,698, which is 102% of the budget. With the reduction due to the refund above, the actual spending would be $753,705, or 100% of the sector budget.

The Commercial/Industrial sector budget sums to $669,697 with reported actual spending of $621,571 or 93% of the sector budget.

The Low Income Home Energy Assistance actual $221,119 represents 15.9% of total actual spending. The requirement for 2017 was at least 17%. **Audit Issue #1**

Revenue $(1,378,412)

Therm sales were reported as follows:	
Within the December 2017 monthly report	68,60**9**,823
Within the Accounting Model	68,606,823
6/2018 filing of Lost Base Revenue	68,606,819
Within PUC Annual Report 2017	68,606,775
HTE and EnQuesta Billing System	68,606,821

The variances among the reported therms and related revenue figures are due to manual adjustments made to the actual sales. Specific testing of the manual adjustments was not conducted due to the immateriality of the variances.

The **EEC,** energy efficiency charge, tariff rate per them for the calendar year 2017 was set as part of the LDAC in dockets DG 16-819 the 2016-2017 Winter/Summer Cost of Gas Filings, Order 25,959 issued 10/26/2016 and DG 17-144 the 2017-2018 Winter/Summer Cost of Gas Filings Order 26,068 issued 10/31/2017. **LDAC** is the annual local delivery adjustment charge, set for implementation each November 1. The LDAC includes the **RLIARA**, low-income financial assistance and regulatory assessment costs, EEC, **ERC** environmental remediation costs related to manufactured gas plants, and **LRR**, lost revenue rate. The LRR was approved by settlement agreement in this docket and provides for the implementation of an adjustment mechanism to recover lost revenue due to the installation of energy efficiency measures beginning in January 2017. The LDAC was verified to the tariff approved by the respective Order:

DG 16-819 2016-2017 Winter/Summer Cost of Gas Order 25,959

	RLIARA	EEC	ERC	Total LDAC
Res Heat	$0.0096	$0.0331	$0.0056	$0.0483
Res Non-heat	$0.0096	$0.0331	$0.0056	$0.0483
Small C&I	$0.0096	$0.0142	$0.0056	$0.0294
Medium C&I	$0.0096	$0.0142	$0.0056	$0.0294
Large C&I	$0.0096	$0.0142	$0.0056	$0.0294

DG 17-144 2017-2018 Winter/Summer Cost of Gas Order 26,068

	RLIARA	EEC	ERC	LRR	Total LDAC
Res Heat	$0.0039	$0.0433	$0.0060	$0.0028	$0.0560
Res Non-heat	$0.0039	$0.0433	$0.0060	$0.0028	$0.0560
Small C&I	$0.0039	$0.0184	$0.0060	$0.0010	$0.0293
Medium C&I	$0.0039	$0.0184	$0.0060	$0.0010	$0.0293
Large C&I	$0.0039	$0.0184	$0.0060	$0.0010	$0.0293

Audit reviewed the December monthly report, and noted that the updated EEC rates for effect 11/1/2017 were not used in the report. Rather, the prior period's EEC rate was used. Audit reviewed the monthly reports through March 2018, and they continue to reflect the $0.0331 and $0.0142 rates which were in effect for November 2016 through October 2017. It appears to be a presentation issue only, as the December 2017 balance on the monthly report agrees with the Accounting model used to track the Energy Efficiency program. **Audit Issue #2**

Audit requested the "monthly billed usage by customer class" billing system summaries to which the reported therm sales and related revenue by month per the Accounting model were verified. Excel downloads of the HTE billing system in place from January through June (through use of Monarch) then downloads of the new billing system, July through December, enQuesta, were provided. All customer classes are assessed the EEC, with the exception of those commercial customers with special contracts, which do not pay the gas energy efficiency charge.

Actual Revenue for the year, $1,378,412 was verified to fifteen general ledger accounts, each beginning with 30-49-01-72-48X-0X-0X and to the Accounting Model used by the Company, without exception.

Balances in other Accrued Revenue 495 accounts reflect the net activity of revenues and expenses, excluding interest.

30-49-01-72-495-01-02 Accrued Revenue LDAC-EEC Residential	$ 4,783
30-49-01-72-495-01-06 Accrued Revenue LDAC-EEC Small C&I	$(73,111)
Total credit to Revenue accounts 495	$(68,328)

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 2017 was reported as $(7,320). Audit verified the interest rates reported correspond to the quarterly prime rates provided to utilities by the PUC, 3.50% for January through March, 3.75% for April through June, 4.00% for July through September, and 4.25% October through December.

Interest included within the incentive reconciliation in the amount of $7,320 was a funding source for the year, verified to:

30-40-01-72-431-10-05, Interest Expense	$(9,531)
30-40-01-72-419-10-05 Interest Income	$ 2,211
Net interest expense CORE	$(7,320)

Expenses

There are 59 general ledger accounts numbered 30-49-02-72-908-XX-xx. 908 represents the FERC expense account to which the costs are booked. XX identifies the program, and xx identifies the type of expense. Audit verified the reported 4th Quarterly Expenses (as revised by the actual reported expenses per the 6/1/2018 performance incentive) to the general ledger:

	Internal Admin	External Admin	Rebates/ Services	Implmntn Services	Marktng	EM&V	TOTAL
HEA	$ 27,114	$ 1,282	$ 160,555	$ 23,820	$ 3,260	$ 5,069	$ 221,100
ESH	$ 18,049	$ 853	$ 131,948	$ 11,315	$ 2,239	$ 6,496	$ 170,900
HPwES	$ 15,404	$ 728	$ 77,704	$ 20,600	$ 1,851	$ 2,879	$ 119,166
ESP	$ 23,667	$ 3,957	$ 211,010	$ 8,288	$ 3,301	$ 4,417	$ 254,640
Other	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Res	$ 84,234	$ 6,820	$ 581,217	$ 64,023	$ 10,651	$ 18,861	$ 765,806
Lg Business	$ 26,614	$ 7,253	$ 272,254	$ 61,892	$ 3,506	$ 5,081	$ 376,600
Sm Business	$ 52,811	$ 10,579	$ 142,916	$ 14,892	$ 9,298	$ 8,704	$ 239,200
Municipal	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ 5,532	$ 268	$ -	$ 5,800
Total C&I	$ 79,425	$ 17,832	$ 415,170	$ 82,316	$ 13,072	$ 13,785	$ 621,600
Combined	$ 163,659	$ 24,652	$ 996,387	$ 146,339	$ 23,723	$ 32,646	$ 1,387,406

The specific general ledger expense activity codes reviewed are summarized below. The representation in the grid above sums several expense accounts together. Audit was able to verify each. Specific account types are summarized below:

Education Implementation-02	$ 5,491
Education Marketing-03	$ 268
Program Admininstration-10	$ 140,831
Regulatory and General–13	$ 163,690
Third Party Administration-14	$ 24,651
Internal Marketing -20	$ 11,566
3rd Party Marketing-21	$ 11,889
Evaluation Internal-30	$ 25,689
3rd Party Monitoring and Evaluation-31	$ 6,957
Financing Buydowns-35	$ 6,899
Rebates-40	$ 688,035
Energy Audits-41	$ 177,322
GasNetwork Rebates-42	$ 111,899
Total GL by account type (rounded)	$1,375,187 (rounded)
Add refund from EFI for 2016 booked 2017 -40	$ 12,800
Add refund from EFI for 2016 booked 2017 -41	$ 190
Balance on Incentive Page 8	$1,388,177
Deduct UES interest buy-down booked to NU-35	$ (772)
Balance on which Incentive was calculated-Page 5	**$1,387,405**

Unitil Service Corp. (USC) performs shared utility services for the affiliates and issues monthly billings for labor, overhead and direct charges. The general overhead charge includes costs for indirect labor and Administrative and General Expenses. Administrative and General Expenses, including USC employee fringe benefits, are those expenses which cannot be directly charged to a specific entity. The expenses not charged to a specific NU-NH or NU-ME account are booked to NU-Common, then allocated to NH and ME based on the cost allocation manual. Allocations of the monthly USC Service Bills were verified to account type #10 for the Energy Efficiency programs. Account types to which the monthly allocation of NU Common accounts were verified were #10, #13, #14, #30, and #31.

Audit tested the USC Service Corp invoice for the month of September 2017. Of the total $1,724,196, $24,613 was booked to twelve Energy Efficiency general ledger accounts. The supporting schedule of thirteen employees, whose labor, indirect costs, and overhead (calculated at 111% of labor and indirect costs) were expensed to the EE, was provided. Of the overall 35 accounts to which the entire Service Corp invoice was booked, six were common accounts, nine were Maine accounts, twelve were the NH-EE accounts, and eight were other NH accounts.

<u>River Energy Consultants $8,197</u>

Audit noted regular general ledger postings of vouchers paid to River Energy Consulting summing to $8,197 across the following accounts:

30-49-02-50-908-29-14 Res HVAC Equip Plan/Admin-Ext	$2,840 part of EnergyStar Products
30-49-02-50-908-29-21 Res HVAC Equip Marketing-Ext	$ 461 part of EnergyStar Products
30-49-02-52-908-51-14 C&I Sm Bus Svcs Plan/Admin-Ext	$4,897 part of Small Business
30-49-02-52-908-51-21 C&I Sm Bus Svcs Marketing-Ext	<u>$ 891</u> part of Small Business
	$8,197

The Company indicated that this consulting company provides management services to energy efficiency program managers in Massachusetts and New Hampshire, streamlining the billing of expenses among multiple utilities. River Energy provides marketing and administration vendor services for GasNetwork high efficiency natural gas heating and water heating equipment and controls.

<u>Performance Systems Development $2,958</u>

Audit requested clarification of the Performance Systems Development general ledger entries noted in two general ledger accounts:

30-49-02-51-908-01-10 LI SingleFam Implsvcs STAT-Int	$1,479 part of HEA
30-49-02-51-908-34-10 LI Res HPwES Implsvcs STAT-Int	<u>$1,479</u> part of HPwES
	$2,958

The Company indicated that Performance Systems Development (PSD) maintains and supports the Treat-OTTER modeling invoicing software. The software is used by the participating CORE gas and electric utilities, as well as the CAA weatherization programs. Invoices are split monthly among the gas and electric Low Income (HEA) and HPwES programs of Northern and UES**.** STAT is an acronym for Sales, Technical Assistance, and Training implementation services.

Home Energy Assistance $221,119

As found in Commission Order #25,976 and the Plan, 17% of the overall budget was budgeted to the HEA Low Income weatherization program. At the end of 2017, 15.9% of the actual expenses were those associated with the HEA program. Refer to Audit Issue #1.

Audit verified the total to nine specific general ledger accounts, each beginning with 30-49-02-51-908-01-XX.

A rebate of $23,810.70, booked to the general ledger 30-49-02-51-908-01-40, Low Income Rebates on 9/5/2017, was paid to Southern NH Services. The total invoice for administrative costs $4,451.06 and rebate costs $23,810.70 for nine customers amounted to $28,261.76. The $4,451.06 was booked to the Low Income Energy Audits account 30-49-02-51-908-01-41. None of the nine exceeded the $8,000 limit.

EnergyStar Homes $170,911

Audit verified the total to nine specific general ledger accounts, each beginning with 30-49-02-50-908-47-XX.

A rebate in the amount of $18,000.00, booked on 9/5/2017 to account 30-49-02-50-908-47-40, Rebates, was selected for review. Fuel summaries provided by GDS Associates reflected annual natural gas and electric energy costs, costs for heating, cooling, water heating, lights and appliances, photovoltaics, related annual end-use consumption data in therms and kWh, and annual energy demands in kW. Each also reflected the HERS confirmation. The summaries related to 36 apartment units in a new building in Rochester. Each unit qualified for $500 rebate based on the HERS target and the actual HERS index.

Home Performance with EnergyStar $119,938

Audit verified the total to ten specific general ledger accounts, nine beginning with 30-49-02-50-908-34-XX and the other 30-49-02-50-908-43-35, Residential Financing-Buydown/Rebates.

One entry booked on 7/27/2017 to 30-49-02-50-908-34-40 in the amount of $11,514.50 was verified to an OTTER invoice from Mill City Energy for energy retrofits for thirteen customers. The invoice total was $15,655.94. Rebates summed to $11,514.50 and related administrative costs amounted to $4,141.44. The administrative costs were booked to account 30-49-02-50-908-34-41, Res HPwES Implscvs/STAT-Ext.

Third Party Financing Program $6,998

The third party financing program buys down the interest on a personal loan, financed through a bank or credit union, to 2%. The calculated net present value of the loan vs. the calculated loan at

2% is paid from the Energy Efficiency program to the lender. As found in the 4th Quarter Report filed by Eversource, UES bought down the interest rate on one project in 2017.

Interest Rate Buy Down Calculation			
	Lender Rate	2% Rate	Difference
Purchase Price	$ 10,601	$ 10,601	
Rebate	$ (2,317)	$ (2,317)	
Loan Amount	$ 8,284	$ 8,284	
Annual Rate	5.99%	2.00%	3.99%
Term of Loan (Months)	60	60	
Monthly Payment	$160.11	$145.19	$14.91
Total of payments	$9,606.44	$8,711.61	$894.83
		$771.61	**PV**

Audit verified the calculated present value of $771.61 without exception. However, the buy-down was initially booked to the Northern Utilities general ledger account 30-49-05-50-908-43-35, Residential Financing-Buydown/Rebates in error, rather than the UES account. The error was identified by Unitil and corrected in 2018.

According to the 4th Quarter Report filed by Eversource on 3/29/2018 covering the 2017 Program Year, page 26, twelve Northern projects were financed through the Third Party Financing program. Audit requested clarification on several line items and was provided:

	4th Quarter Report	Proposed Revision
Budget	$ 10,000	$ 10,000
less Interest Rate Buy-down Paid	$ (6,976)	$ (6,226)
Available for Buy-downs	$ 3,024	$ 3,774
# of Projects Financed	12	9
Total Project Cost	$ 41,374	$ 81,348
Average Project Cost	$ 3,448	$ 9,039
Total Loan Amount	$ 76,519	$ 67,506
Average Loan Amount	$ 6,377	$ 7,501
Average Loan Term	4.3 years	4.6 years
Total Buy-down	$ 6,976	$ 6,226
Average Buy-down	$ 581	$ 692
Average Gross Interest Rate	5.99%	5.99%
Average Customer Interest Rate	2.00%	2.00%
Average Square Foot of Home	6,457	1,347
Estimated Space Heating Save MMBtu	169	124
Average Estimated MMBtu saving	42	13.8

Audit reviewed two of the twelve project buy-downs, and the present value was properly calculated and paid to the Northeast Credit Union.

<u>EnergyStar Products $254,640</u>

Audit verified the total to nine specific general ledger accounts, each beginning with 30-49-02-50-908-29-XX.

One entry in the amount of $42,174.94 was selected for review, from account 30-49-02-50-908-29-40, HVAC Equipment Rebates. The entry was posted 2/17/2017. Supporting documentation demonstrated that the amount was paid to Energy Federation, Inc. (EFI) for the processing of 91 mail-in rebates related to GasNetworks. The rebate portion of the total invoice was $40,174.94. Processing fees which summed to $514.50 were posted to account 30-49-02-50-908-29-41 Res HVAC Equip Implsvcs/STAT-Ext.

<u>Large Business Energy Solutions $376,625</u>

Audit verified the total to ten specific general ledger accounts, beginning with 30-49-02-52-908-52-XX. A total of three entries were selected for review.

One entry, booked to account 30-49-02-52-908-52-40 C&I Large Business Services Rebates-Custom, in the amount of $55,316 was selected for review. The documentation provided reflected the total cost of the boiler control system project to be $153,768, with an estimated annual therm savings of 46,445 and annual kWh savings of 28,356. The rebate of $55,316 represents 36% of the project cost. The installation of measures at a seacoast hospital was proposed by Blake Equipment/Northeast Mechanical Division in March 2016. The project was inspected by GDS Associates with a report provided to Unitil on December 6, 2017.

One entry, booked to account 30-49-02-52-908-52-41 C&I Large Business Services Implementation Services-External, in the amount of $4,310 was selected for review. An invoice from GDS Associates for the engineering work of two employees from 5/30/2017 through 6/28/2017 was provided. The hourly charges for specific reviews of projects were noted. The invoice total was $9,425.85, split between Northern and Unitil Energy Systems:

30-49-02-52-908-52-41 Northern	$4,309.50
10-29-02-52-908-52-41 UES	<u>$5,116.35</u>
	$9,425.85

An entry to account 30-49-02-52-908-52-42 C&I Large Business Services Rebates-GasNetworks, in the amount of $30,000 was selected for review. The account reflected a balance of $36,800. The voucher was posted 11/7/2017. The total cost for an area school to install natural gas boilers with condensate neutralization kits, communications, gateways, and pressure relief valves in a new building was $99,108. The four boilers qualified for 90% thermal efficiency rebate of $7,500 each, or $30,000.

<u>Small Business Energy Solutions $239,188</u>

Audit verified the total to ten specific general ledger accounts, beginning with 30-49-02-52-908-51-XX.

An entry in account 30-49-02-52-908-51-40, C&I Small Business Services Rebates-Custom, in the amount of $34,401.60 was booked on 10/30/2017. The documentation provided indicated energy measures which cost $73,000 of which $34,401.60 was rebated. The amount represents 47% of the total cost. The weatherization was part of a much larger contract with Energy Efficient Investments for a seacoast school. That contract exceeded $4.9 million dollars and was paid on a progress payment schedule, less retainage. The measures installed for which the $34,401 rebate was paid were air sealing 300' of roof wall joint insulation, for anticipated therm savings of 2,223 and 151 kWh per year. The energy efficiency measures and weatherization were authorized as a 2017 custom rebate.

One entry in the amount of $15,800 was posted to account 30-49-02-52-908-51-42, C&I Small Business Services Rebates-GasNetworks. The documentation provided reflected a total project cost of $27,650 for an on-demand tankless water heater and two condensing boilers with a thermal efficiency of 90%. The rebate represents 57% of the cost.

<u>Commercial and Industrial Education $5,759</u>

Audit verified the total to two specific general ledger accounts:

30-49-02-52-908-21-02 C&I Statewide Education Implementation	$5,491
30-49-02-52-908-21-03 C&I Statewide Education Marketing	<u>$ 268</u>
	$5,759

Testing of the Education costs was not conducted.

<u>Lost Base Revenue (LBR)</u>

The Settlement Agreement for the 2017 program, approved by Order #25,932 includes a calculation of a rate to be calculated and assessed to customers to restore "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*".

Audit reviewed the DG 17-144 winter/summer cost of gas filing, Bates page 275, schedule 16-LRR page 3 of 6 which includes the rate classes, corresponding number of customers' billing determinants, and customer charges. Audit was able to trace the customer charges to the tariff, but on the line for R-11 Residential Non-heating Low Income, the customer count and customer charge reflect N/A. The tariff lists the monthly customer charge at $15.52. Also, the C&I Interruptible rate class IT was not included. The Company clarified the customer classes: "*The R-11 Residential Non-heating Low Income Customer Class has been closed to new customers since 2008. The R-11 Customers that were remaining (under 10 customers) were migrated to the R-10 Residential Low Income Heat Customer Class after the October 2016 billing. The R-11 Customer Class was removed* *from the tariff rate schedules in May of 2017 in Docket DG 17-070. Per the Company tariff, the rate class IT is not subject to paying the LDAC; the LRR is one of the seven LDAC components."*

Audit then reviewed the Accounting model which reflected:

Beginning Balance	$ -0-
Lost Revenue Estimates	$ 29,934
Estimated Collected Lost Revenue	$(33,448)
Estimated Interest	$ (87)
Estimated Over-collection	$ (3,601)

The reported actuals, based on the annual report received on June 1, 2018 were noted, on page 2 of 22, to be:

	Residential	Commer/Ind	TOTAL
Beginning Balance	$ -0-	$ -0-	$ -0-
Calculated LBR	$ 22,218	$ 8,106	$ 30,324
Collected LBR	$(16,318)	$(17,131)	$(33,449)
Interest	$ 63	$ (143)	$ (80)
(over)/under bal. 12/18	$ 5,963	$ (9,168)	$ (3,205)

Based on the Accounting model and the performance incentive it appears that the Accounting model should be adjusted from the estimated over collection of $(3,601) to the $(3,205) to reflect the calculated annualized savings.

Audit compared the annualized therms lost revenue estimates, from Attachment RG-1, last page of the 2017 EE plan, to the therms in the annual report (AR):

	Attachment RG-1	AR Pg 1 of 22	AR Table 1 of 22 as % of RG-1
Residential Annualized Savings	66,999	70,757	106%
C&I Annualized Savings	238,743	265,574	111%
	305,742	336,331	110%

Order 25,932 in docket DE15-137 indicated that calculated actual annualized savings could not exceed the budgeted annualized savings by more than 10%. As identified above, Northern did not exceed that threshold for the residential. The actual annualized therms for C&I was 278,413. The Company provided a calculation reducing the combined allowed therm savings to be reduced for the overall calculation of the combined sectors to reflect the authorized 110%.

The Company further noted that within Order 25,932 in docket DE 15-137, the Energy Efficiency Resource Standard and the 2017 Plan Year, "*…we approve the annual process proposed for setting and reconciling the LRAM as described in the Settlement Agreement and the Joint Utilities' EERS proposal…<u>Total</u> lost revenues shall be capped at 110 percent of planned annual savings…*" Audit added the emphasis on "Total". The Company was not required to achieve a cap of 110% at each sector level.

There were 221 measures installed during 2017 across all sectors. Audit requested the detailed support for all installations and was provided with an Excel spreadsheet which included a detailed listing of all of the energy efficiency measures installed by Northern's customers as a result of incentives provided during 2017. The Company explained the sheet and its contents as *"Data points include Sector, Program Name, Equipment, Begin Date, End Date, Measure Life, Annual kWh, and Monthly Savings by measure for 2017. The data arrayed…were determined as monthly therm savings calculated by dividing Annual Therms…by 12; lost revenue from these savings begins in the month indicated by Begin Date…based on when the measure was recorded in the Company's tracking system. The End Date…indicates in what month and year the measure will stop contributing savings and associated lost revenues. Since the measure lives of all the efficiency measures are greater than 1 year, none of the savings expired during 2017…LBR calculations sums the actual savings that occurred in 2017 by sector and month…and the calculation of the savings reduction due to the imposition of a 10% Cap per Settlement in DE 15-137."*

Audit Issue #1
Home Energy Assistance Spending

Background

Attachment M of the Plan approved by Commission Order #25,976, increased the budget requirement for the Low Income Home Energy Assistance program from 15.5% to 17% for calendar year 2017.

Issue

The June 1, 2018 annual report reflects HEA expenses of $221,119 of the total $1,388,179. The HEA spending represents 15.9% of the overall total.

Recommendation

The Company should explain why the 17% targeted spending on HEA was not met.

Company Comment

The 2017 NH Statewide Energy Efficiency Plan, submitted to the Commission in DE 14-216 and subsequently revised on October 31, 2016, called for budgets for the Home Energy Assistance program to increase from 15.5% to 17% (page 18 of 31). This budget requirement conformed to the Energy Efficiency Resource Standard Settlement Agreement in DE 15-137 dated April 26, 2016, which held that "the low income share of the overall energy efficiency budget shall be increased to a minimum of 17% of the total budget" (page 9). The 2017 Plan was subsequently approved by the Commission in Order 25,976 issued December 23, 2016 which affirmed that "the portion of the budget allocated to the Home Energy Assistance (income eligible) Program increased to 17 percent." (page 5).

The Company budgeted 17% for the HEA Program in 2017 as ordered. However, due to factors including the unexpected influx of federal funding to the low income programs earlier in the year and the timing of projects, the Company was not able to expend all of its budgeted funds on the HEA program.

Audit Comment

Audit appreciates the Company's explanation of the reason that the actual spending on the low income program did not meet the budgeted 17%.

Audit Issue #2
Incorrect Tariff Rates

Background

The Energy Efficiency rate to be charged to Northern customers is set annually as part of the Local Distribution Adjustment Clause for effect November 1. Monthly reports are submitted to the Commission.

Issue

The monthly Energy Efficiency reports filed in docket DE 14-216 from November 2017 through March 2018 reflected the rates that were in place through October 31, 2017, rather than updating the information with the current LDAC rates.

The rates that were in effect for November 1, 2016 through October 31, 2017 were:

Residential	$0.0331 per therm (total LDAC $0.0483)
Commercial and Industrial	$0.0142 per therm (total LDAC $0.0294)

The rates that were in effect for November 1, 2017 through October 31, 2018 were:

Residential	$0.0433 per therm (total LDAC $0.0560)
Commercial and Industrial	$0.0184 per therm (total LDAC $0.0293)

It appears that the error was a presentation issue only, as the running balance at the end of December 2017 agreed with the Accounting model and general ledger.

Recommendation

It is recommended that the monthly report be updated to reflect the current rates.

Company Comment

The Company inadvertently did not update its presentation to approved rates in its November 2018 report nor in subsequent monthly reports, however, the running balances were correct. The Company will update its presentation to reflect current rates in future monthly reports.

Audit Comment

Audit agrees that the rate error was a presentation issue only and that the running balances were correct. Audit also appreciates that the rates will be adjusted to reflect the tariff in effect.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: December 17, 2018
AT (OFFICE): NHPUC

FROM: Karen Moran, Chief Auditor

SUBJECT: Liberty Utilities (Granite State Electric) Corp.
DE 14-216 - 2017 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 Electric and Gas Energy Efficiency Programs for the calendar year 2017. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource (Eversource), New Hampshire Electric Cooperative (NHEC), and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (GSE or Liberty) and two gas utilities, Northern Utilities, Inc. (Northern) and Liberty Utilities (EnergyNorth Natural Gas) Corp. (ENG or Liberty) filed a joint petition for the program year 2017. Each utility was audited individually.

Audit appreciates the assistance of Eric Stanley, Tina Poirier, and Sue-Ellen Billeci from Liberty Utilities.

Approved 2017 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/23/2016 for the program year 2017. A joint Settlement Agreement and updated filing were presented to the Commission on 12/12/2016, and approved by Order 25,976 on 12/23/2016. Liberty Utilities' (Granite State Electric) programs for 2017 were approved as follows:

<u>Residential</u>
Home Energy Assistance Program (weatherization program)
NH Home Performance with Energy Star (HPwES)
Energy Star Homes (ESH)
Energy Star Appliance Program (Gas Networks)
Residential Education

Residential Loan Buydown / Third Party Financing

<u>Commercial and Industrial</u>
Large Business Energy Solutions Program
Small Business Energy Solutions Program
Codes, Audits and Educational Programs

Changes to the Plan for 2017

The Plan included the following changes for the 2017 program year, as they apply to Liberty:

Design changes and Savings Assumptions

- Home Energy Assistance budget increased from 15.5% to 17% of the total program budget.
- EnergyStar Homes includes a Drive to Net Zero Competition to encourage and promote super high efficiency, zero net energy homes.
- HEA savings assumptions were updated to reflect current projects modeled by the Community Action Agencies, with updates made to project and measure lives.
- HPwES and ESH savings assumptions were updated to reflect current projects modeled in the program auditing software.

Demand Reduction Induced Price Effects (DRIPE) "*Beginning in 2017, the NH Utilities are including applicable electric and natural gas DRIPE avoided costs in their benefit-cost calculations.*" (Plan page 6 of 31)

The Lost Base Revenue (LBR) as approved by Order 25,932, restores "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31).

The 2017 Performance Incentive target of 5.5% of program expenditures, with a cap of 6.875% is a reduction of the previous electric cap of 10% and gas cap of 12%.

Funding changes

- 3rd party loan interest rate buy-downs (to 2% up to 7 years, up to $15,000) will no longer have NH CDFA available as a funding source. All utilities will continue to use program funds for this program.

Mid-Year Adjustments

As outlined in the 2015-2016 New Hampshire Statewide CORE Energy Efficiency Plan, section IV.C, budget transfers may be accomplished, subject to the following restrictions:

- Budget transfers to or from individual programs of 20% of the individual program's budget or less can be made without consultation and without Commission approval. Notice to the Commission's Staff and interested parties is required.
- Budget transfers to or from individual programs greater than 20% of the individual program's budget shall be filed with the Commission. The Commission's Staff and

interested parties may file any comments with the Commission within two weeks of the filing. If no action has been taken by the Commission's Staff and interested parties, the budget transfer request shall be deemed approved unless the Commission notifies the requesting Company of the need for a more in-depth review within thirty (30) days of the filing.

- Notwithstanding the 2nd and 3rd bullets above, no funds shall be transferred from the Home Energy Assistance Program without prior approval by the Commission.

For informational purposes, Liberty notified the Commission of the following budget transfer on December 22, 2017:

Program	Budget	20% Cap	Amount	%
ES Products	$240,062	$ 48,012	$ 18,000	7%
ES Homes	$120,031	$ 24,006	$(18,000)	-15%
Large Business	$703,050	$140,610	$ 21,000	3%
Small Business	$445,265	$ 89,053	$(21,000)	-5%

Budget vs. Reported Actual

As outlined in the Shareholder Incentive Table 1a, the budgeted figures for 2017 sum to $2,318k, and on Table 1b the reported actual expenses for 2017 sum to $2,157k. Audit calculated the percentages based on the reports.

Residential	Budget ($000)	Actuals ($000)	% of Budget
Energy Star Homes	$ 120	$ 53	44%
Home Performance with Energy Star	$ 186	$ 151	81%
Energy Star Products	$ 240	$ 252	105%
Home Energy Assistance	$ 392	$ 353	90%
ISO-NE FCM-Residential	$ 9	$ 10	111%
Subtotal Residential	$ 946	$ 819	87%
Commercial and Industrial			
Large Business	$ 703	$ 722	103%
Small Business	$ 445	$ 423	95%
C&I Education	$ 23	$ 17	74%
Municipal	$ 180	$ 162	90%
ISO-NE FCM-C&I	$ 20	$ 14	70%
Subtotal C&I	$1,372	$1,338	98%
TOTAL	$2,318	$2,157	93%

Program Activity

2017 Carry Forward Balance

The 2017 beginning balance in table 5 of the 2017 GSE shareholder incentive was $(22,657). While that Over-collection agreed with the prior audit, the 2017 schedule reflects it as an Under-collection.

However, the sum of the beginning balance, revenues, less expenses does sum to the reported Over-collection of $(163,024).

2016 Audited Carry-forward Over-collection		$ (22,660)
System Benefits Charge Revenue		$(1,761,647)
RGGI Funding		$ (215,199)
FCM Payments Received		$ (448,999)
Interest		$ (15,295)
	Total Revenues	$(2,441,140)
Program Expenses		$ 2,157,009
2017 Performance Incentive Estimate		$ 143,767
	Total Expenses	$ 2,300,776
Net 12/31/2017 Over-collection		$ (163,024)

The general ledger reflected the following activity and related adjustments to reflect calendar 2017 EE expenses:

12/2016 Carryforward balance		$ (22,660)
System Benefits Charge Revenue		$(1,761,647)
RGGI Funding		$ (215,199)
FCM Payments Received		$ (448,999)
Interest		$ (14,972)
	Total Revenues	$(2,440,817)
2017 Interest true-up to book 8/2018		$ (323)
	Adjusted Revenue	$(2,441,140)
Program Expenses		$ 1,721,027
Spending		$ 106,990
ISO-NE Spending		$ 251,653
75% estimated Incentive 2017		$ 127,490
2016 Incentive True-up		$ 76,124
2016 Activity booked in 2017		$ (27,074)
2017 Activity booked in 2018		$ 104,413
2017 Performance Incentive Estimate		$ 143,767
	Total Expenses	$ 2,300,776
Net 12/31/2017 Over-collection		$ (163,024)

System Benefits Charge (SBC) and Lost Base Revenue (LBR)

Audit verified the tariff First Revised Page 65, as approved by Commission Order 25,976 dated 12/23/2016, reflects:

Electric Assistance Program (EAP)	$0.00150
Energy Efficiency Programs (EE)	$0.00198
Lost Revenue Mechanism (LBR)	$0.00006
Total System Benefits Charge 2017	$0.00354

The detail regarding each component was included within the 2016/2017 Plan, Attachment O (docket DE 14-216 Exhibit 8).

The SBC is the primary funding method for the Energy Efficiency programs and the Electric Assistance program. The EE portion from $0.0018 to $0.00198 effective January 1, 2017. The rate is statewide. EE revenue initially posts to the System Benefits Charge general ledger account 8830-2-0000-20-2142-2542, and is transferred monthly to the EE 8830-2-0000-20-2142-2423. The LBR is also transferred out of the -2542 account monthly and into 8830-2-0000-20-2142-2426, Current Regulatory Liabilities

The EAP is audited annually at the end of the program's fiscal year, September 30. The rate is statewide. The entire collection of SBC funds is booked to account 8830-2-0000-20-2142-2542, with the Energy Efficiency portion and the Lost Base Revenue portion transferred monthly, as noted above and tested as follows:

The EE reported SBC revenue was $1,761,646.52, per the shareholder incentive report, Table 5. Audit tested the months of January 2017 through December 2017 using the EAP monthly reported kWh billed sales, imputed sales, and the related Cogsdale revenue reports and manual adjustments (for January through September). The overall SBC is included within the Cogsdale reports. The split among EAP/EE/LBR are manual calculations based on the kWh billed to customers. Using the 2016 EE rate of $0.0018 and the 2017 EE rate of $0.00198, Audit was able to recalculate the reported revenue to within $261. The variance is considered immaterial based on cancel/rebills.

The LBR is a new charge designed to align "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31). 2017 is the first year in which the utilities are authorized to charge a per-kWh rate to recover lost revenues due to energy efficiency measures. As estimates and actuals are reconciled, a resulting over/under collection will result. Each utility's LBR rate is set individually. Audit requested the reconciliation of the over/under collection, as the LBR rates were set based on estimates. The estimates and actuals (as calculated) are posted to the general ledger as follows:

To record the annual estimated Lost Revenue:
Debit 8830-2-0000-20-2142-2426 Current Regulatory Liabilities
Credit 8830-2-0000-40-4210-4511 Misc. Service Revenue-Open Access DSM

To record the reclassification of the LBR monthly portion of calculated revenue out of the System Benefits general ledger account (where it is part of the total SBC):

Debit 8830-2-0000-20-2142-542 System Benefits Charge
Credit 8830-2-0000-20-2142-2426 Current Regulatory Liabilities

Audit compared the lost revenue estimates, from Attachment O page 4 of 11 of the 2017 EE plan to the shareholder incentive table 7b:

	Attachment O	Shareholder Incentive Table 7b	SH Table 7b as % of O
Residential Annualized Savings	1,162,032	1,251,949	107%
C&I Annualized Savings	3,966,546	4,363,201	110%

Order 25,932 in docket DE15-137 indicated that calculated actual the annualized savings (not dollars) could not exceed the budgeted annualized savings by more than 10%. As identified above, Liberty did not exceed that threshold for either the residential or commercial.

The shareholder incentive Table 7b shows the actual cumulative savings based on the measures installed in calendar year 2017. Because each month reflects the annualized savings, the lines must be divided by twelve to determine the monthly savings, then multiplied by the average distribution rate. Each month's calculation is rolled into the following month. Table 7b reflects a calculated actual loss of revenue due to annualized savings of installed efficiency measures of $191,350. Audit requested verification of the actual installed savings and was provided with a detailed pivot table, by month, which reflected the total savings associated with that month's installation. The detailed Excel file supporting the pivot was a download of the tracking mechanism of the eTRACK software system used by Liberty. The Commercial and industrial sector reflected over 329 installed measures, and the Residential sector reflected 3,402 measures. The download identified the sector, specific measure, program, project code, installation date, month, monthly kWh savings, monthly therm savings, and annual therm savings. The Company indicated that the inputs to the database are spot-checked to ensure the integrity of the output.

The comparison continues:

	Attachment O	Shareholder Incentive Table 7b	SH Table 7b as % of O
Residential Monthly Cum. Savings	455,129	647,963	142%
Lost Residential Revenue $	**$19,807**	**$55,050**	**278%**
C&I Monthly Cumulative Savings	1,553,564	2,577,757	166%
Lost C&I Revenue $	**$39,383**	**$136,300**	**346%**
Total Lost Revenue $	**$59,190**	**$191,350**	**323%**

The estimate in Attachment O of the 12/2016 plan reflected average distribution rates for Residential customers of $0.04352 for the entire year, and for C&I customers, $0.02535 for the entire year.

Average distribution rates included within the shareholder incentive reflected:

	Residential	C&I
January – April	$0.04338	$0.02597
May – December	$0.09056	$0.05896

The reconciliation of the Table 7b and the general ledger will be done after the conclusion of this audit. It is understood that the general ledger running balance will be impacted (generally) in the following manner:

Beginning Balance	$ -0- per general ledger reconciliation
Debit estimates of lost revenue	$ 59,190 per general ledger reconciliation
Credit entries of calculated LBR	$ (51,046) per gl, based on kWh calculation
Net debit entries interest	$ 220 per general ledger reconciliation
12/31/2017 General Ledger balance	$ 8,364 debit balance over estimated
Add back reversal of calculated LBR	*$ 51,046 reverse the credit entries based on kWh*
Credit the annualized savings SHI	*$(191,350) per Table 7b shareholder incentive*
Estimated 12/2017 ending GL	*$(131,940) under-collection*

The actual under-collection will vary due to the recalculation of interest.

Audit verified the total estimated $59,190 lost revenue was booked as debit entries monthly to 8830-2-0000-20-2142-2426 Current Regulatory Liabilities account. Interest of $220.21 was also noted as net debit to the same account. Calculated revenues of $51,046.44 were credited to the account throughout the year. The credited revenues do not match the shareholder incentive revenues of $191,350 based on the method by which the monthly entries were calculated. The general ledger "actuals" are based on the kWh sales multiplied by the LBR rate, rather than based on the calculated annualized kWh savings as noted on Table 7b. The reconciliation will be adjusted at the conclusion of this audit.

ISO Forward Capacity Market

per 4th Quarterly Report filed in DE 14-216 on 3/28/2018
Actual Forward Capacity Market Proceeds and Expenses

	Liberty	NHEC	Eversource	Unitil	Total
Proceeds					
Quarter 1	$ 53,142	$ 12,128	$ 425,537	$ 67,175	$ 557,982
Quarter 2	$ 50,615	$ 10,148	$ 427,879	$ 65,961	$ 554,603
Quarter 3	$ 188,744	$ 18,687	$1,573,553	$215,229	$ 1,996,213
Quarter 4	$ 156,499	$ 54,035	$1,425,941	$193,304	$ 1,829,779
Total Proceeds	$ 449,000	$ 94,998	$3,852,910	$541,669	$ 4,938,577
Financial Assurance					
Quarter 1	$ -	$ -	$ -	$ -	$ -
Quarter 2	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Quarter 3	$ -	$ -	$ -	$ -	$ -
Quarter 4	$ -	$ -	$ -	$ -	$ -
Total Fncl Assurance	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Other Expenses					
Quarter 1	$ (2,282)	$ -	$ (5,164)	$ (3,141)	$ (10,587)
Quarter 2	$ (18,635)	$ (6,368)	$ (19,111)	$ (12,471)	$ (56,585)
Quarter 3	$ (1,789)	$ (4,267)	$ (11,073)	$ (331)	$ (17,460)
Quarter 4	$ (1,147)	$ -	$ (8,237)	$ (410)	$ (9,794)
Total Other Expenses	$ (23,853)	$ (10,635)	$ (43,585)	$ (16,353)	$ (94,426)
Total Expenses	$ (23,853)	$ (10,635)	$ (44,585)	$ (17,353)	$ (96,426)
NET FCM	**$ 425,147**	**$ 84,363**	**$3,808,325**	**$524,316**	**$ 4,842,151**

GSE reported total funding from the ISO of $449,000 excluding ISO expenses. The expenses of $23,853 were verified to account 8830-2-0000-20-2142-2423. The expenses were allocated 43% to the residential sector and 57% to the C&I sector. Inclusion of the ISO expenses in the Performance Incentive calculation is allowed. Offsetting entries are booked to cash.

RGGI Quarterly Auction Proceeds

The PUC Business Office records and the 2017 RGGI Audit Report indicate a total of $212,225, relating to auctions 35 – 38, was awarded to Liberty Utilities from auctions held in 2017. However, due to the timing of when funds were actually received, the amount of RGGI funding GSE included in their 2017 CORE Program year included include the 4th quarterly 2016 payment and the first 3 payments of 2017 for a total of $215,199. The $215,199 was verified to account 8830-2-0000-20-2142-2423.

The detail below represents the audited 2017 RGGI auctions, as noted within the audit report dated August 2, 2018.

	Calendar Year 2017				
	Auction #35	Auction #36	Auction #37	Auction #38	**2017 Total**
NH Proceeds	$ 2,378,451	$ 2,232,581	$ 3,448,754	$ 3,012,708	**$ 11,072,494**
# of Allowances Sold	792,817	882,443	792,817	792,817	**3,260,894**
RGGI Proceeds at $1.00	$ 792,817	$ 882,443	$ 792,817	$ 792,817	**$ 3,260,894**
Administrative Expenses	$ (80,000)	$ (80,000)	$ (80,000)	$ (80,000)	**$ (320,000)**
RFP 14-004 All-fuels grant	$ (100,000)	$ (100,000)	$ (100,000)	$ (100,000)	**$ (400,000)**
Available to CORE	$ 612,817	$ 702,443	$ 612,817	$ 612,817	**$ 2,540,894**
Eversource	$ (446,301)	$ (511,573)	$ (446,301)	$ (446,301)	**$ (1,850,476)**
NHEC	$ (48,265)	$ (55,324)	$ (48,265)	$ (48,265)	**$ (200,119)**
Liberty	$ (51,185)	$ (58,671)	$ (51,185)	$ (51,185)	**$ (212,225)**
UES	$ (67,066)	$ (76,875)	$ (67,066)	$ (67,066)	**$ (278,074)**
distributed to CORE	$ (612,817)	$ (702,443)	$ (612,817)	$ (612,817)	**$ (2,540,894)**
Rebated to Electric Customers after payment of Administrative costs, All-fuels, and CORE					
Eversource	$ (1,144,283)	$ (974,336)	$ (1,916,674)	$ (1,601,999)	**$ (5,637,292)**
NHEC	$ (109,018)	$ (92,827)	$ (182,605)	$ (152,625)	**$ (537,075)**
Liberty	$ (132,438)	$ (112,769)	$ (221,834)	$ (185,414)	**$ (652,455)**
UES	$ (173,531)	$ (147,758)	$ (290,664)	$ (242,943)	**$ (854,896)**
Ashland	$ (2,662)	$ (2,266)	$ (4,458)	$ (3,726)	**$ (13,112)**
Littleton	$ (9,982)	$ (8,500)	$ (16,720)	$ (13,975)	**$ (49,177)**
New Hampton	$ (516)	$ (440)	$ (865)	$ (723)	**$ (2,544)**
Wolfeboro	$ (9,823)	$ (8,364)	$ (16,453)	$ (13,752)	**$ (48,391)**
Woodsville	$ (3,381)	$ (2,879)	$ (5,664)	$ (4,734)	**$ (16,658)**
Total Rebated	$ (1,585,634)	$ (1,350,138)	$ (2,655,937)	$ (2,219,891)	**$ (7,811,600)**

Audit verified that the auctions #35, #36, and #37 rebates to customers, as well as the auction proceeds from #34 (4th quarter 2016) were credited to account 8830-2-0000-20-2142-2428, RGGI Auction Proceeds to All Distribution Customers for a total of $(643,960). Debits monthly to the same account, representing the actual rebates, summed to $1,471,181. The account had the following activity for 2017:

Beginning credit balance	$(1,662,204.61)
Debit rebates to customers	$ 1,474,180.77
Credit proceeds from auctions	$ (643,959.51)
Net 12/31/2017 credit balance	$ (831,983.35) to be rebated

RGGI All-fuels Program-Grant

Due to the timing of disbursements of the auction proceeds from both the PUC to Eversource, then from Eversource to the other electric utilities, GSE received and posted to their general ledger the two June 2017 and the October 2017 All-fuels grant proceeds during calendar year 2017. The entire grant is documented below:

Payment Dates	TOTAL	Eversource	NHEC	Liberty	Unitil
Feb -16 for Dec -15	$ 400,000	$ 296,510	$ 18,408	$ 40,552	$ 44,530
May-16	$ 100,000	$ 74,127	$ 4,602	$ 10,138	$ 11,133
Jul-16	$ 100,000	$ 74,127	$ 4,602	$ 10,138	$ 11,133
Nov-16	$ 100,000	$ 74,127	$ 4,602	$ 10,138	$ 11,133
Jun-17	$ 100,000	$ 74,127	$ 4,602	$ 10,138	$ 11,133
Jun-17	$ 100,000	$ 74,650	$ 3,887	$ 9,313	$ 12,150
Oct-17	$ 100,000	$ 74,650	$ 3,887	$ 9,313	$ 12,150
Dec-17	$ 100,000	$ 74,650	$ 3,887	$ 9,313	$ 12,150
Jan-18	$ 100,000	$ 74,650	$ 3,887	$ 9,313	$ 12,150
Total All-Fuels Grant	$ 1,200,000	$ 891,618	$ 52,364	$ 118,356	$ 137,662

The shareholder incentive, Table 6, reflects the RGGI grant expenses to be $39,653 with a calculated 7.5% shareholder incentive of $2,974.

Liberty uses account 8830-2-0000-20-2110-2420, Miscellaneous Accrued Liabilities for the All-fuels grant. The -2420 account includes a variety of other reconciling items such as the amount due to/from National Grid, accrued audit fees, line of credit interest, PUC assessment estimate, RGGI Grant, and other. The reconciliation provided for year-end 2017 reflects the RGGI Grant column (of a detailed supporting spreadsheet) with an ending balance of $41,291. This was summarized to be:

January 1, 2017 beginning balance	$ 55,392
2016 expenditures to GL 2017	$ (3,213)
2017 expenditures	$(39,652)
2017 payments from Eversource	$ 28,764
12/31/2017 ending balance	$ 41,291 per account detail
7.5% Performance Incentive	$ (2,974)
Ending balance	$ 38,317 funding available

Offsetting entries to the grant payment receipts and expenditures is cash. Audit requested the supporting information relating to one expense entry in the amount of $25,000, paid to Pike Industries for 34% of the difference between a base model and an efficient model of a HEATEC power flame CNG boiler with economizer. The purchased unit was $488,838 with an annual CBG cost of 16,248 vs. a base option amounting to a total of $442,689.

Interest

The shareholder incentive Table 5 reflects interest of $15,295.28 as a source of funding. The general ledger reconciliation provided to Audit reflects interest in the amount of $14,972.15, or $323.13 less than the Table 5 figure. The timing and inclusion of 2016 expenses booked to the general ledger in 2017, and 2017 expenses booked to the general ledger in 2018 cause the figures to be different. The timing and reported interest result is not an issue.

Performance Incentive Calculation

GSE's Annual Report for the 2017 Core indicates they earned a Performance Incentive of $143,767.

Residential	$ 51,812	6.322% of $819,487 expenses
Commercial/Industrial	$ 91,955	6.875% of $1,337,522 expenses
Total	$143,767	

Both customer segments' calculated performance incentive are at or below the Commission authorized 6.875% incentive cap. The incentive is credited to revenue account 8830-2-0000-40-4210-4511.

During the calendar year 2017, the Company booked an estimate of their budgeted figure $169,987. The estimate, $127,490 represents 75% of the budget. The actual calculated incentive $143,767 will require a true-up in 2018 of $16,277.

Expense Test Summary

Expenses for the year ending December 31, 2017, as noted in the shareholder incentive filing, were reported to be $2,157,009, including ISO expenses, identified as follows:

Program Expenditures by Category - 2017 ACTUAL

	Evaluation	External Administration	Internal Administration	Internal Implementation	Marketing	Rebates-Services	Total
Residential Programs							
ENERGY STAR Homes	$ 7,958	$ 219	$ 902	$ 12,597	$ 4,031	$ 27,652	**$ 53,360**
Home Performance with ENERGY STAR	$ 6,468	$ 338	$ 3,227	$ 11,971	$ 8,948	$ 119,569	**$ 150,522**
ENERGY STAR Products	$ 9,335	$ 438	$ 3,656	$ 45,632	$ 13,718	$ 179,582	**$ 252,360**
Home Energy Assistance	$ 13,421	$ 715	$ 4,750	$ 57,788	$ 10,163	$ 266,151	**$ 352,987**
ISO-NE FCM	$ 10,257	$ -	$ -	$ -	$ -	$ -	**$ 10,257**
Subtotal Residential	**$ 47,439**	**$ 1,709**	**$ 12,536**	**$ 127,989**	**$ 36,860**	**$ 592,954**	**$ 819,487**
Commercial & Industrial Programs							
C&I Education	$ -	$ -	$ 575	$ -	$ -	$ 16,174	**$ 16,748**
Large Business Energy Solutions	$ 24,726	$ 1,281	$ 7,102	$ 118,409	$ 17,463	$ 553,372	**$ 722,353**
Small Business Energy Solutions	$ 24,272	$ 812	$ 4,451	$ 75,402	$ 11,390	$ 306,994	**$ 423,319**
Municipal	$ 9,611	$ 328	$ 1,338	$ 29,350	$ 4,471	$ 116,407	**$ 161,505**
ISO-NE FCM	$ 13,597	$ -	$ -	$ -	$ -	$ -	**$ 13,597**
Subtotal Commercial & Industrial	**$ 72,206**	**$ 2,421**	**$ 13,464**	**$ 223,161**	**$ 33,323**	**$ 992,946**	**$ 1,337,522**
Total	**$ 119,645**	**$ 4,130**	**$ 26,000**	**$ 351,149**	**$ 70,184**	**$ 1,585,900**	**$ 2,157,009**

The total expenses of $2,157,009 were verified to the detailed Excel pivot table of the Company's general ledger provided to Audit. Expenses are debited directly to general ledger account #8830-2-0000-20-2142-**242**3. Audit selected a sample of the expenses to review, which are summarized below.

C&I Education $16,748

Of the reported $16,748, $575 was classified as Internal Administration and $16,174 as Rebates and Services. Audit selected one invoice in the amount of $4,402.05 which was paid to Resilient Buildings Group, Inc. The entry was posted 3/13/2018 for a "NHSaves Lighting and Controls for Small Businesses" conference held at the AVA Gallery and Art Center in Lebanon on 11/24/2017. The cost covered the rental of the facility and food costs.

Franklin Energy Services, LLC – Large, Small Business and Municipal Customers

In the audit report of the 2016 program year, the following was documented:
Liberty's agreement with Franklin Energy consists of both a fixed and variable pricing structure. In 2016, Liberty agreed to pay Franklin a total of $x per month as a fixed fee for supporting the delivery of the Large Business, Small Business and Municipal electric programs, of which 53%, or $x was allocated to the Large Business program. The monthly fixed fee helps cover costs related to staffing an office, answering customer phone and Web inquires, and providing Liberty's customers with assistance with the C&I Electric Programs. This assistance is provided to all customers requesting assistance. Not all customer requests result in a project, therefore the monthly fixed fee helps cover costs related to this assistance. The report identified the posting of the Franklin Energy Services as a Rebate/Service to be in error, which Liberty disputed and reinforced the understanding the Franklin provides a Service similar to other vendors. The report concluded that the Company and Staff should determine the most appropriate classification. Audit clarified with the Company that the issue was discussed in detail at the second quarterly EERS meeting in June 2018. At that time, it was concluded that classifying the Franklin costs within the Rebates/Services bucket was appropriate. Audit concurs with the classification.

Large Business Energy Solutions Program $722,353

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 2015-2017.

For 2017, the program costs were identified as:

Evaluation	$ 24,726
External Administration	$ 1,281
Internal Administration	$ 7,102
Internal Implementation	$118,409
Marketing	$ 17,463
Rebates/Services	$553,372
Total	$722,353

Audit selected six specific items to review:

1. $82,413.00 eTRACK item #436957 booked 11/1/2017 Lowe's rebate
2. $ 6,419.49 eTRACK invoice #406088 booked 2/9/2017 Esource evaluation

3. $ 3,356.69 EE benefits and taxes – internal implementation 4/30/2017
4. $ 3,480.19 eTRACK item #436358 marketing Ideas Agency Inc. booked 6/16/2017
5. $ 6,360.00 eTRACK item #416184 booked 3/15/2017, rebates/services Franklin Energy
6. $ 6,360.00 etTRACKitem #436251 booked 4/3/2017, rebates/services Franklin Energy

1. The Lowe's rebate in the amount of $82,413 represents a rebate of 29.58% of a total project cost of $278,591. The project was a retrofit of the commercial lighting fixtures within the Salem NH store. Anticipated lifetime kWh savings were noted to be 7,110,841. The measures were inspected for completeness on 10/10/2017.

2. The Esource $6,419.49 was an allocation of an overall invoice dated 1/18/2017 for an annual contract. Esource provided demand side management, technology assessment services, residential marketing services, and business marketing services. The total annual contract amount was $74,100 allocated among:

Liberty-Gas	$53,409
Liberty-Electric	$20,691
	$74,100

Of the $20,691 allocated to the Electric portion of Liberty, the amount was spread among the following programs (rounded to nearest dollar):

Energy Star Homes	$ 1,096
Energy Star Products	$ 2,192
Home Energy Assist	$ 3,581
Home Performance	$ 1,694
Large Business	$ 6,419
Municipal	$ 1,643
Small Business	$ 4,066
	$20,691

3. The supporting detail for the EE benefits reflected a reclassification entry summing to $25,261.54. Debit entries were noted between 8830-2-0000-20-2142-2423, GSE Current and Accrued Liabilities-R Ref-C&LM and ENG 8840-2-0000-10-1163-1755, Deferred Reserve EE and related Group Benefits, Social Security Taxes, and Medicare expense accounts for both GSE and ENG.

4. Ideas Agency, Inc. was paid $40,171.71 for marketing expenses relating to creative costs for letters, information sheets, postcards, email blasts, bill inserts, cable television, other production and media. The invoice was dated 5/8/2017 and was allocated among:

Liberty-Gas	$28,954
Liberty-Electric	$11,218
	$40,172

Of the $11,218 allocated to the Electric portion of Liberty, the amount was spread among the following programs (rounded to nearest dollar):

Energy Star Homes	$ 594
Energy Star Products	$ 1,188
Home Energy Assist	$ 1,941
Home Performance	$ 918
Large Business	$ 3,480
Municipal	$ 891
Small Business	$ 2,204
	$11,218

5. $ 6,360.00 booked 3/15/2017 as a Rebates/Services paid to Franklin Energy was chosen for review. The invoice provided reflected monthly fixed fees for Large Business customers for the month of February.

6. $ 6,360.00 booked 4/3/2017 as a Rebates/Services paid to Franklin Energy was chosen due to the timing and identical amount posted on 3/15/2017. The invoice provided reflected monthly fixed fees for Large Business customers for the month of March.

Small Business Energy Solutions Program $423,319

The Small Business program targets 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.

For 2017, the program costs were identified as:

Evaluation	$ 24,272
External Administration	$ 812
Internal Administration	$ 4,451
Internal Implementation	$ 75,402
Marketing	$ 11,390
Rebates/Services	$306,994
Total	$423,319

Audit selected one rebate to review, in the amount of $17,036.20. The entry was booked on 11/1/2017. Burlington Self Storage of Salem, LLC was provided the rebate at 28.77% for retrofitting interior and external light fixtures. The total project cost was $59,209.90.

Municipal Program $161,505

The program was designed as follows: *"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.

For 2017, the program costs were identified as:

Evaluation	$ 9,611
External Administration	$ 328
Internal Administration	$ 1,338
Internal Implementation	$ 29,350
Marketing	$ 4,471
Rebates/Services	$116,407
Total	$161,505

Audit selected two entries to review. The first, in the amount of $21,840.07 was booked to the general ledger on 8/10/2017, and paid to D.E.M. Electric for materials and labor associated with town hall building lights and pole lights. The overall cost of the project was $69,102 of which $21,840.07 was rebated and $47,261.93 was financed through on-bill financing. Audit verified that the $47,261.93 was included within the "Other Accounts Receivable-Grants" carryforward account reconciliation for 8830-2-0000-10-1160-1438.

The second entry, in the amount of $3,086.70 booked on 5/9/2017, was paid to Franklin Energy Services, LLC. for the April monthly fixed fee associated with Municipal customers, as well as a lifetime MWh savings performance incentive of $781.50 relating to efficiency measures installed at an elementary school.

Residential Energy Star Homes Program $53,360

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 coordinate where appropriate to provide rebates for high efficiency gas HVAC equipment. For 2017, the program costs were identified as:

Evaluation	$ 7,958
External Administration	$ 219
Internal Administration	$ 902
Internal Implementation	$12,597
Marketing	$ 4,031
Rebates/Services	$27,652
Total	$53,360

Audit selected two general ledger entries for review.

The first entry was booked on 12/15/2017 in the amount of $357.70 and represented one employee's labor expense for the pay-period 11/26/2017 – 12/9/2017. The amount was noted as Internal Implementation.

The second entry was noted as a rebate in the amount of $4,000, booked on 6/14/2017. The figure was invoiced through eTrack #436440 by Unity Building Technologies. Based on the Energy Star products installed and the ratings associated with the HERS index (per the GDS Associates rating) the total rebate was calculated to be $4,625. However, the program is capped at $4,000 and that is the amount rebated to the property owner.

Residential Home Performance with Energy Star (HPwES) $150,522

The HPwES program allows electric utilities to provide fuel neutral weatherization services, in coordination with the gas utilities, where appropriate, to provide "deep retrofits". Customer incentives of 50% up to $4,000 from their electric company in addition to the $4,000 incentive from their gas company are authorized for those customers who qualify.

For 2017, the program costs were identified as:

Evaluation	$ 6,468
External Administration	$ 338
Internal Administration	$ 3,227
Internal Implementation	$ 11,971
Marketing	$ 8,948
Rebates/Services	$119,569
Total	$150,522

Audit selected one invoice, posted on 4/20/2017 in the amount of $11,396.33 as a rebate. Horizon Residential Energy Services, utilizing Shakes to Shingles, provided air sealing, venting, spray foam insulation, fire rated foam insulation, thermostats, among other measures for three homes in the upper valley. The invoice was submitted using the OTTER system.

Residential Energy Star Products Program

This program is a combination of the formerly separate Energy Star Lighting and Energy Star Appliance programs. For 2017, the program costs were identified as:

Evaluation	$ 9,335
External Administration	$ 438
Internal Administration	$ 3,656
Internal Implementation	$ 45,632
Marketing	$ 13,718
Rebates/Services	$179,582
Total	$252,360

Audit reviewed five entries, four of which offset one another, with a net debit to the expense of $317.50. A request for clarification of the entries was made, as the figures appear to be weekly payroll that was booked, reversed the next week, posted the following week, reversed the next week, and finally posted the following week. The postings and reversals were the result of a batch upload error, according to the Finance department at Liberty.

Another invoice in the amount of $7,879.93, submitted via eTrack and booked on 12/6/2017 was identified as a rebate. The invoice, paid to Energy Federation Inc. (EFI) The invoice submitted indicated "Upstream Incentives" of $7,676.50, 2.25% Track and Report fee of $172.20 and 0.40% COM (cost of money) fee of $30.71. Each fee was recalculated without exception.

Low Income Home Energy Assistance Program

As stipulated in NH RSA 125-O: 23 and the Joint Settlement Agreement covering the NH CORE Programs, certain amounts of funding are required to be allocated to the HEA (Low-Income Weatherization) program. Those amounts are, at least 15% of the RGGI Auction Proceeds and at least 17% of the SBC funds in any one calendar year.

According to the fourth quarter CORE report filed by Eversource covering the 2017 CORE Program Year, GSE spent $36,618 of RGGI funds on the HEA program. This amount is 17.25% of the total RGGI funds awarded ($212,225) to GSE in 2017 and 17% of the total RGGI funds literally received and counted ($215,199) in 2017. The difference between awarded and received funding is the result of the timing when the auction proceeds are received.

The shareholder incentive report reflects total HEA expenses of $352,987 which represents 16.4% of the total expenses. **Audit Issue #1**

For 2017, the program costs were identified as:

Evaluation	$ 13,421
External Administration	$ 715
Internal Administration	$ 4,750
Internal Implementation	$ 57,788
Marketing	$ 10,163
Rebates/Services	$266,151
Total	$352,987

OTTER is the system, used by all utilities participating in the energy efficiency plan in 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.

The 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*."

Audit selected three entries from the general ledger detail to review. The first, identified as an evaluation entry, in the amount of $3,580.85, was booked on 2/9/2017. The documentation provided supported the remittance to Esource Companies, LLC. Esource 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 GSE was $24,821.51 with that total being allocated to the following:

		Evaluation		External Admin.
C&I Large Business	$	6,419.49		$1,281.40
C&I Municipal	$	1,643.48		$328.06
C&I Small Business	$	4,065.68		$811.56
Res-ES Products	$	2,191.99		$437.54
Res-HPwES	$	1,693.81		$338.10
Res-HEA	$	3,580.85		$714.78
Res-ES Homes	$	1,095.99		$218.78
	$	20,691.29	$	4,130.22

The second was a charge from Liberty Utilities Service Corp. in the amount of $485 which posted on 7/31/2017 as an internal administration expense. Documentation provided was a journal entry and time allocation which reflected labor costs for the Senior Manager-Energy Efficiency East Region. Her July time was allocated between GSE and ENG, with the GSE identified as:

Job #	Name of Program	$
3017-EEE03-RESAP	Energy Star Products	$ 297
3017-EEE03-RESNC	Energy Star Homes	$ 148
3017-EEE03-RESLI	**Home Energy Assistance**	**$ 485**
3017-EEE03-RESAW	Home Perf. w/Energy Star	$ 229
3017-EEE03-C&ILB	C&I Large Business	$ 869
3017-EEE03-C&IMU	Municipal	$ 223
3017-EEE03-C&ISB	C&I Small Business	$ 551
	Total to GSE	$2,802

The allocations to the ENG CORE programs were similar, and summed to $7,234. The Senior Manager's labor expense for July, as allocated to the EE programs, was $10,036.

The third entry was booked as a rebate on 9/11/2017 in the amount of $32,328.35 and was paid to Horizon Residential Energy Services NH., LLC. The documentation provided was a project cost summary reflecting weatherization and heat system efficiency measures for two customers, and weatherization measures for two additional customers. The OTTER support indicated that $23,514.35 was funded through the SBC, while the $8,814 remaining was funded through the (federal) Department of Energy. The Community Action agencies determine, by measure, which will be funded (billed) to the SBC and which to the DOE. DOE money goes directly to the Community Action agencies.

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 the balance in the account, 8830-2-0000-10-1160-1438 Other Accounts Receivable Grants, at 12/31/2017. The net outstanding figure noted in the 4th quarterly report represented activity through November 2017, rather than December 2017.

Audit requested a detailed listing of the loans, and was provided with a pivot table of the 66 loans issued, repaid, and identified for write off for all customers 2012 through 2017. The net activity from inception through 2017, excluding the original funding, was reconciled to be:

Original loans outstanding (2013 – 2017)	$(512,299)
Principal Repaid (2013 – 2017) per pivot	$ 314,169
Net outstanding at end of 2017	$(198,130)
Reduce by two loans written off (2018)	$ 26,714
Adjusted net outstanding	$(171,416) per GL roll-forward
GL includes billed in Dec yet to be paid	$ 3,731
	$(167,685)

The two loans identified for write off were booked in 2018. The two are the first uncollectibles, representing a 3% bad debt rate.

Stated differently:	
Original loan fund	$ 303,000
Net outstanding 12/17	$(198,130)
Available for Lending at 12/2017	$ 104,870
Reduce by Write Off	$ (26,714)
Add repayment billed in 12/17	$ 3,731
Adjusted balance available 12/17	$ 81,887

Third Party Financing Program

As found in the 4th Quarter Report filed by Eversource, GSE used CORE funds to buy down the interest rates on four projects. The total costs of the projects were $25,490 and the total of the interest rate buy downs was $747. Audit requested and was provided with the detail of each financing. Audit recalculated the interest rate buy down by ensuring that the bank was paid the present value of the difference of the monthly payments using the bank's rate 5.99% or 6.49% and the discounted rate 2.00%. Each was recalculated without exception.

The buy down is paid in full, up front, and buys the interest rate down to 2% for the customer from the rate charged by the financing bank or credit union. The interest rate buy downs are charged to the Rebates/Services expense codes, primarily the HPwES program.

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)

The Company indicated an interest buy down spreadsheet is used (Microsoft Excel amortization and present value calculation) to calculate the amount. The buy down is compared to the figure prepared by the bank, and the lower of the two amounts is paid.

In previous Audits, the Company detailed the process used to ensure that this payment was then made within the contracted five-day timeframe. *"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*." Liberty has stated in the past that processing expedited checks internally is not cost effective and therefore the use of a third party is reasonable.

Audit Issue #1
Home Energy Assistance Spending

Background

Attachment M of the Plan approved by Commission Order #25,976, increased the budget requirement for the Low Income Home Energy Assistance program from 15.5% to 17% for calendar year 2017.

Issue

The June 1, 2018 Shareholder Incentive package reflects HEA expenses of $352,987 of the total $2,157,009. The HEA spending represents 16.4% of the overall total.

Audit understands that the budget for 2017 estimated 17% HEA spending.

Recommendation

The Company should explain why the 17% targeted spending on HEA was not met.

Company Comment

The Company allocated 17% of the overall 2017 Energy Efficiency program budget for the Low Income Home Energy Assistance program, conforming to the Energy Efficiency Resource Standard Settlement Agreement in DE 15-137 dated April 26, 2016, which stated on page 9, "the low income share of the overall energy efficiency budget shall be increased to a minimum of 17% of the total budget."

The Company makes every effort to fully deliver and utilize the available Home Energy Assistance program budget and resources to its customers each year. However, in 2017 $39,181 of the total $392,168 budget, was unspent due primarily to an unexpected influx and an un-budgeted influx of federal weatherization assistance program funding into the program in early 2017, along with weatherization contractor capacity and timing challenges. Also, approximately, $9,245, of the $39,181 was unspent due to lower than budgeted internal administration, marketing and evaluation costs.

It should be clarified that while there is a requirement that a minimum of 17% of the overall energy efficiency program budget is assigned to the Home Energy Assistance program, there is not a similar requirement that actual Home Energy Assistance program expenditures also represent a minimum of 17% of actual overall energy efficiency program expenditures. Such a requirement, if it existed, would create a program implementation interdependency between the utilization of the Home Energy Assistance program budget and the other residential program sector and commercial and industrial program sector budgets that is not contemplated when considering how each program is ultimately delivered to customers and how budgets are deployed.

Audit Comment

Audit appreciates the Company comment, and agrees that the budget complied with the 17% requirement. Documentation of the reasons that the actual expenditures did not amount to what had been budgeted is an important and educational part of the overall understanding of the program.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: December 21, 2018
AT (OFFICE): NHPUC

FROM: Karen Moran, Chief Auditor

SUBJECT: Unitil Energy Systems, Inc.
DE 14-216 – 2017 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 Electric and Gas Energy Efficiency Programs for the calendar year 2017. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource (Eversource), New Hampshire Electric Cooperative (NHEC), and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (GSE) and two gas utilities, Northern Utilities, Inc. (Northern) and Liberty Utilities (EnergyNorth Natural Gas) Corp. (ENG) filed a joint petition for the program year 2017. Each utility was audited individually.

Audit thanks Karen Daniell and Tracy Fuller for their assistance with the audit.

Approved 2017 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/23/2016 for the program year 2017. A joint Settlement Agreement and updated filing were presented to the Commission on 12/12/2016, and approved by Order 25,976 on 12/23/2016. The UES programs for calendar year 2017 were approved as follows:

Residential
Home Energy Assistance - weatherization program (HEA)
Home Performance with ENERGY STAR – weatherization program (HPwES)
- 3rd Party Financing
- On-bill Financing

ENERGY STAR Homes – New Construction (ESH)
ENERGY STAR Products – Lighting and Appliances
ISO Forward Capacity Market Expenses

Commercial and Industrial
Large Business Energy Solutions Program
Small Business Energy Solutions Program
Municipal Energy Solutions
Education
ISO Forward Capacity Market Expenses

Changes to the CORE for 2017

The Plan included the following changes for the 2017 program year, as they apply to Unitil Energy Systems, Inc.:

Design changes and Savings Assumptions

- Home Energy Assistance budget increased from 15.5% to 17% of the total program budget.
- Energy Star Homes includes a Drive to Net Zero Competition to encourage and promote super high efficiency, zero net energy homes.
- HEA savings assumptions were updated to reflect current projects modeled by the Community Action Agencies, with updates made to project and measure lives.
- HPwES and ESH savings assumptions were updated to reflect current projects modeled in the program auditing software.

Savings assumptions include updates to the HEA by the CAA; updates to Energy Star products to incorporate new baselines reflecting federal guidelines; and updates to the Large and Small C&I programs based on actual projects from prior years, as well as the assumptions in the Evaluation Monitoring and Verification (EM&V) impact study.

Demand Reduction Induced Price Effects (DRIPE) *"Beginning in 2017, the NH Utilities are including applicable electric and natural gas DRIPE avoided costs in their benefit-cost calculations."* (Plan page 6 of 31)

The Lost Base Revenue (LBR) as approved by Order 25,932, restores "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31).

The 2017 Performance Incentive target of 5.5% of program expenditures, with a cap of 6.875% is a reduction of the previous electric cap of 10% and gas cap of 12%.

Funding changes

- 3rd party loan interest rate buy-downs (to 2% up to 7 years, up to $15,000) will no longer have NH CDFA available as a funding source. All utilities will continue to use program funds for this program.

Evaluation, Monitoring and Verification (EM&V)

- Continuation of independent third party EM&V activities shall be conducted, as approved in DE 05-137;
- Use of an independent expert who shall provide advice on issues relating to scope, methods, scheduling, how EM&V results inform program improvements, ISO-NE's forward capacity market evaluation requirements, and standardization of EM&V recording and reporting (12/2016 plan Bates page 000027/000094). The expert shall be paid from the EM&V budgets.
- 2017 studies initiated or planned include:
  - Avoided Energy Supply Cost Limited Update scheduled for completion in early 2017
  - Energy Star Homes Program process and impact evaluation begun in 2016 anticipated to be completed first half 2017
  - Process evaluation to examine the Municipal Program
  - Energy Star Products (appliances) program market assessment
  - Energy Star Products (lighting) regarding LEDs
  - Small Business Energy Solutions Program regarding certain segments
  - Participation in the Northeast Energy Efficiency Partnership (NEEP) Regional EM&V forum

Mid-Year Adjustments

UES submitted to the Commission on April 12, 2017 a notice that, pursuant to RSA 125-O:23, III(b), $252,000 of $477,000 had been committed to municipal and local projects, with the remaining $225,000 available on a first come first served basis to municipal and other commercial and industrial customers.

Program Activity

2017 Carry Forward Balance

The reconciliation of program year activity to the general ledger year end posting was noted in the 2017 Performance Incentive Filing (Filing). According to the Filing for program year 2017, the ending balance was an over-collection of $(892,222). That balance agrees with the 2016 audit report issued on 3/28/2018.

2016 Over-collection	$ (892,222)
Revenues	
System Benefits Charge	$(2,343,097)
FCM Revenue	$ (541,669)
RGGI Auction Proceeds	$ (281,582)
Interest	$ (39,971)
Total Funding	$(3,206,318)
Expenses	
Program Expenses	$ 3,004,693
PI current year estimate	$ 188,430
PI 2015 year true-up	$ 3,206
Total Expenses	$ 3,196,329
2017 Ending Over-collection	$ (902,211)

The Company indicated that the 2015 true-up of $3,206 noted within the 2016 year's audit report, was collected in 2017. Audit understands that the $23,848 true-up for calendar year 2016 will be booked in 2018. The calculated actual performance incentive for calendar year 2017 activity was estimated to be $188,430, while the actual calculation was $178,793. The credit of the over-estimated incentive of $9,636 will be booked in 2019. For "carry-over" purposes, the over-collection of $(902,211) would be $(911,847).

The noted 2015, and 2016 over-collections agreed with the filed Performance Incentives and audit reports. Audit verified the 2015, 2016, and 2017 ending balances to the following general ledger accounts:

	2015	2016	2017
10-20-00-00-173-13-01 Accrued Rev SBC Res	$(337,745)	$(222,804)	$(451,767)
10-20-00-00-173-13-02 Accrued Rev SBC Res LI	$ (65,704)	$(128,138)	$(237,235)
10-20-00-00-173-13-03 Accrued Rev SBC C&I	$(590,488)	$(541,280)	$(213,209)
	$(993,937)	$(892,222)	$(902,211)

Account 10-20-00-00-173-13-05, Accrued Revenue Sys Ben Outdoor Lighting reflected revenue of $15,953 which was classified to C&I.

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 net Forward Capacity Market (FCM) revenue and expenses, and interest on the CORE activity over/under collected balance.

SBC - $2,343,253

In compliance with Commission Order 25,976 issued on 12/23/2016, the SBC for 2017 was set for UES to be $0.00357, as noted in the compliance tariff filed on 1/6/2017:

Low Income Electric Assistance portion (EAP)	$0.00150
Energy Efficiency Portion	$0.00198
Lost Revenue Rate	$0.00009
Total SBC for UES for 2017	$0.00357

The EAP is audited annually, after the close of the program's fiscal year, September 30. The Energy Efficiency portion $0.00198 represents an increase over the 2016 rate of $0.0018. Total kWh sales for 2017, as reflected in the Accounting department models
1,189,057,034, was noted. The FERC form 1 for 2017, page 304 reflected total billed MWh sold to be 1,188,639, 418,000 less. That variance represents $828 EE funding less than the Accounting model.

Audit requested the "monthly billed usage by customer class" billing system summaries to which the reported kWh sales and related revenue by month per the Accounting model were compared. Excel downloads of the HTE billing system in place from January through June (through use of Monarch) then downloads of the new billing system, July through December, enQuesta, were provided. All customer classes are assessed the SBC. The reported kWh sales agreed with the billing system downloads for ten of the twelve months. July and August billing system data did not agree with the Accounting model, and neither agreed with the FERC form 1 reported sales:

	Model	enQuesta	variance		EE rate		EE $
July 2017	117,332,868	117,186,357	146,511	*	$0.00198 =	$	290
August 2017	112,803,047	112,660,117	142,930	*	$0.00198 =	$	283

The total 2017 kWh sales were reported to be:

Per the Accounting model	1,189,057,034
Per the monthly billed usage by customer class	1,188,767,852
Per the FERC form1 2017 report	1,188,639,000 (shown in MWh)

Audit Issue #1

Audit reviewed each of the revenue general ledger accounts, which sum to $2,343,097, which agrees with the figure noted within the reconciliation included in the incentive package.

Outdoor Lighting	$ 15,952
Residential	$ 954,208
Commercial/Industrial	$1,372,936
	$2,343,097

10-29-01-21-444-00-00 Elec Revenue-OL-Sys Ben Chrg EE	$ 1,802
10-29-01-21-444-01-00 Elec Rev Unmetered Sales-Sys Ben Chrg EE	$ 6,874
10-29-01-21-444-30-00 Elec Revenue-OL-Sys Ben Chrg EE-Ext Sup	$ 2,543
10-29-01-21-444-31-00 Elec Rev Unmetered Sales-Sys Ben Chrg EE-Ext Sup	$ 4,733
Total Outdoor Lighting revenue	$ 15,952
10-29-01-21-440-00-00 Elec Revenue-D-System Benefit Chg-EE	$ 822,214
10-29-01-21-440-30-00 Elec Revenue-D-System Benefit Chg-EE-Ext Sup	$ 131,994
Total Residential revenue	$ 954,208

10-29-01-21-442-01-00	Elec Revenue-G2-System Benefit Chg-EE	$ 326,049
10-29-01-21-442-02-00	Elec Revenue-G1-System Benefit Chg-EE	$ 68,685
10-29-01-21-442-31-00	Elec Revenue-G2-SBC-EE-Ext Sup	$ 317,819
10-29-01-21-442-32-00	Elec Revenue-G1-System Benefit Chg-EE-Ext Sup	$ 562,023
10-29-01-21-445-01-00	Elec Revenue-Pub Auth G2-Sys Ben Chg-EE	$ 3,676
10-29-01-21-445-31-00	Elec Revenue-Pub Auth G2-Sys Ben Chg-EE-Ext Sup	$ 31,887
10-29-01-21-445-32-0	Elec Revenue-Pub Auth G1-Sys Ben Chg-EE-Ext Sup	$ 62,797
	Total Commercial and Industrial revenue	$1,372,936

Audit reviewed each customer billing classes kWh sales for each month to recalculate the EE revenue charged. With adjustments for cancel/rebills, and timing of January and December invoices (covering billed kWh outside of the 2017 program year), the revenues were calculated to be within 0.2% of the reported revenue.

Forward Capacity Market - $541,669 Revenue

per 4th Quarterly Report filed in DE 14-216 on 3/28/2018

Actual Forward Capacity Market Proceeds and Expenses

	Liberty	**NHEC**	**Eversource**	**Unitil**	**Total**
Proceeds					
Quarter 1	$ 53,142	$ 12,128	$ 425,537	$ 67,175	$ 557,982
Quarter 2	$ 50,615	$ 10,148	$ 427,879	$ 65,961	$ 554,603
Quarter 3	$ 188,744	$ 18,687	$1,573,553	$215,229	$ 1,996,213
Quarter 4	$ 156,499	$ 54,035	$1,425,941	$193,304	$ 1,829,779
Total Proceeds	$ 449,000	$ 94,998	$3,852,910	$541,669	$ 4,938,577
Financial Assurance					
Quarter 1	$ -	$ -	$ -	$ -	$ -
Quarter 2	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Quarter 3	$ -	$ -	$ -	$ -	$ -
Quarter 4	$ -	$ -	$ -	$ -	$ -
Total Fncl Assurance	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Other Expenses					
Quarter 1	$ (2,282)	$ -	$ (5,164)	$ (3,141)	$ (10,587)
Quarter 2	$ (18,635)	$ (6,368)	$ (19,111)	$ (12,471)	$ (56,585)
Quarter 3	$ (1,789)	$ (4,267)	$ (11,073)	$ (331)	$ (17,460)
Quarter 4	$ (1,147)	$ -	$ (8,237)	$ (410)	$ (9,794)
Total Other Expenses	$ (23,853)	$ (10,635)	$ (43,585)	$ (16,353)	$ (94,426)
Total Expenses	$ (23,853)	$ (10,635)	$ (44,585)	$ (17,353)	$ (96,426)
NET FCM	**$ 425,147**	**$ 84,363**	**$3,808,325**	**$524,316**	**$ 4,842,151**

UES reflected $541,669 in revenue and $17,353 in expenses related to ISO activities for a net funding figure of $524,316. The FCM revenue was verified to the general ledger account 10-29-02-21-456-80-00. The CORE accounting model reflected the revenue split between residential and commercial/industrial to be 30% and 70% respectively. FCM expenses were verified to the following general ledger accounts:

10-29-02-50-908-80-01 Res ISO Plan/Admin-Int	$ 3,708
10-29-02-50-908-80-02 Res ISO Plan/Admin-Ext	$ 2,549
10-29-02-50-908-80-03 Res ISO Fees-Ext	$ 868
Total Residential	$ 7,125
10-29-02-52-908-80-04 C&I Internal Admin.	$ 4,280
10-29-02-52-908-80-05 C&I External Admin.	$ 5,948
Total C&I	$10,228
Total FCM Expenses	$17,353

RGGI Quarterly Auction Proceeds - $ 281,582

NH RSA 125-O:23 specifies that 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. Any unused amount will roll over and accumulate (during calendar years 2014, 2015, and 2016) until May of program year 2017 when, meeting certain requirements, the unused portion of the funds may be released to other C&I customers. Audit requested the monitoring method used by UES to track the municipal program, and was provided with the following information:

Target Funding (from RGGI Auctions)	2014	2015	2016	5/1/2017	Total
UES Allocation	11.42%	11.13%	10.99%	11.02%	
Statewide Municipality Funding	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	
UES Share of Funding	$ 228,400	$ 222,600	$ 219,800	$ 220,400	$ 891,200
Anticipated Expenses	$ (228,400)	$ (222,600)	$ (219,800)	$ (220,400)	$ (891,200)
Anticipated net	$ -	$ -	$ -	$ -	$ -
Actual Revenue Booked	$ 279,026	$ 224,702	$ 208,815	$ 237,937	$ 950,480
Actual Municipal Expenses booked	$ (121,364)	$ (142,709)	$ (134,369)	$ (386,783)	$ (785,225)
Net Over/(Under) Collection	$ 157,662	$ 81,993	$ 74,446	$ (148,846)	$ 165,255

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. The Commission awarded a set grant amount of $1,200,000, approved by the Governor and Council, for implementation of the statute. The grant was awarded to Eversource on behalf of Eversource, NH Electric Cooperative, UES, and Liberty. The approved budget for the grant was $400,000 in state fiscal year ending June 30, 2016; $400,000 in fiscal year 2017; and $400,000 in fiscal year 2018 (each subject to adequate auction proceeds).

The total auction proceeds for 2017 were $11,072,494 distributed as follows, in accordance with RSA 125-O:23:

2017 Auction Proceeds	$11,072,494
Refunded to All Customers	$ (7,811,600)
Set Aside for Admin Costs	$ (320,000)
Set Aside for All Fuels Grant	$ (400,000)
Distributed to CORE at Electric Utilities	$ (2,540,894)
Undistributed	$ -0-

The proceeds are distributed to Eversource, NHEC, Liberty, UES, and municipalities with their own electric departments, Ashland, Littleton, New Hampton, Wolfeboro, and Woodsville.

According to PUC Business Office and the subsequent details provided by Eversource, Unitil was paid the following from the 2017 RGGI auctions noted:

	CORE	Customer Rebates	Total
Auction #35 03/2017	$ 67,066	$173,531	$ 240,597
Auction #36 06/2017	$ 76,875	$147,758	$ 224,633
Auction #37 09/2017	$ 67,066	$290,664	$ 357,730
Auction #38 12/2017	$ 67,066	$242,943	$ 310,009
	$278,074	$854,896	$1,132,969

UES reported $281,582 as RGGI proceeds on the SHI and within the general ledger 10-29-02-21-456-00-00 Other Elec Revenue-Grant Funding-Total. The difference is the result of the timing of when the fourth quarterly auction checks for both 2016 and 2017 were received. The auction #34 check was received in January 2017, with $70,574 dedicated to CORE. The auction #38 check was received in January 2018 in the amount of $310,009 with $67,066 of that directed to CORE as a funding source for 2018.

The UES CORE accounting model reflects 15.5% of the $281,582 proceeds deposited in 2017 was allocated to Low Income, and 84.5% to the municipal and C&I programs. For 2017, that allocation was $43,645 for Low Income and $237,937 for municipal and C&I programs. The 15.5% complies with RSA 125-O:23. The percentage is not impacted by the Commission Order requiring 17% of SBC funds be allocated to low income programs.

The All Fuels portion of the RGGI Auctions, as described earlier, was approved by the Commission and the Governor and Council to be administered as a $1.2 million grant, spanning the state fiscal years 2016, 2017, and 2018. Audit requested of Eversource (the grantee on behalf of the participating electric utilities) and was provided with the distribution details. The state fiscal year runs from July through June.

Fiscal year ended 6/30/2016	$ 400,000	2015
Fiscal year ended 6/30/2017	$ 300,000	2016
Fiscal year ended 6/30/2018	$ 500,000	2017
Complete Grant	$1,200,000	

Eversource distributed the grant proceeds across nine quarters to the utilities:

	Eversource	NHEC	Liberty	UES	TOTAL
Feb 2016 for Dec 2015	$296,510	$18,408	$40,552	$44,530	$400,000
May 2016	$ 74,127	$ 4,602	$10,138	$11,133	
July 2016	$ 74,127	$ 4,602	$10,138	$11,133	
November 2016	$ 74,127	$ 4,602	$10,138	$11,133	
Total 2016	$222,381	$13,806	$30,414	$33,399	$300,000
June for Jan 2017	$ 74,127	$ 4,602	$10,138	$11,133*	
June 2017	$ 74,650	$ 3,887	$ 9,313	$12,150*	
October 2017	$ 74,650	$ 3,887	$ 9,313	$12,150*	
December 2017	$ 74,650	$ 3,887	$ 9,313	$12,150	
Total 2017	$372,727	$20,150	$47,390	$59,733	$500,000

Because of the timing of the disbursements, UES reflected the * $35,433 on the 2017 Accounting Model. The Model incorporates all RGGI sources of funding and all related expenses within one spreadsheet. The year-end net funding of $462,041 was verified to the balance sheet Accrued Revenue accounts:

10-20-00-44-173-01-00 Accrued Rev on RGGI Res Non Low Inc	$(261,291)
10-20-00-44-173-02-00 Accrued Rev on RGGI Res Low Inc	$ 4,488
10-20-00-44-173-03-00 Accrued Rev on RGGI C&I	$(205,238)
Total RGGI Funding not spent at 12/31/2017	$(462,041)

Refer to the Revolving Loan Fund portion of this report for additional information.

Interest - $39,971

Audit verified the prime rate used by the Company to the PUC Consumer website. Puc1202.14 indicates that the rate should be "*the rate reported in the Wall Street Journal on the first business day of the month preceding the beginning of each calendar quarter*…" Rates were noted to be:

January through March	3.50%
April through June	3.75%
July through September	4.00%
October through December	4.25%

The calculations were: ((((Beg Bal + End Bal)/2)*.RATE)/365)*Actual # of days in month)

Budgeted vs. Actual Expenses

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 following reflects the budget and the actual expenses for 2017. The figures were noted within the shareholder incentive package filed on 6/1/2018 in DE14-216.

Program	2017 Budget	2017 Actual	% Difference
Home Energy Assistance	$ 538,900	$ 388,231	-39%
Home Performance with EnergyStar	$ 300,000	$ 213,462	-41%
EnergyStar Homes	$ 130,000	$ 101,427	-28%
EnergyStar Products	$ 402,800	$ 340,905	-18%
Other (FCM/Education)	$ 23,000	$ 7,125	-223%
Total Residential	$ 1,394,700	$ 1,051,150	-33%
Large Business energy Solutions	$ 804,900	$ 748,200	-8%
Small Business Energy Solutions	$ 686,100	$ 794,500	14%
Municipal	$ 476,500	$ 386,800	-23%
Other (FCM/Education)	$ 63,800	$ 24,800	-157%
Total Commercial/Industrial	$ 2,031,300	$ 1,954,300	-4%
Total 2017 Budget and Actual	$ 3,426,000	$ 3,005,450	-14%

Audit verified the reported (rounded) actual balances to the general ledger. Each program is identified by a two-digit code, and each expense type is further identified by a two- digit code. All expenses are booked to accounts beginning with 10-29-02-5X-XX-XX. One interest rate buy down, in the amount of $772, was incorrectly booked to Northern Utilities' general ledger. The error was identified by the Company, and adjusted in 2018.

GL 10-29-02-5X-908-	#13 Internal Admin	#14 External Admin	#40 Rebates/ Services	#10+#41 Implmntn Services	#20+#21 Marketing	#30+#31 EM&V	Total
HEA 41	$ 52,895	$ 3,058	$ 248,165	$ 67,418	$ 7,144	$ 9,551	$ 388,231
HPwES 26	$ 29,538	$ 1,702	$ 79,165	$ 91,047	$ 5,924	$ 5,314	$ 212,690
ESH 47	$ 12,755	$ 737	$ 44,553	$ 32,485	$ 1,791	$ 9,106	$ 101,427
ES Products 28 and 40	$ 39,534	$ 2,285	$ 186,143	$ 93,652	$ 12,154	$ 7,137	$ 340,905
Subtotal Residential	$ 134,722	$ 7,782	$ 558,027	$ 284,602	$ 27,013	$ 31,107	$ 1,043,254
		908-80-02, 03		908-80-01			
ISO ODR 80	0	$ 3,417	$ -	$ 3,708	$ -	$ -	$ 7,125
Other Residential	$ -	$ 3,417	$ -	$ 3,708	$ -	$ -	$ 7,125
Total Residential	**$ 134,722**	**$ 11,199**	**$ 558,027**	**$ 288,311**	**$ 27,013**	**$ 31,107**	**$ 1,050,379**

GL 10-29-02-5X-908-	#13 Internal Admin	#14 External Admin	#40 Rebates/ Services	#10+#41 Implmntn Services	#20+#21 Marketing	#30+#31 EM&V	Total
Large Business 52	$ 64,975	$ 4,569	$ 571,827	$ 81,732	$ 10,838	$ 14,267	$ 748,208
Small Business 51	$ 67,335	$ 3,894	$ 651,855	$ 43,283	$ 7,799	$ 20,336	$ 794,503
Municipal 54	$ 41,895	$ 3,604	$ 291,425	$ 27,037	$ 8,680	$ 14,123	$ 386,763
Subtotal C&I	$ 174,204	$ 12,067	$ 1,515,107	$ 152,052	$ 27,317	$ 48,727	$ 1,929,474
	908-80-04	908-80-05					
C&I ISO ODR 80	$ 4,280	$ 5,948	$ -		$ -	$ -	$ 10,228
C&I Education				$ 14,612	$ -		$ 14,612
Other C&I	**$ 4,280**	**$ 5,948**	**$ -**	**$ 14,612**	**$ -**	**$ -**	**$ 24,840**
Total C&I	**$ 178,484**	**$ 18,015**	**$ 1,515,107**	**$ 166,664**	**$ 27,317**	**$ 48,727**	**$ 1,954,314**
Combined Total	**$ 313,206**	**$ 29,214**	**$ 2,073,135**	**$ 454,975**	**$ 54,330**	**$ 79,834**	**$ 3,004,693**

As noted earlier, the difference between the general ledger total of $3,004,693 and the reported total of $3,005,450 was an interest rate buy down which was booked to the Northern Utilities general ledger during 2017. The adjustment was made by the Company during 2018.

Allocated Expenses $462,609

Audit reviewed all of the general ledger accounts and identified allocation entries of target distributions, as well as costs relating to the Unitil Service Company monthly service bills. Those bills include labor and miscellaneous expenses such as cellular phones used by the Energy Efficiency group. The expenses were booked to the accounts below then cleared to the various CORE accounts.

GL #	GL Name	Debit	Credit	End Balance
10-29-02-21-908-00-00	Elec General-Plan/Admin-All Int	$ 222,366	$ (222,366)	$ -
10-29-02-21-908-00-04	Elec General Evaluation-All Int	$ 54,920	$ (54,920)	$ -
10-29-02-21-908-00-05	Elec General Evaluation-All Ext	$ 10,292	$ (10,292)	$ -
10-29-02-21-908-00-20	Electric General Marketing-All Int	$ 31,827	$ (31,827)	$ -
10-29-02-21-908-00-21	Electric General Marketing-All Ext	$ 16,310	$ (16,310)	$ -
10-29-02-21-908-00-23	Elec General Planning&Admin/Legal-All Ext	$ 18,949	$ (18,949)	$ -
10-29-02-21-908-00-24	Elec General Plant/Admin-Res Int	$ 55,704	$ (55,704)	$ -
10-29-02-21-908-00-25	Elec General Plant/Admin-C&I Int	$ 41,362	$ (41,362)	$ -
10-29-02-21-908-00-29	Elec General Implsvs/stat-All Int	$ 10,878	$ (10,878)	$ -
		$ 462,609	$ (462,609)	$ -

Home Energy Assistance Budget code#41 - $388,231

The Home Energy Assistance (HEA) Core program is designed to provide weatherization services to qualifying customers in New Hampshire at no charge to the customer. This is accomplished by reducing and managing the customers' 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 is set within the Settlement Agreement at a percentage of the estimated total CORE expenses for the calendar year, and the second 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 **17%** of the CORE budgets should be reserved for the HEA programs, inclusive of the estimated RGGI Proceeds. For 2017, the budget of $538.9 was recalculated:

$3,426,000 * **15.7%** = $538,900

The total reported expenses relating to the HEA program were $388,231 or **13%** of the total spending of $3,004,693. **Audit Issue #2** The total was verified to the following general ledger accounts:

10-29-02-51-908-41-10	LI SingleFam Implsvcs/STAT-Int	$	42,797		
10-29-02-51-908-41-13	LI SingleFam Plan/Admin-Int	$	52,895		
10-29-02-51-908-41-14	LI SingleFam Plan/Admin-Ext	$	3,058		
10-29-02-51-908-41-20	LI SingleFam Marketing-Int	$	4,511		
10-29-02-51-908-41-21	LI SingleFam Marketing-Ext	$	2,632		
10-29-02-51-908-41-30	LI SingleFam Evaluation-Int	$	7,890		
10-29-02-51-908-41-31	LI SingleFam Evaluation-Ext	$	1,661		
10-29-02-51-908-41-40	LI SingleFam Rebates	$	248,165		
10-29-02-51-908-41-41	LI SingleFam Implsvcs/STAT-Ext	$	24,621	$	388,231

Audit selected one rebate in the amount of $12,242.52 which was booked on 2/24/2017 to account 10-29-02-51-908-41-40. The documentation provided was an OTTER invoice from Southern NH Services. There were two clients listed for whom rebates totaling $12,242.52 and associated administrative costs of $1,684.26 were identified. The administrative costs were booked to 10-29-02-51-908-41-41. The total invoice was $13,926.78.

<u>Home Performance with Energy Star code #26 - $213,462</u>

10-29-02-50-908-26-10	Res HPwES Implsvcs/STAT-Int	$	71,516		
10-29-02-50-908-26-13	Res HPwES Plan/Admin-Int	$	29,538		
10-29-02-50-908-26-14	Res HPwES Plan/Admin-Ext	$	1,702		
10-29-02-50-908-26-20	Res HPwES Marketing-Int	$	2,510		
10-29-02-50-908-26-21	Res HPwES Marketing-Ext	$	3,415		
10-29-02-50-908-26-30	Res HPwES Evaluation-Int	$	4,390		
10-29-02-50-908-26-31	Res HPwES Evaluation-Ext	$	924		
10-29-02-50-908-26-40	Res HPwES Rebates	$	79,165		
10-29-02-50-908-26-41	Res HPwES Implsvcs/STAT-Ext	$	19,532		
10-29-02-50-908-26-42	Res E Retrofit 1-4 Interest Buydown	$	-	$	212,690

The $772 variance between the reported HPwES total of $213,462 and the general ledger $212,690 was caused by a misposting of an interest rate buy down. The $772 related to a UES customer, but was booked to the Northern Utilities general leger account in error. The Company determined the error, and adjusted the entry in 2018.

One Rebate in the amount of $3,427.27, booked on 1/31/2017 was selected for review. An OTTER invoice from Newell & Crathern, LLC. was provided. The work was done and invoiced in December 2016, with a payment due date of 1/26/2017. The total cost was $4,000 with $3,427.27 identified as a rebate and $572.73 identified as an administrative cost. The energy retrofit details were not included with the OTTER invoice.

Energy Star Homes code #47 - $101,427

10-29-02-50-908-47-10	Res NewConst Implsvcs-Int	$	12,810		
10-29-02-50-908-47-13	Res NewConst Plan/Admin-Int	$	12,755		
10-29-02-50-908-47-14	Res NewConst Plan/Admin-Ext	$	737		
10-29-02-50-908-47-20	Res NewConstr Marketing-Int	$	1,087		
10-29-02-50-908-47-21	Res NewConstr Marketing-Ext	$	704		
10-29-02-50-908-47-30	Res NewConst Evaluation-Int	$	1,902		
10-29-02-50-908-47-31	Res NewConst Evaluation-Ext	$	7,204		
10-29-02-50-908-47-40	Res NewConst Rebates	$	44,553		
10-29-02-50-908-47-41	Res NewConst Implsvcs/STAT-Ext	$	19,675	$	101,427

One rebate in the amount of $25,000 was selected for review from the account detail in 10-29-02-50-908-47-40. The entry posted to the general ledger on 10/6/2017 and was verified to a rating provider invoice from GDS. Measures installed at an apartment building in Plaistow were calculated to earn a performance incentive of $38,700, but $25,000 was the cap for the program. The building includes 25 apartments, each built with Energy Star refrigerators and envelope ratings which exceeded the HERS target index.

Energy Star Products codes #28 and #40 - $340,905

As noted within the 2016 CORE audit report, Audit requested clarification of the services provided by CLEAResult, and was told that the company "*assists the NH electric utilities implement the residential lighting program. Their responsibilities include marketing as well as program services*." UES further provided an assignment (letter dated 5/5/2015) of the Applied Proactive Technologies, LLC (APT) agreement (dated 10/21/2013) to CLEAResult, which was acquired by APT as of 7/31/2014. The original APT scope of service included, but was not limited to, delivering cost effective results to deliver lighting and appliance efficiency programs such as store visits and building customer awareness programs, and integration of software packages which collect and report on field activity. The agreement was made among APT and the four participating CORE electric utilities.

10-29-02-50-908-28-10	Res Lighting Implsvcs/STAT-Int	$ 16,628	
10-29-02-50-908-28-13	Res Lighting-Plan/Admin-Int	$ 19,632	
10-29-02-50-908-28-14	Res Lighting Plan/Admin-Ext	$ 1,135	
10-29-02-50-908-28-20	Res Lighting Marketing-Int	$ 1,674	
10-29-02-50-908-28-21	Res Lighting Marketing-Ext	$ 4,385	
10-29-02-50-908-28-30	Res Lighting Evaluation-Int	$ 2,928	
10-29-02-50-908-28-31	Res Lighting Evaluation-Ext	$ 617	
10-29-02-50-908-28-40	Res Lighting-Rebates	$ 82,378	
10-29-02-50-908-28-41	Res Lighting Implsvcs/STAT-Ext	$ 27,339	
	subtotal lighting	$ 156,716	
10-29-02-50-908-40-10	Res Products Implsvcs/STAT-int	$ 15,492	
10-29-02-50-908-40-13	Res Products Plan/Admin-Int	$ 19,902	
10-29-02-50-908-40-14	Res Products Plan/Admin-Ext	$ 1,150	
10-29-02-50-908-40-20	Res Products Marketing-Int	$ 1,697	
10-29-02-50-908-40-21	Res Products Marketing-Ext	$ 4,398	
10-29-02-50-908-40-30	Res Products Evaluation-Int	$ 2,967	
10-29-02-50-908-40-31	Res Products Evaluation-Ext	$ 625	
10-29-02-50-908-40-40	Res Products-Rebates	$ 103,765	
10-29-02-50-908-40-41	Res Products Implsvcs/STAT-Ext	$ 34,193	
	subtotal products	$ 184,189	
	Total EnergyStar Products	$ 340,905	$ 340,905

One lighting rebate in the amount of $2,394 was selected for review from account 10-29-02-50-908-28-40. The amount was verified to an invoice from EFI, Energy Federation Inc. for instant coupon rebates relating to 49 CF lamps and 719 LED bulbs. The invoice was dated 2/15/2017 and also reflected fees totaling $316.78 which were posted to the Res Lighting Implsvcs/STAT-Ext 10-29-02-50-908-28-41.

One Rebate, booked to account 10-29-02-50-908-40-40 on 6/27/2017 in the amount of $20,877.50 was also verified to an invoice from EFI. The detail indicated that it was for the processing of mail-in rebates. An administrative fee of $233.01 was also noted on the invoice, and posted to 908-40-41.

Other – Residential $7,125

Audit verified the reported total expense figure to the following general ledger accounts, without exception:

10-29-02-50-908-80-01 Res ISO Plan/Admin-Int	$3,708
10-29-02-50-908-80-02 Res ISO Plan/Admin-Ext	$2,549
10-29-02-50-908-80-03 Res ISO Fees-Ext	$ 868
	$7,125

Other expenses represented costs associated with the Forward Capacity Market ISO Other Demand Response (ODR). Specific individual testing was not performed.

Large Business Energy Solutions code #52 - $748,208

10-29-02-52-908-52-10	C&I Lg Bus Implsvcs/STAT-Int	$ 63,154	
10-29-02-52-908-52-13	C&I Lg Bus Plan/Admin-Int	$ 64,975	
10-29-02-52-908-52-14	C&I Lg Bus Plan/Admin-Ext	$ 4,569	
10-29-02-52-908-52-20	C&I Lg Bus Marketing-Int	$ 6,739	
10-29-02-52-908-52-21	C&I Lg Bus Marketing-Ext	$ 4,099	
10-29-02-52-908-52-30	C&I Lg Bus Evaluation-Int	$ 11,786	
10-29-02-52-908-52-31	C&I Lg Bus Evaluation-Ext	$ 2,482	
10-29-02-52-908-52-40	C&I Lg Bus Rebates	$ 571,827	
10-29-02-52-908-52-41	C&I Lg Bus Implsvcs/STAT-Ext	$ 18,578	$ 748,208

Audit selected three entries from the 10-29-02-52-908-52-40, Rebates general ledger account for specific review:

1. The first entry was posted on 9/6/2017 in the amount of $200,000. The Energy Efficiency Project Completion Form indicated that refrigeration and compressor equipment, control, and operational upgrades were made to an industrial food facility in Concord. The projected kWh saved was noted to be 425,981 with the total project cost $445,550 less $102,000 “base case” cost. The $200,000 rebate represents 58% of the adjusted total of $343,550.
2. The second entry was posted on 10/20/2017 in the amount of $97,955. Documentation supporting the entry indicated that the lighting project at a retail store in Seabrook had a total cost of $246,595. The rebate represents 40% of the total. The lighting worksheet supported the incentive total, based on the count and type of fixture installed.
3. The third entry was posted 8/3/2017 in the amount of $59,520 was verified to an unsigned LED lighting rebate form. The fixtures were installed at a fitness facility in Hampton. The total cost of the project was noted to be $138,600, with the incentive rebate representing 43% of the total cost.

Small Business Energy Solutions code #51 - $794,503

10-29-02-52-908-51-10	C&I Sm Bus Implsvcs/STAT-Int	$	38,994		
10-29-02-52-908-51-13	C&I Sm Bus Plan/Admin-Int	$	67,335		
10-29-02-52-908-51-14	C&I Sm Bus Plan/Admin-Ext	$	3,894		
10-29-02-52-908-51-20	C&I Sm Bus Marketing-Int	$	4,280		
10-29-02-52-908-51-21	C&I Sm Bus Marketing-Ext	$	3,519		
10-29-02-52-908-51-30	C&I Sm Bus Evaluation-Int	$	10,045		
10-29-02-52-908-51-31	C&I Sm Bus Evaluation-Ext	$	10,291		
10-29-02-52-908-51-40	C&I Sm Bus Rebates	$	651,855		
10-29-02-52-908-51-41	C&I Sm Bus Implsvcs/STAT-Ext	$	4,290	$	794,503

Audit selected nine specific entries which were booked to the Rebates general ledger account:

1. The first entry, posted 2/2/2017 to 10-29-02-52-908-51-40 in the amount of $4,744.63 was verified to a New Equipment and Construction compressed air incentive calculation, proposal, and incentive worksheet. One 25 horsepower compressor received an incentive of $3,500, $660 for additional storage, and $584.63 incentive for a lifetime kW savings of 22,229.25 for a refrigerated air dryer. The dryer calculation was “derived from MA 2016-2018 TRM savings algorithm for Air Dryers”.
2. The second entry, posted 7/26/2017 to the same rebate account in the amount of $28,665 was verified to a 2017 Commercial and Industrial Retrofit 2017 Lighting Incentive worksheet. The total project cost was noted to be $135,262.08, of which $28,665 was rebated. The overall invoice from BL Mechanical related to progress payments for work at the Concord airport, and summed to $685,813.08. Audit was able to verify the electrical total of the progress payment to $135,262.08.
3. The third entry, posted on 6/27/2017 to the rebate account in the amount of $27,548.86 was verified to a Commercial and Industrial Retrofit 2017 Lighting incentive worksheet. The signed worksheet indicated that the project cost was $55,097.71 of which $27,548.86 was rebated. The lighting appeared to be installed at a car dealership in Bow, although additional details regarding the lighting were not included.
4. The fourth entry, posted on 6/23/2017 in the amount of $23,442.66 was verified to an invoice from Prism Energy Services. Prism installed lighting throughout a small business in Stratham, with the specific measures, quantity installed, cost, incentive, etc. included within the invoice. The total cost was noted to be $50,761.08. The rebate represents 46% of the total.
5. The fifth entry, posted 11/6/2017 in the amount of $37,840 related to a lighting incentive paid to a store in Seabrook. The total cost of the project was noted to be $97,780,95. The rebate represents 39% of the invoices from Arcadia Construction, Rexel Energy Solutions, and Denco Services.
6. The sixth entry posted 10/30/2017 in the amount of $29,702 was verified to an invoice from Prism Energy Services, which listed a variety of LED fixtures

installed at a car dealership in Concord. The total cost of the installation was $59,404, with the rebate representing 50% of the total.

7. The seventh entry posted 9/25/2017 in the amount of $20,138.50 was verified to two invoices from LighTec, Inc. The Lighting efficiency project at a dealership in Kingston was noted to cost a total of $40,267. The rebate invoices summed to $20,128.50, or $10 less than what was rebated. Due to the immateriality of the error, Audit is not considering this an issue.
8. The eighth entry posted 9/25/2017 in the amount of $21,885.50. The Commercial and Industrial Retrofit 2017 Lighting Incentive documentation reflected a total lighting cost of $60,901. The retrofit was made to a college in Concord. The rebate reflects 36% of the total cost. Details and invoices from Energy Management Consultants, Inc. supported the overall cost and related incentive.
9. The ninth and final entry reviewed posted 11/28/2017 in the amount of $30,170.50. The Commercial and Industrial retrofit 2017 Lighting Incentive document indicated that the measures were installed at a car dealership in Stratham, at a retrofit cost of $57,941 and new cost of $1,600, with rebates of (retrofit) $28,970.50 and (new) $1,200 for a total rebate of $30,170.50, or 51% of the total measure costs. Calculation worksheets and invoices from LSI Lighting Solutions documented the parking lot LED light fixtures and bulbs which were installed, which replaced outdated measures, and provided additional fixtures to areas where there had been no lighting.

Municipal code #54 - $386,763

10-29-02-52-908-54-10	C&I Muni Implsvcs/STAT-Int	$	19,185		
10-29-02-52-908-54-13	C&I Muni Plan/Admin-Int	$	41,895		
10-29-02-52-908-54-14	C&I Muni Plan/Admin-Ext	$	3,604		
10-29-02-52-908-54-20	C&I Muni Marketing-Int	$	5,452		
10-29-02-52-908-54-21	C&I Muni Marketing-Ext	$	3,227		
10-29-02-52-908-54-30	C&I Muni Evaluation-Int	$	6,976		
10-29-02-52-908-54-31	C&I Muni Evaluation-Ext	$	7,147		
10-29-02-52-908-54-40	C&I Muni Rebates	$	291,425		
10-29-02-52-908-54-41	C&I Muni Implsvcs/STAT-Ext	$	7,852	$	386,763

Audit selected three specific rebate entries to review, chosen from account 10-29-02-52-908-54-40:

1. The first entry was posted on 7/18/2017 in the amount of $77,552. The documentation provided indicated that the custom incentive for walk-in cooler and freezer controls for measures installed at a county nursing home in Boscawen, an interior lighting rebate, an exterior lighting rebate, and occupancy sensors rebate.
2. The second entry was posted on 7/17/2017 in the amount of $28,135 related to the same nursing home in Boscawen. The measures installed were for LED lighting, motors, and variable frequency drives. The overall cost of the measures was $153,544, with the rebate $28,135 representing 18%.

3. The third entry was posted on 6/14/2017 in the amount of $40,778.50. Supporting documentation indicated that LED lighting was installed at an ice arena in Concord. The total project cost, per the invoice from Affinity LED Light, LLC was $81,557. The rebate represents 50% of the total.

C&I Other - $24,840

10-29-02-52-908-21-02	C&I Statewide Edu Implsvcs/STAT-Ext	$ 14,612	
10-29-02-52-908-80-04	C&I ISO Planning/Admin-Int	$ 4,280	
10-29-02-52-908-80-05	C&I ISO Planning/Admin-Ext	$ 5,948	$ 10,228

Other expenses represented costs associated with the Educational expenses and Forward Capacity Market ISO Other Demand Response (ODR) expenses. Specific individual testing was not performed.

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 to be used to establish the RLF:

Utility	Original Grant	Additional	Total RLF
Liberty GSE	$ 302,077	$	$ 303,000
NHEC	$ 300,000	$ (3,004)	$ 296,558
Eversource (PSNH)	$ 500,000	$190,000	$ 690,000
UES	$ 725,000	$115,000	**$ 840,000**
Total	$1,727,077	$301,996	$2,129,558

As summarized on page 24 of the 4th quarterly report for 2017 received by the Commission on 3/29/2018, cumulative activity in the RLF was identified as:

	Liberty 4th Qtr 2017	NHEC 4th Qtr 2017	Eversource 4th Qtr 2017	Unitil 4th Qtr 2017
Revolving Loan Fund	$ (303,000)	$ (296,558)	$ (690,000)	$ (800,250)
Less: Loans Issued	$ 512,299	$ 559,354	$ 1,451,085	$ 1,275,572
Plus: Customer Repayments	$ (308,972)	$ (468,994)	$ (1,210,313)	$ (820,429)
Current Balance	$ (99,673)	$ (206,198)	$ (449,228)	$ (345,107)
Less: Loans in Process	$ -	$ -	$ -	$ 1,541
Less: Potential Loans	$ -	$ 7,381	$ 14,000	$ -
Available to Loan 12/31/2017	$ (99,673)	$ (198,817)	$ (435,228)	$ (343,566)

The Liberty GSE fund total has been rounded up to $303,000 since 2013.

Approved in the settlement agreement covering the 2013/2014 CORE Programs, Unitil added $115,000 to the original loan balance of $725,000, bringing the total to $840,000.

Eversource received Commission approval on 10/25/2013 to move $190,000 from the 2012 carryover to the RLF. The transfer increased Eversource's original $500,000 to $690,000.

NHEC was authorized to add $100,000 in 2013 to its original $200,000 loan fund, resulting in an overall balance of $300,000. In 2015, a loan was written off as uncollectible, decreasing the RLF beginning balance in the 4th quarterly report (in the 2016 filing received in 3/2017) to $296,996. In 2017, a loan balance of $438 was written off as uncollectible, dropping the total loan fund to $296,558.

Audit verified that the change from the 4th quarterly report of the 2016 program year to the 4th quarterly report of the 2017 program year for UES was $62,933 loans issued and $(158,892) customer repayments. The reported available to lend figure of **$343,566** was compared to the general ledger and Accounting model at year end:

	Beg. Balance	End Balance
10-20-00-44-173-01-00 Acc. Rev-Res RGGI Non LowInc.	$(196,418)	$(261,291)
10-20-00-44-173-02-00 Acc. Rev-Res RGGI Low Inc.	$ 4,488	$ 4,488
10-20-00-44-173-03-00 Acc. Rev-Res RGGI C&I	$(145,384)	$(205,238)
	$(337,314)	**$(462,041)**

A reconciliation of the general ledger and Accounting model to the 4th quarter reported available to lend balance is:

The 44-173-0X-00 GL accounts total	$(462,041)
Less the portion of the $1.2M grant	$ 99,375
Less a reserve for administrative costs	$ 39,750
Plus a default (reduced loan availability)	$ (7,534)
Plus administrative costs 2009 – 2012	$ (14,656)
Less pending loan per 4th quarter	$ 1,541
Available to lend per 4th Quarter Report	**$ 343,565**

The 173-03-00 account and Accounting model includes the UES portion of the $1.2 million dollar grant proceeds (refer to the RGGI audit and discussion of compliance with RSA 125-O:23 within this report). The Accounting model reflects the total RGGI RLF and grant proceeds on one Excel sheet. For UES, $77,929 was received in 2016 and $35,433 in 2017. The remaining grant disbursement will be $24,300 booked in 2018. Of the grant received,

2016 grant proceeds received	$(77,929)
2016 expenses	$ 7,322
2017 grant proceeds received	$(35,433)
2017 expenses	$ 6,665
Net UES portion $1.2M grant	$(99,375) is included as a net funding source on the

model.

As part of the 2016 audit, Audit requested clarification of the difference between the original loan fund balance of $840,000 and reported $800,250, or $39,750. The Company indicated that the $39,750 represents the allocated administrative expenses associated with the revolving loan fund. The $39,750 has not yet been used by UES, rather is being "reserved" for use in the future, and as a result, remains within the general ledger. There was $(7,534) identified by the Company as a default, and the Administrative Costs were those incurred from the years 2009 – 2012.

The net change within the total 173 balance sheet accounts for the 2017 year was $(124,727), which was offset the following revenue accounts:

10-29-02-44-449-01-00 Acc Rev RGGI Res Non-low Inc.	$ 64,873
10-29-02-44-449-03-00 Acc Rev RGGI Res C&I	$ 59,854
2017 loan payments received	$124,727

The total loans issued during 2017 were verified to:

10-29-02-44-908-43-14 C&I RGGI RLF Loan Buydown	$ 61,392
10-29-02-44-908-43-22 RES RGGI RLF Loan Buydown	$ 1,541
2017 loans issued	$ 62,933

The total loan payments received during 2017 were verified to:

10-29-02-44-456-00-01 Loan Payback RGGI-RES	$ (66,415)
10-29-02-44-456-02-01 Loan Payback RGGI-C&I	$ (92,477)
2017 loan payments received	$(158,892)

The Accounting models for RGGI RLF reflected, excluding the $1.2M grant portion discussed above:

	C&I	Residential	Low Income	TOTAL
Beginning Balance 2017	$ (74,777)	$(196,417)	$4,488	$(266,706)
Loans Issued	$ 61,392	$ 1,541	$ -0-	$ 62,933
Customer Repayments	$ (92,477)	$ (66,415)	$ -0-	$(158,892)
Administrative Costs	$ -0-	$ -0-	$ -0-	$ -0-
Total Available RLF	$(105,862)	$(261,291)	$4,488	$(362,665)

Third Party Financing Program

As found in the 4th Quarter Report filed by Eversource, UES bought down the interest rate on one project in 2017.

Interest Rate Buy Down Calculation			
	Lender Rate	**2% Rate**	**Difference**
Purchase Price	$ 10,601	$ 10,601	
Rebate	$ (2,317)	$ (2,317)	
Loan Amount	$ 8,284	$ 8,284	
Annual Rate	5.99%	2.00%	3.99%
Term of Loan (Months)	60	60	
Monthly Payment	$160.11	$145.19	$14.91
Total of payments	$9,606.44	$8,711.61	$894.83
		$771.61	**PV**

Audit verified the calculated present value of $771.61 without exception. The buy down was initially booked to the Northern Utilities general ledger account 30-49-05-50-908-43-35, Residential Financing-Buydown/Rebates. The error was identified by Unitil and corrected in 2018.

Lost Base Revenue

For the calendar year 2017, the lost base revenue (LBR) rate was approved by the Commission to be $0.00009, included within the total System Benefits Charge. The rate was calculated and provided to the Commission at the December 2016 hearing in DE 14-216, and was identified as Exhibit 10, Attachment R. Specifically, page 5 of 16 reflects the anticipated roll-forward:

Line 1, Beginning Balance	$ -0-
Line 2, Lost Revenues	$ 102,395
Line 5, Revenue collected	$(107,362)
Line 10, Computed Interest	$ (759)
Line 11, Ending Balance Over-collection	$ (5,726)

Within the shareholder incentive package provided to the Commission on 6/1/2018 was a 14 page component relating to the lost base revenue. Because 2017 is the first year in which the lost base revenue component of the SBC was approved, the roll-forward, seen on page 2 of 14, began with zero. The reported "actuals" noted on pages 1 of 14 and 2 of 14 reflect:

Pg 2 of 14 line 1, Beginning Balance	$ -0-
Pg 1 of 14, line 12 and Pg 2 of 14, line 2 Lost Revenues	$ 111,139
Pg 2 of 14, line 3, Revenue collected	$(101,543)
Pg 2 of 14, line 8, Computed Interest	$ (705)
Pg 2 of 14, line 9, Ending Balance Under-collection	$ 8,891

The Company indicated that the reported under-collection of $8,891 will be "trued-up" once the savings and resulting calculated revenues are accepted based on the conclusion of this audit.

The general ledger reflected:

10-20-00-24-173-00-00 Accrued Revenue SBC-LBR	$ 226.89
10-20-01-24-4xx-xx-00 15 Elec Rev SBC-LBR accounts	$(102,394.67)
10-20-01-24-431-00-00 Int Expense SBC-LBR	$ 625.21
Net General Ledger	$(101,542.57)

Audit compared the annualized kWh (et al) lost revenue estimates, from Attachment R of the 2017 EE plan to the shareholder incentive page 1 of 14:

	Attachment R	Shareholder Incentive Pg 1 of 14	SH Pg 1 of 14 as % of R
Residential Annualized Savings	1,534,213	1,344,218	88%
C&I Annualized Savings	5,167,419	6,004,880	116%
Combined	6,701,632	7,349,098	110%

Order 25,932 in docket DE15-137 indicated that calculated actual the annualized savings (not dollars) could not exceed the budgeted annualized savings by more than 10%. As identified above, UES did not exceed the 110% threshold for the residential sector, but did exceed the annualized savings for the commercial sector. The combined savings represent 110% of the estimate. As noted in docket DE 15-137, Gas and Electric Energy Efficiency Resource Standard, Electric Attachment A, the LRAM cap was footnoted to be on the combined total annualized savings for UES.

The shareholder incentive page 1 of 14 shows the actual cumulative savings based on the measures installed in calendar year 2017. Because each month reflects the annualized savings, the lines must be divided by twelve to determine the monthly savings, then multiplied by the average distribution rate. Each month's calculation is rolled into the following month. Page 1 of 14 reflects a calculated actual loss of revenue due to annualized savings of installed efficiency measures of $111,139

Audit requested verification of the actual installed savings and was provided with a detailed pivot table, by month, which reflected the total savings associated with that month's installation. The combined commercial and industrial sector and the residential sector reflected 1,169 installed measures. The download identified the sector, specific measure, program, project code, installation date, month, monthly kWh savings, monthly therm savings, and annual therm savings. The Company indicated that the inputs to the database are spot-checked to ensure the integrity of the output.

The comparison continues, using page 4 of 16 of Attachment R:

	Attachment R	Shareholder Incentive Pg 1 of 14	SH as % of R
Residential Monthly Savings	717,245	696,039	97%
Lost Residential Revenue $	**$ 26,724**	**$ 25,790**	**97%**
C&I Monthly Savings	2,548,247	2,551,612	100%
Lost C&I Revenue $	**$ 75,671**	**$ 85,349**	**113%**
Total Lost Revenue $	**$102,395**	**$111,139**	**109%**

The estimate in Attachment R of the 12/2016 plan reflected average distribution rates for Residential customers of $0.03726 for the entire year, and for C&I customers, $0.02970 for the entire year.

Average distribution rates included within the shareholder incentive reflected:

	Residential	C&I
January – April	$0.03926	$0.03168
May – December	$0.03682	$0.03351

Audit reviewed the monthly billing summaries by rate class and verified the approved LBR rate of $0.00009 was charged to all customer classes throughout 2017. In January 2017, the rate, as calculated using the kWh divided by the reported lost revenue, was $0.00004. Throughout the remainder of 2017, all Residential, Commercial, and Municipal rate classes were charged the Commission approved rate of $.00009. The Company indicated that due to the crossover timing of when customer invoices are issued, the January analysis included kWh usage in December 2016, at which time the LBR was not assessed.

The rate class Outdoor Lighting-Residential and Commercial was charged $0.00008 for the months of February through June and $0.00007 for the months of July through December. The Outdoor Lighting-Municipal rate class was charged $0.00005 for the months of February through June and $0.00006 for the months of July through December. Audit requested clarification of the Outdoor Lighting rates and was informed that an Outdoor Lighting customer would have to use at least 55.56 kWh to be assessed an amount that is billable. As a result, many Outdoor Lighting customers do not use that level and thus, dividing the total reported kWh by the reported lost revenue would result in a rate less than what was charged on an individual basis.

Audit Issue #1
Billed kWh and Reported Revenue

Background

Unitil completed a billing system conversion which took effect for the July 2017 bills.

Issue

Based on the review of monthly billing system totals the Accounting department model agreed with the kWh sales for ten of twelve months. The two months which did not agree were July and August. The kWh variance of 289,441 (model higher than billing system) was calculated to be $573 related to the Energy Efficiency portion of the SBC only.

The total 2017 kWh sales were reported to be:	
Per the Accounting model	1,189,057,034
Per the monthly billed usage by customer class	1,188,767,852
Per the FERC form1 2017 report	1,188,639,000 (shown in MWh)

Recommendation

The Company should explain the variances among the reported kWh sales.

Company Comment

The Accounting Model pulls this kWh information directly from the General Ledger, as it is considered the system of record. During the conversion of the new billing system in July and August, there were some transition-related variances in the units on these reports to the General Ledger. The Company ultimately reported the units as recorded in the General Ledger.

Audit Comment

Audit appreciates the explanation and understands that ongoing reconciliations of the billing system and the general ledger will take place as they consistently have.

Audit Issue #2
Home Energy Assistance Spending

Background

Attachment M of the Plan approved by Commission Order #25,976, increased the budget requirement for the Low Income Home Energy Assistance program from 15.5% to 17% for calendar year 2017.

Issue

The June 1, 2018 Shareholder Incentive package reflects budgeted HEA expenses of $538,900 of the total $3,426,000, representing 15.7% of the budget.

The actual HEA spending $388,231represents 13% of the overall total spending of $3,004,693.

Recommendation

The Company should explain the reason (if known) for not achieving the spending goal. Audit understands that the UES HEA budget of $539k was represented to the Commission within Table III.5, page 14 of 31, identified originally as Bates page 000014 and revised to Bates page 000081, and subsequently approved by Order 25,962.

Company Comment

The 2017 NH Statewide Energy Efficiency Plan, submitted to the Commission in DE 14-216 and subsequently revised on October 31, 2016, called for budgets for the Home Energy Assistance program to increase from 15.5% to 17% (page 18 of 31). This budget requirement conformed to the Energy Efficiency Resource Standard Settlement Agreement in DE 15-137 dated April 26, 2016, which held that "the low income share of the overall energy efficiency budget shall be increased to a minimum of 17% of the total budget" (page 9). The 2017 Plan was subsequently approved by the Commission in Order 25,976 issued December 23, 2016 which affirmed that "the portion of the budget allocated to the Home Energy Assistance (income eligible) Program increased to 17 percent." (page 5).

The Company budgeted 17% for the HEA Program in 2017 as ordered. However, due to factors including the unexpected influx of federal funding to the low income programs earlier in the year and the timing of projects, the Company was not able to expend all of its budgeted funds on the HEA program.

Audit Comment

Audit agrees the budget was in compliance with the Order, and appreciates the information regarding the influx of federal funding and timing of projects which caused the actual expenditure to be less than budgeted.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: March 14, 2019
AT (OFFICE): NHPUC

FROM: Karen Moran, Chief Auditor

SUBJECT: Public Service Company of New Hampshire d/b/a Eversource Energy
DE 14-216 - 2017 NHSaves Programs
FINAL Audit Report

TO: Tom Frantz, Director NH PUC Electric Division
Les Stachow, Assistant Director, NH PUC Electric Division
James Cunningham, NH PUC Utility Analyst IV

Introduction

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the NHSaves Electric and Gas Energy Efficiency Programs for the calendar year 2017. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource (Eversource), New Hampshire Electric Cooperative (NHEC), and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (GSE or Liberty) and two gas utilities, Northern Utilities, Inc. (Northern) and Liberty Utilities (EnergyNorth Natural Gas) Corp. (ENG or Liberty) filed a joint petition for the program year 2017. Each utility was audited individually.

Audit appreciates the assistance of Kate Peters, Tracey Lengyel-Krechko, Tomas Fuller, Tom Belair, Chris Goulding, Bridget Pearson, Paul Parsons, and Marc Lemenager.

Approved 2017 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/23/2016 for the program year 2017. A joint Settlement Agreement and updated filing were presented to the Commission on 12/12/2016, and approved by Order 25,976 on 12/23/2016. Eversource's programs for 2017 were approved as follows:

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

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

Changes to the Plan for 2017

The Plan included the following changes for the 2017 program year, as they apply to Eversource:

Design changes and Savings Assumptions

- Home Energy Assistance budget increased from 15.5% to 17% of the total program budget.
- Energy Star Homes includes a Drive to Net Zero Competition to encourage and promote super high efficiency, zero net energy homes.
- HEA savings assumptions were updated to reflect current projects modeled by the Community Action Agencies, with updates made to project and measure lives.
- HPwES and ESH savings assumptions were updated to reflect current projects modeled in the program auditing software.

Demand Reduction Induced Price Effects (DRIPE) "*Beginning in 2017, the NH Utilities are including applicable electric and natural gas DRIPE avoided costs in their benefit-cost calculations.*" (Plan page 6 of 31)

The Lost Base Revenue (LBR) as approved by Order 25,932, restores "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31).

The 2017 Performance Incentive target of 5.5% of program expenditures, with a cap of 6.875% is a reduction of the previous electric cap of 10% and gas cap of 12%.

Funding changes

- 3rd party loan interest rate buy-downs (to 2% up to 7 years, up to $15,000) will no longer have NH CDFA available as a funding source. All utilities will continue to use program funds for this program.

Mid-Year Adjustments

According to the Settlement Agreement, the Commission shall be notified of any transfer into or out of any one program of 20% or more. On 5/11/2017 Eversource notified the Commission of the following transfer:

Program	Budget	To/ From	%	Revised Budget
HPwES	$2,161,079	$ (70,000)	-3%	$2,091,079
Energy Star Products	$2,044,264	$ (45,438)	-2%	$1,998,826
Residential CEP	$ 85,081	$ 115,438	+136%	$ 200,519
Large Business	$5,257,680	$(173,156)	-3%	$5,084,524
C&I CEP	$ 127,622	$ 173,156	+136%	$ 300,778

Budget vs Actual Expenses

The following reflects the original budgeted figures, updated budget figures based on the May 2017 notice, the reported actual expenses included in the 6/6/2018 shareholder incentive filing, and the percentage difference of the reported actual to the revised budget.

Program	Original 2017 Budget	Revised 2017 Budget	2017 Actual	Actual to Revised % Difference
Home Energy Assistance	$ 3,450,400	$ 3,450,400	$ 2,930,700	-18%
Home Performance with EnergyStar	$ 2,161,100	$ 2,091,079	$ 1,365,100	-53%
EnergyStar Homes	$ 1,147,200	$ 1,147,200	$ 1,218,900	6%
EnergyStar Products	$ 2,044,300	$ 1,998,826	$ 2,058,700	3%
Home Energy Reports	$ 355,100	$ 355,100	$ 333,900	-6%
Customer Engagement Platform	$ 85,100	$ 200,519	$ 171,300	-17%
ISO-NE Forward Capacity Market	$ 48,000	$ 48,000	$ 15,200	-216%
Total Residential	$ 9,291,200	$ 9,291,124	$ 8,093,800	-15%
Large Business Energy Solutions	$ 5,257,700	$ 5,084,524	$ 5,610,400	9%
Small Business Energy Solutions	$ 3,104,600	$ 3,104,600	$ 3,301,900	6%
Municipal Energy Solutions	$ 1,452,400	$ 1,452,400	$ 1,436,300	-1%
C&I Customer Partnerships	$ 20,100	$ 20,100	$ 900	-2133%
Energy Rewards RFP	$ 668,700	$ 668,700	$ 486,600	-37%
Customer Engagement Platform	$ 127,600	$ 300,778	$ 256,900	-17%
Education	$ 210,000	$ 210,000	$ 175,700	-20%
ISO-NE Forward Capacity Market	$ 112,000	$ 112,000	$ 35,400	-216%
Total Commercial/Industrial	$ 10,953,100	$ 10,953,102	$ 11,304,100	3%
Smart Start	$ 52,000	$ 52,000	$ 9,700	-436%
Total 2017 Budget and Actual	$ 20,296,300	$ 20,296,226	$ 19,397,900	-5%

The $19,397,900 varies from the detail below due to rounding to the nearest $100 on the annual report.

As noted within the annual report (formerly known as the shareholder incentive filing), page 8 of 16, the 2017 activity was summarized as follows:

Beginning Balance	$ (482,656.00)	under-funded **Audit Issue #1**

Funding

System Benefits Charge	$ 15,111,351.61	
RGGI Funding	$ 1,850,475.67	
Net FCM Payments	$ 3,808,323.51	see below **Audit Issue #1**
Interest 12/16 – 11/17	$ 89,776.00	
Total Funding	$20,859,926.79	

Expenses

Energy Efficiency Expenses	$(19,407,597.75)	see below **Audit Issue #1**
PI 2017 estimate in Dec.	$ (1,272,875.00)	
PI 2016 True-up in 2017	$ (35,893.00)	
PI 2017 True up	$ 5,898.46	
Smart Start PI	$ (52,357.50)	
Eversource Facilities	$ -0-	
Total Expenses	$(20,762,824.79)	

Carry Forward Balance	$ (385,554.00)	under-funded as of 12/31/2017 **Issue #1**

Audit verified the Net FCM included in the Funding portion above is the result of:

FCM Revenue	$3,852,910	
Financial Assurance	$ (1,000)	
FCM Expenses	$ (43,586)	**Audit Issue #1**
Net	$3,808,324	

Audit also verified that the FCM Expense is included in the Energy Efficiency Expenses total, thereby reducing the overall balance twice.

FCM Expenses	$ (43,586)	**Audit Issue #1**
Smart Start Labor	$ (7,401)	
Smart Start SSEV00	$ (85)	
Program Expenses 254P90 1/17 – 7/17	$ (7,426,476)	
Program Expenses 908100 8/17 – 12/17	$(10,511,167)	
RGGI Auction Expenses 242RG0	$ (1,418,883)	
Reported Expense Total	$(19,407,598)	

Funding

The NHSaves programs are funded through the System Benefits Charge (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 balance of the fund itself, interest.

(SBC) System Benefits Charge $15,111,352

The System Benefits Charge is the primary means of funding the NHSaves programs. For 2017, the rate was set at $.00356 for every kWh sold.

Electric Assistance Program (EAP)	$0.00150
Energy Efficiency (NHSaves)	$0.00198
Lost Base Revenue	$0.00008
	$0.00356

The EAP and Energy Efficiency portions of the SBC are the same across the electric utilities. The Lost Base Revenue is utility specific. The above overall rate was approved by Order 25,976 in this docket. Total kWh sales (actual billed sales) for 2017 were 7,685,109,110. The variance of the 7,685,109,110 Energy Efficiency and Lost Base Revenue, on a straight kWh * rate is due to cancel/rebills and the balancing of the split charges rounded to two decimal places.

Audit selected the month of November, 2017 to verify the reported funding. The report provided, "Delivery Sales and Revenue by Class, Rate, and Component" was provided to Audit. Totals on the report were for month to date and year to date for C2 customers. A report of the Large Power Billing was also provided.

November customer billing system kWh	352,088,035
November large power billing system kWh	218,243,326
Total kWh sales for November 2017	570,331,361

EAP revenue at $.00150	$ 855,497
Efficiency revenue at $.00198	$1,129,256
LBR revenue at $.00008	$ 45,627
Billing system SBC	$2,030,380

The EAP revenue was verified to the November 2017 monthly submission to the Commission. The EAP is audited annually, based on the program's fiscal year of October 1 through September 30.

The Energy Efficiency revenue was verified to an Excel spreadsheet reflecting all activity by month in account 254P90. All SBC revenue figures for the year, including the test month of November, were also verified to revenue accounts 440000, 442010, and 442020.

The LBR is a new charge designed to align "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31). 2017 is the first year in which the utilities are authorized to charge a per-kWh rate to recover lost revenues due to energy efficiency measures. As estimates and actuals are reconciled, a resulting over/under collection will result. Each utility's LBR rate is set individually. Audit requested the reconciliation of the over/under collection, as the LBR rates were set based on estimates.

The LBR revenue was verified to the monthly allocated calculations which identified the three portions of the SBC. The lost revenue figures were debited to line of business 12205, EE, and credited to line of business 12230, Lost Revenue:

Debits to revenue accounts:
06-12205-440000
06-12205-442010
06-12205-442020
06-12205-444000
Credits to revenue accounts:
06-12230-440000
06-12230-442010
06-12230-442020
06-12230-444000

Audit compared the lost revenue estimates, from Attachment Q page 4 of 9 of the 2017 EE plan to the shareholder incentive pages referenced below:

	Attachment Q Page 4 of 9	Shareholder Report Pg 1 of 16	Pg 1 as % of Att. Q	Shareholder Report Pg 11 of 16	Pg 11 as % of Att. Q
Residential	12,366,893	14,195,300	115%	13,603,582	110%
Comm/Ind	37,571,529	53,681,700	143%	41,326,682	110%
	49,938,422	67,877,000	136%	54,930,264	110%

Order 25,932 in docket DE15-137 indicated that the actual annualized savings (not dollars) could not exceed the total budgeted annualized savings by more than 10%. As identified above, and noted within the Shareholder Incentive report on page 9 of 16, Eversource exceeded that threshold for both the residential and commercial sectors. However, the lost base revenue details noted on page 11 reflect adjustments for both sectors down to the Commission authorized 110% of the total budgeted annualized savings. Supporting schedules were provided to Audit for verification.

The shareholder incentive shows the actual cumulative savings based on the measures installed in calendar year 2017. Because each month reflects the annualized savings, the lines must be divided by twelve to determine the monthly savings, then multiplied by the average distribution rate. Each month's calculation is rolled into the following month.

The Shareholder Incentive report, page 11 of 16 shows a calculated actual loss of revenue due to annualized savings of installed efficiency measures of $671,487. Audit requested verification of the actual installed savings and was provided the following summary:

Large Business Energy Solutions	354
Small Business Energy Solutions	484
Energy Star Products	92,134
Home Energy Assistance and Home Performance w/Energy Star	5,351
Participants in the Home Energy Reports	50,000
Participants in the Energy Star Homes	457

The comparison continues:

		Attachment Q Page 4 of 9		Shareholder Rpt Pg 11 of 16	Pg 11 as % Att. Q
Res. Monthly Cum. Savings		1,030,574		1,133,632	110%
Lost Residential Revenue	$	**244,715.00**	$	**280,898.00**	115%
Comm/Ind Cum. Savings		3,130,961		3,444,057	110%
Lost C&I Revenue	$	**362,416.00**	$	**390,590.00**	108%
Total Lost Revenue	$	**607,131.00**	$	**671,488.00**	111%

The Shareholder report, page 11 does not agree with the supporting spreadsheet documentation provided to Audit, nor does the dollar amount of the actual calculated lost revenue. The spreadsheet support reflects:

		Spreadsheet	Page 11 Shareholder Report	Difference
Lost Residential Revenue		$301,595	$280,898	$20,697
Lost Com/Ind Revenue		$394,974	$390,590	$ 4,384
Total Lost Revenue	$	696,569	$671,488	$25,081

The difference is due primarily to the use of different average distribution rates. The estimate in Attachment Q of the 12/2016 plan included forecasted average distribution rates for Residential customers of $0.04087 for the entire year, and for C&I customers, $0.02578 for the entire year. The supporting Excel spreadsheet provided to Audit continued to reflect those rates, while the Shareholder Incentive report reflect the following rates:

	Shareholder Incentive	
	Residential	C&I
January – June	$0.04073	$0.02671
July – December	$0.04039	$0.02629

The reconciliation on Page 12 of 16 of the Shareholder Incentive report details an under-recovery of lost revenue of $56,679 based on the calculated $671,488 vs. the billed lost base revenue of $614,809. The preliminary calculation of lost revenue resulted in an entry of $132,765 (booked in June 2017). A true-up entry, after the actual lost revenue was calculated, was made at year-end 2017 in the amount of $50,909, resulting in an adjusted year-end balance of account 182LBR of $81,856. However, that under-recovery figure should be adjusted again to reflect the reported under-recovery of $56,679. **Audit Issue #2.**

Audit verified the total billed $614,809 lost revenue was booked as debit entries monthly to 182LBR Current Regulatory Asset, and offset to revenue account 407300.

2017 RGGI Quarterly Auction Proceeds $1,850,476

The PUC Business Office records and the 2017 RGGI Audit Report indicate a total of $7,487,768, relating to auctions 35 – 38, was awarded to Eversource from auctions held in 2017. Of that total, $1,850,476 was credited to the 2017 NHSaves and $5,637,292 set for rebates to customers. The $1,850,476 was verified to account 242RGO.

The detail below represents the audited 2017 RGGI auctions, as noted within the audit report dated August 2, 2018.

	Calendar Year 2017				
	Auction #35	Auction #36	Auction #37	Auction #38	**2017 Total**
NH Proceeds	$ 2,378,451	$ 2,232,581	$ 3,448,754	$ 3,012,708	**$ 11,072,494**
# of Allowances Sold	792,817	882,443	792,817	792,817	**3,260,894**
RGGI Proceeds at $1.00	$ 792,817	$ 882,443	$ 792,817	$ 792,817	**$ 3,260,894**
Administrative Expenses	$ (80,000)	$ (80,000)	$ (80,000)	$ (80,000)	**$ (320,000)**
RFP 14-004 All-fuels grant	$ (100,000)	$ (100,000)	$ (100,000)	$ (100,000)	**$ (400,000)**
Available to CORE	$ 612,817	$ 702,443	$ 612,817	$ 612,817	**$ 2,540,894**
Eversource	$ (446,301)	$ (511,573)	$ (446,301)	$ (446,301)	**$ (1,850,476)**
NHEC	$ (48,265)	$ (55,324)	$ (48,265)	$ (48,265)	**$ (200,119)**
Liberty	$ (51,185)	$ (58,671)	$ (51,185)	$ (51,185)	**$ (212,225)**
UES	$ (67,066)	$ (76,875)	$ (67,066)	$ (67,066)	**$ (278,074)**
distributed to CORE	$ (612,817)	$ (702,443)	$ (612,817)	$ (612,817)	**$ (2,540,894)**
Rebated to Electric Customers after payment of Administrative costs, All-fuels, and CORE					
Eversource	$ (1,144,283)	$ (974,336)	$ (1,916,674)	$ (1,601,999)	**$ (5,637,292)**
NHEC	$ (109,018)	$ (92,827)	$ (182,605)	$ (152,625)	**$ (537,075)**
Liberty	$ (132,438)	$ (112,769)	$ (221,834)	$ (185,414)	**$ (652,455)**
UES	$ (173,531)	$ (147,758)	$ (290,664)	$ (242,943)	**$ (854,896)**
Ashland	$ (2,662)	$ (2,266)	$ (4,458)	$ (3,726)	**$ (13,112)**
Littleton	$ (9,982)	$ (8,500)	$ (16,720)	$ (13,975)	**$ (49,177)**
New Hampton	$ (516)	$ (440)	$ (865)	$ (723)	**$ (2,544)**
Wolfeboro	$ (9,823)	$ (8,364)	$ (16,453)	$ (13,752)	**$ (48,391)**
Woodsville	$ (3,381)	$ (2,879)	$ (5,664)	$ (4,734)	**$ (16,658)**
Total Rebated	$ (1,585,634)	$ (1,350,138)	$ (2,655,937)	$ (2,219,891)	**$ (7,811,600)**

From the 2017 RGGI audit report, the following was copied:

Eversource uses account 242RG0. The 2017 reconciliation provided demonstrated the following:

January 1, 2017 beginning balance	$ 1,574,067 (all RGGI proceeds)
2017 funding	$ 2,350,476
2017 RLF loan repayments	$ 171,850
2017 monthly RLF loans out	$ (20,827)
2017 grant pymts to other utilities	$ (101,923)
2017 All-fuels grant expenses	$ (253,474)
2017 Municipal expenses	$(1,418,883)
2017 EE /HEA/ PI tr from 254P9	$ (996,209)
12/31/2017 ending balance	$ 1,305,077 agrees with ending 242RGO
7.5% Performance Incentive	$ (19,011)
Available funding for all programs	$ 1,286,066

Funding represents the quarterly RGGI auction proceeds allocated to the NHSaves programs as well as quarterly receipts of $100,000 for the All-fuels grant. Eversource distributes portions of the grant funding to the other utilities. Audit verified the total 2017 funding to the general ledger account 242RG0.

The RLF is the revolving loan fund which was established through a grant issued after Governor and Council approval on 8/9/2009. The grant was known as Re-CORE. The repayments are specifically the loan repayments from customer, and the monthly loans out represent new loans to customers. Refer to the RLF portion of this report for additional information.

Grant payments to other utilities represent the flow through of the quarterly All-fuels grant to Liberty, NHEC and UES. The All-fuels grant expenses of $(253,474) and Municipal expenses $(1,418,883) were verified to field work order details.

The $(996,209) represents a net transfer out of account 254P90, the System Benefit Charge account and into 242RG0 of the 2016 and 2017 charges for the Home Energy Assistance (Low Income program) and performance incentive, along with allocated costs of tracking the Municipal program, and costs relating to the NHCOR municipal program. Reference on the document provided to Audit reflected that the transfers were made to comply with the 9/30/2015 Plan filed in this docket. Audit reviewed the Plan and could not find specific reference to transferring energy efficiency charges for the HEA, Municipal, performance incentives, tracking or allocated charges from the SBC to the RGGI account. Pages 9 and 10 of the Plan do discuss the RGGI proceeds and allocating a portion of those proceeds to the HEA and municipal programs.

Forward Capacity Market (FCM) - NET $3,808,325

per 4th Quarterly Report filed in DE 14-216 on 3/28/2018
Actual Forward Capacity Market Proceeds and Expenses

	Liberty	NHEC	Eversource	Unitil	Total
Proceeds					
Quarter 1	$ 53,142	$ 12,128	$ 425,537	$ 67,175	$ 557,982
Quarter 2	$ 50,615	$ 10,148	$ 427,879	$ 65,961	$ 554,603
Quarter 3	$ 188,744	$ 18,687	$1,573,553	$215,229	$ 1,996,213
Quarter 4	$ 156,499	$ 54,035	$1,425,941	$193,304	$ 1,829,779
Total Proceeds	$ 449,000	$ 94,998	$3,852,910	$541,669	$ 4,938,577
Financial Assurance					
Quarter 1	$ -	$ -	$ -	$ -	$ -
Quarter 2	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Quarter 3	$ -	$ -	$ -	$ -	$ -
Quarter 4	$ -	$ -	$ -	$ -	$ -
Total Fncl Assurance	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Other Expenses					
Quarter 1	$ (2,282)	$ -	$ (5,164)	$ (3,141)	$ (10,587)
Quarter 2	$ (18,635)	$ (6,368)	$ (19,111)	$ (12,471)	$ (56,585)
Quarter 3	$ (1,789)	$ (4,267)	$ (11,073)	$ (331)	$ (17,460)
Quarter 4	$ (1,147)	$ -	$ (8,237)	$ (410)	$ (9,794)
Total Other Expenses	$ (23,853)	$ (10,635)	$ (43,585)	$ (16,353)	$ (94,426)
Total Expenses	$ (23,853)	$ (10,635)	$ (44,585)	$ (17,353)	$ (96,426)
NET FCM	**$ 425,147**	**$ 84,363**	**$3,808,325**	**$524,316**	**$ 4,842,151**

Audit reviewed the Eversource work order activity NHISO which reflected labor and overhead associated with the FCM, as well as annual certification and financial assurance as recorded to Eversource account 254P90. The $43,585 represents direct expenses.

As noted on page 8 of 16 of the 2017 annual incentive report, the net forward capacity market is the result of:

Forward Capacity Market Payments Received	$3,851,910
Forward Capacity Market Expenses Paid	$ (43,586)
Net Funding	$3,808,324

As noted earlier in this report, because the expenses paid were netted against the revenues for the net funding figure and also included in the total EE expenses, the $43,586 has been deducted from the available balance twice. Refer to **Audit Issue #1**.

Audit verified the direct and allocated expenses to the general ledger pivot table detail of the FCM activity for both residential and C&I. The Direct Labor and Direct Outside Services line items noted below, within the Implementation and the EM&V expense categories, represent the $43,586, while the allocation total was not noted as an expense within the 4th quarter report, nor in the "net funding" on the shareholder incentive 2017 general ledger roll-forward. The entire expense, $50,553 is noted within the total $19,407,598.

Res FCM	Int. Admin.	Ext. Admin.	Implmntn	EM&V	Total
Direct Labor	$ -	$ -	$ 9,968	$ -	
Direct OS Services	$ -	$ -	$ -	$ 3,108	
Allocated EM&V	$ -	$ -	$ -	$ 251	
Allocated NHCORE	$ 1,558	$ -	$ -	$ -	
Allocated NHCORE	$ -	$ 130	$ -	$ -	
Allocated IT Eval	$ -	$ -	$ -	$ 151	
Residential Totals	$ 1,558	$ 130	$ 9,968	$ 3,510	$ 15,166

C&I FCM	Int. Admin.	Ext. Admin.	Implmntn	EM&V	Total
Direct Labor	$ -	$ -	$ 23,259	$ -	
Direct OS Services	$ -	$ -	$ -	$ 7,251	
Allocated EM&V	$ -	$ -	$ -	$ 586	
Allocated NHCORE	$ 3,634	$ -	$ -	$ -	
Allocated NHCORE	$ -	$ 303	$ -	$ -	
Allocated IT Eval	$ -	$ -	$ -	$ 353	
C&I Totals	$ 3,634	$ 303	$ 23,259	$ 8,190	$ 35,387

4th Quarter Report of Direct Expenses					**$ 43,586**
2017 Allocated Expenses Identified Above					**$ 6,967**
TOTALS	$ 5,192	$ 433	$ 33,228	$ 11,700	**$ 50,553**

Audit reviewed one journal entry related to Forward Capacity Market revenue. The entry was for $139,206.93 and was included within the Wholesale Power revenue figure of $280,910.46. The entry which moved the EE related portion was posted in April 2017 with a debit to revenue account 447210 and a credit to the EE account 254P90.

Interest $89,776

Interest of $89,776 represents the calculations for both the NHSaves and the 2% RSA 125-O: 25 running balances. The interest is calculated monthly and is factored into the next month's starting balance.

Audit verified (using the Federal Reserve St. Louis website https://fred.stlouisfed.org/data/PRIME.txt) that the interest rate used was the Federal Reserve's prime rate as of the first of the month for which interest was calculated. During 2017, rates in place were January through March 3.75%; April through June 4.00%; July through December 4.25%. Specifically, Eversource uses the interest formula below:

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

The December 2017 EE interest figure to be included in the 2018 calendar year should be $92,575. The variance is due to exclusion of $2,048 interest associated with calendar year 2016 which was posted in 2017 and $4,847 of 2017 interest posted in 2018.

RSA 125-O:5

NH RSA 125-O:5, Energy Efficiency, Renewable Energy, and Conservation and Load Management Incentive, specifically authorizes PSNH to "*utilize SBC funds equivalent to the unencumbered amount, if any, rolled over from prior program year for energy efficiency projects at facilities owned and operated by PSNH, provided that the company made a good faith effort in the prior program year to meet the goals approved by the public utilities commission for its core energy efficiency programs, and provided that the SBC funds used by PSNH shall not exceed 2% of all SBC funds collected in the prior program year…*" The Commission further outlined (in docket DE 09-170, Secretarial Letter dated 11/4/2010) that the balance held shall not exceed $600,000.

Audit requested the report for calendar year activity 2017, and was provided with evidence that the report had been emailed to the Commission on June 6, 2018. The report had not been included within the docket book record for DE14-216. Audit forwarded the report to the Executive Director of the PUC and the Clerk's office for inclusion with the official record. The activity did not change from the prior year's balance of $43,973.

Audit understands that any plant in service, funded through the RSA 125-O:5 monies, will be considered as a Contribution in Aid of Construction.

NHSaves Program- Expenses

	Int. Admin.	Ext. Admin.	Rebates/ Services	Implmntn Services	Marketing	EM&V	TOTAL
HEA	$111,965	$ 9,334	$ 2,637,387	$ 103,234	$ 2,359	$ 66,392	$ 2,930,671
ES Homes	$ 37,227	$ 3,104	$ 1,057,356	$ 57,599	$ 9,450	$ 54,173	$ 1,218,909
HPwES	$ 70,127	$ 5,877	$ 1,061,284	$ 162,712	$ 12,394	$ 52,686	$ 1,365,080
ES Products	$ 66,336	$ 5,530	$ 1,773,316	$ 80,214	$111,416	$ 21,854	$ 2,058,666
Other	$ 15,842	$ 1,321	$ 473,590	$ 21,524	$ -	$ 8,051	$ 520,328
Total Res.	$301,497	$ 25,166	$ 7,002,933	$ 425,283	$135,619	$203,156	$ 8,093,654
Lg Bus.	$170,612	$ 14,224	$ 4,897,593	$ 445,960	$ 20,159	$ 61,891	$ 5,610,439
Small Bus.	$100,745	$ 8,399	$ 2,668,456	$ 367,295	$ 8,069	$101,621	$ 3,254,585
Municipal	$ 47,132	$ 3,929	$ 1,371,148	$ 14,254	$ 2,760	$ 44,393	$ 1,483,616
Other	$ 38,627	$ 3,220	$ 803,117	$ 43,998	$ 56,873	$ 19,467	$ 965,302
Total C&I	$357,116	$ 29,772	$ 9,740,314	$ 871,507	$ 87,861	$227,372	$11,313,942
Combined	$658,613	$ 54,938	$16,743,247	$1,296,790	$223,480	$430,528	$19,407,596

The grid above is the summary of the 4th quarter expenses by activity. Audit verified the rounded total to the annual shareholder incentive reconciliation of 2017 activity.

A limited review of expenses was conducted, due to the timing of the audit fieldwork. Regarding overhead rates in place during 2017, applied to labor, the following information was provided:

	PSNH Employees		
	Non-productive time	Payroll Benefit Rate	Company Overhead
January 2017	0.1670	0.3295	N/A
February – September	0.1670	0.3207	N/A
October – December	0.1475	0.3207	N/A

	Eversource Service Company Employees		
	Non-productive time	Payroll Benefit Rate	Company Overhead
January 2017	0.1857	N/A	0.6750
February – September	0.1857	N/A	0.6658
October – December	0.1577	N/A	0.6658

During this Energy Efficiency audit, a review of the overhead rate determinants and inputs was not conducted. The overheads will be audited in depth during the Company's next full rate case.

Allocated Expenses

Eversource submitted documents indicating $992,408 of expenses classified as Allocated Charges were spread among the various programs. Eversource further indicated the Allocation Charges consist of costs that are shared among all programs such as management, supervision, membership, and information technology fees. All Allocated Charges were booked to the Internal

Administration or Implementation category of the expense listing and allocated using a table representative of each program's percentage of the overall budget.

The allocated costs were identified by Accounting Work Orders (AWO):

06TRASYS NH Tracking System EE Expenses	$ 64,044
06ISOFCM General ISO/FCM Program Admin.	$ 43,586
06NHCOR0 General NHSaves Program Admin.	$884,778
	$992,408

The 06TRASYS figure was verified to field work orders and cost elements which identified the expenses as:

S14 Contractor Services	$ 1,353
S17 IT Outside Services	$17,339
S49 Contractor Labor	$23,807
S68 Other Outside Services	$ 5,886
UO8 UVL-Contractor Labor	$ (534)
L11 Labor Straight Time Exempt	$ 8,298
ZGS General Service Loader	$ 6,473
ZNP Non-productive Time Loader	$ 1,421
ZVE Vehicle Cost Clearing	$ 1
	$64,044

Activity within the work orders reflected payroll, allocations, and payments to Comensura Inc., Energy Orbit, CRM Orbit Inc., Tata America International, and Randstad US LP.

The 06ISO000 figure was verified to field work orders and cost elements which identified the expenses as:

S68 Other Outside Services	$10,359
L11 Labor Straight Time Exempt	$16,921
ZGS General Service Loader	$13,281
ZNP Non-productive Time Loader	$ 3,020
	$43,586

The Outside Services were evaluation services provided by Northeast Energy Efficiency, Stephen Waite, and Celtic Energy Inc. Labor was verified to 24 payroll lines within the work order. Samples of the loaders were recalculated and verified to the work orders.

The 06NHCOR0 figure was verified to field work orders and cost elements which identified the expenses as:

	06COREV0	06COREX0	06CORIM0	06CORMK0	06CORMS0	TOTALS
A73-Payments	$ -	$ -	$ -	$ -	$ 586.86	$ 586.86
E11-Employee Expense Other	$ 19.90	$ -	$ 649.27	$ 145.76	$ 539.43	$ 1,354.36
E13-Meals	$ -	$ -	$ -	$ 20.47	$ 37.06	$ 57.53
E14-Mileage	$ 1,170.06	$ -	$ 4,111.51	$ 505.60	$ 28.00	$ 5,815.17
E18-Training	$ -	$ -	$ 235.93	$ -	$ -	$ 235.93
F12-Dues and Membership	$ 2,919.72	$ -	$ -	$ -	$ -	$ 2,919.72
L11-Labor Straight Time	$ 46,068.17	$ -	$ 362,730.87	$ 9,851.99	$ 25,723.09	$ 444,374.12
L12-Non-exempt Labor	$ -	$ -	$ -	$ 1,653.54	$ 1,584.71	$ 3,238.25
M11-Materials Purchased	$ -	$ -	$ 707.49	$ -	$ -	$ 707.49
S49-Contractor Labor	$ -	$ -	$ 1,193.40	$ 41,973.56	$ -	$ 43,166.96
S68-Other Outside Services	$ 19,011.72	$ 54,908.18	$ 18,234.71	$ 0.00	$ -	$ 92,154.61
ZGS-Gen Ser Co Benefit Loader	$ 22,829.00	$ -	$ 38,578.41	$ 8,776.28	$ 21,460.98	$ 91,644.67
ZNP-Non-productive Time Loader	$ 7,779.50	$ -	$ 60,041.49	$ 2,027.25	$ 4,874.73	$ 74,722.97
ZPB-Payroll Benefits Loader	$ 6,272.73	$ -	$ 117,258.88	$ 112.65	$ -	$ 123,644.26
ZVE-Vehicle Cost Clearing	$ 78.33	$ -	$ 1.86	$ 40.74	$ 34.17	$ 155.10
06NHCOR0	$ 106,149.13	$ 54,908.18	$ 603,743.82	$ 65,107.84	$ 54,869.03	**$ 884,778.00**

The 06NHCOR0 Accounting Work Order represents General NHSaves Program Administration. The related field work orders are defined as follows:

06COREV0	Evaluation
06COREX0	External Administration
06CORIM0	Implementation
06CORMK0	Marketing
06CORMS0	Management and Supervision

Audit reviewed the 06CORIM0 and noted:

Payroll	181 entries	$367,728
WB Mason	39 entries	$ 707
Comensura	2 entries	$ 1,193
Esource	1 entry	$ 18,235
Allocations	96 entries	$215,881
		$603,744

Home Energy Assistance Program - $2,930,671

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 in addition to that amount, 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 most vulnerable population.

As stipulated in NH RSA 125-O: 23 and the Joint Settlement Agreement covering the NHSaves Programs, the 2017 funding was set at least 15% of the RGGI Auction Proceeds and at least 17% of the total budget. The reported actual expenses, according to the 4th quarterly report, are:

Internal Administration	$ 111,965
External Administration	$ 9,334
Rebates/Services	$2,637,387
Implementation Services	$ 103,234
Marketing	$ 2,359
Evaluation/Monitoring/Verification	$ 66,392
HEA Total	$2,930,671

While the budget for 2017 did set the HEA at 17% of the overall budget, the percentage of HEA funds spent compared to the overall expense total is 15.1%. **Audit Issue #3**

Audit selected one expense item for review. The $90,666.95 was verified to an OTTER invoice from Southern NH Services. Twenty-one customers were identified, each line with an administrative cost, rebate cost, and eleven who had a credit noted. The credits were related to refrigerator replacements which were initially included in the total cost for energy savings, but excluded from the invoice as those specific costs are paid to SMOC rather than the Community Action Agency. None of the customers exceeded the $8,000 cap for weatherization, etc.

Home Performance with Energy Star (HPwES) - $1,365,080

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. Customers who qualify can receive up to approximately 50% of the cost of weatherizing up to a cap of $4,000. The HPwES program uses the same OTTER system as the HEA Program, and therefore the same contractor billing rates in order to ensure adherence to the statewide rates. Customers may finance their copay amount, up to $2,000 through on-bill financing, with zero interest. The tariff pages 95-96 specify the explicit terms of financing arrangements.

Internal Administration	$ 70,127
External Administration	$ 5,877
Rebates/Services	$1,061,284
Implementation Services	$ 162,712
Marketing	$ 12,394
Evaluation/Monitoring/Verification	$ 52,686
Home Performance Total	$1,365,080

Energy Star Homes - $1,218,909

As noted in the filing, this program is fuel neutral and 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 the 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 and a combination of energy efficient lighting and appliances. The electric and gas utilities also coordinate to provide rebates for high efficiency gas HVAC equipment. The 2017 ESH costs were reported to be:

Internal Administration	$ 37,227
External Administration	$ 3,104
Rebates/Services	$1,057,356
Implementation Services	$ 57,599
Marketing	$ 9,450
Evaluation/Monitoring/Verification	$ 54,173
EnergyStar Homes Total	$1,218,909

Energy Star Products - $2,058,666

As noted in the filing this program will continue to increase the promotion, use and availability of energy efficient lighting products, appliances (white goods) and electric heating, cooling, and water heating equipment in New Hampshire. The program is open to all residential customers with rebates offered in stores, online, and through the NHSaves website.

Internal Administration	$ 66,336
External Administration	$ 5,530
Rebates/Services	$1,773,316
Implementation Services	$ 80,214
Marketing	$ 111,416
Evaluation/Monitoring/Verification	$ 21,854
Energy Star Products Total	$2,058,666

Further, the field work orders which reflect the figure above were:

06LITI00 Energy Star Lighting	$ 701,936
06ESA000 Energy Star Appliances	$1,231,884
Subtotal Direct expenses	$1,933,280
Allocated expenses	$ 125,386
Total Expenses	$2,058,666

OTHER RESIDENTIAL $520,328

Other Residential Programs consists of the following reported expenses:

Internal Administration	$ 15,842
External Administration	$ 1,321
Rebates/Services	$473,590
Implementation Services	$ 21,524
Marketing	$ -0-
Evaluation/Monitoring/Verification	$ 8,051
Other Residential Total	$520,328

Audit verified direct and allocated charges to the following Accounting Work Orders:

Home Energy Report	$333,867
Residential Customer Engagement	$171,300
30% of total ISO	$ 15,166
Subtotal	$520,328

Home Energy Reports $333,867

The Home Energy Reports Pilot Program was approved in 2016 by the Commission with the purpose of evaluating the effectiveness of using a behavioral-based energy efficiency program in NH before expanding the program to a larger audience of residential customers. The primary objectives of the pilot program include: a) measuring the program's effectiveness on electric energy savings, enrollment in other energy-efficiency programs and customer satisfaction, and b) measuring the effect messaging has on electric energy savings using two separate engagement methods:

1) Normative – customers are compared to and ranked against similar customers to stimulate electric energy savings; and
2) Rewards – customers receive reward points for saving electric energy that can be redeemed at local merchants.

According to the 4th Quarter 2017 Report, page 16, Eversource spent $333,867 on the HER Program. The participation goal and actual reported participation was 50,000 customers with a goal of lifetime kWh savings of 7,131,184. The reported actual lifetime savings was noted to be 12,450,000kWh. The random sampling of customers enrolled is not compared against any other Eversource energy efficiency program in which the customer may have participated.

Customer Engagement Platform (CEP) - Residential $171,300

The CEP is an interactive [on-line] tool that allows Eversource to reach all of its customers with energy usage information that is tailored to the customer and his/her situation and can be accessed through the Eversource website.

As found on page 25 of the 2017 Plan, the CEP was implemented in CT and MA during 2015, and in NH during 2016. The CEP interactive online tool allows customers to do self-assessments of their energy usage, track energy usage, compare usage with similar customers in the geographic location, and customer segment. Information regarding the CEP was provided to customers via bill-stuffers and online.

Large Business Energy Solutions - $5,610,439

Noted in the filing, the Large Business program is designed for business customers using more than a twelve-month average of 200kW. 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. A third option, referred to as "turn-key", allows for up to a 50% rebate. The NHSaves Program generally defines incremental costs as the difference in cost between standard equipment and energy efficient equipment.

Internal Administration	$ 170,612
External Administration	$ 14,224
Rebates/Services	$4,897,593
Implementation Services	$ 445,960
Marketing	$ 20,519
Evaluation/Monitoring/Verification	$ 61,891
Large Business Total	$5,610,439

Small Business Energy Solutions - $3,301,900

Noted in the filing, the Small Business program is designed for business customers using less than a twelve-month average of 200kW, with similar program opportunities outlined for the Large Business program.

Audit verified the reported total of $3,301,900 to the pivot table detail of expenses which reflected a total of $3,254,585. The $47,315 variance was clarified by the Company that three specific waste water treatment projects within the town of Newmarket had been moved from Municipal projects to Small Business projects after the accounting system had been closed. As a result, there is a $47,315 difference between the accounting pivot table data and the reported actual expenses for Small Business and Municipal programs. Overall there is no variance.

Internal Administration	$ 100,745
External Administration	$ 8,399
Rebates/Services	$2,668,456
Implementation Services	$ 367,295
Marketing	$ 8,069
Evaluation/Monitoring/Verification	$ 101,621
Small Business Total	$3,254,585

Municipal Energy Solutions - $1,436,300

This program is designed for 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.

The funding for the Municipal Program was legislated in NH RSA 125-O:23-III-B, coming from the Quarterly RGGI Auction Proceeds where up to $2 million of these proceeds were set aside for municipal and local government energy efficiency projects, including projects by local governments that have their own municipal utilities, through April of 2017. If funds remained uncommitted after that, they could be made available to commercial/industrial customers on a first come, first served basis. Based on a review of the detailed work order, municipal customers utilized the funding.

Internal Administration	$ 47,132
External Administration	$ 3,929
Rebates/Services	$1,371,148
Implementation Services	$ 14,254
Marketing	$ 2,760
Evaluation/Monitoring/Verification	$ 44,393
Municipal Total	$1,483,616

Refer to the Small Business Energy Solutions discussion regarding the $47,340 variance between the accounting pivot table data and the reported expense total.

Audit chose one rebate for review. $4,110, paid to the North Hampton School was for a retrofit lighting in the parking lot and gymnasium. Invoices from Daniels Electric and Parson's Electric were provided. The rebate was based on the 2016 C&I rebate form, and represents 15% of the total project cost. Audit requested clarification of the dates and inclusion in the 2017 program year. The work was completed in 2016, but not verified until 1/5/2017. Audit also verified that the rebate figure was not included within the 2016 program year as an accrual.

C&I OTHER $965,303

The reported costs for Other C&I expenses were noted to be $965,303 according to the 4th quarterly report:

Internal Administration	$ 38,627
External Administration	$ 3,220
Rebates/Services	$803,117
Implementation Services	$ 43,998
Marketing	$ 56,873
Evaluation/Monitoring/Verification	$ 19,467
C&I Other Total	$965,302

Audit verified the direct and allocated expense totals of the following Accounting Work Orders:

C&I Smart Start	$ 9,750
C&I Education	$175,701
C&I FCM (70%)	$ 35,387 See FCM portion of this report
C&I RFP	$486,617
C&I Customer Partnership	$ 906
C&I Customer Engagement	$256,909
Total	$965,303

Smart Start - $9,750

The Smart Start expenses represent:

Allocation NHSaves	$1,687	Internal Administration
Allocation NHSaves	$ 141	External Administration
Labor	$7,401	Implementation
Outside Services	$ 521	EM&V
Total	$9,750	

Commercial and Industrial Education - $175,700

The Education component of the NHSaves Programs includes energy code Training, Commercial Energy Auditing Classes, C&I Customer Education, Energy Education for Students, Energy Code training for homebuilders, and more. Expenses for the year were noted to be:

Internal Administration	$ 6,814	Allocation NHSaves
External Administration	$ 568	Allocation NHSaves
Rebates/Services	$103,159	Direct Rebates/Services
Implementation	$ 7,767	Direct Labor
Marketing	$ 55,067	Direct Outside Services, allocated labor
EM&V	$ 2,325	Direct Services, Marketing, allocated NHSaves
	$175,700	

Audit selected one Education invoice for review. In May 2017, a payment of $16,981.77 was made to GDS Associates. The invoice provided to Audit referenced all six participating electric and gas utilities in Energy Code Workshops. The $16,981 was Eversource's portion of the total invoice. The dates of the workshops were 5/11/2017, 5/18/2017, 5/16/2017, and 5/23/2017. Attendance sign-in sheets were provided with the support. Locations of the workshops were the Puritan Backroom in Manchester, the Strafford Farms in Dover, and the Courtyard Marriott in Portsmouth.

Commercial and Industrial Energy Rewards RFP - $486,617

The Commercial and Industrial Request for Proposal Program was designed to promote competitive market development in the energy efficiency industry by encouraging third parties to bid for energy efficiency projects on a competitive basis. The RFP Program is aimed at energy efficiency potential from large C&I customers not participating in the other C&I NHSaves programs. Audit verified the total reported figure to the following totals, details of which were reviewed:

Internal Administration	$ 21,699	Allocation NHSaves
External Administration	$ 1,809	Allocation NHSaves
Rebates/Services	$448,573	Direct Rebates/Services
Implementation	$ 5,571	Direct Labor
Marketing	$ 1,806	Direct Outside Services, allocated labor
EM&V	$ 2,325	Outside Services, allocated EM&V, allocated IT
	$486,617	

C&I Customer Partnerships $906

The Commercial and Industrial Customer Partnership Program was designed to provide focused education to members on energy efficiency technologies and opportunities available in New Hampshire. The format is open to be able to react to a wide range of proposals "*for an outreach or other partnership that would benefit the C&I programs, but does not fit within the typical rebate structure*". The original budget for 2017 was $20,100, with only $900 actually spent. Audit requested clarification of such a shortfall in actual expenditures, and was informed that Eversource simply did not receive requests for partnerships with any vendors or other entities which would have benefited commercial/industrial electric consumers.

Customer Engagement Platform- $256,900

As found on page 25 of the 2017 Plan, the Customer Engagement Platform (CEP) was implemented in CT and MA during 2015, and in NH during 2016. The CEP is an interactive online tool that allows customers to do self-assessments of their energy usage, track energy usage, compare usage with similar customers in the geographic location and customer segment. Information regarding the CEP was provided to customers via bill-stuffers and online.

Performance Incentive

Eversource submitted their Annual Report and Performance Incentive (PI) calculation on June 6, 2018. The 2016 true-up of $35,893 noted on page 8 of 16 was verified to the 2016 audit report. The calculated incentive for 2017 was reported to be:

C&I Incentive	$ 777,163	6.875% of	$11,304,192	NHSaves expenses
Residential Incentive	$ 489,813	6.050% of	$ 8,093,656	NHSaves expenses
Calculated	$1,266,976		$19,397,848	
Booked	$1,272,875			
Adjustment	$ (5,899)			

The Commission set a cap on each customer segment's performance incentive at 6.875% for 2017. The C&I incentive reached the cap. The Residential incentive was calculated to be slightly less at 6.05%.

The overall expense total included in the incentive calculation is $9,750 less than the total reported EE expenses included on page 8 of 16. The $9,750 represents Smart Start costs.

RGGI Revolving Loan Fund (RLF)

On August 19, 2009, a $7,646,020 NH PUC Sustainable Energy grant, identified as Re-CORE, was approved by the Governor and Council. The grant, among other things, established the Revolving Loan Funds (RLF) totaling $1,728,000, administered by the participating Electric Utilities.

PSNH/Eversource initially received $500,000 from the Re-CORE grant to establish a revolving loan fund. By Secretarial Letter (in 2013) the Company was authorized to use an additional $190,000 for the RLF, bringing the total to $690,000.

According to the 2017 4th Quarter Report, page 24 of 31, the following information was provided:

Revolving Loan Fund	$ 690,000
Less cumulative loans issued	$(1,451,085)
Plus loan payments received	$ 1,210,313
Less pending loans	$ (14,000)
Available to lend as of 12/31/2017	$ 435,228

As noted within the Company's tariff, customers are able to use the loan funds to pay for the customer portion of an energy efficiency measure completed in connection with the HPwES program. Loan amounts range from $500 to $2,000 (not to exceed the actual customer cost), with terms up to two 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.

Smart Start

PSNH was authorized by Commission Order 23,851 (issued 11/29/2001) to offer an on-bill financing program known as Smart Start. Establishment of the revolving loan fund was originally through the SBC. The program is available to municipal customers.

2017 Summary:	
Beginning Bal. Available to Lend	$ 343,482
Loans issued during 2017	$(279,630)
Repayments during 2017	$ 872,625
Available to Lend 12/2017	$ 936,477
Bad Debt allocated to Reserve	$ (43,631)
Smart Start Incentive	$ 52,358

The bad debt is a calculation of 5% of loaned funds, added to a municipality's repayment costs. For 2017, the repayments amounted to a combined total of $872,625. The bad debt calculation, as noted on the model maintained by project type and expense category, was verified to be $43,631. The net loan principal repaid was therefore $828,994.

PSNH was specifically authorized by Commission Order #23,851 to earn a shareholder incentive of 6% of loaned funds repaid. For 2017, $828,994 was repaid, resulting in a calculated incentive of $49,740. The Company included the Bad Debt repayment when the incentive was calculated. Audit requested clarification of the Company's understanding of the 6% and related basis, and was told that the "*5% Bad Debt fee is a fee included as part of the total project cost and included in the loan balance at the time the Smart Start loan is made. As an approved part of the program, it is part of the project cost to the customer. In this respect it is the same as any other cost associated with the project that is being loaned out and repaid through the loan mechanism. Eversource/PSNH has always calculated the performance incentive on 6% of repayments without separating out particular types of project costs from others*."

Audit Issue #1

Roll-forward Balance

Background

The annual shareholder incentive report presented to the Commission on June 6, 2018 includes a 2017 End of Year Reconciliation. Refer to page 8 of 16. The 2017 net carry-forward was noted to be an under-recovery of $(385,554).

Issue

Audit was unable to verify the beginning or ending balance to account 254P90 due to the inclusion of Smart Start revolving loan fund, buy-down, and performance incentives within the same account. Eversource indicated that the roll-forward balance included on the Reconciliation within the shareholder filing uses the figure from the prior year's shareholder incentive reconciliation page as the basis for the roll-forward. A reconciliation to the beginning and ending balance is not done, rather only the annual activity is verified to the general ledger.

Specifically, Audit also verified the Net FCM $3,808,324, noted within the Funding portion of the reconciliation on page 8, is the result of:

FCM Revenue	$3,852,910
Financial Assurance	$ (1,000)
FCM Expenses	**$ (43,586)**
Net	$3,808,324

However, Audit also verified that the FCM Expense is included in the Energy Efficiency Expenses total, thereby reducing the overall balance twice.

FCM Expenses	**$ (43,586)**
Smart Start Labor	$ (7,401)
Smart Start SSEV00	$ (85)
Program Expenses 254P90 1/17 – 7/17	$ (7,426,476)
Program Expenses 908100 8/17 – 12/17	$(10,511,167)
RGGI Auction Expenses 242RG0	$ (1,418,883)
Reported Expense Total	$(19,407,598)

The roll-forward from previous years may include the expense in both places, as was identified in 2017. The actual roll-forward Energy Efficiency balance is unknown.

Recommendation

Audit recommends that the reported roll-forward balance within the shareholder incentive report be adjusted to account for the 2017 expense deduction reflected twice, and for any and all previous years in which the NET FCM and the Energy Efficiency Expenses both included the FCM Expenses. A reconciliation of the balance sheet account 254P90 should be conducted monthly to ensure the reported roll-forward balance is accurate.

Company Comment

The Company has revised the report to correct the 2017 FCM expense and reviewed prior year reports and found no similar error.

A reconciliation of account 254P90 and 242RG0 was completed for 2017 and discussed on the February 8, 2019 audit conference call. A similar reconciliation will be provided in support of the 2018 report when filed. The company will continue to update the reconciliation on a monthly basis. In addition, a project is under way to create a single balance sheet account that will contain the roll-forward balance related to the shareholder incentive report. The difference of funding as compared to energy efficiency expenses will be recorded to this account. This is expected to be in place by December 31, 2019.

Audit Conclusion

Audit received a copy of the revised pages 8 and 9 for the 2017 shareholder incentive report on March 14, 2019. The pages and related cover letter indicated that they were filed with the Executive Director of the NH PUC for inclusion in docket DE 14-216. The adjusted net under-recovery was revised to be $(250,917).

Audit appreciates the information provided regarding the upcoming 2018 annual report, as well as the information relating to the creation of the new balance sheet account for use in subsequent years.

Audit Issue #2

Lost Base Revenue

Background

2017 was the first year in which a calculation of Lost Base Revenue was authorized.

Issue

Within the Shareholder Incentive filing, pages 11 and 12 of 16, summaries of the calculations were noted. However, the general ledger 182LBR account was not updated to reflect the final calculated LBR.

Preliminary 2017 LBR	$132,688.29
1st Adjustment to cap at 110%	$ (50,928.00)
General ledger 12/31/2017	$ 81,759.68
2nd Adjusting Entry not posted	$ (25,081.00)
Related Carrying Charge not posted	$ 5,120.00
Reported Page 12 of 16	$ 51,558.68

Recommendation

The Company should ensure that the adjusting entries are posted, with copies of the entries provided to Audit within 30 days of this Final audit report.

Company Comment

An adjusting entry was made in January 2019 for $30,201 to true up the final 2017 calculated LBR amount including carrying charges. Provided as Attachment Audit Issue #2 is a copy of the adjusting entry.

Audit Conclusion

Audit reviewed the entries and concurs with the postings.

Audit Issue #3

Home Energy Assistance

Background

Attachment M of the Plan approved by Commission Order #25,976, increased the budget requirement for the Low Income Home Energy Assistance program from 15.5% to 17% for calendar year 2017.

Issue

The June 8, 2018 Shareholder Incentive package reflects HEA expenses of $2,930,671 of the total $19,407,596. The HEA spending represents 15% of the overall total.

Audit understands that the budget for 2017 correctly estimated 17% HEA spending.

Recommendation

The Company should provide an explanation of why the 17% targeted spending on HEA was not met. The information requested is for educational purposes.

Company Comment

The Company budgeted 17% for the HEA Program in 2017 as approved by Order #25,976. However, due to factors including the unexpected influx of federal funding to the low-income programs earlier in the year and the timing of projects, the Company was not able to expend all of its budged funds on the HEA program in 2017.

Audit Conclusion

Audit appreciates the information provided by the Company.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: February 12, 2019
AT (OFFICE): NHPUC

FROM: Bridget Heffernan, Examiner

SUBJECT: New Hampshire Electric Cooperative
DE 14-216 - 2017 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 Electric and Gas Energy Efficiency Programs for the calendar year 2017. The four participating electric utilities, Unitil Energy Systems, Inc. (UES), Public Service of New Hampshire d/b/a Eversource (Eversource), New Hampshire Electric Cooperative (NHEC), and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities (GSE or Liberty) and two gas utilities, Northern Utilities, Inc. (Northern) and Liberty Utilities (EnergyNorth Natural Gas) Corp. (ENG or Liberty) filed a joint petition for the program year 2017. Each utility was audited individually.

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

Approved 2017 Programs

The participating utilities submitted a joint energy proposal to the Commission on 9/23/2016 for the program year 2017. A joint Settlement Agreement and updated filing were presented to the Commission on 12/12/2016, and approved by Order 25,976 on 12/23/2016. NHEC's programs for 2017 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
- Educational Programs
- Smart Start

Changes to the CORE for 2017

The Plan included the following changes for the 2017 program year, as they apply to NHEC:

Design changes and Savings Assumptions

- Home Energy Assistance budget increased from 15.5% to 17% of the total program budget.
- EnergyStar Homes includes a Drive to Net Zero Competition to encourage and promote super high efficiency, zero net energy homes.
- HEA savings assumptions were updated to reflect current projects modeled by the Community Action Agencies, with updates made to project and measure lives.
- HPwES and ESH savings assumptions were updated to reflect current projects modeled in the program auditing software.

Demand Reduction Induced Price Effects (DRIPE) "*Beginning in 2017, the NH Utilities are including applicable electric and natural gas DRIPE avoided costs in their benefit-cost calculations.*" (Plan page 6 of 31)

The Lost Base Revenue (LBR) as approved by Order 25,932, restores "*the relationship between utility volumetric sales levels and the revenue requirements that were used in setting rates in each utility's last rate case*" (Plan page 7 of 31). LBR does not apply to the NHEC as they are member owned.

The 2017 Performance Incentive target of 5.5% of program expenditures, with a cap of 6.875% is a reduction of the previous electric cap of 10% and gas cap of 12%.

Funding changes

- 3rd party loan interest rate buy-downs (to 2% up to 7 years, up to $15,000) will no longer have NH CDFA available as a funding source. All utilities will continue to use program funds for this program.

Mid-Year Adjustments

The utilities are authorized to transfer 20% or less of an individual program budget, without Commission approval, although notification to Staff and interested parties is required. Transfers in excess of 20% require review by the Commission. There were no mid-year adjustments or budget transfers made or requested by NHEC during 2017.

SBC CORE Filing Summary

NHEC filed their 2017 Performance Incentive report on July 9, 2018. As noted in docket DE 10-188, Order 25,189, the utilities agreed to strive to complete their prior year performance incentive filings by June 1 of the subsequent calendar year.

The filed 2017 beginning balance matches the audited 2016 ending balance of $11,129 plus the 2016 member incentive of $118,029 which was expensed during 2017.

Carryforward Balance over collection	$ 129,159
System Benefit Charge	$ 1,490,912
RGGI Funding	$ 200,119
FCM Funding	$ 94,997
Interest	$ 10,521
Energy Efficiency Expenses	$(1,538,715)
2016 Correction	$ (8,120)
2016 Member Incentive	$ (118,029)
2017 Member Incentive	$ (88,932)
Carryforward Balance over collection	$ 171,913

The filed and calculated ending over collected balance for the NHEC 2017 Core Programs was $171,913. The amount reflected in the general ledger account 254.40, was $260,845. The difference from the account ending balance and the filed balance is $88,932 due to NHEC not booking the 2017 performance incentive until 2018.

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 for 2017. Overall, NHEC was at 91% of their budget.

2017 Budget per Plan filed 9/26/2016 in DE 14-216

	Int Admin	Ext Admin	Rebate/Service	Implmntn	Marketing	EM&V	Total
Home Energy Assistance	$ 16,316	$ 11,250	$ 213,623	$ 28,518	$ 3,964	$ 10,637	$ 284,308
Home Performance with EnergyStar	$ 19,942	$ 11,250	$ 137,807	$ 34,856	$ 3,964	$ 10,637	$ 218,456
EnergyStar Homes	$ 26,356	$ 11,250	$ 74,490	$ 46,067	$ 3,964	$ 10,637	$ 172,764
EnergyStar Products	$ 53,207	$ 11,250	$ 160,154	$ 93,000	$ 10,000	$ 10,637	$ 338,248
FCM Reporting	$ -	$ -	$ -	$ -	$ -	$ 3,000	$ 3,000
Total Residential	$115,821	$ 45,000	$ 586,074	$202,441	$ 21,892	$ 45,548	$1,016,776
Large Business Energy Solutions	$ 21,261	$ 10,000	$ 126,656	$ 37,161	$ 3,964	$ 10,637	$ 209,679
Small Business Energy solutions	$ 21,261	$ 10,000	$ 158,319	$ 37,161	$ 3,964	$ 10,637	$ 241,342
Municipal Program per SB123	$ 21,261	$ 10,000	$ 91,945	$ 37,161	$ 3,964	$ 10,637	$ 174,968
Education and FCM Reporting	$ 2,800	$ -	$ 31,664	$ 4,894	$ -	$ 7,000	$ 46,358
Total C&I	$ 66,583	$ 30,000	$ 408,584	$116,377	$ 11,892	$ 38,911	$ 672,347
SmartStart							$ -
TOTAL	$182,404	$ 75,000	$ 994,658	$318,818	$ 33,784	$ 84,459	$1,689,123

Actuals per 4th Quarterly Report of Expenses by Activity	Int Admin	Ext Admin	Rebate/Service	Implmntn	Marketing	EM&V	Total	Actual
Home Energy Assistance	$ 26,995	$ 7,605	$ 212,248	$ 28,439	$ 1,505	$ 3,358	$ 280,150	**99%**
Home Performance with EnergyStar	$ 11,032	$ 2,546	$ 60,396	$ 50,775	$ 743	$ 4,159	$ 129,651	**59%**
EnergyStar Homes	$ 13,149	$ 4,807	$ 80,945	$ 45,971	$ 832	$ 2,933	$ 148,637	**86%**
EnergyStar Products	$ 27,176	$ 6,272	$ 168,789	$ 97,019	$ 8,066	$ 834	$ 308,156	**91%**
FCM Reporting	$ 1,082					$ 2,540	$ 3,622	**121%**
Total Residential	$ 79,434	$ 21,230	$ 522,378	$222,204	$ 11,146	$ 13,824	$ 870,216	**86%**
Large Business Energy Solutions	$ 21,854	$ 5,044	$ 164,803	$ 43,155	$ 1,282	$ 671	$ 236,809	**113%**
Small Business Energy solutions	$ 21,217	$ 4,896	$ 141,113	$ 62,578	$ 1,485	$ 6,862	$ 238,151	**99%**
Municipal Program per SB123	$ 14,567	$ 3,362	$ 107,549	$ 30,105	$ 1,245	$ 1,543	$ 158,371	**91%**
Education and FCM Reporting	$ 4,926	$ 554	$ 20,338	$ 1,049	$ 141	$ 6,001	$ 33,010	**71%**
Total C&I	$ 62,564	$ 13,856	$ 433,803	$136,887	$ 4,153	$ 15,077	$ 666,341	**99%**
SmartStart	$ 136	$ 31	$ -	$ 1,980	$ 8	$ 4	$ 2,160	**0%**
TOTAL	$142,135	$ 35,118	$ 956,181	$361,071	$ 15,307	$ 28,906	$1,538,717	**91%**

As required by the Settlement, 17% of the overall Core expenses in 2017 must be budgeted for the Low Income Weatherization Program (HEA). Audit verified that the actual HEA expenses of $280,150 represent 18.2% of the total actual expenses of $1,538,718.

Revenue

The total of the funding sources for the 2017 calendar year, found in the Performance Incentive report were reported to be:

System Benefit Charge	$1,490,912
RGGI Funding	$ 200,119
FCM Payments	$ 94,997
Interest	$ 10,521
Total Funding	$1,796,550

System Benefits Charge

Audit requested and was provided with the kWh sales data for the calendar year. A comparison to the sales reported to the Commission monthly, as part of the Electric Assistance Program (EAP), demonstrated that for April 2017 through September 2017, the total kWh less the group net metering resulted in the same reported kWh as that provided to Audit as part of this CORE review. For the months of January 2017 through March 2017, the CORE kWh did not include a deduction for group net metering, whereas the EAP did. The difference in kWh for January was 2,939; February 2,459; and March 4,379, totaling 9,777 kWh or $19.35 in SBC revenue.

NHEC provided Audit with a revised reconciliation noting the SBC revenue for 2017 should be $1,490,927. This amount includes the adjustment for the group net metering SBC revenue plus it includes a correction in the program revenue amount for the months of April through December. On the original reconciliation provided the program revenue amount was a calculation of the total kWh times the SBC CORE rate. On the reviewed reconciliation, the program revenue is the actual revenues collected through billing. The difference between the original amount and revised amount is $15.

NHEC's journal entry #121810 was input to correct the group net metering SBC revenue. A correction needed to be made as the $19.35 was posted to the incorrect general ledger account. NHEC has prepared the correcting entry, which Audit reviewed, but it has not yet been posted to the GL. This correction will be included in the 2018 SBC fund balance reconciliation.

Total kWh sales for 2017, including the deduction for group net metering kWh which were corrected, were 753,950,761. The January 2017 ski area kWh totaling 10,723,387 are a month behind in billing and were charged the SBC rate of $0.0018. The remaining kWh sales of 743,227,374 were charged the new SBC rate of $0.00198.

Straight calculation of the sales multiplied by the energy efficiency portion of the SBC equates to $1,490,892. The difference between the straight calculation and the reported sales is an immaterial $35.

SBC revenues were also verified to the EE Reconciliation Report provided by NHEC and to the general ledger accounts associated with the Demand Side Management (DSM) below:

440.40 DSM Recovery Residential	$ 906,913
442.40 DSM Commercial	$ 237,836
442.41 DSM Recovery PG <1000KVA	$ 58,949
442.43 DSM Recovery PG >1000KVA	$ 51,952
442.44 DSM Ski Area Revenue	$ 60,211
442.45 DSM Industrial	$ 172,993
444.15 DSM Lighting	$ 2,073
Total SBC Revenue	$ 1,490,927

2017 RGGI Auction Proceeds

According to the 2017 End of Year Reconciliation provided in the incentive package, the filed amount of 2017 Quarterly RGGI Auction Proceeds $200,119 includes all four quarters' payments of 2017. The proceeds were verified to general ledger account 254.40, Miscellaneous Deferred Credit-DSM Over Recovery, as well as to the Audit work performed for the RGGI 2017 year, with a report issued on 8/2/2018. The statute required, after administrative costs, a portion of the quarterly proceeds be refunded to all retail electric ratepayers, and a portion be combined with the SBC Funded Energy Efficiency programs administered by the Core Electric Utilities. Further, according to 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.

The total auction proceeds for the year were $11,072,494 distributed as follows, in accordance with RSA 125-O:23:

2017 Auction Proceeds	$ 11,072,494
Refunded to All Customers	$ (7,811,600)
Set Aside for Admin Costs	$ (320,000)
Set Aside for All Fuels Grant	$ (400,000)
Distributed to CORE at Electric Utilities	$ (2,540,894)
Undistributed	$ -0-

The proceeds are distributed to Eversource, NHEC, Liberty, UES, and municipalities with their own electric departments: Ashland; Littleton; New Hampton; Wolfeboro; and Woodsville. The breakdown by recipient is as follows:

	Auction #35	Auction #36	Auction #37	Auction #38	**2017 Total**
NH Proceeds	$ 2,378,451	$ 2,232,581	$ 3,448,754	$ 3,012,708	**$ 11,072,494**
# of Allowances Sold	792,817	882,443	792,817	792,817	**3,260,894**
RGGI Proceeds at $1.00	$ 792,817	$ 882,443	$ 792,817	$ 792,817	**$ 3,260,894**
Administrative Expenses	$ (80,000)	$ (80,000)	$ (80,000)	$ (80,000)	**$ (320,000)**
RFP 14-004 All Fuels	$ (100,000)	$ (100,000)	$ (100,000)	$ (100,000)	**$ (400,000)**
Available to CORE	$ 612,817	$ 702,443	$ 612,817	$ 612,817	**$ 2,540,894**
Eversource	$ (446,301)	$ (511,573)	$ (446,301)	$ (446,301)	**$ (1,850,476)**
NHEC	$ (48,265)	$ (55,324)	$ (48,265)	$ (48,265)	**$ (200,119)**
Liberty	$ (51,185)	$ (58,671)	$ (51,185)	$ (51,185)	**$ (212,225)**
UES	$ (67,066)	$ (76,875)	$ (67,066)	$ (67,066)	**$ (278,074)**
distributed to CORE	$ (612,817)	$ (702,443)	$ (612,817)	$ (612,817)	**$ (2,540,894)**
Rebated to Electric Customers after payment of Administrative costs, RFP All Fuels, and CORE					
Eversource	$ (1,144,283)	$ (974,336)	$ (1,916,674)	$ (1,601,999)	**$ (5,637,292)**
NHEC	$ (109,018)	$ (92,827)	$ (182,605)	$ (152,625)	**$ (537,075)**
Liberty	$ (132,438)	$ (112,769)	$ (221,834)	$ (185,414)	**$ (652,455)**
UES	$ (173,531)	$ (147,758)	$ (290,664)	$ (242,943)	**$ (854,896)**
Ashland	$ (2,662)	$ (2,266)	$ (4,458)	$ (3,726)	**$ (13,112)**
Littleton	$ (9,982)	$ (8,500)	$ (16,720)	$ (13,975)	**$ (49,177)**
New Hampton	$ (516)	$ (440)	$ (865)	$ (723)	**$ (2,544)**
Wolfeboro	$ (9,823)	$ (8,364)	$ (16,453)	$ (13,752)	**$ (48,391)**
Woodsville	$ (3,381)	$ (2,879)	$ (5,664)	$ (4,734)	**$ (16,658)**
Total Rebated	$ (1,585,634)	$ (1,350,138)	$ (2,655,937)	$ (2,219,891)	**$ (7,811,600)**

Audit verified the CORE revenue postings to account 254.40 without exception. NHEC spent $158,370 of the total $200,119 on Municipal Programs, identified within their general ledger tracking system as activity code 120. The amount was verified to the 4th quarterly report on page 29. Page 29 also shows $32,780 or 16.4% of the RGGI funding was identified as spent on the low income program, activity code 117 resulting in the total RGGI funded expenses for 2017 to be $191,151, $8,968 lower than the $200,119.

Per RSA 125-O:23, the unused portions of the Municipal funds may be released to other C&I customers. NHEC noted that the remaining funds were used in the Large C&I program, which was overspent for the year. Since the $8,968 was less than 20% of the budget, an official transfer was not performed.

FCM Revenue and Expenses

per 4th Quarterly Report filed in DE 14-216 on 3/28/2018
Actual Forward Capacity Market Proceeds and Expenses

	Liberty	**NHEC**	**Eversource**	**Unitil**	**Total**
Proceeds					
Quarter 1	$ 53,142	$ 12,128	$ 425,537	$ 67,175	$ 557,982
Quarter 2	$ 50,615	$ 10,148	$ 427,879	$ 65,961	$ 554,603
Quarter 3	$ 188,744	$ 18,687	$1,573,553	$215,229	$ 1,996,213
Quarter 4	$ 156,499	$ 54,035	$1,425,941	$193,304	$ 1,829,779
Total Proceeds	$ 449,000	$ 94,998	$3,852,910	$541,669	$ 4,938,577
Financial Assurance					
Quarter 1	$ -	$ -	$ -	$ -	$ -
Quarter 2	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Quarter 3	$ -	$ -	$ -	$ -	$ -
Quarter 4	$ -	$ -	$ -	$ -	$ -
Total Fncl Assurance	$ -	$ -	$ (1,000)	$ (1,000)	$ (2,000)
Other Expenses					
Quarter 1	$ (2,282)	$ -	$ (5,164)	$ (3,141)	$ (10,587)
Quarter 2	$ (18,635)	$ (6,368)	$ (19,111)	$ (12,471)	$ (56,585)
Quarter 3	$ (1,789)	$ (4,267)	$ (11,073)	$ (331)	$ (17,460)
Quarter 4	$ (1,147)	$ -	$ (8,237)	$ (410)	$ (9,794)
Total Other Expenses	$ (23,853)	$ (10,635)	$ (43,585)	$ (16,353)	$ (94,426)
Total Expenses	$ (23,853)	$ (10,635)	$ (44,585)	$ (17,353)	$ (96,426)
NET FCM	**$ 425,147**	**$ 84,363**	**$3,808,325**	**$524,316**	**$ 4,842,151**

Audit verified that the FCM/ISO capacity revenue of $94,997 was credited to account 415.26, Revenue-ODR, activity code 134. The revenue was also verified to the fourth quarterly filing for the CORE for 2017.

FCM expenses of $10,635 were noted within the fourth quarterly filing and traced to accounts:

416.45 Administrative Salaries CP&S	$ 2,167
416.50 Evaluation Miscellaneous Expense	$ 8,468
	$10,635

Refer to the ***Payroll*** portion of this report for discussion regarding the Salaries and Benefit Allocation.

Interest $10,521

Throughout 2017, the interest was calculated using a rate 3.75% for all twelve months. Audit reviewed the prime rate listed on https://fred.stlouisfed.org/data/PRIME.txt and noted the following interest rates in effect during 2017:

- January, February and March – 3.75%
- April, May and June – 4.00%
- July, August, September, October, November and December – 4.25%

NHEC recalculated the interest using the new interest rates and the total of the year was $11,527 or a $1,006 difference from the original calculation. An adjusting entry was performed to correct the interest amount in the general ledger. Journal entry #121810 corrected $937.45 of the interest and the remaining $68.54 will be corrected in a journal entry that Audit reviewed but has not yet been posted to the general ledger. This correction will be included in the 2018 SBC fund balance reconciliation.

Interest was calculated using the average monthly balance, including interest from the previous month, throughout the calendar year 2017. Specifically, NHEC uses the formula:

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

Expenses

Member Incentive

NHEC's Performance Incentive was filed with the Commission on July 9, 2018 and noted an incentive amount of $88,932. The filing, page 5 of 8, provided the performance incentive calculation in which the incentive was calculated using C&I and Residential expenses totaling $1,525,753. However, the end of year reconciliation, on page 8 of 8 in the filing, noted Energy Efficiency expenditures of $1,538,715. Audit was able to verify the expenditure amount of $1,538,715 to the 4th quarter report and general ledger.

NHEC acknowledged that the correct expense amount for 2017 is $1,538,715. The amount stated on page 5 of $1,525,753 was a clerical error. Upon completion of this audit, NHEC will file a revised performance incentive calculation, which will exclude Smart Start savings and expenses, with the Commission.

The revised 2017 performance incentive will be reviewed for accuracy during the 2018 CORE audit. Audit will also verify that both customer segments' calculated performance incentives are below the 2017 Commission authorized 6.875% incentive cap.

The $88,932 incentive was not booked to the general ledger during the program year 2017. The prior 2016 incentive of $118,029 was booked to the 254.40 account in December 2017. No exception was noted with the booking of the incentive.

Payroll

Payroll related expenses were verified to the following general ledger accounts for 2017. 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.

24.416.35 CP&S Salaries	$211,083
24.416.45 Administrative Salaries CP&S	$ 84,559
24.416.47 P&B Sick Leave	$ 7,007
Subtotal Payroll	$302,649
24.416.48 P&B Benefit Allocation	$189,268
Total Payroll and Benefits	$491,917

The P&B Benefit allocation was recalculated by Audit at 61.70% for 2017, which was the benefit rate reported to be in place during the calendar year. There was a difference between the straight calculation amount of $186,734 and the GL benefit allocation amount of $189,268 of $2,533. Audit traced the difference to the June allocation amount. NHEC noted the difference is related to two correcting journal entries that were completed in May and June. A total of $4,105 of payroll was removed from account 24.416.35 and transferred to account 20.416.35. The benefits associated with the payroll were not moved. The payroll total of $4,105 multiplied by the benefit allocation rate of 61.70% equals $2,533; the difference in the calculated benefit amount and the GL benefit amount. NHEC has noted they will perform a correcting journal entry to remove the benefit amount of $2,533 from account 24.416.48. Audit reviewed a copy of the journal entry, which has not yet been posted to the general ledger, correcting the $2,533 benefit allocation. This correction will be included in the 2018 SBC fund reconciliation.

Audit reviewed the payroll activity for two employees. The Payroll/Labor Distribution History report for August 2017 reflected redacted employee names, the department 24 which is the Energy Efficiency group, the activity code to which the labor hours were spread, the general ledger account to which the payroll was posted, hours, and the employees' payroll total for the period. The report totaled 120 hours and $6,545 for the two employees. The total was verified to account 416.45 Administrative Salaries - CP&S without exception.

Transportation

Transportation charged to account 24.416.52 Transportation Expense-Administration, represents Internal Administrative transportation mileage and tolls to such things as PUC meetings and hearings. The total in the account, $1,438 was booked to activity code 162 and allocated among all CORE programs. Account 24.416.54, Cost-Job Work Sales-Transportation Indirect represents Internal Implementation activities such as site visits, and transportation costs which follow the specific employee's labor charges. The total for 2017 was $7,201, booked to the following activity codes:

116 Energy Star Lighting	$ 673
117 Home Energy Assistance	$ 630
140 Energy Star Appliances	$ 592
141 Energy Star Homes	$1,183
143 Home Energy Solutions	$1,858
162 Allocate to All Programs	$ 482
164 Allocate to Business Programs	$1,783
	$7,201

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 and tolls incurred.

Expense Summary

NHEC tracks all SBC Core related expenses in the 24.416.xx general ledger account numbers and by Activity Codes. Audit verified that the codes agreed with the expense type identified in the fourth quarterly report.

Residential Home Energy Assistance Program activity code 117 $280,148

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.

Internal Administration	$ 26,994
External Administration	$ 7,605
Rebates/Services	$ 212,248
Internal Implementation	$ 28,438
Marketing	$ 1,505
Evaluation	$ 3,358
Total	$ 280,148

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

One invoice reviewed indicated projects were completed for one residence, at a total cost of $6,754. The invoice from OTTER indicated Administrative Costs of $823, and Rebates of $5,931 for measures such as lighting, hot water pipe insulation, low flow water devices, air sealing, belly insulation, and attic insulation. The invoice was verified to general ledger account 416.19 activity code 117 without exception.

Municipal and Local Government Energy Program activity code 120 $158,370

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. 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.

Internal Administration	$ 14,567
External Administration	$ 3,362
Rebates/Services	$ 107,549
Internal Implementation	$ 30,105
Marketing	$ 1,245
Evaluation	$ 1,543
Total	$ 158,370

Audit reviewed a lighting incentive application along with a light rebate proposal for interior and exterior LED lighting fixtures and labor, which was booked to account 416.19 Rebates and Services. An invoice from the contractor shows lighting fixtures were installed at a municipal building totaling $5,716.50. The rebate amount was 50% or $2,858.25. The lighting incentive application contained signatures from a NHEC representative noting a post-installation inspection was performed. The invoice was verified to general ledger account 416.19 activity code 120 without exception.

Residential Energy Star Products Program $308,155

This program is the combination of the Energy Star Lighting program activity code 116 and the Energy Star Appliances program activity code 140 as described in the 2017 Plan. NHEC tracks the programs separately due to the set-up of their financial tracking and accounting systems. For Lighting, 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. For Appliances, the program is designed to offer mail-in rebate incentives on certain Energy Star rated appliances. The program also includes second refrigerator and freezer pickup and recycling.

The rounded expenses associated with these programs were verified to the company's general ledger without exception, and were traced to the presentation breakdown by expense category:

Category	Lighting	Appliances	Total
Internal Admin.	$ 14,215	$ 12,961	$ 27,176
External Admin.	$ 3,281	$ 2,991	$ 6,272
Rebates/Services	$ 92,107	$ 76,682	$168,789
Int. Implementation	$ 46,699	$ 50,320	$ 97,019
Marketing	$ 2,853	$ 5,213	$ 8,066
Evaluation	$ 436	$ 398	$ 834
Total	$159,591	$148,565	$308,155

Audit reviewed two invoices; one for EFI June Instant Coupons (light bulbs) in the amount of $124 and one for EFI June Air Conditioners in the amount of $141. The instant coupon invoice notes that $107.50 was the amount of instant coupons, and $16.83 was processing fees totaling the invoice amount $124. The invoice detail breaks down the coupon amount of $107.50 by bulb type.

The air conditioner invoice shows $120 was for the rebates and $21.48 was for processing fees totaling the $141 invoice amount. The invoice detail provides the model number and manufacturer of the air conditioners receiving rebates.

Both invoices were verified to general ledger account 416.19. Activity code 116 was used for the instant coupons and activity code 140 was used for air conditioner rebates. No exceptions were noted with the review of the two invoices.

Residential Energy Star Homes Program activity code 141 $129,651

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.

Internal Administration	$ 11,032
External Administration	$ 2,546
Rebates/Services	$ 60,396
Internal Implementation	$ 50,775
Marketing	$ 743
Evaluation	$ 4,159
Total	$129,651

Audit reviewed one rebate in the amount of $3,150. The invoice notes that $50 of the rebate is for appliances with the remaining $3,100 is for performance. The invoice was verified to general ledger account 416.19 activity code 141 without exception.

Residential Home Performance with Energy Star (HPwES) activity code 143 $148,637

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.

Internal Administration	$ 13,149
External Administration	$ 4,807
Rebates/Services	$ 80,945
Internal Implementation	$ 45,971
Marketing	$ 832
Evaluation	$ 2,933
Total	$ 148,637

Specific testing of rebates and services was not done. However, the payroll, benefits, and transportation costs were reviewed and determined to have been properly allocated.

Third Party Financing

The third party financing option, which was approved for loans up to $15,000 with the institution's interest rate to be bought down to 2%, allows for external lending institutions to fund energy efficiency project. Audit reviewed documentation for one interest rate buy down. The loan totaled $9,953 and the interest rate buy down was $1,035. The detail was verified to the general ledger 416.19, activity code 143. Audit recalculated the buy down without exception.

Small Business Energy Solutions Program activity codes 127 Retrofit and 148 New Construction $238,152

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. This program is intended for new or retrofit projects, with the activity code identifying the internal NHEC category. 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 percentage caps.

Internal Administration	$ 21,218
External Administration	$ 4,896
Rebates/Services	$141,113
Internal Implementation	$ 62,578
Marketing	$ 1,485
Evaluation	$ 6,862
Total	$238,152

An invoice for a retrofit of LED lighting at a State Agency was reviewed by Audit. The invoice totaled $3,097 of material and $850 for the contractor to install. To simplify the accounting process, the State Agency requested that the NHEC pay the rebate to the contractor directly. The contractor invoiced NHEC for 50% of the total cost, or $1,973, which was the incentive amount due. The rebate payment was booked to general ledger account 416.19, activity code 127 without exception.

Audit reviewed a lighting incentive application for a new equipment and construction lighting project at a small commercial member. The invoice from the electrician totaled $8,171 and showed that six LED lamps and fixtures were installed. The incentive worksheet shows an incentive amount of $150 per fixture totaling $900. The $900 was booked to general ledger account 416.19 activity code 148 without exception.

Large Business Energy Solutions Program activity codes 128 Retrofit and 149 New Construction $236,809

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.

Internal Administration	$ 21,854
External Administration	$ 5,044
Rebates/Services	$ 164,803
Internal Implementation	$ 43,155
Marketing	$ 1,282
Evaluation	$ 671
Total	$ 236,809

Audit reviewed one incentive application for a retrofit project in which eleven standard snow hydrants were replaced with energy efficient hydrants. An invoice for the hydrants shows a total expense of $16,500. The incentive amount paid was $5,775, or the 35% of incremental costs, as that was less than the one-year payback amount. The rebate amount of $5,775 was booked to account 416.19 activity code 128 without exception.

No invoice was reviewed for activity code 149 as the only general ledger activity was a correcting entry in the amount of $140.

Other Expenses Reviewed

Audit reviewed several other expense items which were posted to the accounts 416.50 Evaluation Miscellaneous Expenses, 416.65 Marketing, and 416.77 Office Supplies and Expenses. Generally, entries which are posted to those accounts are allocated among CORE programs.

Audit reviewed two invoices booked to general ledger account 416.50, Evaluation Miscellaneous Expenses, activity code 134. Both invoices were for ISO certification with one invoice being in the amount of $6,368 and the other in the amount of $2,100. The invoices were posted June 12, 2017 and September 12, 2017, respectively.

Two invoices booked to the Marketing account 416.65 activity code 162 were reviewed by Audit. One invoice in the amount of $4,753 was for social media execution fees. The invoice totaled $96,800 and was allocated to all of the CORE electric and gas utilities. The $4,753 represents the NHEC allocation percentage or 4.82%. The second invoice reviewed was for publication in the Lakes Region Community Guide. The invoice totaled $1,639 but only $350 of the total was for CORE advertising and charged to account 416.65.

Two invoices in the amounts of $225 and $30, booked to general ledger account 416.77, Office Supplies and Expenses, were reviewed by Audit. The first invoice, in the amount of $225, was for the Northeast Home Energy Rating System Alliance membership. The invoice totaled $250 but the NHEC took advantage of an early bird discount resulting in a reduction of $25. The second invoice for $30 was for business cards. The invoice total was $356 but only $30 was related to the CORE programs.

No exceptions were noted with Audit's review of other expenses.

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, and in 2016, payments to a collection agency were deducted from the available loan balance resulting in a total loan fund adjusted to $296,615. In 2017 collection fees amounted to $329 resulting in a year-end balance of $296,286. The reconciliation of the RLF demonstrated:

(2013) RLF Fund	$ 300,000
2015 Loan Write-Off	$ (3,003)
2016 Collection Fees	$ (382)
Adjusted Loan Fund	$ 296,615
2017 Collection Fees	$ (329)
2017 RLF Fund	$ 296,286
Principal Outstanding 12/17	$ (83,002)
Available to Lend	$ 213,284 rounded

Audit reviewed the NHEC activity within general ledger account #242.86 for both expenses and revenues.

Available to Lend 12/31/2016	$ (149,796)
Loans made during 2017	$ 11,449
Payments received during 2017	$ (75,266)
Collection Fees during 2017	$ 329
Net GL Balance 12/31/2017	$ (213,284)

The net GL balance represents the (rounded) funds available to lend at the end of December 31, 2017. The balance noted on the 4th quarter report, page 24 reflects a current balance of $206,197 less $7,381 in potential loans resulting in the amount available to loan being $198,816. NHEC noted that there was a data entry error on the 4th quarter report resulting in the balance being misstated. The general ledger and loan system reflect the accurate available to lend balance of $213,284.

NHEC Specific Program

Smart Start Program Activity Code 185 $2,160

According to the Joint Settlement Agreement this program provides C&I and municipal 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 2017 program year, NHEC spent $2,160. The costs were noted as:

Internal Administration	$ 136
External Administration	$ 31
Internal Implementation	$ 1,981
Marketing	$ 8
Evaluation	$ 4
	$ 2,160

NHEC financed two projects at a cost of $133,509, which was verified to the 4th Quarter Energy Efficiency Report. Because NHEC uses their own funds to finance the Smart Start loans, the NH PUC does not review the specific loan files. There was a total of $133,509 loans granted and $93,344 of loan repayments which were verified to debit and credit postings respectively to general ledger account 143.18, Miscellaneous Accounts Receivables-PAYS. Further testing was not performed.

Conclusion

Based on a review of the information and documentation provided to Audit, the revenue and expenses associated with the 2016 NHEC CORE appear to be in compliance with Commission Orders and properly reflected following the December 2018 adjusting journal entries of interest, benefit allocation and SBC group net metering revenue. NHEC shall refile their 2017 Member Incentive reflecting the correct expense and revenue totals.

	Original*	Revised	
System Benefit Charge	$ 1,490,912	$ 1,490,927	Page 5
Interest	$ 10,521	$ 11,527	Page 9
Corrections	$ 8,120	$ 5,586	

*Per member incentive filing page 8 of 8

The revised corrections amount of $5,586 includes an $8,120 correction from 2015 and the payroll benefit correction of ($2,533) from page 10 of this report. The $8,120 was a disbursement from RGGI Auction 27 in April 2015 that should have been posted to Department 25 but was posted to Department 24. The correcting journal entry was processed in March 2017.