

## THE STATE OF NEW HAMPSHIRE

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Debra A. Howland



## PUBLIC UTILITIES COMMISSION

21 S. Fruit Street, Suite 10  
Concord, N.H. 03301-2429

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

Tel. (603) 271-2431

FAX (603) 271-3878

Website:  
[www.puc.nh.gov](http://www.puc.nh.gov)

July 1, 2013

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

**Re: DE10-188 Final Audit Reports of the 2011 CORE Electric and Gas Efficiency Programs**

Dear Ms Howland:

In compliance with the Settlement Agreement dated 12/15/2010 and approved by Commission Order No. 25,189, enclosed is an original Final Audit Report of the 2011 CORE Electric and Gas Efficiency programs for each of the following Utilities:

Granite State Electric Company  
New Hampshire Electric Cooperative  
Public Service of New Hampshire  
Unitil Energy Services, Inc.  
Northern Utilities, Inc.

An audit report of EnergyNorth Natural Gas for the 2011 program year remains in Draft form as of the date of this letter. Additional supporting general ledger detail requested by Audit has yet to be provided.

PUC Audit has verified with each of the Utilities that nothing within the Final Audit Reports is considered confidential. If you have any questions, please do not hesitate to contact me.

Sincerely

A handwritten signature in blue ink that reads "Karen J. Moran".

Karen J. Moran  
Chief Auditor  
New Hampshire Public Utilities Commission

Enclosures

Cc: Susan Chamberlin, Esq.

**STATE OF NEW HAMPSHIRE**  
**Inter-Department Communication**

**DATE:** May 24, 2013  
**AT (OFFICE):** NHPUC

**FROM:** Karen Moran, Chief Auditor

**SUBJECT:** CORE Energy Programs – DE 10-188  
**FINAL** Audit Report  
Granite State Electric

**TO:** Tom Frantz, Director, Electric Division, NHPUC  
Jim Cunningham, Analyst, Electric Division, NHPUC

**Introduction**

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2011. The four participating electric utilities, Until Energy Services, Inc. (UES), Public Service of New Hampshire (PSNH), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) filed a joint petition for the program years 2011 through 2012. Each utility was audited individually.

Audit thanks Bob Bowcock, Tiffany Forsythe, Angela Li, and Brian Pelletier from National Grid, and Eric Stanley from Liberty Utilities. Audit work began in September 2012 and concluded in May 2013.

**Summary of the Program**

The four electric companies filed a joint proposal for the 2011-2012 CORE energy efficiency programs on August 3, 2010. On December 30, 2010, a Settlement Agreement was approved by Commission Order 25,189. The Order authorized the continuation of the following programs:

1. Energy Star Homes (ESH)
2. Home Performance with EnergyStar-fuel blind pilot GSE and UES (HPwES)
3. Energy Star Lighting (ESL)
4. Energy Star Appliance (ESA)
5. Home Energy Assistance for low income customers (HEA) at 14.5% of SBC
6. New Equipment and Construction for large commercial and industrial customers (C&I)
7. Large C&I Retrofit
8. Small Business Energy Solutions for small C&I customers
9. Educational programs
10. certain utility specific programs

The utility specific programs outlined in the Order are:

- NHEC: Smart Start program, and High Efficiency Heat Pump program
- PSNH: Specific adaptations of programs for C&I customers, as well as its Smart Start program, services under the EnergyStar Homes Program Enhancement option (Geothermal and Air Source Heat Pump), educational enhancements for C&I Customer Partnerships, and C&I Request for Proposal for Competitive and Economic Development
- UES: Continue its Energy Efficiency on-line Tools Program

### Senate Bill 300

On January 14, 2010, Senate Bill 300 was signed into law, directing a change in the allocation of the System Benefits Charge (SBC) between the Low Income Electric Assistance Program (EAP) and the Energy Efficiency program (EE). Prior to passage, the allocation of the \$.0033 was \$.0015 EAP and \$.0018 EE. Effective on January 15, 2010 (PUC Secretarial letter) and through June 30, 2011, the allocation changed to \$.0018 EAP and \$.0015 EE. For CORE program year 2011, the first six months reflected the \$.0015 while the second six months reflected \$.0018.

### Senate Bill 323

Senate Bill 323 required the PUC, in conjunction with the Energy Efficiency and Sustainable Energy (EESSE) Board, to choose an independent consultant to conduct a comprehensive review and analysis of energy efficiency, conservation, demand response, and sustainable energy programs and incentives in the state, and provide recommendations for possible improvements, among other things. Vermont Energy Investment Corporation (VEIC) was chosen in December 2010. The final report was provided to the legislature on September 30, 2011. Per legislation, the total cost of the review was not to exceed \$300,000 (statewide). Audit reviewed the VEIC records on file in the PUC Business Office and noted the total contract amount was \$282,965. Two gas utilities and four electric utilities were assessed the invoiced costs as incurred. Specifically, the utilities were assessed by the PUC Business Office (through February 2012):

Northern Utilities (gas)	\$ 12,623
EnergyNorth (gas)	\$ 63,373
NHEC (electric)	\$ 12,428
UES (electric)	\$ 26,477
GSEC (electric)	\$ 15,852 of which \$12,471 was billed and paid in 2011.
PSNH (electric)	<u>\$152,213</u>
Total	\$282,965

The electric utilities reflected their costs as Evaluation expenses, across each of the CORE programs.

## CORE Program Summary

On March 1, 2012, a final quarterly report of the 2011 CORE program was filed with the NH PUC. The following represents the totals for the statewide combined residential and commercial/industrial sectors from all electric utilities (and does not include shareholder incentive expenses):

Utility	Internal Admin.	External Admin.	Rebate	Internal Impl.	Mrktng	Eval.	TOTAL
GSE	\$163,310	\$ -0-	\$ 1,203,416	\$ 35,623	\$ 6,847	\$ 58,164	\$ <b>1,467,360</b>
NHEC	\$ 98,822	\$ 59,537	\$ 783,926	\$ 197,603	\$ 9,972	\$ 66,794	\$ 1,216,965
PSNH	\$313,353	\$ -0-	\$10,836,905	\$1,716,811	\$197,603	\$ 807,940	\$13,870,447
UES	<u>\$107,497</u>	\$ 14,479	\$ 1,171,511	\$ 507,166	\$ 86,627	\$ 159,120	\$ 2,046,400
Total	\$682,982	\$ 74,016	\$13,993,593	\$2,457,514	\$301,049	\$1,092,018	\$18,601,172

## GSE Summary

On June 3, 2012, GSE filed with the Commission a request for extension of time to file its shareholder incentive report. A Secretarial Letter approved the request, and the Company filed the incentive calculation on June 21, 2012. The Shareholder Incentive Calculation reflected the following expense totals:

### Commercial and Industrial Implementation Expenses:

New Construction	\$ 268,000
Large C&I Retrofit	\$ 394,000
Small C&I Retrofit	<u>\$ 243,000</u>
Subtotal	\$ 905,000

### Residential

EnergyStar Homes	\$ 79,000
NH Home Performance w/EnergyStar	\$ 95,000
EnergyStar Appliances	\$ 57,000
Home Energy Assistance	\$ 243,000
EnergyStar Lighting	<u>\$ 79,000</u>
Subtotal	<u>\$ 553,000</u>
TOTAL	<b>\$1,458,000</b>

On January 14, 2013, Audit was provided with the following revised data, which was verified to the pivot table detail:

Program	Int. Admin	Rebates	Int. Impl	Market	Eval	Total
ES Homes	\$ 6,803	\$ 67,934	\$ -	\$ 24	\$ 4,307	\$ 79,068
HES	\$ 9,647	\$ 83,173	\$ -	\$ 81	\$ 1,875	\$ 94,776
ES App	\$ 13,466	\$ 33,584	\$ -	\$ (474)	\$ 740	\$ 47,316
HEA	\$ 22,455	\$ 220,755	\$ -	\$ 24	\$ 66	\$ 243,300
ES Light	\$ 24,733	\$ 17,940	\$ -	\$ (3,083)	\$ 17,474	\$ 57,064
New C&I	\$ 30,116	\$ 226,801	\$ 5,257	\$ 2,153	\$ 3,625	\$ 267,952
Lg C&I Retro	\$ 40,796	\$ 323,433	\$ 25,253	\$ 1,185	\$ 3,713	\$ 394,380
Small Bus. En Sol	\$ 10,205	\$ 38,741	\$ 3,000	\$ (443)	\$ 19,737	\$ 71,240
<b>Total</b>	<b>\$ 158,221</b>	<b>\$ 1,012,361</b>	<b>\$ 33,510</b>	<b>\$ (533)</b>	<b>\$ 51,537</b>	<b>\$ 1,255,096</b>

Per discussion with Company personnel on January 14, 2013, the figures in the grid do not include forward capacity market expenses nor any shareholder incentive expenses. Discussion with the Company on May 1, 2013 revealed that the adjusted \$1,255,096 represents the general ledger detail to which the DSM system was reconciled. The figure may be understated for program year 2011 due to a variety of adjustments (relating to RGGI items) that were misposted in 2009 and 2010 and corrected (deducted from the general ledger) in 2011. The amount of the adjustments could not be determined. **Audit Issue #1**

### **FUNDING**

Funding for the CORE program is comprised of the Energy Efficiency portion of the System Benefits Charge (SBC), the net Forward Capacity Market (FCM) revenue less expense, and interest. For 2011, the totals were:

SBC	\$1,495,169
FCM Revenue	\$ 142,754
Less FCM Expenses	( 12,799)
CORE Interest	<b>unknown</b>

### **VERIFICATION of kWh on which SBC Charged**

GSE kWh sales were verified to the monthly report number CR97992A without exception. The allocation between the Electric Assistance Program and the Energy Efficiency CORE programs was reviewed and verified to the monthly EAP reports submitted to the Commission.

### **FORWARD CAPACITY MARKET**

GSE FCM reflected \$142,754 revenue less \$13,704 expenses on the final quarterly report page NH CORE Energy Efficiency FCM Budget and Expenses for January 1 – December 31, 2011. The Company indicated that the expenses are overstated by \$925 due to a double posting of an expense item in May 2011. The adjusted expense total should be \$12,779.

FCM expenses were properly not included in the shareholder incentive calculation.

## INTEREST

The Company reflected three different amounts for interest on three different internal documents. Three different interest figures were provided to Audit. Specifically:  
via email, October 31, 2012:

The general ledger 2011 interest = (\$6,489.60)

The DSM to general ledger 2011 interest total = (\$17,326.68)

The 2011 fund balance table 5 activity (sent as part of the shareholder incentive calculation on 6/21/2012) shows interest = (\$16,355)

Audit was unable to determine the total amount of interest that actually posted and/or what the total amount of interest should have been. **Audit Issue #2**

### **Expense Total for 2011 - \$1,255,096**

Overall CORE expenses for the year 2011 were adjusted to exclude RGGI items from 2010. Adjusting entries in 2011 to correct the mispostings out of CORE and into RGGI were made. After months of review and discussion, and at a meeting held at the Commission on May 2, 2013, the Company and Audit understand that the adjusted total expense of \$1,255,096 is likely inaccurate. The general ledger adjustments involving the RGGI related activity were stated to be too numerous and cumbersome to then back out to reflect the true 2011 CORE activity only. Refer to Audit Issue #1.

### Expense Test Residential

#### Energy Star Lighting Project X00003-Residential Lighting - \$56,798

Audit reviewed the activity within the project code and selected a General Evaluation figure of \$19,167 for review. \$12,150 was paid to KEMA. The remaining \$7,117 represented an allocation of \$15,651 for costs incurred for the Internal Energy Program, Pro Unlimited, and the NHPUC for SB323. The total \$15,651 was allocated amount the following projects:

X00003	\$ 7,117 Residential Lighting –Energy Star Lighting
X00008	\$ 78 EnergyWise-Home Energy Solutions
X00010	\$ 1,282 Energy Star New Construction –Energy Star Homes
X00011	\$ 598 Design 2000plus-New C&I
X00012	\$ 460 Energy Initiative – Large C&I Retrofit
X00013	<u>\$ 6,116 Small C&amp;I</u>
	\$15,651

#### Home Energy Assistance Project X00006-Appliance Management Program - \$243,300

Expenses related to the Home Energy Assistance portion of the 2011 CORE were ordered to be “at least 14.5% of the SBC budget” for 2011. Total reported expenses relating to the HEA

were \$243,300. The calculated percentage was based on the CORE expense budget figures for 2011:

C&I Budget for 2011	\$ 815,100 (see August 1, 2010 filing)
Residential for 2011	<u>\$ 614,100</u> (see August 1, 2010 filing)
2011 Budget	\$1,429,200 *14.5% = \$207,234

Actual costs identified as Low Income summed to \$243,300, or 17% of the budget. Audit was provided with a listing of payments made to the various Community Action Agencies. From that list, Audit selected two specific invoices for further detailed review.

The two invoices supported NH Energy Retrofit Programs, funded through the SBC, for eight specific clients. The invoices reflect the CAA level account, customer, administrative cost, measure cost, credits, and the total cost which is the invoiced amount. Audit verified that each client noted on the Tri-County CAA invoices lived within the counties served by that agency, and ensured that the town was within the Granite State Electric territory. None of the clients listed on the invoices exceeded the \$5,000 cap as noted in the August 2010 proposal.

Audit also reviewed the individual line items on the invoices and noted that the administrative costs ranged from \$140 to \$673. The Company noted that Administrative costs are audit costs. The amounts vary based on the type of audit, such as single family, multi-family, base load audit, etc. The Company noted that the administrative “cost listed on a contractors’ invoices represents their audit fee...administrative fees, along with measure pricing, are fixed cost that are negotiated with a participating contractor as part of implementing the program. The maximum audit fee is \$240 plus 10% of Utility funded costs for complete implementation. Other fees are fixed amounts of \$130, \$140 or \$160 (appliance audit, base load) depending on the project type and \$25.50 fee if there is refrigerator in the package. The invoice details are in OTTER.”

Credits noted on the invoices “are removals of refrigerator billing to National Grid. National Grid pays refrigerator orders to Southern Middlesex Opportunity Council, Inc. (SMOC)”. SMOC handles the removal and recycling of older refrigerators.

Audit also questioned how the utility ensures that the measures for which the CAA bills were actually installed at the cost noted. The Company noted that “the joint utilities have a third party QA/QC done by Horizon. Also, Tri-County Community Action (the CAA involved with the invoice review selected by Audit) is required by the Department of Energy to perform quality control on all Home Energy Assistance jobs.”

#### Energy Star Appliances -X00007 -Energy Star Products - \$47,096

Total expenses were verified to the pivot table data. \$20,429 noted in the customer rebate portion was verified to invoices from EFI, JACO, and Applied Proactive. EFI processes rebates for appliances, JACO processes rebates for refrigerators, and Applied Proactive is the circuit rider, paid to review retail outlets to ensure signage, rebate information, etc. are appropriately displayed and understood.

Home Energy Solutionsr-X00008-Energy Wise - \$94,335

Audit selected one item on the summary spreadsheet provided, which was noted as program implementation, AGO160, with expense type 400, Other Consultants and Management Services. The cost is included in the total Rebates portion of the report to the PUC. \$18,583 was comprised of one invoice from Conservation Services Group, in the amount of \$19,173. The total for this AGO160 bucket was reduced by an adjusting entry of \$591, verified to the general ledger. A request for clarification indicated that the adjustment was likely booked there as there was not a better offset. It appeared to be a co-payment, although the specifics of the item were unknown.

National Grid had not scanned a copy of the Conservation Services Group vendor invoice, and was unable to produce support. Liberty Utilities contacted the vendor and supporting documentation was provided. The invoice reflected audit fees in the amount of \$14,956 and one program management fee of \$4,218. The fee represented 15% of the installed contractor work, completed by Dinis Electric and billed to Conservation Services Group. The Dinis invoice was also provided and reflected 112 lighting measures installed at the Lancelot Court condominium complex in Salem, NH.

Energy Star Homes- X00010 – Energy Star New Construction - \$78,699

Comprised of internal admin \$6,803, marketing \$24, rebates and services \$67,934, and evaluation \$3,938. Detailed testing of the components was not conducted.

Sponsorships and Subscriptions – X12992 – Allocated among Residential Programs - \$1,296

Residential Sponsorships and Subscriptions, project code X12992 was allocated among all residential projects, based on the percentage of total residential projects for the year. The total amount was \$1,296 and was verified to, and included within, the total costs discussed above for the following programs:

X00003 Energy Star Lighting	\$ 226
X00007 Energy Star Appliances	\$ 220
X00008 Home Energy Solutions	\$ 442
X00010 Energy Star Homes	<u>\$ 368</u>
Total	\$1,296

Expense Test Commercial and Industrial

Sponsorships and Subscriptions – X12993 – Allocated among C&I Programs - \$1,296

C&I Sponsorships and Subscriptions, project code X12993 is allocated among all C&I projects, based on the percentage of total C&I projects for the year. The total amount was \$1,296 and was verified to, and included within, the total costs discussed below for the following programs:

X00011 New C&I Design Plus	\$ 473
X00012 Large C&I Retrofit	\$ 697
X00013 Small C&I	<u>\$ 126</u>
Total	\$1,296

New C&I (Design 2000plus X00011) \$267,463 and (Designlights Consortium X00025) \$16 reflect the New C&I total of \$267,479

The project X00011 was reviewed in detail, representing the vast majority of the expenses associated with New C&I. Audit requested supporting detail for \$13,583 noted in the rebate column of TA Studies, AGO176. From the detail provided, which reflected four individual engineering invoices, Audit selected one payment in the amount of \$6,935 for detailed review.

The invoice provided, dated 11/23/2010 was the second half of a payment made to Andelman and Lelek Engineering for a TA study relating to the proposed Life Sciences Building at Dartmouth College. Audit questioned why a November 2010 invoice was noted in the 2011 CORE program year, and was told that the invoice was paid on 1/8/2011. Further, clarification from National Grid stated: "Typically, National Grid stops making payments for projects sometime in mid-December so that the books can be officially closed for the calendar year. This must have been an invoice that did not make the deadline especially if the invoice was mailed to the Company." **Audit Issue #3**

Audit also reviewed the detailed listing of customer rebates noted under code AGO162 in the amount of \$202,151 and selected from that listing one invoice in the amount of \$26,750. The detailed information provided by National Grid reflected ten specific invoices all due in full 9/2010. The total on which the rebate was calculated was the overall ten invoice quote of \$178,868. Actual rebate was processed 10/13/2011 in the amount of \$26,750, representing 15% of the overall project.

Large C&I Retrofit X00012 Energy Initiative - \$393,683

Audit reviewed the activity within the expense categories and selected a C&I Ballast Recycling charge for AGO185 in the amount of \$4,644. An invoice from Veolia ES Technical Solutions, LLC was provided. The invoice reflected a line item for the recycle/incineration of the PCB ballast at a cost of \$4,318 and a 6% energy and security surcharge calculated on the recycling charge. The surcharge was recalculated at \$259 without exception.

Small C&I X00013 - \$71,239

Audit reviewed the activity within the expense categories and noted a small marketing expense in the amount of \$702. The item in AGO169, expense type 400 was traced to the general ledger system, which reflected five individual entries with an expense code #401. The code was from the Oracle legacy system and could not be validated.

## **Incentive for 2011**

According to the Settlement Agreement, approved by the Commission by Order 25,189, dated 12/30/2010, a performance incentive for 2011 between 0% and 12%, based on the actual expenditures rather than budgeted expenditures, for each residential and C&I sector was authorized. The Order further requested that utilities “strive to complete their performance incentives by June 1 of the subsequent year.” GSE provided the incentive calculation on June 21, 2012, with the approval via Secretarial letter for the extension.

Audit was provided with an internal memo dated 1/1/2012 from the Energy Efficiency division at National Grid to the Accounting division. Specifically for Granite State Electric, it was recommended that the 2010 incentive which had been estimated and booked, be reduced by \$29,574 and that the 2011 incentive of \$49,027 be booked. The net accounting treatment was an incentive of \$19,453 for year-end 2011. The memo indicates that the \$49,027 represents a conservative 70% of the total incentive estimate of \$70,039.

Due to the significant revision to the reported expenses for CORE program year 2011, National Grid will provide a revised 2011 shareholder incentive calculation to the Commission. Submission of the revised incentive should take place within one month of the date of this FINAL Audit report. An adjusted fund balance report should also be included with the revised incentive calculation. **Audit Issue #4**

## **Re-CORE Regional Greenhouse Gas Initiative (RGGI) Revolving Loan Fund (RLF)**

On March 20, 2009, Granite State Electric Company d/b/a National Grid (GSE), the New Hampshire Electric Cooperative, Inc. (NHEC), Public Service Company of New Hampshire (GSE), and Unitil Energy Systems, Inc. (UES), collectively known as the Utilities, presented a detailed proposal to expand the existing CORE energy programs which are funded through the system benefits charge (SBC). On August 19, 2009, \$7,646,020 was approved by the Governor and Council. The original term of the grant was through June 30, 2010, with approved extension to December 31, 2010.

PSNH was named as the general grantee, and as such, issued invoices for services to the Sustainable Energy Division and distributed allocated amounts to GSE, NHEC, and UES.

Of the total \$7,016,982 grant received by the Utilities, \$1,728,000 was used to establish Revolving Loan Funds. Specifically, each utility received the following:

<u>PSNH</u> \$500,000	<u>GSE</u> \$302,077	<u>NHEC</u> \$200,000	<u>UES</u> \$725,000
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Docket DE11-213 regarding on-bill financing was opened after the audit report was issued, and GSE filed a tariff with the Sustainable Energy division. On 11/28/2011, the PUC Staff recommended the tariff be approved, in essence increasing the maximum residential loan amount from \$500 to \$7,500 and extending the repayment period from 24 to 84 months. The proposed tariff also “converted an existing municipal revolving loan fund to a non-residential

program that will include municipal, commercial and industrial entities...with loan amounts less than or equal to \$50,000 per project. A participating customer is limited to \$150,000 per year in loan funds with no limit on the number of projects at the sole discretion of National Grid. The proposed tariff would also extend the repayment period ...from 24 months to 120 months.” Because the on-bill tariff docket and filing took place late in the test year, the approved tariff is effective January 1, 2012.

The National Grid general ledger details **the unused RGGI** (initial) grant for Re-CORE programs to be **\$87,934** at 12/31/2011. The grant period ended 12/31/2010. The balance is reflected in account #242045.

The balance in the National Grid general ledger account #242046 which holds the RGGI revolving loan fund, reflects a **year-end balance of \$319,114** of funds available to loan. The Commission had **approved a loan fund of \$303,000**.

An email to National Grid 10/20/2012 requested clarification of both accounts. The Accounting Manager responded the same day that the two accounts represent the balance remaining from the RGGI grants.

Account #242045	\$ 87,934 Unused RGGI Grant money-not included in DSM
Account #242046	<u>\$319,114</u> On-bill Financing available to lend
Total RGGI	\$407,048

Several email clarifications were communicated, and a final question on December 5, 2012, regarding just what the available revolving loan fund balance was remains open as of the date of this audit report. The available RGGI funding appears to be excessive. **Audit Issue #5**

## **Audit Issue #1**

### **CORE Expenses**

#### **Background**

Audit began the process of reviewing the 2011 CORE program expenses in September 2012, after participating utilities provided the shareholder incentive calculations to the Commission.

#### **Issue**

After numerous site visits, and email communications (some of which remain unanswered), the Company provided Audit with the \$1.2million expense figure, acknowledging that the amount is likely incorrect.

#### **Recommendation**

On May 1, 2013, National Grid and Liberty Utilities representatives came to the Commission office to review the 2011 expenses. One Grid employee was able to locate items within the general ledger system, while another Grid employee attempted to further substantiate items within the DSM system. Some items were located within both computer systems, others were not. It was at that point that the adjusted \$1.2million expense total was agreed as the end point on the general ledger for 2011. The fund balance (carry-forward) is unknown at this time.

With the transition from National Grid to Liberty Utilities, it is imperative that all expenses be accurately recorded on the financial books of the Company. It is further imperative that such recordkeeping be in a manner such that the Company itself is able to determine what the expenses are. Submission of unsubstantiated figures to the Commission will result in denial of shareholder incentives.

It is understood that National Grid will re-file the 2011 shareholder incentive calculation with the Commission. The submission must be within one month of the date of this report.

#### **Company Comment**

National Grid will re-file the 2011 shareholder incentive calculation within one month of the date of this report and will use the agreed upon \$1.2 million expense amount. All revenues and expenses that were reflected on National Grid's General Ledger have been transferred to Liberty Utilities upon the sale of the Company. The full electric energy efficiency expense allocation and reporting files have also been provided to Liberty Utilities. National Grid will be

available to work with Liberty through any reconciliation process needed between National Grid's energy efficiency expenses and National Grid's General Ledger.

**Audit Comment**

Audit appreciates that National Grid agrees to a timely filing of the revised 2011 shareholder incentive calculation. Audit understands the Transition Service Agreement will be used as the basis for reconciling records provided to Liberty Utilities from National Grid.

## **Audit Issue #2**

### **Calculation of Interest**

#### **Background**

Interest is calculated on the running balance of the CORE program funds.

#### **Issue**

Audit requested clarification of the three different interest figures provided for year ended 12/31/2011. None has been provided.

#### **Recommendation**

The Company must be able to support the information provided to the Commission, and verify the accuracy of the same. Given the difficulties properly accounting for expenses related to the CORE program, Audit cannot be sure that any of the three figures noted within the text of the report are accurate.

#### **Company Comment**

When determining interest earned on balances held for the CORE program, National Grid uses the H15 Annual Prime Bank Rate as published monthly by the Federal Reserve System. The interest earned is calculated as the monthly interest rate multiplied by the average monthly balance of CORE funds. The average monthly balance is determined as the simple average of the balance at the start of the month and the balance at the end of the month as determined in the Fund Balance file.

The determination of the annual interest earned is a process predicated on the finalization of all revenue, expense and Shareholder Incentive. At various points along the process it is common to have fluctuating calculated interest amounts as revenue and expense figures are being finalized. However, once the final revenue and expense figures have been determined, the final interest amount is calculated as described above and maintained in the Fund Balance file.

As far as the General Ledger is concerned, it will not initially have the same interest amount as that calculated in the Fund Balance file due to various timing issues. To resolve this, once the final Fund Balance file has been completed, the Energy Efficiency division at National Grid typically provides the National Grid Accounting Department with the correct interest amount from its Fund Balance file and Accounting will adjust the General Ledger to match.

The three different interest amounts you were reviewing came from A: the General Ledger that had yet to adjusted; B: the Fund Balance file at the time of the Annual Filing and C: a more recently updated Fund Balance file with revised expenditures. None of these matched for the reasons described above, yet none of them reflect the final corrected interest amount either.

That final corrected interest amount will be in the final Fund Balance National Grid has been asked to file by June 17, 2013, as that Fund Balance file will be based up on our recently agreed upon expenditures and the revised Shareholder Incentive.

### **Audit Comment**

Audit concurs with the monthly simple interest calculation for interest. Audit also concurs with the use of the Prime Rate documented by the Federal Reserve.

Audit understands that during the program year, the actual shareholder incentive and any adjustments that must be made, will impact the calculated interest. Other participating utilities adjust the interest calculation once, after the known adjustments and corrections to the shareholder incentive are posted.

As described in the paragraph regarding the three different interest amounts, and a fourth yet to be documented, Audit reiterates the difficulty in determining the accuracy of the amount.

Finally, audit appreciates that the revision to be filed with the Commission for the 2011 shareholder incentive calculation will include the adjusted interest figure.

## **Audit Issue #3**

### **CORE Program Year Expenses**

#### **Background**

Audit understands that the expenses associated with certain projects in one program year, may have costs posted in the general ledger in a subsequent year, resulting from invoice timing. The other three participating Electric Utilities provide a reconciliation of the general ledger balance less any items posted to the ledger which were included in the prior CORE program year, plus any known invoices paid in the subsequent year which relate to the CORE program year.

#### **Issue**

The Fund Balance as reported, includes a rolling beginning balance and does not reflect annual revenue, expenses, interest, and anticipated shareholder incentives. The Fund Balance report however, does not reflect the general ledger (or reconciliation thereto). Clarification of the process was requested and the Company (National Grid) provided the following:

“Typically, National Grid stops making payments for projects sometime in mid-December so that the books can be officially closed for the calendar year. This must have been an invoice that did not make the deadline especially if the invoice was mailed to the Company.”

#### **Recommendation**

The reported Fund Balance which was part of the shareholder incentive calculation submitted to the Commission must also be re-filed. The activity, and thus ending balance as provided in the report, does not agree with the expenses discussed and agreed at the May 2, 2013 meeting, and none of the expense figures outlined in the text of this report agreed with the general ledger. As noted in Audit Issue #1, the re-filing of the Fund Balance report should take place within one month of the date of this report.

#### **Company Comment**

In regards to the Fund Balance not reconciling to the General Ledger, the final Fund Balance that will be filed by the requested date of June 17, 2013, and which will be based on the recently agreed upon expenses, will reconcile to the General Ledger.

Historically, the calendar year-end closing process for Energy Efficiency has been run on a cash basis. This has typically resulted in the General Ledger reconciling to the same costs as the Energy Efficiency division would report. However, for 2011 National Grid did have adjustments made in 2012, mainly due to labor expense changes resulting from organizational

restructuring. A summary of these adjustments have been provided previously, and they do show that National Grid's recently agreed upon expenses do reconcile to the General Ledger. The final Fund Balance will be based upon these same recently agreed upon expenses and will therefore also reconcile with the General Ledger.

In regards to the particular invoice referenced in the draft audit report that was dated in 2010 but paid in 2011, an explanation of the underlying payment process is required.

If a project's direct costs were not paid by year end, National Grid would not claim that project's savings in its annual performance filing. To ensure that all payments were able to be processed by Accounts Payable by year end, National Grid would enforce mid-December payment processing deadlines. However, the volume of invoices in November and December are more than all other months combined. So at year end, to support savings claimed to meet annual targets, invoices that directly support claimed savings projects were paid first, and all others would be paid after those initial ones had been paid.

The invoice in question in the draft audit report was for a TA Study, which is not a direct expense associated with any project with savings being claimed. As described above, TA Study invoices would be processed after all other savings supporting invoices were paid. As a result of the sheer volume of invoices to be processed and the necessary prioritization, each year it was common to have a very small number of TA Study invoices that could not get processed by the mid-December deadline, and would be paid the following year. This is what occurred with the particular invoice addressed in the draft audit report. Having the costs for a TA Study reflected in a subsequent year was not concerning, as National Grid has found that a significant number of TA Studies are not acted upon by customers in the year the study was developed, but instead would indirectly lead to savings projects in subsequent years.

As per the recommendation from the draft audit report, National Grid will file a revised Shareholder Incentive and final Fund Balance by the requested June 17, 2013 date.

### **Audit Comment**

Audit reminds the Company that the use of accrual accounting is required. A reconciliation of the DSM supporting system to the general ledger should be a reconciliation, not a direct match. For instance, items known to have posted to the general ledger which relate to a prior year should be deducted, for reconciliation purposes only, from the general ledger figure, and those which relate to the current program year which post to the general ledger in the subsequent year should be added. The net result represents the CORE program year activity, reconciled back to the general ledger at December 31.

## **Audit Issue #4**

### **2011 Shareholder Incentive and Fund Balance**

#### **Background**

According to the Settlement Agreement, approved by the Commission by Order 25,189, dated 12/30/2010, a performance incentive for 2011 between 0% and 12%, based on the actual expenditures rather than budgeted expenditures, for each residential and C&I sector was authorized. The Order further requested that utilities “strive to complete their performance incentives by June 1 of the subsequent year.” GSE provided the incentive calculation on June 21, 2012, with the approval via Secretarial letter for the extension.

#### **Issue**

Due to the significant revision to the reported expenses for CORE program year 2011, National Grid will provide a revised 2011 shareholder incentive calculation to the Commission.

Audit was provided with an internal memo dated 1/1/2012 from the Energy Efficiency division at National Grid to the Accounting division. Specifically for Granite State Electric, it was recommended that the 2010 incentive which had been estimated and booked, be reduced by \$29,574 and that the 2011 incentive of \$49,027 be booked. The net accounting treatment was an incentive of \$19,453 for year-end 2011. The memo indicates that the \$49,027 represents a conservative 70% of the total incentive estimate of \$70,039.

#### **Recommendation**

Submission of the revised incentive should take place within one month of the date of this FINAL Audit report. An adjusted fund balance report should also be included with the revised incentive calculation.

Adjusting entries should also be provided which reflect any addition to or reduction of the booked 2011 incentive figure of \$49,027, and any subsequent true-up that may have been done at the close of 2012.

#### **Company Comment**

Nothing has changed since the initial booking of the 2011 Shareholder Incentive outlined in the 1/1/2012 internal memo previously provided. No further booking recommendations were made in the annual memo dated 1/1/2013.

National Grid will work with its Accounting department to make a final true-up transaction based on the revised Shareholder Incentive and Fund Balance it will be filing by the requested June 17, 2013 date.

**Audit Comment**

As noted in Audit Issue #1, Audit appreciates that National Grid agrees to a timely filing of the revised 2011 shareholder incentive calculation. Audit understands the Transition Service Agreement will be used as the basis for reconciling records provided to Liberty Utilities from National Grid.

**Audit Issue #5**  
**Regional Greenhouse Gas Related Funds**

**Background**

In 2009, the Electric Utilities applied for a grant through the Sustainable Energy division of the NH PUC. The grant, entitled the Re-CORE was approved through the Regional Greenhouse Gas Initiative Fund in the amount of \$7,646,020. The term of the grant period was through 12/31/2010.

Granite State Electric's portion of the grant, as identified in the June 2011 Audit Report of the Re-CORE grant included:

Re-CORE program funding rebates	\$ 738,440
Re-CORE administrative costs	\$ 58,900
Re-CORE Incentive	\$ 104,050
Establishment of Revolving Loan Fund (on-bill financing)	<u>\$ 303,000</u>
Total Grant for GSE	\$1,204,390

**Issue**

Two general ledger accounts reflect the RGGI related activity, at the end of 2011 detail the following balances:

Account #242045	\$ 87,934 Unused RGGI Grant money
Account #242046	<u>\$319,114 On-bill Financing available to lend</u>
Total RGGI	\$407,048

Audit cannot verify the unused RGGI Grant money, and the funds available to lend exceed the approved Commission RLF. The total \$407,048 represents 34% of the entire RGGI grant. Excluding the Incentive, the unused portion of the grant appears to be 37% of the total. Audit cannot reconcile the rebates and administrative costs included in the June 2011 audit report with the unused portion noted in account #242045.

**Recommendation**

As noted in Audit Issue #1, National Grid's DSM reporting and the Accounting system are not in agreement, and a reconciliation of the two systems appears to be an ongoing problem.

Because of the change in ownership effective July 2012, Audit recommends that Liberty Utilities conduct its own due-diligence relating to all CORE and Re-CORE related accounts to ensure the transfer from National Grid to Liberty is accurate.

**Company Comment**

National Grid will support Liberty Utilities in efforts to reconcile the RGGI accounting.

**Audit Comment**

Audit understands the Transition Service Agreement will be used as the basis for reconciling records provided to Liberty Utilities from National Grid.



**STATE OF NEW HAMPSHIRE**  
**Inter-Department Communication**

**DATE:** March 15, 2013  
**AT (OFFICE):** NHPUC

**FROM:** Karen Moran, Chief Auditor

**SUBJECT:** CORE Energy Programs – DE 10-188  
**FINAL** NHEC Audit Report

**TO:** Tom Frantz, Director, Electric Division, NHPUC  
Jim Cunningham, Analyst, Electric Division, NHPUC

**Introduction**

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2011. The four participating electric utilities, Unil Energy Services, Inc. (UES), Public Service of New Hampshire (PSNH), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) filed a joint petition for the program years 2011 through 2012. Each utility was audited individually. Audit thanks Carol Woods and Patti Corbeil from NHEC for their assistance during the audit process.

**Summary of the Program**

The four electric companies filed a joint proposal for the 2011-2012 CORE energy efficiency programs on August 3, 2010. On December 30, 2010, a Settlement Agreement was approved by Commission Order 25,189. The Order authorized the continuation of the following programs:

1. Energy Star Homes (ESH)
2. Home Performance with EnergyStar-fuel blind pilot PSNH and UES (HPwES)
3. Energy Star Lighting (ESL)
4. Energy Star Appliance (ESA)
5. Home Energy Assistance for low income customers (HEA) at 14.5% of SBC
6. New Equipment and Construction for large commercial and industrial customers (C&I)
7. Large C&I Retrofit
8. Small Business Energy Solutions for small C&I customers
9. Educational programs
10. certain utility specific programs

The utility specific programs outlined in the Order are:

- NHEC: Smart Start program, and High Efficiency Heat Pump program
- PSNH: Specific adaptations of programs for C&I customers, as well as its Smart Start program, services under the EnergyStar Homes Program Enhancement option (Geothermal and Air Source Heat Pump), educational enhancements for C&I Customer Partnerships, and C&I Request for Proposal for Competitive and Economic Development
- UES: Continue its Energy Efficiency on-line Tools Program

### Senate Bill 300

On January 14, 2010, Senate Bill 300 was signed into law, directing a change in the allocation of the System Benefits Charge (SBC) between the Low Income Electric Assistance Program (EAP) and the Energy Efficiency program (EE). Prior to passage, the allocation of the \$.0033 was \$.0015 EAP and \$.0018 EE. Effective on January 15, 2010 (PUC Secretarial letter) and through June 30, 2011, the allocation changed to \$.0018 EAP and \$.0015 EE. For CORE program year 2011, the first six months reflected the \$.0015 while the second six months reflected \$.0018.

### Senate Bill 323

Senate Bill 323 required the PUC, in conjunction with the Energy Efficiency and Sustainable Energy (EESSE) Board, to choose an independent consultant to conduct a comprehensive review and analysis of energy efficiency, conservation, demand response, and sustainable energy programs and incentives in the state, and provide recommendations for possible improvements, among other things. Vermont Energy Investment Corporation (VEIC) was chosen in December 2010. The final report was provided to the legislature on September 30, 2011. Per legislation, the total cost of the review was not to exceed \$300,000 (statewide). Audit reviewed the VEIC records on file in the PUC Business Office and noted the total contract amount was \$282,965. Two gas utilities and four electric utilities were assessed the invoiced costs as incurred. Specifically, the utilities were assessed by the PUC Business Office (through February 2012):

Northern Utilities (gas)	\$ 12,623
EnergyNorth (gas)	\$ 63,873
NHEC (electric)	\$ 12,428 of which \$9,777 posted in 2011
UES (electric)	\$ 26,477
GSEC (electric)	\$ 15,852
PSNH (electric)	<u>\$152,213</u>
Total	\$282,965

The electric utilities reflected their costs as Evaluation expenses, across each of the CORE programs.

### CORE Program Summary

On March 1, 2012, a final quarterly report of the 2011 CORE program was filed with the NH PUC. The following represents the totals for the statewide combined residential and

commercial/industrial sectors from all electric utilities (and does not include shareholder incentive expenses):

Utility	Internal Admin.	External Admin.	Rebate	Internal Impl.	Mrktng	Eval.	TOTAL
Grid	\$163,310	\$ -0-	\$ 1,203,416	\$ 35,623	\$ 6,847	\$ 58,164	\$ 1,467,360
NHEC	\$ 98,822	\$ 59,537	\$ 783,926	\$ 197,603	\$ 9,972	\$ 66,794	\$ 1,216,965
PSNH	\$313,353	\$ -0-	\$10,836,905	\$1,716,811	\$197,603	\$ 807,940	\$13,870,447
UES	\$107,497	\$ 14,479	\$ 1,171,511	\$ 507,166	\$ 86,627	\$ 159,120	\$ 2,046,400
Total	\$682,982	\$ 74,016	\$13,993,593	\$2,457,514	\$301,049	\$1,092,018	\$18,601,172

NHEC Summary

NHEC filed its Shareholder Incentive Calculation on August 23, 2012. The filing contained an error, identified by the Electric Division Staff at the PUC, and a revised filing was informally sent for review. That calculation reflected the following expense totals:

Utility	Internal Admin.	External Admin.	Rebate	Internal Impl.	Mrktng	Eval.	TOTAL
NHEC	\$98,894	\$59,535	\$795,780	\$198,104	\$9,972	\$67,966	\$1,230,251
Less 2010 items (footnotes on Shareholder Incentive page 6 of 8)							<u>(331,450)</u>
Net Adjusted Expenses per Revised Shareholder Incentive filing							\$ 898,850

The adjusted total of \$898,850 does not include the Forward Capacity market expenses or revenues, incentive dollars, or amounts relating to the SB323.

**Funding - NHEC \$1,283,498**

Funding for the CORE program is comprised of the Energy Efficiency portion of the System Benefits Charge (SBC), the net Forward Capacity Market (FCM) revenue less expense, and interest. For 2011, the totals were:

SBC	\$1,223,287
Net FCM	\$ 35,906
CORE Interest	<u>\$ 24,305</u>
Total Funding	\$1,283,498

Verification of kWh on which SBC Charged

KWh sales were verified to the End of Month Sales Report for each month of the test year. Total kWh 743,999,860 sales were verified to the system reports without exception. Total SBC allocated to the Energy Efficiency CORE programs was \$1,223,287, as properly allocated based on SB300. General ledger activity was traced to the following revenue accounts: #440.40, #442.40, #442.41, #442.43, #442.44, #444.15.

Forward Capacity Market - \$35,906

NHEC FCM reflects \$46,283 revenue less \$10,377 expenses for net revenue of \$35,906. The Accounting reconciliation includes the net figure as a reduction to the program costs. No exception.

Audit verified the revenue figure to the general ledger account #24.415.26 and the expenses to posting within the following accounts:

#24.416.45 Payroll Management	\$ 1,319
#24.416.49 Consultants and Legal	\$ 450
#24.416.50 Evaluation	<u>\$ 8,607</u>
Total Expenses	\$10,377

Interest - \$24,305

The CORE interest rate used is the Federal Reserve's prime rate as of the first of the month for which interest is calculated. Audit verified the rate to the quarterly interest rate letters sent to all utilities by the Director of the Gas/Water Division of the NHPUC.

The CORE calculation includes all revenue and expenses related to the CORE program, including Forward Capacity Market revenue and expense figures and the prior year's incentive expense. Total interest for 2011 was \$24,305 and was recalculated without exception.

Indirect Expenses

Allocated payroll related expenses were verified to the following general ledger accounts for 2011. Allocated 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.

Payroll Indirect		Sick Time	
24.416.35	\$102,209	24.416.47	\$ 6,243
68.416.35	<u>\$ 4,511</u>		
	\$106,478		
Taxes and Benefits		Benefit Allocation for Dept. 68	
24.416.48	\$111,557	68.926.05	\$ 230
68.416.48	<u>\$ 2,943</u>		
	\$114,500		

Transportation shown in account 24.416.52 represents Internal Administrative transportation to such things as PUC meetings and hearings. Account 24.416.54 represents Internal Implementation activities such as site visits. Each account can include mileage costs for Company or personal vehicle reimbursement. Company car usage includes an aggregated monthly cost for the vehicle (maintenance, registration, gas, depreciation, overhead for garage,

etc.) which is then allocated based on miles driven. Personal vehicle use includes only mileage reimbursed at the IRS rate.

Transportation		
24.416.52	\$	949
24.416.54	\$	<u>6,242</u>
	\$	7,191

### **Smart Start**

NHEC and PSNH were authorized by Commission Order 23,851 (issued 11/29/2001) to offer on-bill financing, presently referenced as Smart Start. Establishment of the revolving loan fund was originally through the SBC for PSNH. NHEC currently offers the funding option to all commercial customers, using Company funds. A revolving loan fund was not established.

Smart Start NHEC Expense summary includes:

Internal Administration	\$	357
External Administration	\$	207
Rebates/Services	\$	207
Internal Implementation	\$	5,585
Marketing	\$	13
Evaluation	\$	<u>91</u>
Total	\$	6,460

### **Expense Test Summary**

Audit randomly selected a variety of expenses for review (chosen from the detailed general ledger activity).

#### **Legal Costs – Allocated Among all CORE Programs - \$78,379**

Allocated among all programs are legal costs incurred in the implementation of the Commission ordered statewide program. Costs were noted in general ledger account #24.416.49. Audit reviewed three invoices from Mark Dean, LLC which sum to \$41,014.

One entry in the amount of \$15,743 which posted in December represents CORE related activity during the month of December 2011.

One entry in the amount of \$11,993 was verified to a larger invoice from the legal vendor, and the amount represented one entry on the invoice. No other energy efficiency related entries on invoice during the month of November. One entry in the amount of 13,279 relates to CORE filings (in October 2011).

Audit also reviewed one invoice paid to Horizon Residential Energy Services in the amount of \$1,799. Ms. Woods indicated that the invoice, allocated to activity code 172, Weatherization, is not related to the CORE. This amount was noted as a reversing entry in

March 2012, effective 2/28/2012. Thus, for the 2011 program year, the amount of \$1,799 should be removed. Refer to the Incentive Calculation portion of this report.

Office Supplies - Allocated - \$6,555

Of the total Office Supplies per general ledger account #24.416.77, Audit reviewed one entry in the amount of \$2,863. Documentation provided reflected an invoice paid to USI Insurance for an Errors and Omissions policy which ran from 12/29/2010 through 12/29/2011. No exception.

Training/Conferences – Allocated - \$3,797

Audit selected one entry from the general ledger account #24.416.77, in the amount of \$1,762. The documentation provided supported travel to the LightFair Conference in Philadelphia, PA, airfare, meals, and hotel from May 10 through May 16, 2011. No exception.

Home Energy Assistance

Expenses related to the Home Energy Assistance portion of the 2011 CORE were ordered to be “at least 14.5% of the SBC budget” for 2011. Total reported actual expenses relating to the HEA were \$199,505 in account 24.416.xx, activity code 117. The calculated percentage was based on the CORE expense budget figures for 2011:

C&I Budget for 2011	\$ 384,800	(see August 1, 2010 filing, page 95)
Residential for 2011	<u>\$ 735,300</u>	(see August 1, 2010 filing, page 95)
2011 Budget	\$1,120,100	*14.5% = \$162,451

The total HEA expended amount represents 17.8% of the budget and 16.3% of the actual expenses for the program year.

One invoice, in the amount of \$14,796 dated 4/29/2011 was selected for review. The invoice supported thirteen residential measures without exception.

Commercial and Industrial New Construction

Audit reviewed the activity in account #24.416.19, activity code 139, and selected a rebate in the amount of \$15,000. The total is comprised of two rebates. One in the amount of \$4,485 relating to a refrigeration system with a total cost of \$30,035 and one rebate in the amount of \$10,515 based on total project cost of \$51,919 for a variety of new lighting fixtures. The total cost of the combined projects \$81,954 was within a reasonable amount of the estimate received \$86,655.

Large Commercial and Industrial Retrofit

The amount above represents the 2011 rebate total for the large C&I Retro, per the general ledger account #24.416.19, activity code #128. The rate class caps for Large

Commercial and Industrial customers were noted within the August 2010 CORE proposal, on page 50.

Two invoices, representing 53% of the rebate total, were selected for review. The first, in the amount of \$15,000 was verified to the 2011 Custom Rebate form, with final completion dated 3/25/2011. Twenty two snow guns were purchased at a total project cost of \$51,700, with an estimated rebate of \$18,095. The benefit cost ratio was estimated to be 4.5. The actual rebate was calculated at 29% of the cost, or \$15,000, within the parameters outlined in the CORE proposal.

The second invoice reviewed, in the amount of \$14,175, dated 12/19/2011, represented costs associated with a different ski area for the same type of purchase. Twenty two snow guns, with an estimated benefit cost ratio of 15.7. There were 15 30 foot guns with brackets, and 7 20 foot guns with brackets. The total cost of \$40,500 was verified to an invoice from Snow Economics, Inc. 35% of the total was calculated to be \$14,175 without exception.

#### Small Commercial and Industrial Retrofit

The August 2010 CORE proposal states that this program is “designed to provide turnkey energy efficiency services for customers under 200 kw demand.” The rebate offered to customers is up to 50% of the installed costs up to the customer’s incentive cap. The caps are those outlined on page 50 of the August 2010 CORE proposal.

Audit reviewed one entry chosen from account 24.416.19, activity code 127. The entry in the amount of \$20,067 posted in July 2011. The total represents measure costs of \$17,127 plus the calculated member incentive (rebate) of \$2,940. The measures were financed through the Smart Start on-bill funding mechanism.

## Incentive Calculation for 2011

According to the Settlement Agreement, approved by the Commission by Order 25,189, dated 12/30/2010, a performance incentive for 2011 between 0% and 12%, based on the actual expenditures rather than budgeted expenditures, for each residential and C&I sector was authorized. The Order further requested that utilities “strive to complete their performance incentives by June 1 of the subsequent year.”

For incentive purposes, the total general ledger expenses were noted and adjusted as follows:

Total General Ledger Reconciliation	\$1,186,752
Add the FCM revenue which reduced Total	\$ 46,283
Deduct FCM Expenses included in Total	\$ (10,377)
Deduct Commercial expenses from 2010 PY	\$ (197,350)
Deduct Residential expenses from 2010 PY	\$ (134,100)
2009 error adjusted backward in 2010, then	\$ 3,914
Double correcting entry in 2011	\$ 3,914
Deduct Load Management entry	<u>\$ (241)</u>
Reported Actuals per Incentive Calculation	\$ 898,795 (immaterial \$7 difference)

### Adjustments to Actuals for Incentive Purposes

Costs associated with SB323	\$ (1,171)
Training costs associated w/Weatherization	\$ (58)
Load Mgmt Transportation costs	\$ (51)
CORE transportation posted incorrectly	\$ 111
Weatherization consultant	<u>\$ (1,799)</u>
Net Adjustments	\$ (2,968)

Adjusted Actual for Incentive Calculation \$ 895,827

NHEC provided the total actual expenses on the Member Incentive calculation to be:

Commercial/Industrial	\$308,600 *12% = \$ 37,032
Residential	<u>\$590,202</u> *11% = <u>\$ 65,032</u>
Total	\$898,802 \$102,064

Audit cannot specify to what expense category the net reduction of \$2,968, identified above, should be applied. The identification of the adjustments was made by NHEC but the entries to adjust the balances were not posted to the general ledger until March 2012, effective for month end February 2012. The total \$2,968 represents a reduction to the reported actuals of 0.3%.

Audit was informed by NHEC (through the DRAFT audit report communication) that it “has revised the incentive calculation to incorporate the adjustments of \$2,968 listed above. These adjustments result in a net decrease in the incentive of \$138. NHEC will also make this correction to the fund balance.”

## **Carry-forward Balance**

The carry-forward balance represents the availability of funds at each utility, so anticipated expenses that have not yet posted to the general ledger have already been “reserved” for future use, and are thus considered not available.

The reconciliation of program year activity to the general ledger year end posting was noted in the informal shareholder incentive package provided to the Staff at the Commission.

<b>2010 Carry-forward Balance</b>	<u>Reported</u> <b>\$ 576,201</b>
SBC Funding	\$1,223,287
Forward Capacity Revenue	\$ 46,283
Forward Capacity Expense	\$ (10,377)
Interest on CORE	<u>\$ 24,305</u>
<b>Total Funding</b>	<b>\$1,283,498</b>
Energy Efficiency Expenses	\$1,222,658
2010 Incentive booked 2011	\$ 67,758
2011 Incentive to book 2012	<u>\$ 102,064</u>
<b>Total Expenses</b>	<b>\$1,392,480</b>
2011 NET activity	<u><b>\$ (108,982)</b></u>
<b>2011 Carry-forward Balance</b>	<b>\$ 467,220 net over-collection</b>
Plus Recommended Adjustments	<u>\$ 2,968</u>
<b>Adjusted 2011 Carry-forward</b>	<b>\$ 470,188 adjusted over-collection</b>

**Re-CORE Regional Greenhouse Gas Initiative (RGGI) Revolving Loan Fund (RLF)**

On March 20, 2009, Granite State Electric Company d/b/a National Grid (GSE), the New Hampshire Electric Cooperative, Inc. (NHEC), Public Service Company of New Hampshire (PSNH), and Unitil Energy Systems, Inc. (UES), collectively known as the Utilities, presented a detailed proposal to expand the existing CORE energy programs which are funded through the system benefits charge (SBC). On August 19, 2009, \$7,646,020 was approved by the Governor and Council. The original term of the grant was through June 30, 2010, with approved extension to December 31, 2010.

PSNH was named as the general grantee, and as such, issued invoices for services to the Sustainable Energy Division and distributed allocated amounts to GSE, NHEC, and UES. (Refer to the Final PUC Audit Report of the RE-CORE issued on June 24, 2011 for additional information)

Of the total \$7,016,982 grant received by the Utilities, \$1,728,000 was used to establish Revolving Loan Funds. Specifically, each utility received the following:

PSNH \$500,000      GSE \$302,077      NHEC \$200,000      UES \$725,000

Audit reviewed the NHEC activity within general ledger account #242.86 for both expenses and revenues. A reconciliation of the Loans System data with the general ledger was provided for the period ending 12/31/2011:

Original Loan Balance	\$200,000
Principal Outstanding 12/31/2011	( 87,680)
Loans Issued 1/2012	( 4,684)
Available to Lend	\$107,636

**STATE OF NEW HAMPSHIRE**  
**Inter-Department Communication**

**DATE:** October 24, 2012  
**AT (OFFICE):** NHPUC

**FROM:** Karen Moran, Chief Auditor

**SUBJECT:** CORE Energy Programs – DE 10-188  
**FINAL** PSNH Audit Report

**TO:** Tom Frantz, Director, Electric Division, NHPUC  
Jim Cunningham, Analyst, Electric Division, NHPUC

**Introduction**

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2011. The four participating electric utilities, Unil Energy Services, Inc. (UES), Public Service of New Hampshire (PSNH), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) filed a joint petition for the program years 2011 through 2012. Each utility was audited individually.

Audit thanks Gil Gelineau, Issa Ansara, Pam Moriarty, Tom Belair, Paul Lentine, Jack Schelling, Gary LaCasse, and Frank Melanson for their assistance during the audit process.

**Summary of the Program**

The four electric companies filed a joint proposal for the 2011-2012 CORE energy efficiency programs on August 3, 2010. On December 30, 2010, a Settlement Agreement was approved by Commission Order 25,189. The Order authorized the continuation of the following programs:

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On March 1, 2012, a final quarterly report of the 2011 CORE program was filed with the NH PUC. The following represents the totals for the statewide combined residential and commercial/industrial sectors from all electric utilities (and does not include shareholder incentive expenses):

Utility	Internal Admin.	External Admin.	Rebate	Internal Impl.	Mrktng	Eval.	TOTAL
Grid	\$163,310	\$ -0-	\$ 1,203,416	\$ 35,623	\$ 6,847	\$ 58,164	\$ 1,467,360
NHEC	\$ 98,822	\$ 59,537	\$ 783,926	\$ 197,603	\$ 9,972	\$ 66,794	\$ 1,216,965
PSNH	\$313,353	\$ -0-	\$10,836,905	\$1,716,811	\$197,603	\$ 807,940	\$13,870,447
UES	\$107,497	\$ 14,479	\$ 1,171,511	\$ 507,166	\$ 86,627	\$ 159,120	\$ 2,046,400
Total	\$682,982	\$ 74,016	\$13,993,593	\$2,457,514	\$301,049	\$1,092,018	\$18,601,172

## PSNH Summary

On June 1, 2012, in compliance with the Commission Order, PSNH filed its Shareholder Incentive Calculation, which reflected the following expense totals:

Utility	Internal Admin.	External Admin.	Rebate	Internal Impl.	Mrktng	Eval.	TOTAL
PSNH	\$313,353	\$ -0-	\$10,837,134	\$1,701,707	\$197,762	\$ 807,940	\$13,857,896
Less Fossil portion HPwES							(1,315,688)
Less 2010 items (notes 3, 4 on Shareholder Incentive page 3 of 7)							(202,148)
Net Adjusted Expenses per 6/1/2012 Shareholder Incentive filing							\$12,340,060

The total on which the incentive calculation was based was reduced by the fossil fuel related expenses associated with the HPwES fuel blind program, in accordance with the Commission Order. The reported expense total deducted was \$1,315,688. *Refer to the HPwES portion of this report for further information.* The notes on the 6/1/2012 shareholder incentive calculation relate to projects which were included in the 2010 shareholder incentive calculation and projects which were not included in the 2010 shareholder incentive calculation. Therefore the total on which the incentive was based was reported to be \$12,340,060. As noted above, the total does not include prior year or current year estimated shareholder incentives, nor does the PSNH expense total include Smart Start bad debt or incentives.

## FUNDING - PSNH \$14,502,858

Funding for the CORE program is comprised of the Energy Efficiency portion of the System Benefits Charge (SBC), the net Forward Capacity Market (FCM) revenue less expense, interest on both the CORE activity and the interest calculated on the RSA 125-O 2% set aside. For 2011, the totals were:

SBC	\$12,816,877
Net FCM	\$ 1,583,822
CORE Interest	\$ 86,985
2% Interest	<u>\$ 15,174</u>
Total Funding	\$14,502,858

VERIFICATION of kWh on which SBC Charged

PSNH kWh sales were verified to the summary detail of Large Power Billings (LPB) report “Current Monthly Summary of Delivery Service by Rate and Class” plus the C2 “Delivery Sales and Revenue by Class, Rate and Component”. Audit was provided with year to date information for January through June, and monthly July sales, to detail the allocation used for the SB300 re-allocation of the SBC. Audit was also provided with the year to date sales detail January through December. Total kWh 7,823,874,114 sales were verified to the system reports without exception. Total SBC allocated to the Energy Efficiency CORE programs was \$12,816,877, as properly allocated based on SB300.

FORWARD CAPACITY MARKET

PSNH FCM reflects \$1,671,546 revenue less \$87,724 expenses. The PSNH Accounting model reflects individual lines for revenue and for expenses. No exception. Audit reviewed the PSNH activity NHISO which reflected labor and overhead, as well as annual certification work and consulting services. The NHISO expenses were (properly) not reflected in the final quarterly report to the Commission (referenced as Schedule H), but were properly outlined in the final quarterly report schedule entitled NH CORE Energy Efficiency FCM Budget & Expenses (January 1-December 31, 2011). The FCM expenses were (properly) not included in the shareholder incentive calculation.

INTEREST

The CORE interest rate used is the Federal Reserve’s prime rate as of the first of the month for which interest is calculated. Audit verified the rate to the quarterly interest rate letters sent to all utilities by the Director of the Gas/Water Division of the NHPUC.

The CORE calculation includes all revenue and expenses related to the CORE program, including Forward Capacity Market revenue and expense figures and an estimated shareholder incentive expense. Total interest for 2011 was \$86,985.

The Commission also ordered that interest be calculated on the 2% reserve, held per RSA 125-O:5. Audit reviewed the same interest calculation and noted a total of \$15,174 interest added to the available funding for the CORE program for 2011. The calculation uses the prime rate multiplied by the average balance, divided by 360 days, multiplied by 30 days, regardless of the actual days in the month.

From month to month, the prior month’s calculated interest is rolled into the balance of the subsequent month.

The CORE activity spreadsheet model includes the relevant FCM as well as an estimated 8% shareholder incentive as a program expense. The budget of \$13,193,450, as presented to the Commission on August 1, 2010, reflected the 8% incentive figure to be \$1,055,476. The amount included on the model agrees with the amount included in the August 2010 filing, including \$1,223,500 related to the fuel blind program. The August filing did not differentiate the fuel neutral portion of the HPwES for purposes of the incentive budget. Therefore, the total incentive basis was overstated, causing the \$1,055,476 to be overstated by \$97,884. The interest calculation is therefore understated. **Audit Issue # 1.** Audit understands that the actual incentive is booked at the end of the year, with a true up the following year. Refer to the Shareholder Incentive portion of this audit report for additional information.

**2% Set-aside 125-O:5 Energy Efficiency, Renewable Energy, and Conservation and Load Management Incentive.** – language from the statute reads:

“I. In order to encourage energy efficiency, energy conservation, renewable energy, and the reductions in local emissions which result, the integrated multi-pollutant strategy shall promote energy efficiency and conservation through conservation and load management programs.

II. Public Service Company of New Hampshire (PSNH) may utilize SBC funds equivalent to the unencumbered amount, if any, rolled over from the 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 percent of all SBC funds collected in the prior program year. PSNH may utilize these funds to implement approved core energy efficiency initiatives or measures at PSNH's facilities that are cost effective and which enhance the efficient use of energy at PSNH facilities. Any energy savings resulting from the use of these funds by PSNH at its facilities will not be included in the calculation of PSNH's energy efficiency program goals, any shareholder incentive, or any other incentive program. In any year that PSNH utilizes SBC funds, PSNH shall submit a report to the public utilities commission and the department detailing how these funds were utilized, and will make the report available to interested parties. Any party may request that the public utilities commission schedule a hearing to review these reports and the expenditure by PSNH of rolled over SBC funds at its facilities”. (Underline added by Audit).

Audit noted in the 2010 CORE report that “PSNH, Staff at the PUC, and the OCA signed a settlement agreement dated July 13, 2010, outlining a number of issues relating to RSA 125-O:5. Primarily, as noted on the “Attachment A”, methodology for determining the set-aside amounts, a specific format was instituted...Further, a cap of \$600,000 was placed on the set aside balance, over which any monies would be returned back to the CORE...” In July 2011, three lighting projects which began in 2010 at Area Work Centers, were completed at a cost of \$74,013. A new project described in an email dated October 7, 2011 discussed utilizing \$38,000 for lighting upgrades at the Schiller Turbine Bay. An email dated 11/23/2011 was provided to Audit outlining planned efficiency projects related to replacing lighting and HVAC systems at facilities in Milford, Portsmouth, and Hooksett, at a cost of \$76,937. Finally, the balance noted in the email at 11/23/2011 was \$152,926. This figure represented:

General ledger beginning balance	\$264,939
less general ledger expenses	(\$74,013)
less an estimate of	<u>(\$38,000)</u>
Emailed balance	\$152,926

The funding does not include the \$238,330 which represents the 2% allocation of the 2010 set aside. This amount was in the net general ledger balance.

Per PSNH Accounting reconciliation at year end 2011, the balance in the 125-O set aside is comprised of:

\$130,879 remaining from the 2008 2% set aside  
\$238,330 remaining from the 2010 2% set aside  
\$369,209 balance in reserve at year end 2011

\$230,791 balance calculated after 2011 year end representing 2011 2% set aside  
\$600,000 stipulated cap on funding after allocating 2011 set aside

The funding is part of the net over collection, with a reconciling memo indicating what the reserve balance is. The general ledger reconciliation represents all net activity in the Conservation and Load Management programs, maintained in balance sheet account 229 P9 with eight distinct cost center allocations. Individual projects which were funded out of the set aside balance were specifically noted in the general ledger account 229 P9 799.

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

**INDIRECT EXPENSES**

Allocated payroll related expenses were verified to activity NHCOR for calendar year 2011. A total of \$312,308 was spread among the CORE programs. The total is comprised of the following:

AE-Employee Expenses	\$ 10,689
AV-Vehicle Charge	\$ 33
LT-Labor	\$156,957
ZB-Non Productive Time	\$ 25,425
ZE-Payroll Overheads	<u>\$119,203</u>
NHCOR Total	\$312,308

Indirect expenses represent time worked on the CORE but without reference to specific programs. As time is so identified, it is directly charged to the NHEEP11, NHCOR activity and allocated among the specific programs.

Non-Productive (ZB) payroll benefits overhead percentages are calculated monthly. As examples, the rate for December 2011 was 16.25% and for December 2010 it was 16.14% (as documented in the July 2012 Clean Air Project PUC audit report). Audit recalculated the monthly December 2011 ZB that posted to the NHCOR work order without exception. The rate was applied to Labor charges which posted in December 2011.

Payroll Benefits (ZE) overhead percentages are calculated annually. This loader spreads employee costs such as, payroll taxes, workers' compensation, pensions, etc. The following were the individual rates, (ZE) applied to PSNH labor for year 2011:

Payroll Taxes	8.23%
Insurance	3.21%
Pensions	26.25%
Benefits	<u>27.68%</u>
	65.37%

Audit recalculated the \$119,203 by applying the 65.37% to the sum of the LT Labor and ZB Non-productive time. The result was \$119,223, or an immaterial \$20 higher than reported on the NHCOR work order detail.

### **Smart Start Revolving Loan Fund**

NHEC and PSNH were authorized by Commission Order 23,851 (issued 11/29/2001) to offer on-bill financing, presently referenced as Smart Start. Establishment of the revolving loan fund was originally through the SBC. NHEC currently offers the funding option to all commercial customers, while PSNH offers it to municipalities only.

Smart Start PSNH Expense summary includes:

Rebates/Services	\$ (229)
Internal Implementation costs	\$ 15,104
Bad Debt allocated to Reserve	\$ (30,209)
Smart Start Incentive	<u>\$ 36,251</u>
Subtotal on Model	\$ 20,917

Smart Start Principal portion of the loan fund itself:

Principal available to loan	
Rolling Beginning Balance	\$254,069
Expenses/loans out 2011	(\$721,661)
Repayments 2011	<u>\$604,176</u>
Smart Start RLF net activity	\$117,485

Total RLF \$136,583 available for lending

The bad debt is a calculation of 5% of loaned funds, added to a municipality's repayment costs. For 2011, the repayments amounted to \$634,384. The bad debt calculation, as noted on

the model maintained by project type and expense category, was verified to be \$30,209. The total was also verified to the work order. The net loan principal repaid was therefore \$604,176.

PSNH was specifically authorized by Commission Order #23,851 to earn a shareholder incentive of 6% of loaned funds repaid. For 2011, \$604,176 principal was repaid, which calculated to the Smart Start incentive of \$36,251. The revolving loan fund from which funding is made and to which repayments are noted, was originally funded through the SBC. The bad debt reflects 5% of total repayments (principal plus bad debt). Audit verified the totals to spreadsheets maintained by the Accounting division.

For the purposes of the CORE shareholder incentive calculation, the Smart Start expenses are properly not included. The expenses above are reflected in the work order SSMUN11. The loan fund itself is reflected in work order SSRLF.

Audit reviewed the quarterly reports of the Smart Start funding, provided to the Commission. The total noted expenses were \$721,402 or \$259 less than the 2011 detailed activity. Audit noted the minor variance within the months of February and March. PSNH indicated that the \$259 represented costs associated 2010 activity which were carried over into 2011.

For purposes of the Carry-forward Balance general ledger reconciliation, the following was verified to the shareholder incentive Attachment F page 7 of 7, as filed on June 2, 2011:

Bad debt allocated to Reserve	\$ 30,209
Smart Start Revolving Loan Fund net activity for 2011	(\$117,485)
Net credit to expense	(\$ 87,429)

### **Re-CORE Regional Greenhouse Gas Initiative (RGGI) Revolving Loan Fund (RLF)**

On March 20, 2009, Granite State Electric Company d/b/a National Grid (GSE), the New Hampshire Electric Cooperative, Inc. (NHEC), Public Service Company of New Hampshire (PSNH), and Unitil Energy Systems, Inc. (UES), collectively known as the Utilities, presented a detailed proposal to expand the existing CORE energy programs which are funded through the system benefits charge (SBC). On August 19, 2009, \$7,646,020 was approved by the Governor and Council. The original term of the grant was through June 30, 2010, with approved extension to December 31, 2010.

PSNH was named as the general grantee, and as such, issued invoices for services to the Sustainable Energy Division and distributed allocated amounts to GSE, NHEC, and UES. Audit noted the final invoices presented to the PUC Sustainable Energy Division in the amount of \$404,358 and \$5,941 posted to the revenue portion of the PSNH RGGI general ledger account 242RG799. Proper final distributions to GSE and NHEC were also noted. (Refer to the Final PUC Audit Report of the RE-CORE issued on June 24, 2011 for additional information)

Of the total \$7,016,982 grant received by the Utilities, \$1,728,000 was used to establish Revolving Loan Funds. Specifically, each utility received the following:

PSNH \$500,000

GSE \$302,077

NHEC \$200,000

UES \$725,000

Audit reviewed the activity within general ledger account 242RG for both expenses and revenues. All activity was verified to the work order RLFRGGI as appropriate. In addition, the running balance spreadsheet maintained by PSNH Accounting reflected the initial loan amount of \$500,000, payments issued to contractors and repayments made from customers for the 2011 calendar year and cumulative. The net amount available to lend to customers as of 12/31/2011 is \$73,655. Customers are able to use the loan fund to pay for the customer portion of an efficiency measure completed in connection with the HPwES program. Loan amounts range from \$500 to \$7,500 (not to exceed the actual customer cost), with terms up to seven years. There is no interest or administrative fee charged, and the customer may repay the loan early without penalty. The repayment occurs through an additional charge on the customer's monthly electric bill.

Any administrative expenses associated with the RGGI RLF post to the NHCOR activity. PSNH indicated administrative expenses would be minimal based on the available funding. While the RLF is an ongoing funding source for customers, PSNH considers the RGGI grant and thus the RGGI (RE-CORE) work order closed. Audit concurs with this accounting treatment.

### **Expense Test Summary**

Audit selected a variety of expenses from each project category and expense type, from the work order detail.

#### **Energy Star Homes (ESHOME11)**

According to the August 2010 proposal, the Energy Star Homes program "is designed to be a market driving program, encouraging both builders and homeowners to build a new home with energy efficiency in mind. The program provides incentives in the form of rebates and services to help offset the consumer cost of building to a more energy efficient standard." Emphasis added. "Any new, residential single family or multifamily construction project is eligible for the program, including complete rehabs of existing structures..." The language does not reference a corporation's cost of building an apartment building, to which the renters will have no ownership.

Audit reviewed the ESHOME11 work order and selected four specific dollar entries for review. In addition, clarification was requested of a variety of even dollar amount rebates noted on the work order, with the description of HRES-DO-XXX noted. PSNH informed Audit that the HRES stands for Horizon Residential Energy Services, which is an Energy Star Homes Home Energy Rating System (HERS) rating contractor. Payments made to homeowners ranged from \$800 to \$3,600.

A rebate in the amount of \$50,800 was paid to Southwestern Community Services. The total was verified to the general ledger 229 P9 788 without exception. The description on the work order referenced GDS, as that company performed the Energy Star Home verification.

Documentation provided to Audit supports the figure, but the information contained within it refers to two different addresses in the town of Swanzey. A letter from PSNH to Southwestern Community Services, Inc. dated 2/11/11, refers to the property at 185 Monadnock Highway, as does the PSNH/GDS Rebate Invoice Multi-family home. The GDS Energy Star Home verification summary sheets refer to 153 Monadnock Highway. Audit was informed by PSNH that 185 is the correct address. Audit also verified the address with the tax collector in the town of Swanzey.

The Energy Star Homes language in the 2011/2012 CORE proposal indicates this residential rebate program will offset the consumer cost of building to a more energy efficient standard. The building documentation refers to a 38 unit apartment building, with rent subsidies for seniors. The renters had no cost at risk in the building of the unit, and result in no ownership of the construction project. In addition, PSNH indicated that the building is master metered, with wiring to each apartment in case the need arises for individual meters. **Audit Issue #2**

A rebate in the amount of \$42,675 was paid to South Porter Apartments, Inc. The total was verified to the general ledger 229 P9 788 without exception. As noted above, Audit requested clarification of the meter status. PSNH informed Audit that each apartment is individually metered. As a result, while the cost of building to a more energy efficient standard was borne by the South Porter Apartments, Inc., the individual renters are benefiting directly with their electric bills offset by the efficiency measures installed. The South Porter Apartments, Inc. sole member of the corporation is the Manchester Housing and Redevelopment Authority. Any dissolution of the corporation would result in the assets, and thus the building for which the rebate was paid, reverting to the Manchester Housing and Redevelopment Authority. As with the apartment in Swanzey, there are two different addresses. One is “80”, the other is “800”

A work order charge of \$39,162 was selected for review. The rebated amount was verified to eight different invoices, for projects, lighting, fixtures, ratings, and inspections. All invoice totals were verified to the general ledger 229 P9 788 without exception.

An evaluation cost on the work order in the amount of \$12,064 was verified to an invoice from the NMR Group, Inc, dated 10/7/2011. The invoice was for finalization of a questionnaire entitled the 2011 NH New Home Buyer Survey and interviews. The invoiced amount was \$16,800, due from all utilities, with the PSNH portion of 71.81% calculating to the \$12,064. An early pay discount of 2% (if paid within 15 days) was not used. The 2% on the PSNH portion was calculated to be \$241. Audit verified the \$12,064 to the general ledger 229 P9 788.

Home Energy Solutions/Home Performance with Energy Star (HES/HPwES)

The Settlement Agreement signed in December 2010 for the 2011/2012 CORE states that “consistent with the authorization for the 2010 (fuel blind) pilot in Order No. 24,974, ...the rebate for all HPwES programs...will be capped at the lesser of 50% of the project expenditures or \$4,000... PSNH serving a total of 716 homes and UES serving up to 100 homes”

<u># of 2011 projects</u>	<u>Total HPwES</u>	<u>Electric Portion</u>	<u>Fossil Portion</u>
PSNH 921	\$1,621,079	\$305,411	\$1,315,668

Noted within the audit report of the 2010 CORE, \$7,500 had been booked as a HES rebate for 2010 but should have posted to the RGGI revolving loan fund. Audit requested the adjustment of the work order and general ledger as appropriate, which detailed the correction made in October 2011. No exception.

Audit requested and was provided with a listing of 887 projects for the 2011 HES/HPwES program. The listing did not include 34 additional heating system rebates totaling \$14,747, as the heating system rebates were maintained in a spreadsheet. The detail will be uploaded to the OTTER system in 2013, and the cost to integrate the sheets was not deemed necessary during 2011 or 2012. The listing outlines the type of energy savings (electricity or fossil fuel such as oil, wood, propane, natural gas, kerosene) and the related Mbtu projected savings, by fuel type. None of the projects exceeded the rebate cap of \$4,000. The August 2010 proposal for the 2011/2012 CORE reflected the \$4,000 cap as the only restriction on the amount of any rebate. However, language within the settlement agreement dated December 2010 included the following: "The rebate for all HPwES programs run by the Electric and Gas Utilities will be capped at the lesser of 50% of the project expenditures or \$4,000."

832 of the 887 projects reflected in the detailed listing exceeded 50% of the project expenditure. None exceeded the dollar cap of \$4,000. The total rebated amount summed to \$1,075,772. Audit requested clarification of the apparent excess and was provided with a detailed table used by PSNH for rebating various measures that are included in a Home Performance with Energy Star weatherization. For example, rebates for more energy efficient refrigerators range from \$100 to \$450, based on the size of the model. The rebates are flat dollar rebates. Flow control devices and CFL (up to 6) are rebated at 100% of the cost. Literal weatherization measures such as duct sealing, air sealing, insulation, tank wraps, among others are rebated at 50% of cost. Therefore, the listing of the projects summarized a variety of measures installed at the sites. Because of the variety of measures used and rebates provided, the total project cost cannot be calculated at the flat 50%. Audit requested ten individual projects and noted that none exceeded the \$4,000. Each complied with the PSNH internal table of rebates for the measures installed.

#### Energy Star Appliance (ESAPP11)

The program, open to all residential consumers, provides rebates (through rebate forms obtained at retail locations) on the following Energy Star rated appliances:

- \$30 clothes washer
- \$20 room air conditioner
- \$10 smart power strip
- \$30 refrigerator
- \$10 room air cleaner

Audit selected three specific entries from the ESAPP11 work order. One rebate in the amount of \$61,227 which posted in December 2011 was supported with twenty individual rebate processing invoices, including two management fee \$855 invoices, allocated between ESAPP11 and LIGHT11. The invoice dates range from June 2011 through December 2011. Audit

requested clarification of the dates and was informed that June scanned invoice in the amount of \$90 was not received by the CT NU Accounts Payable department. It was re-scanned and processed. Two July invoices from EFI for online purchases of Smart Strips (customers purchased the measures from the NHSaves website) required proper documentation. When all documentation was received, the invoices were processed. Audit was told that the delay with the documentation was due to a database change at EFI.

Two evaluation entries were selected. \$2,000 paid for VEIC as invoiced by the NH Public Utilities Commission Business Office for costs incurred by Vermont Energy Investment Corporation (VEIC). Refer to the discussion relating to Senate Bill 323. The total invoice was \$5,654, allocated among ESAP11, LIGHT11, and HEA2011. The invoice represented VEIC costs for January 2011.

\$5,355 was listed as an evaluation expense in the ESAPP11 workorder, with the description of “avoided energy cost”. The CORE proposal discusses the avoided cost study in detail on page 66. Audit was provided with an invoice in the amount of \$17,295 from the Synapse Energy Economics, Inc., billed to Northeast Utilities. The invoice was allocated among the NU subsidiaries. At the NU level, the invoice was re-allocated. The workorder was reviewed and a reversal of the \$5,355 was noted, taking the amount out of ESAPP11, and putting the adjusted amount of \$4,047 into the LCIRET11. No exception noted.

#### Home Energy Assistance – HEA2011 - \$1,780,430

Expenses related to the Home Energy Assistance portion of the 2011 CORE were ordered to be “at least 14.5% of the SBC budget” for 2011. Total reported expenses relating to the HEA were \$1,780,430. The calculated percentage was based on the CORE expense budget figures for 2011:

C&I Budget for 2011	\$ 6,844,100 (see August 1, 2010 filing)
Residential for 2011	<u>\$ 6,349,350</u> (see August 1, 2010 filing)
2011 Budget	\$13,193,450 *14.5% = \$1,913,050

Audit requested clarification of the variance between the budget allotment of \$1,913,050 and the actual expense of \$1,780,430. PSNH indicated that due to the availability of gas assistance programs, state weatherization funding, and federal funding for low income weatherization programs, the cost per job estimate that was used to forecast the production and kWh goals for 2011 dropped to a level which allowed the kWh goals to be met without spending all of the available funding allocated to the HEA.

Audit selected eight specific charges in the work order HEA2011 for review. The eight sum to \$312,466 representing 18% of the direct charges for the year. Direct charges were \$1,735,145, with \$45,285 indirect charges. Direct charges reviewed were verified to appliance invoicing and to invoices from NH Community Action Agencies for the New Hampshire Energy Retrofit Program (also known as weatherization). Audit also reviewed one invoice from Horizon Residential Energy Services NH, LLC in the amount of \$5,095. The invoice was for inspection services, quality assurance reviews, mileage, and minimal telephone and clerical costs. As

outlined in the CORE proposal, Audit reviewed the appliance and weatherization invoices for compliance with the cap of \$5,000 per participating customer. There were no exceptions noted.

### Energy Star Lighting (LIGHT11)

Audit selected four postings from the LIGHT11 work order activity for detailed review. Two postings in the amount of \$13,039 were chosen, one of which was categorized as “rebates”, the other as “marketing”. Audit was provided with an invoice from APT for marketing services, in the amount of \$26,078. The invoice was split with 50% to LIGHT11 and 50% to ESAPP11. Initially, the costs were noted as rebates then corrected to marketing. Audit requested clarification regarding where the reversal could be located, and was provided with a query outlining the work order activity. There was no exception noted. The invoice \$26,078 was verified to the general ledger 229 P9 788 without exception.

A \$5,000 posting for LIGHT11, noted with the activity code Evaluation (Eval), was verified to an invoice from the PUC Business Office for costs incurred by Vermont Energy Investment Corporation (VEIC), for their work done in June and July 2011. PSNH spread the invoice figure of \$53,925 among the following programs:

CINEW11	\$10,000-verified to work order and activity Eval
LCIRET11	10,000-verified to work order and activity Eval
SCIRET11	10,000-verified to work order and activity Eval
RFP11	5,000-verified to work order and activity Eval
HEA2011	5,000-verified to work order and activity Eval
HES2011	5,000-verified to work order and activity Eval
LIGHT11	5,000-verified to work order and activity Eval
ESAPP11	<u>3,925-verified to work order and activity Eval</u>
	\$53,925

A posting in the amount of \$36,029, classified as rebates, was also selected for review. Audit was provided with invoices from EFI, Energy Federation Incorporated. EFI processes coupons from the retail outlets at which consumers purchase lights and fixtures. Nine invoices from February and March 2011 were provided to support the work order posting. Clarification of management fees in the amounts of \$855 and \$300 was requested. PSNH indicated that the fees are for administrative services provided by EFI for the processing of catalog orders. A \$600 quarterly management fee is allocated between the LIGHT11 and SCIRET11. The monthly management fee \$855 compensates EFI for administrative tasks such as attending meetings, preparing reports, responding to program related requests and customer participation.

### Energy Star Geothermal (ESGEO11)

This residential program is designed to provide incentives for customers to install geothermal and air heat pumps as part of the Energy Star Homes Program (HES/HPwES). Audit selected one internal implementation cost from the work order, in the amount of \$12,786. The amount represented a PSNH employee’s time spent on the program, over a six week period, with the ZE and ZB overheads accurately applied and recalculated by Audit without exception.

Refer to the Indirect Cost portion of this report for additional information.

Audit selected five rebates from the work order. Specifically, \$5,040 posted in March, \$7,500 posted in March, \$7,500 posted in June, \$7,500 posted in October, and \$6,076 posted in January 2012.

\$5,040 was paid to the homeowner in Franklin, NH in March 2011. GDS Associates prepared an Energy Star home certification report detailing that a ground source heat pump had been installed for both heating and cooling. The 2,240 square foot home calculated at \$2.25 per square foot achieved the rebate total of \$5,040. PSNH indicated that the rebate is calculated at \$2.25 per square foot based on homes with 2,400 square feet or less. Detail from the PSNH “Frequently Asked Questions” indicating the rebate per square foot was provided.

The \$7,500 that posted in March was paid to the homeowner in New Boston, NH. The rebate was calculated on a home with 4,057 square feet. At \$2 per square foot, the estimated rebate was \$8,114. The rebate of \$7,500 is the cap for the program. GDS prepared a certification report and outlined the heating and cooling were ground source heat pumps.

The \$7,500 paid in June 2011 to the contractor for property in Dover, NH represents the maximum allowed for the geothermal incentive. The home is 3,807 square feet, which when multiplied by the \$2 per square foot rebate estimation factor, calculated to \$7,614. GDS prepared an Energy Star home certification report, which indicated that the systems installed were ground source heat pumps for heating, water heating, and cooling.

The \$7,500, paid to the homeowner in October 2011, represents the cap of the ESGEO11 program. The incentive calculation indicated the conditioned home space was 6,220 square feet. The rebate is calculated at \$2 per square foot, with a cap of \$7,500. The square footage calculation at \$2 per square foot was \$12,440. GDS provided an Energy Star homes certification report for the property in Strafford, NH. The homeowner installed ground-source heat pumps for heating and cooling,

The \$6,076 description was for GDS, the company which verified the home energy rating of the measures once installed. The rebate was paid to the homeowner of the 3,038 square foot dwelling in Auburn, NH. Documentation indicated that the rebate related to a ground source heat pump.

#### Commercial and Industrial New Construction (CINew11)

The CORE proposal outlines caps on commercial and industrial new projects at levels of \$50,000 for rate G customers, \$100,000 for rate GV customers, and \$150,000 for rate LG customers.

Audit selected one work order rebate in the amount of \$211,153. The total was comprised of the three individual ski areas and their respective rebates in the following amounts:

1. Pat’s Peak received the cap of \$100,000 for 6 standard pole cat snow guns and 2 super pole cat snow guns, and the associated hardware necessary for the operation of each. The

total cost of the measures was \$155,608. The benefit cost ratio of 2.53 indicated the project was within the range of benefits exceeding the cost of the project.

2. RMR Resort, also known as Ragged Mountain, received a rebate of \$93,116 for 45 HKD Impulse snow guns. Snow Economics, Inc. provided a base case energy use comparison of water usage, operating times, air flows, number of guns operating, water flows, annual compressed air, and the conversion to kWh per year. The total project cost was detailed to be \$124,155. The calculated benefit cost ratio was 2.26.
3. Mount Sunapee Resort received a rebate in the amount of \$18,036. A benefit cost ratio of 3.34 was calculated for the 14 HKD snow guns and related equipment purchased at a total cost of \$26,124

Audit also selected an Evaluation expense relating to Northeast Energy Efficiency Partnerships (NEEP), and requested clarification of the total paid to NEEP for the year and a summary of the spread of the costs among the various programs. The following was provided and verified to each work order:

	Sponsorship	Evaluations/Studies	Total NEEP
ESHOME11	\$ 1,095	\$ 2,625	\$ 4,590
HES 2011	\$ 3,356	\$ 2,115	\$ 5,471
ESAPP11	\$ 1,473	\$ 4,678	\$ 6,151
HEA2011	\$ 3,956	\$ -0-	\$ 3,956
LIGHT11	\$ 1,583	\$ 4,678	\$ 6,621
ESGEO11	\$ 737	\$ 2,207	\$ 2,944
CINEW11	\$ 3,629	\$22,869	\$26,498
LCIRET11	\$ 4,393	\$11,909	\$16,302
SCIRET11	\$ 5,212	\$ 3,251	\$ 8,463
RFP11	\$ 982	\$ 2,207	\$ 3,189
	\$27,286	\$56,539	\$83,825

Audit reviewed the invoices from NEEP and verified the total allocated \$83,825 without exception.

#### Large Commercial and Industrial Retrofit (LCIRET11)

The rate class caps for Large Commercial and Industrial customers were also noted within the August 2010 CORE proposal, on page 50. Audit selected four individual entries from the work order relating to LCIRET11 rebates.

One work order entry in the amount of \$57,000 represented a customer rebate paid to the city of Rochester. The total cost of the project was noted to be \$279,896, with a benefit cost ratio of 1.9. The project was summarized as replacing four positive displacement blowers with two new turblex centrifugal blower systems at the waste water facility. Design for the system was completed by Brown & Caldwell, with the purchase of the system from Siemens Energy, and construction by Apex Construction. The total actual cost of the three components was noted to be \$673,896, with a grant disbursement of \$394,000 leaving the remaining funds of \$279,896.

Based on the total actual cost, it does not appear that this project would have met the benefit cost ratio baseline, had the total actual cost been used, rather than the cost less the grant. **Audit Issue #3.**

One rebate on the work order in the amount of \$26,820 was paid to Energy Resource Solutions (ERS) for a comprehensive energy audit of the YMCA of Downtown Manchester, \$13,230, and a comprehensive energy audit of the Allard Center YMCA in Goffstown in the amount of \$13,590.

One work order rebate in the amount of \$51,441, paid to Hitchner Manufacturing in Milford represented 35% of the \$146,975 equipment and installation expense relating to the replacement of an existing compressed air system with a variable speed rotary screw compressor, and related components. The rebate percentage was calculated based on the estimated demand savings in KW. The benefit cost ratio was calculated to be 2.44.

The final work order entry selected for review, in the amount of \$68,950 was verified to four individual rebates.

1. One rebate in the amount of \$32,835 was paid to Southern New Hampshire University in January 2012 for a large quantity of lights which were retrofit with more energy efficient LED among others, and installation of sensors. The total estimated cost of the lighting improvements was \$303,509. The invoice supporting the rebate was for services provided by NORESCO during December 2011. NORESCO invoiced SNHU. Because lights have a straight “per bulb prescriptive rebate”, a benefit cost ratio was not performed.
2. Cheshire County Facilities received a rebate in the amount of \$9,500 in January 2012. The documentation provided indicated the total cost of the project to be \$63,594. The total project cost is combined with item #3 below, which reflected a total cost of \$59,219. The combined worksheets agree with three invoices attached to each documentation package, which detail the cost to be \$122,813. The Maplewood Nursing Home received both interior and exterior lighting upgrades. This rebate related to interior lighting (507 4 foot T8 and 103 14 watt LED). Interior bulbs reflect the prescriptive rebate and thus a benefit cost ratio was not calculated.
3. An additional rebate in the amount of \$20,695 was paid to Cheshire County Facilities in February 2012. The conversion of outdoor lighting to LED was completed in December 2011 and accomplished a benefit cost ratio of 1.11. Audit was told that because PSNH does not regularly perform outdoor lighting retrofits, a benefit cost ratio was calculated to ensure the program met the minimum threshold.
4. One rebate in the amount of \$5,920 was paid to United Natural Foods in February 2012. The rebate offset costs for installation of 296 lighting upgrades from florescent to T8. The rebate per bulb was \$20 which recalculated to the \$5,920. Invoices provided reflect total costs of the upgrade to be \$28,134. Measures were installed in February 2011, with invoices sent from Amer Electric Inc to United Natural Foods Inc.

#### Small Commercial and Industrial Retrofit (SCIRET11)

As noted in the 2010 audit report, municipalities which receive a rebate and use the Smart Start revolving loan fund to finance the customer portion of cost, have the calculated rebate reduced by 10% (of their 50% copay). The reduction of rebate amounts, when in conjunction with use of the Smart Start revolving loan fund, was authorized by Commission Order 24,417, issued on December 30, 2004 (without specifying percentages). The reduction was intended to reduce the reliance on rebates and transform the efficiency market.

The August 2010 CORE proposal states that this program is “designed to provide turnkey energy efficiency services for customers under 200 kw demand.” The rebate offered to customers is up to 50% of the installed costs up to the customer’s incentive cap. The caps are those outlined on page 50 of the August 2010 CORE proposal. Audit selected ten work order entries for review.

One work order rebate in the amount of \$40,031 was verified to fourteen individual invoices for lighting retrofit orders placed by contractors for small businesses, through the NHSaves online ordering system.

One work order rebate in the amount of \$25,054 was verified to eleven individual invoices for lighting retrofit orders placed by contractors for small businesses, through the NHSaves online ordering system.

One work order rebate in the amount of \$96,248 was verified to twenty seven individual invoices for lighting retrofit orders placed by contractors for small businesses, through the NHSaves online ordering system. One of the rebate amounts reflected a 10% reduction of the calculated rebate of 50% as the Academy in Orford chose to fund the customer portion of the cost using Smart Start funds.

One work order rebate in the amount of \$52,428 was verified to thirteen individual invoices for lighting retrofit orders placed by contractors for small businesses, through the NHSaves online ordering system. Two of the thirteen represented contractor invoices for lighting retrofits at the Gilsum and Monadnock school systems. Those two rebate figures were calculated at 50%, then reduced by 10% as both school systems used the Smart Start loan funding mechanism to offset the customer portion of the total cost.

One work order rebate in the amount of \$36,661 was verified to four individual invoices for lighting retrofit orders placed by contractors for small businesses, through the NHSaves online ordering system. One of the four represented lighting retrofits in Monadnock, and reflected a 10% reduction to the rebate portion of the cost, as the municipality used the Smart Start loan fund to pay for the customer portion of the total cost.

One work order rebate in the amount of \$87,059 was verified to fourteen individual invoices for lighting retrofit orders placed by contractors for small businesses, through the NHSaves online ordering system. Three of the fourteen were municipalities with access to Smart Start funding. Thus, the rebates included in the \$87,059 represent the reduced rebate calculation for Hampstead Fire, and two schools in Swanzey.

One work order rebate in the amount of \$23,750 was paid to the Mason School district for lighting upgrades. The total project cost of \$73,796 was supported with 24 invoices for specific lighting fixtures. The rebate of \$23,750 represents 32% of the total costs.

One work order rebate in the amount of \$32,845 was paid to the State of New Hampshire Treasurer, for lighting upgrades at thirty two offices and Department of Transportation sheds throughout the state. The total cost of the retrofit project was \$160,483, with the rebate representing 20% of the total.

One work order rebate in the amount of \$54,248 was paid in June 2011 to Plastic Tech of VT, for a 12 head injection molding machine. The benefit cost ratio demonstrated 5.41 for this project. The rebate was calculated using the 2010 75% rebate cap, rather than the 2011 50% rebate cap. The total cost of the equipment was noted to be \$97,040. 75% would have been a rebate of \$72,780, but the one year buydown calculation was \$54,248. The 50% calculation would have meant a rebate of \$48,520, or \$5,728 less than what was paid. **Audit Issue #4**

One work order rebate in the amount of \$64,264 was paid in July 2011 to Tech Inc. The rebate was used to offset the purchase and installation of a new 400 ton electric molding machine. The rebate was calculated at 75% of the difference between the “base case cost” and the purchase price. Audit requested clarification of why the variance was used as the basis for the rebate calculation and was told that the rebate is based on the difference in order to encourage the company to purchase the more efficient measure, at a higher cost than what the base model cost would have been,

#### Educational Programs (CIEDU11)

PSNH offered training programs designed to assist facility managers in, among other things, identifying energy efficiency opportunities, and developing an energy management plan. Audit reviewed the work order detail and selected a variety of expenses for review.

Five individuals were noted throughout the year receiving payments. PSNH indicated that the people are “teachers hired through PSNH’s Teacher Consultant Program that offers energy conservation education to approximately 10,000 third graders throughout PSNH’s service territory. Each is hired through Comensura, which is an agency that hires all contractors who work for any of the Northeast Utilities companies.”

A rebate paid to Tidewater Catering Group in the amount of \$1,883 was for an on-site seminar for commercial customers held at Anheuser Busch on June 1, 2011. The invoice supporting the expense represented costs for a continental breakfast, coffee break, and lunch for approximately 52 attendees and seven speakers. The seminar was entitled “Developing Your Perpetual Blueprint for Efficiency”.

A rebate paid to Graphic Brokerage in the amount of \$6,739 in April 2011 was for 100 bound booklets used at commercial and industrial seminars offered by PSNH. The information and booklet was produced by the Federal Energy Management Program (FEMP), but they do not print the books. Audit was provided with a copy to review, entitled “Release 3.0 Operations &

Maintenance Best Practices A Guide to Achieving Operational Efficiency”. The FEMP is part of the US Department of Energy.

A rebate paid to GDS Associates in September 2011 in the amount of \$25,303 represented an adjustment to three previously invoiced amounts. The previously invoiced amounts summed to \$47,432. Audit reviewed the adjusting invoice and noted an error of \$100. The total amount paid should have been \$25,203. Audit requested clarification of the workshops for which CORE funding was used to offset the cost and was provided with a list of eight which took place in the fall and winter 2010 into 2011. Workshops which were presented earlier in 2010 were not funded with CORE money. PSNH also stated that GDS invoices each of the electric utilities individually.

#### Commercial and Industrial Request for Proposal (RFP) Pilot Program (RFP11)

The CORE proposal outlines the RFP as a commercial customer with at least 350kW of demand, and a projected project energy savings of 100,000 kWh per year, with a minimum project cost of \$150,000. The program offers incentives for the installation of “*eligible improvements*” such as “*energy-efficient equipment, products and measures that are cost-effective according to the criteria established by the NH Energy Efficiency Working Group and approved by the NHPUC.*”

Two RFP work order entries were chosen for review. Summaries of the measures, measure estimated annual kWh savings, costs, and incentives were provided. Audit requested clarification of the customer demand size, to verify compliance with the minimum 350kW demand outlined in the CORE proposal. There was no exception noted.

Specifically, one commercial customer installed a 135 hp variable speed air compressor, along with ductwork of exhaust from the compressor to be used for heating manufacturing space, installation of no-loss drains and low-pressure drop filtration, installation of a cycling air dryer, and replacement of lighting. The total cost of the projects was reported to be \$180,799, of which \$80,000, or 44.3% of the actual measure costs, was rebated to the company. The average monthly kW demand for this customer during calendar year 2011 was 2,474. The estimated annual kWh savings for the measures installed was reported to be 538,769.

One other review of a rebate in the amount of \$25,006 represented HVAC variable frequency drives which replaced the inlet vane dampers of two air handler 50 hp supply air fans; installation of lighting occupancy sensors in two warehouses. The average monthly kW demand for this customer during calendar year 2011 was 1,492. The estimated annual kWh savings for the measures installed was reported to be 181,835. However, the total installed measure cost was \$70,734, well under the \$150,000 minimum cost noted in the CORE proposal.

#### Incentive for 2011

According to the Settlement Agreement, approved by the Commission by Order 25,189, dated 12/30/2010, a performance incentive for 2011 between 0% and 12%, based on the actual expenditures rather than budgeted expenditures, for each residential and C&I sector was

authorized. The Order further requested that utilities “strive to complete their performance incentives by June 1 of the subsequent year.” PSNH provided the incentive calculation on June 1, 2012.

For purposes of the Shareholder Incentive calculations, the PSNH did not include FCM expenses, incentives, smart start incentives or loans, or expenses related to the fossil fuel portion of the HPwES.

The model used by Accounting to monitor the income and expenses of the EE program utilizes the 8% or \$1,055,476 (refer to Audit Issue #1) spread evenly over the twelve months of the 2011 program year. Debits were posted monthly to the PSNH Accrued C&LM general ledger account 229-P9-788, with offsetting entries to 229-P9-799. The net impact on the balance sheet and income statement during the year is zero. Actual incentive as calculated was \$1,240,034 or \$184,558 higher than the amount used within the model. The difference between the 8% calculated incentive used throughout the year, and the actual incentive is changed on the spreadsheet at the beginning of the subsequent year. Interest is not adjusted during the year. The annual movement of the incentive which takes place in December of each year posts in the following manner:

Debit 229-P9-799 -PSNH Accrued C&LM Expenses  
Credit 421-9R-799 -Below the line revenue account

The calculated incentive was \$1,031,911 for program year 2010. PSNH booked an estimated incentive (out of 229P9 and into the 421 R9 below the line revenue account) of \$826,869 at year end 2010. Therefore, the total true up anticipated to post in December 2011 was \$205,042. Audit was provided with the general ledger detail supporting the \$205,042 which was booked with an effective date 12/31/2011.

The calculated incentive was \$1,240,034 for program year 2011. PSNH booked at 12/31/2011 an estimated incentive (out of 229P9 and into the 421 9R below the line revenue account) of \$901,000. Therefore, the total true up which may post in December 2012 is \$339,034. Audit was provided with the general ledger detail supporting the \$901,000 which was booked with an effective date 12/31/2011.

### **Carry-forward Balance**

The carry-forward balance represents the availability of funds at each utility, so anticipated expenses that have not yet posted to the general ledger have already been “reserved” for future use, and are thus considered not available.

The reconciliation of program year activity to the general ledger year end posting was noted in the June 1, 2012 shareholder incentive package provided to the Staff at the Commission.

<b>2010 Carry-forward Balance</b>	<u>Reported</u> \$ <b>895,372</b> Balance agrees with 2010 CORE Audit report
SBC Funding	\$12,816,877
Forward Capacity Revenue	\$ 1,671,546
Forward Capacity Expense	\$ (87,724)
Interest on CORE	\$ 86,985
Interest on 2% RSA 125-O	<u>\$ 15,174</u>
<b>Total Funding</b>	<b>\$14,502,858</b>
Energy Efficiency Expenses	\$11,923,217
2011 EE posted to GL 2012	\$ 2,073,232
Less Smart Start net loan activity	\$ (117,638)
Add back Bad debt component (SS)	<u>\$ 30,209</u>
Net CORE Expenses 2011	\$13,909,020
2011 Incentive booked 2011	\$ 901,000
2011 Incentive to book 2012	<u>\$ 339,034</u>
<b>Total Expenses</b>	<b>\$15,149,054</b>
2011 NET activity	<u>\$ (646,196)</u>
<b>Carryforward before 125-O</b>	<b>\$ 249,176</b>
<b>2011 RSA 125-O taken</b>	<u><b>\$ (230,791)</b></u>
<b>2011 Carry-forward Balance</b>	<b>\$ 18,385</b>

- (1) The Smart Start revolving loan fund, originally established using SBC proceeds, is maintained in a separate subsystem, but the funding is maintained within the same general ledger account as the CORE program. The Commission approved the RLF to maintain a \$2,000,000 funding level.
- (2) PSNH, per RSA 125-O:5, is authorized to utilize prior year unencumbered funds not to exceed 2% of prior year SBC funds. The Commission capped the fund at \$600,000. 2% of the SBC funding for 2011 calculates to \$256,338. The available funds at year end 2011 were \$249,176. PSNH allocated \$230,791 as the 2% set aside, which brought the funding up to the cap of \$600,000.

Audit reviewed the balance sheet reconciliation of the general ledger account 229 P9 used to record the ongoing activity of the EE. PSNH also reflects the Smart Start revolving loan fund, Smart Start bad debt estimates, and unused RSA 125-O:5 allocations within the account 229P9 balance. The ending balance is not the same as the carry-forward balance, due to timing of postings to the general ledger.

Account 229P9 December 31, 2010 Balance	\$ (3,401,279)
Account 229P9 December 31, 2011 Balance	<u>\$ (3,231,357)</u>
Net General Ledger activity	\$ 169,922 reduction to liability



## **Audit Issue #1 Calculation of Interest**

### **Background**

Interest calculated monthly at 3.25% was noted on the running balance of all activity within the CORE accounting model.

### **Issue**

An estimated cost of the shareholder incentive is reflected on the Accounting Department model of activity. The amount used in the model reflects the 8% estimate proposed in the CORE proposal issued to the Commission August 1, 2010. At the time of the proposal, the estimated \$1,223,400 of fuel blind costs related to the HPwES were included in the total estimated costs.

The resulting shareholder incentive of 8% was based on \$13,193,400, or \$1,055,476. Removing the fuel blind portion of the budget would have resulted in the 8% estimate being based on \$11,969,900 which would have resulted in an 8% shareholder incentive estimate of \$957,592.

Because the interest is calculated monthly based on the net activity each month, and because the PSNH model reflects the 8% estimated shareholder incentive on a monthly basis, the cost portion of the model was overstated for the year by \$97,884 causing the interest calculation to be less than it should have been.

### **Recommendation**

The model should be re-run to reflect the adjustment to the budget minus the fuel blind portion. Audit understands that the model is typically re-run to reflect the shareholder incentive actually posted at year end.

In the 2010 program year, the HPwES fuel blind pilot was determined to be allowed under the CORE, but only costs relating to electric savings could be included for purposes of the shareholder incentive calculation. Refer to Commission Order 25,189 dated December 30, 2010 pages 13 – 14.

### **Company Comment**

PSNH agrees with this recommendation that as a result of the fuel neutral portion of the HPwES budget not being removed from the 2011 shareholder incentive, the monthly interest calculated on the net balance was understated. PSNH has recalculated this and will record an adjustment in October 2012 to reflect the additional interest of \$1,605 for the period January 2011 through December 2011.

### **Audit Comment**

Audit concurs with the Company comment.

## **Audit Issue #2**

### **Rebate in Energy Star Homes**

#### **Background**

The Energy Star Homes language in the 2011/2012 CORE proposal indicates this residential rebate program will offset the consumer cost of building to a more energy efficient standard.

#### **Issue**

A rebate in the amount of \$50,800 was paid to Southwestern Community Services, Inc. The description on the work order referenced GDS, as that company performed the Energy Star Home verification. Documentation provided to Audit indicates that a 38 unit apartment building in the town of Swanzey, owned by Page Homestead Senior Housing, Inc. Page is a wholly owned subsidiary of SCS Housing, Inc., which is a wholly owned subsidiary of Southwestern Community Services, Inc. Further documentation indicated that the building is master metered.

The building documentation refers to a 38 unit apartment building, with rent subsidies for seniors. The renters had no cost at risk in the building of the unit, and result in no ownership of the construction project. In addition, the building is master metered, with wiring to each apartment in case the “need arises” for individual meters.

#### **Recommendation**

A review of the policies and procedures relating to apartment buildings in general should be conducted by the Energy Efficiency Working Group. The commercial nature of the construction, and thus the offset to the cost of construction, did not benefit the residential homeowner’s cost of construction. Further, the use of the Energy Star Homes program, which has no cap, should be considered in relation to the HPwES, which has a cap of \$4,000 or whether apartment buildings with master meters should be considered Commercial rather than Residential.

#### **Company Comment**

The utilities are currently following the federal EPA Energy Star Homes guidelines. These guidelines allow Energy Star Certifications to be issued to multifamily projects. The program and incentive is designed to encourage consumers to build more efficiently and help to pay for part of the incremental cost associated with building to ENERGY STAR standards. The “consumer” in this project was Southwestern Community Services. In the case of these projects, the reduced operational costs are often passed on to the potential tenant. With 38 units in this building, the incentive was \$1,337 per unit. The issue of incentive caps for multi-family dwellings has been addressed with the establishment in 2012 of a \$4,000 cap for single family homes and \$1,000 cap per multi-family unit.

PSNH will work with Staff and other interested parties through the CORE Quarterly Meeting process to resolve the classification of apartment buildings with master meters as residential or commercial.

**Audit Comment**

Audit appreciates the cooperation among stakeholders in trying to comply with a variety of guidelines and agrees with the Company comment that multiple family dwellings were reviewed for the 2012 program year. Audit further agrees that discussions should be ongoing at the quarterly meetings as specific issues arise, with conclusions identified and documented.

**Audit Issue #3**  
**Large Commercial and Industrial Retrofit**

**Background**

One entry in the amount of \$57,000 represented a customer rebate paid to the city of Rochester. The total cost of the project was noted to be \$279,896, with a reported benefit cost ratio of 1.9. The project was summarized as replacing four positive displacement blowers with two new turblex centrifugal blower systems at the waste water facility.

**Issue**

Design for the system was completed by Brown & Caldwell, with the purchase of the system from Siemens Energy, and construction by Apex Construction. The total actual cost of the three components was noted to be \$673,896, with a grant disbursement of \$394,000 leaving the remaining funds of \$279,896. Based on the total actual cost, it does not appear that this project would have met the benefit cost ratio baseline, had the total actual cost been used. The ratio would have calculated to be 0.80.

**Recommendation**

It is recommended that clarification of the “total cost” be more specifically discussed when the CORE working group meets. The funding for this project was based on a net amount to the city, after a significant grant offset a major portion of the project cost.

**Company Comment**

The original benefit / cost analysis included in the rebate package was an older version of the benefit/cost ratio calculation sheet. The original benefit / cost analysis used a total project cost equivalent to the remaining project costs after the grant distribution (\$279,896) and a measure life of 13 years which is the default retrofit program measure life. For this particular project, the total project cost is actually \$673,896 with a measure life of 17 years. The original project proposal from the City of Rochester indicates an equipment measure life of 20 years. However when performing cost benefit analysis for this equipment, PSNH used a 17 year measure life to reflect the measure life of the equipment being replaced. The corrected benefit/cost ratio for this project is 1.05 and includes the total cost ( $\$279,896 + \$394,000 = \$673,896.45$ ) and the measure life of 17 years.

**Audit Comment**

Audit understands the Company comment as concurring with the total cost recommendation. Audit further understands the measure life used in the calculations of the benefit cost ratio had an impact on the project, and the project continued to meet the benefit cost ratio of at least 1.0

## **Audit Issue #4 SCIRET11 Rebate**

### **Background**

One work order rebate in the amount of \$54,248 was paid to Plastic Tech of VT, for a 12 head injection molding machine. The rebate was calculated using the 2010 75% rebate cap, rather than the 2011 50% rebate cap. The total cost of the equipment was noted to be \$97,040. 75% would have been a rebate of \$72,780, but the one year buydown calculation was \$54,248. The 50% calculation would have meant a rebate of \$48,520, or \$5,728 less than the one year buydown. The calculation was done by PSNH in May 2011, with the check issued to Plastic Tech 6/13/2011.

### **Issue**

Documentation provided to Audit reflected dates in 2011, with the exception of the Custom Rebate form, which was the 2010 form. The earliest date on the form was 2/16/2011.

### **Recommendation**

It appears based on the documentation provided, that the rebate was calculated using a rebate percentage higher than what had been approved for the program year.

### **Company Comment**

At the time the incentive was offered, Plastic Tech of VT was a Rate G customer. However with their purchase and installation of the new injection molding equipment and the service upgrade required to operate the new equipment, it was anticipated that the customer would move from Rate G to GV (100-200 kW) at the completion of the project. The incentive was processed as a Small Business “new equipment custom rebate” under rate GV. The calculation for the rebate was based on an incentive of 75% of the incremental cost for purchasing a high efficiency model over a standard efficiency model or a one year buy down whichever was less. The incentive cap for a GV customer undertaking a new construction project is \$100,000. In this case, the one year buy down in the amount of \$54,248 was the lower of the two incentive calculations. (A 50% rebate would have been for a lighting or refrigeration retrofit project).

### **Audit Comment**

Audit understands the Company comment and reiterates the issue. Proper documentation should support the rebate issued.

**STATE OF NEW HAMPSHIRE**  
**Inter-Department Communication**

**DATE:** January 30, 2013  
**AT (OFFICE):** NHPUC

**FROM:** Karen Moran, Chief Auditor

**SUBJECT:** CORE Energy Programs – DE 10-188  
**FINAL** Audit Report  
Unitil Energy Services, Inc.

**TO:** Tom Frantz, Director, Electric Division, NHPUC  
Jim Cunningham, Analyst, Electric Division, NHPUC

**Introduction**

The Public Utilities Commission Audit Staff (Audit) has conducted an audit of the books and records related to the CORE Energy Efficiency Program for the calendar year 2011. The four participating electric utilities, Unitil Energy Services, Inc. (UES), Public Service of New Hampshire (PSNH), New Hampshire Electric Cooperative (NHEC), and Granite State Electric (GSE) filed a joint petition for the program years 2011 through 2012. Each utility was audited individually.

Audit thanks Chad Dixon and Karen Daniell for their assistance during the audit process.

**Summary of the Program**

The four electric companies filed a joint proposal for the 2011-2012 CORE energy efficiency programs on August 3, 2010. On December 30, 2010, a Settlement Agreement was approved by Commission Order 25,189. The Order authorized the continuation of the following programs:

1. Energy Star Homes (ESH)
2. Home Performance with EnergyStar-fuel blind pilot PSNH and UES (HPwES)
3. Energy Star Lighting (ESL)
4. Energy Star Appliance (ESA)
5. Home Energy Assistance for low income customers (HEA) at 14.5% of SBC
6. New Equipment and Construction for large commercial and industrial customers (C&I)
7. Large C&I Retrofit
8. Small Business Energy Solutions for small C&I customers
9. Educational programs
10. certain utility specific programs

The utility specific programs outlined in the Order are:

- NHEC: Smart Start program, and High Efficiency Heat Pump program
- PSNH: Specific adaptations of programs for C&I customers, as well as its Smart Start program, services under the EnergyStar Homes Program Enhancement option (Geothermal and Air Source Heat Pump), educational enhancements for C&I Customer Partnerships, and C&I Request for Proposal for Competitive and Economic Development
- UES: Continue its Energy Efficiency on-line Tools Program

#### Senate Bill 300

On January 14, 2010, Senate Bill 300 was signed into law, directing a change in the allocation of the System Benefits Charge (SBC) between the Low Income Electric Assistance Program (EAP) and the Energy Efficiency program (EE). Prior to passage, the allocation of the \$.0033 was \$.0015 EAP and \$.0018 EE. Effective on January 15, 2010 (PUC Secretarial letter) and through June 30, 2011, the allocation changed to \$.0018 EAP and \$.0015 EE. For CORE program year 2011, the first six months reflected the \$.0015 while the second six months reflected \$.0018.

#### Senate Bill 323

Senate Bill 323 required the PUC, in conjunction with the Energy Efficiency and Sustainable Energy (EESE) Board, to choose an independent consultant to conduct a comprehensive review and analysis of energy efficiency, conservation, demand response, and sustainable energy programs and incentives in the state, and provide recommendations for possible improvements, among other things. Vermont Energy Investment Corporation (VEIC) was chosen in December 2010. The final report was provided to the legislature on September 30, 2011. Per legislation, the total cost of the review was not to exceed \$300,000 (statewide). Audit reviewed the VEIC records on file in the PUC Business Office and noted the total contract amount was \$282,965. Two gas utilities and four electric utilities were assessed the invoiced costs as incurred. Specifically, the utilities were assessed by the PUC Business Office (through February 2012):

Northern Utilities (gas)	\$ 12,623
EnergyNorth (gas)	\$ 63,373
NHEC (electric)	\$ 12,428
UES (electric)	\$ 26,477 of which \$20,830 was billed and paid in 2011
GSEC (electric)	\$ 15,852
PSNH (electric)	<u>\$152,213</u>
Total	\$282,965

The electric utilities reflected their costs as Evaluation expenses, across each of the CORE programs.

## CORE Program Summary

On March 1, 2012, a final quarterly report of the 2011 CORE program was filed with the NH PUC. The following represents the totals for the statewide combined residential and commercial/industrial sectors from all electric utilities (and does not include shareholder incentive expenses):

Utility	Internal Admin.	External Admin.	Rebate	Internal Impl.	Mrktng	Eval.	TOTAL
Grid	\$163,310	\$ -0-	\$ 1,203,416	\$ 35,623	\$ 6,847	\$ 58,164	\$ 1,467,360
NHEC	\$ 98,822	\$ 59,537	\$ 783,926	\$ 197,603	\$ 9,972	\$ 66,794	\$ 1,216,965
PSNH	\$313,353	\$ -0-	\$10,836,905	\$1,716,811	\$197,603	\$ 807,940	\$13,870,447
UES	<u>\$107,497</u>	<u>\$ 14,479</u>	<u>\$ 1,171,511</u>	<u>\$ 507,166</u>	<u>\$ 86,627</u>	<u>\$ 159,120</u>	<u>\$ 2,046,400</u>
Total	\$682,982	\$ 74,016	\$13,993,593	\$2,457,514	\$301,049	\$1,092,018	\$18,601,172

## UES Summary

On June 1, 2012, in compliance with the Commission Order, UES filed its Shareholder Incentive Calculation. On June 8, 2012 a revised calculation was provided, which reflected the following expense totals:

Total Residential Expenses	\$990,170
Less fossil portion of HPwES	( 137,313)
Plus FCM Expenses	<u>4,734</u>
Shareholder Incentive Residential Expense	\$857,591
Total C&I Expenses	\$1,056,232
Plus FCM Expenses	<u>5,469</u>
Shareholder Incentive C&I Expenses	\$1,061,701

The total on which the incentive calculation was based was reduced by the fossil fuel related expenses associated with the HPwES fuel blind program, in accordance with the Commission Order. The reported expense total deducted was \$137,313. *Refer to the HPwES portion of this report for further information.* As was identified in the prior year audit report, UES should not be including of the Forward Capacity Market expenses for purposes calculating the shareholder incentive. **Repeat Audit Issue #1**

## FUNDING

Funding for the CORE program is comprised of the Energy Efficiency portion of the System Benefits Charge (SBC), the net Forward Capacity Market (FCM) revenue less expense, and interest on the CORE activity. For 2011, the totals were:

SBC	\$1,994,651
Riverwoods	( 23,253)
FCM Revenue	\$ 152,897
FCM Expenses	( 10,203)
CORE Interest	<u>( 2,619)</u>
Total Funding	\$2,111,473

SBC and Riverwoods Adjustment

KWh sales were verified to the Capital and Seacoast regional monthly billing reports and to the Accounting model for the CORE. The deduction identified as “Riverwoods” relates to that portion of an overcharged account. Refer to docket DE 11-105 for specifics and approvals. SBC revenues were also verified to the general ledger accounts 10.29.xx.21.440. The Riverwoods adjustment was verified to general ledger 10.29.01.21.449.01.00.

Forward Capacity Market

UES reflects \$152,897 revenue less \$10,203 expenses for the net \$142,694 inclusion in funding of the CORE as directed by Commission Order. The FCM expenses were (properly) not reflected in the final quarterly report to the Commission (referenced as Schedule H), but were properly outlined in the final quarterly report schedule entitled NH CORE Energy Efficiency FCM Budget & Expenses (January 1-December 31, 2011). The FCM expenses were included in the shareholder incentive calculation. **Refer to Audit Issue #1**

FCM revenue was verified to the general ledger account 10-29-02-21-456-80.00 and FCM expenses were verified to the following general ledger accounts:

10-29-02-21-908-80-01	Internal Administration	\$ 6,738
10-29-02-21-908-80-02	External Administration	\$ 2,465
10-29-02-21-908-80-03	Non Administration	<u>\$ 1,000</u>
	Total FCM Expenses	\$10,203

INTEREST

The CORE interest rate used is the Federal Reserve’s prime rate as of the first of the month for which interest is calculated. Audit verified the rate to the quarterly interest rate letters sent to all utilities by the Director of the Gas/Water Division of the NHPUC.

The CORE calculation includes all revenue and expenses related to the CORE program, including Forward Capacity Market revenue and expense figures and an estimated shareholder incentive expense. Total interest for 2011 was a net expense of (\$2,619).

From month to month, the prior month’s calculated interest is rolled into the balance of the subsequent month.

The CORE activity spreadsheet model includes the relevant FCM as well as an estimated 8% shareholder incentive as a program expense. The budget of \$2,128,722, as presented to the Commission on August 1, 2010, reflected the 8% incentive figure to be \$170,298.

The incentive estimate included on the Accounting model agrees with the amount included in the August 2010 filing. The filing budget included \$240,000 related to the total Home Performance with Energy Star program. The August filing did not differentiate the fuel neutral portion of the HPwES for purposes of the incentive budget.

Audit reviewed the actual percentages of electric and non-electric costs associated with the HPwES for the year (see the HPwES portion of this report) and noted that 58% of the costs related to non-electric measures. Audit therefore, calculated 58% of the HPwES budget to be \$139,200. The total budget on which the 8% estimated incentive should have been calculated was \$2,128,722 - \$139,200 = \$1,989,522. Incentive estimated on the revised budget calculates to \$159,162.

Because the fuel neutral portion of the HPwES cannot have an incentive associated with it, the budgeted figure on which the incentive estimate was based was overstated. Because the estimated shareholder incentive reflected in the Accounting model was overstated, the interest calculation was therefore understated. **Audit Issue # 2.**

Audit understands that the actual incentive is booked at the end of the year, with a true up the following year. Refer to the Shareholder Incentive portion of this audit report for additional information.

### **Expense Test Summary**

Audit selected a variety of expenses from each project category and expense type, from the work order detail.

#### **Energy Star Homes**

According to the August 2010 proposal, the Energy Star Homes program “is designed to be a market driving program, encouraging both builders and homeowners to build a new home with energy efficiency in mind. The program provides incentives in the form of rebates and services to help offset the consumer cost of building to a more energy efficient standard.” Emphasis added. “Any new, residential single family or multifamily construction project is eligible for the program, including complete rehabs of existing structures...”

Audit selected one rebate in the amount of \$43,754 for review. Documentation provided supported a 45 unit residential new construction at Menino Place. Installed were electric heaters, 240 energy star fixtures and 264 CFL. No exception noted.

Home Energy Solutions/Home Performance with Energy Star (HES/HPwES)

The Settlement Agreement signed in December 2010 for the 2011/2012 CORE states that “consistent with the authorization for the 2010 (fuel blind) pilot in Order No. 24,974, ...the rebate for all HPwES programs...will be capped at the lesser of 50% of the project expenditures or \$4,000... PSNH serving a total of 716 homes and UES serving up to 100 homes”

<u># of 2011 projects</u>	<u>Total HPwES</u>	<u>Electric Portion</u>	<u>Fossil Portion</u>
45	\$224,684	\$87,371	\$137,313

Audit selected the Marketing expense total of \$10,800 for review and was provided with USC service bill allocations from January through June. The total was reflected via monthly entries January through June in account 10-29-02-21-908-26-20.

Energy Star Appliance

The program, open to all residential consumers, provides rebates (through rebate forms obtained at retail locations) on the following Energy Star rated appliances:

- \$30 clothes washer
- \$20 room air conditioner
- \$10 smart power strip
- \$30 refrigerator
- \$10 room air cleaner

Audit requested and was provided with an invoice from Energy Federation. The total invoice \$4,426 was verified to the general ledger 10-29-02-21-908-40-40, EStar Appl Rebates in the amount of \$3,990 and to 10-29-02-21-908-40-14 EStar Appl 3<sup>rd</sup> Part Admin in the amount of \$436. The invoice reflected mail in rebates and processing fees for clothes washers.

Home Energy Assistance

Expenses related to the Home Energy Assistance portion of the 2011 CORE were ordered to be “at least 14.5% of the SBC budget” for 2011. Total reported expenses relating to the HEA were \$286,721. The HEA budget represented 14.5% of the overall budget for 2011, or \$306,057. Actual expenses however were 286,721, or 13.6% of the total budget. Under-utilization of the calculated HEA budget was, as specified by both PSNH and UES, due to the availability of gas assistance programs, state weatherization funding, and federal funding for low income weatherization programs, the cost per job estimate that was used to forecast the goals for 2011 dropped to a level which allowed the kWh goals to be met without spending all of the available funding allocated to the HEA.

Audit reviewed an appliance and weatherization invoice, in the amount of \$44,258, for compliance with the cap of \$5,000 per participating customer, as outlined in the CORE proposal. There were no exceptions noted.

Audit also requested supporting documentation for a general ledger posting to account 10-29-02-21-908-41-21, representing Low Income third party marketing. The detail which agreed with the journal entry description was for a Northern New England CAP conference. The total invoice \$1,500 appears to have posted in full in error to this account. The account identification on the batch report and the detail indicate that \$750 should have posted to this account and \$750 to 30-49-02-72-908-01-20, Northern Utilities. **Audit Issue #3**

#### Large Commercial and Industrial Retrofit

Audit selected a rebate in the amount of \$4,500 paid to Machine Craft for lighting retrofit in one of their warehouses. Further supporting detail indicated that the large business retrofit included lighting fixtures, bulbs, remote occupancy sensor and daylight dimming controls. Specific invoices supporting the measures were provided.

A rebate in the amount of \$120,630 was selected for review. Paid to Concord Hospital, the amount represented lighting retrofit in the main hospital building. A total of 4,359 high efficiency volumetric retrofit kits, with an annual estimated kWh savings of 668,235 were installed.

#### Small Commercial and Industrial Retrofit

The August 2010 CORE proposal states that this program is “designed to provide turnkey energy efficiency services for customers under 200 kw demand.” The rebate offered to customers is up to 50% of the installed costs up to the customer’s incentive cap. The caps are those outlined on page 50 of the August 2010 CORE proposal.

Audit selected a payment to KEMA Inc, noted within the third party monitoring and evaluation section of the general ledger in the amount of \$5,161. The supporting documentation (including toll receipts, expense details, progress reports, etc.) summed to \$48,594 of which UES was allocated 10.62% or \$5,161. Based on the documentation provided, it appears that the KEMA expense should be noted under the Residential Energy Star Lighting category, not the Small Commercial and Industrial.

A rebate in the amount of \$19,081 was provided to the state of New Hampshire, Bureau of Turnpikes. The rebate offset the cost of purchasing a variety of efficient lighting fixtures for the Hampton toll plaza.

#### Incentive for 2011

According to the Settlement Agreement, approved by the Commission by Order 25,189, dated 12/30/2010, a performance incentive for 2011 between 0% and 12%, based on the actual expenditures rather than budgeted expenditures, for each residential and C&I sector was authorized. The Order further requested that utilities “strive to complete their performance incentives by June 1 of the subsequent year.” UES provided the incentive calculation on June 1, 2012, then updated the calculation on June 8, 2012. The overall incentive noted summed to \$160,790 (refer to attachment B of the DE 10-188 2011 Earned Shareholder Incentive detail.)

## Carry-forward Balance

The carry-forward balance represents the availability of funds at each utility, so anticipated expenses that have not yet posted to the general ledger have already been “reserved” for future use, and are thus considered not available. For purposes of the rolling fund balance on the general ledger, all expenses prudently incurred, including forward capacity market, fuel neutral expenses, shareholder incentives, etc., in addition to the energy efficiency expenses, are reflected.

The reconciliation of program year activity to the general ledger year end posting was noted in the June 2012 shareholder incentive package provided to the Staff at the Commission.

UES maintains the net activity of the CORE in account balance sheet account 10-20-00-00-173-13-01, 02, 03, and 05. The revenue and expense activity posts to the appropriate income statement accounts, and each was verified without exception. The EE related income and expense are designated with code 10-29-as the account number identifier.

	<b>2010 program Audited</b>	<b>2011 program Submitted</b>	<b>2011 program Audited</b>
Carry-forward Balance	\$ 614,653	\$ (9,538)	\$
Carry-forward Interest	<u>\$ 171,613</u>	<u>\$</u>	<u>\$</u>
Net Carry-forward	\$ 786,266	<b>\$ (9,538)</b>	<b>\$ 181,811</b>
	over-collect	under-collect	over-collect
SBC Funding less LI Allocation	\$1,560,463	\$1,663,581	\$1,663,581
SBC LI Funding	\$ 300,570	\$ 308,058	\$ 308,058
Forward Capacity Market Rev.	\$ 190,679	\$ 152,897	\$ 152,897
Forward Capacity Market Exp.	( 15,975)	\$	\$ ( 10,203)
Interest	<u>\$ 19,736</u>	<u>\$ 188,732</u>	<u>\$ (2,619)</u>
Total Funding	\$2,071,449	\$2,313,267	\$2,111,714
Energy Efficiency Expenses	\$2,453,487	\$2,056,605	\$2,046,402
Prior Year Incentive true-up	\$ -0-	\$ (14,154)	\$ (14,154)
Estimated 8% Incentive	<u>\$ 222,417</u>	<u>\$ 170,298</u>	<u>\$ 159,162</u>
Total Expenses	\$2,675,904	\$2,212,749	\$2,191,410
Net activity 2010 and 2011	\$ (604,455)	\$ 100,518	\$ (79,696)
Carry-forward Balance	<b>\$ 181,811</b>	<b>\$ 90,981</b>	<b>\$ 102,115</b>
	over-collect	over-collect	over-collect

LI Allocation indicates “low income” within the Accounting Department model. Residential non-low income, and Commercial and Industrial model spreadsheet allocate a portion of their SBC to the Low Income spreadsheet, for monitoring purposes.

The 2010 ending carry-forward balance reported by UES agreed with the audited ending balance of \$181,812 over-funded. The fund balance reconciliation provided with the June 2012 shareholder incentive did not begin with the audited ending balance. The final balance submitted

with the 2011 shareholder incentive calculation, a credit of \$90,981, was verified to the balance sheet accounts 10-20-00-00-173-13-01, 02, and 03 without exception. The variance between the reported net carry-forward balance of (\$90,981) and the audited (\$107,353) of \$11,134 is the result of the reduced estimate of the 8% shareholder incentive.

**Re-CORE Regional Greenhouse Gas Initiative (RGGI) Revolving Loan Fund (RLF)**

On March 20, 2009, Granite State Electric Company d/b/a National Grid (GSE), the New Hampshire Electric Cooperative, Inc. (NHEC), Public Service Company of New Hampshire (PSNH), and Unitil Energy Systems, Inc. (UES), collectively known as the Utilities, presented a detailed proposal to expand the existing CORE energy programs which are funded through the system benefits charge (SBC). On August 19, 2009, \$7,646,020 was approved by the Governor and Council. The original term of the grant was through June 30, 2010, with approved extension to December 31, 2010.

PSNH was named as the general grantee, and as such, issued invoices for services to the Sustainable Energy Division and distributed allocated amounts to GSE, NHEC, and UES. (Refer to the Final PUC Audit Report of the RE-CORE issued on June 24, 2011 for additional information)

Of the total \$7,016,982 grant received by the Utilities, \$1,728,000 was used to establish Revolving Loan Funds. Specifically, each utility received the following:

PSNH \$500,000      GSE \$302,077      NHEC \$200,000      UES \$725,000

Audit reviewed the activity within general ledger account 10-29-01-44-449-xx-xx, and 10-29-02-44-456-xx-01 for revenues, expenses, and loan repayments. The net amount available to lend to customers as of 12/31/2011 is \$610,688. Lending activities were limited during 2011, as the Company, in conjunction with Commission Staff, determined the need for a tariff, which was documented, effective November 1, 2011. Refer to docket DE11-213 and related Secretarial Letter issued 10/21/2011.



## REPEAT Audit Issue #1

### Inclusion of Forward Capacity Market Expenses in the Total Expenses used to Calculate the Shareholder Incentive

#### Background

The Commission required that all utilities reflect the net forward capacity market revenues and expenses as a funding (or expense) source of the CORE program.

#### Issue

UES included the FCM expenses in their actual expenses for calculation of the shareholder incentive. The total was \$10,203.

In response to the issue identified in the audit report of program year ended December 31, 2010, UES stated:

*“FCM expenses are actual costs incurred by the Company as required under ISO-NE’s market rules for participation in the FCM. The majority of the FCM expenses are related to fulfilling the numerous and ongoing reporting obligations. All of these costs are directly related to the electric savings generated by measures installed through the Company’s energy efficiency programs. Savings bid into the FCM generate revenues which directly benefit the Company’s customers by increasing funds available for energy efficiency. The Company believes that all of the costs related to administering its FCM obligations are prudent and therefore appropriate for inclusion in the Shareholder Incentive calculation”*

#### Recommendation

As also stated in the prior audit report, *“Audit concurs with the accounting models used by all four utilities which reflect the FCM revenues and expenses within the net CORE activity per program year. However, **for calculation purposes of the shareholder incentive**, only those expenses which relate to (electrical) energy efficiency should be included. Therefore, the FCM expenses should be excluded, just as the fossil fuel portion of the HPwES are excluded from the actual expenses in the calculation of the incentive. **Audit recommends that the Utilities and the Staff at the Commission expressly determine what costs are authorized for inclusion in the calculation of Actual costs for the Shareholder Incentive. Given that two Utilities include the FCM costs and two Utilities exclude the FCM cost, there is no consensus on the accurate method to use.**”* (Emphasis added)

Audit has spoken with Commission Staff who indicated that this level of detail has not yet been determined. Audit again recommends that the exact expense items to be included, for shareholder incentive purposes, be specifically documented.

### **Company Comment**

UES reiterates its response provided in the audit report of the program year ended December 31, 2010:

*“FCM expenses are actual costs incurred by the Company as required under ISO-NE’s market rules for participation in the FCM. The majority of the FCM expenses are related to fulfilling the numerous and ongoing reporting obligations. All of these costs are directly related to the electric savings generated by measures installed through the Company’s energy efficiency programs. Savings bid into the FCM generate revenues which directly benefit the Company’s customers by increasing funds available for energy efficiency. The Company believes that all of the costs related to administering its FCM obligations are prudent and therefore appropriate for inclusion in the Shareholder Incentive calculation”*

In the audit report of the program year ended December 31, 2010, Audit concluded:

*“Audit recommends that the Utilities and the Staff at the Commission expressly determine what costs are authorized for inclusion in the calculation of Actual costs for the Shareholder Incentive. Given that two Utilities include the FCM costs and two Utilities exclude the FCM cost, there is no consensus on the accurate method to use.*

UES will continue to use its current performance incentive calculation method pending clarification from the NHPUC Staff.

### **Audit Comment**

The Company response is appreciated. Audit encourages the Staff at the Commission to fully document what to include in the actual costs of the performance incentive.

## **Audit Issue #2 Calculation of Interest**

### **Background**

Interest calculated monthly at 3.25% was noted on the running balance of all activity within the CORE Accounting model.

### **Issue**

An estimated cost of the shareholder incentive is reflected on the Accounting Department model of activity. The amount used in the model reflects the 8% estimate proposed in the CORE proposal issued to the Commission August 1, 2010. At the time of the proposal, the estimated \$240,000 of fuel blind costs related to the HPwES were included in the total estimated costs.

Removing the fuel blind portion of the budget would have resulted in the 8% estimate being based on \$2,128,720 less the fossil portion of the HPwES (58% \* \$240,000) \$139,200 which would have resulted in an 8% shareholder incentive estimate of \$159,162.

### **Recommendation**

The model should be re-run to reflect the adjustment to the budget minus the fuel blind portion. Audit understands that the model is typically re-run to reflect the shareholder incentive actually posted at year end.

In the 2010 program year, the HPwES fuel blind pilot was determined to be allowed under the CORE, but only costs relating to electric savings could be included for purposes of the shareholder incentive calculation. Refer to Commission Order 25,189 dated December 30, 2010 pages 13 – 14.

### **Company Comment**

As noted above, once the NHPUC approves the actual shareholder incentive amount earned for a project year, the Company re-runs its accounting models. The shareholder incentive amounts are updated in each month of the project year, and of the following year through the true up date, so that the interest revenue or expense is recalculated as if the actual shareholder incentive amount had been known at the beginning of the project year. The difference between the recalculated amounts and the amounts recorded based on the estimated shareholder incentive is then recorded in the general ledger.

The estimated shareholder incentive recorded in the accounting models was calculated as the equivalent of 8% of total program expenses. This method is used to provide a reasonable estimate of shareholder incentive expected to be earned and the Company believes adjusting the amount for estimated non-electric HPwES costs would complicate the calculation of the estimate without substantially improving the result. On an ongoing basis, the Company plans to continue

with the current estimation method, which allows for the estimated amount to be trued up when the actual amount is known.

**Audit Comment**

Audit understands the position of the Company. As long as the re-running of the model is conducted over the entire twelve month period, such that the interest calculations are trued-up in the fashion that the performance incentive is, then the response the Company provided is reasonable.

### **Audit Issue #3**

#### **Overstatement of Electric CORE and Understatement of Gas Energy Efficiency Program**

##### **Background**

An invoice in the amount of \$1,500 for attendance at a Northern New England CAP Conference was provided in response to a request for the detail.

##### **Issue**

The invoice which posted to the Low Income third party marketing expense should have been split, with \$750 posting as it did, and \$750 posting to the Northern Utilities Gas Energy Efficiency Program.

##### **Recommendation**

The Company is encouraged to review and ensure that all cross-functional expenses are allocated as intended. Because \$750 is a fraction of a percentage of the overall CORE expenses, an adjustment is not recommended.

##### **Company Comment**

The Company agrees that the \$1,500 invoice for the Northern New England CAP Conference was inadvertently charged to the UES electric energy efficiency programs rather than shared between the UES electric energy efficiency programs and the Northern Utilities, Inc. gas energy efficiency programs. The Company has increased oversight of energy efficiency program invoice processing to ensure future expenses are allocated correctly.

##### **Audit Comment**

Audit concurs with the Company comment.

# STATE OF NEW HAMPSHIRE

## Inter-Department Communication

**DATE:** January 16, 2013

**AT (OFFICE):** NHPUC

**FROM:** Karen Moran, Chief Auditor  
Robyn Descoteau, Examiner

**SUBJECT:** Northern Utilities, Inc.  
DE 10-188  
**FINAL** Audit Report (**revised 1/16/2013 4:30pm**)

**TO:** James Cunningham, Analyst III

### Introduction

The NHPUC Audit Staff (Audit) has reviewed the annual costs associated with the calculation of the shareholder incentive (SHI) for Northern Utilities (NU) for year of January 1, 2011 through December 31, 2011, as filed with the Commission on June 1, 2012 in docket DE10-188.

In accordance with Commission Order #24,630 in Docket DG 06-036, NU provided the Commission with monthly summaries of expenses and recoveries related to the energy efficiency programs in effect.

### Summary

Actual Demand Side Management (DSM) expenses for the year ending December 31, 2011 were reported to be \$791,889. See the SHI June 2012 filing, Exhibit A: Summary of Expenditures and Savings, Table 2 – Reporting Year-End Actual Expenditures, Participation, Savings. Actual DSM expenses were within 80% of the approved budget \$985,188. Revenue collected for the year was \$1,236,587. The Accounting Department model reviewed by Audit summarized the following:

Beginning Balance Under-collection	\$ 197,816
2011 Program Expenses	\$ 791,889
2011 Incentive Estimate	\$ 79,208
2010 Incentive True-up	\$ 26,987
2011 Revenue (Collections)	(1,236,586)
2011 Interest	( 4,509)
Ending 2011 Over-collection	( 145,196)

## **DSM Collections**

The monthly summary report filed with the NHPUC detailed the DSM Collections breakdown as follows:

	<u>Commercial &amp; Industrial (C&amp;I)</u>	<u>Residential</u>	<u>Totals</u>
January 2011	\$105,184	\$104,751	\$209,935
February 2011	104,940	117,432	222,372
March 2011	89,429	91,424	180,853
April 2011	66,466	68,916	135,382
May 2011	41,219	35,547	76,766
June 2011	31,671	21,606	53,277
July 2011	25,937	14,356	40,293
August 2011	25,700	11,515	37,215
September 2011	29,659	12,820	42,479
October 2011	33,971	15,368	49,339
November 2011	45,645	38,694	84,339
December 2011	<u>54,683</u>	<u>49,654</u>	<u>104,337</u>
	\$654,504	\$582,083	\$1,236,587

The Company provided Audit with a 2011 general ledger trial balance (equaling the filed amount) that detailed the monthly revenue and adjustments booked per billing group.

Accrued Revenue, per the general ledger accounts 30-49-01-72-495-01-xx at December 31, 2011, for Residential was a debit balance of (\$191,101) and for C&I was a debit balance of (\$147,402).

Audit verified that the rate per them, as identified in the January 2012 monthly report (which includes all activity from June 2010 through January 2012) agreed with the rates approved in Commission Orders. Specifically, in DG 10-250, Order 25,162, the Residential DSM rate was \$0.0359 and the C&I DSM rate was \$0.0152 for the period of November 1, 2010 through October 31, 2011. In DG 11-207, Order 25,282, the Residential DSM rate was \$0.0333 and the C&I DSM rate was \$0.0126 for the period of November 1, 2011 through October 31, 2012.

## **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 days in the month. The month-end over/under recovery balance including interest is used as the beginning balance for the following month. Total interest for 2011 was \$4,508.

Audit tied the interest rates reported to the prime rates of the Federal Reserve that were in effect on the first day of the month prior to the quarter start; all of which were 3.25%. Audit also verified the rates to the quarterly interest rate letters sent to all utilities by the Director of the Gas/Water Division of the NHPUC

### DSM Expenditures

The monthly summary report filed with the NHPUC detailed the DSM expense breakdown as follows:

	<u>Commercial &amp; Industrial (C&amp;I)</u>	<u>Residential</u>	<u>Low Income</u>	<u>Totals</u>
January 2011	\$17,968	\$22,454	\$11,441	\$51,863
February 2011	22,338	17,659	9,944	49,941
March 2011	54,389	16,137	10,363	80,889
April 2011	23,217	34,661	16,047	73,926
May 2011	15,915	13,813	21,790	51,518
June 2011	20,821	20,884	8,246	49,950
July 2011	13,947	24,549	9,145	47,641
August 2011	36,527	19,087	8,759	64,372
September 2011	35,276	33,308	9,161	77,745
October 2011	24,447	24,593	8,371	57,412
November 2011	106,272	40,058	69,395	215,725
December 2011	<u>18,219</u>	<u>35,361</u>	<u>23,521</u>	<u>77,101</u>
	\$389,336	\$302,564	\$206,183	\$898,083
FILED AMOUNT	<u>389,336</u>	<u>302,564</u>	<u>99,989</u>	<u>791,889</u>
Incentive	\$0	\$0	\$106,194	\$106,194

The Company provided Audit with a 2011 detailed general ledger that listed the supporting invoices, general ledger entries, customer rebate requests and expense details. Audit was able to verify that the breakdown of expenses by DSM class from the monthly summary report was accurate for C&I and Residential; the expenses shown for Low Income were over-stated by \$106,194 due to performance incentive amounts included in monthly reports.

Per the Company, performance incentive amounts for all programs are included in the Low Income expense column for monthly reporting. Audit verified that the Accounting Department model (used to track energy efficiency program revenues and expenses) included an 8% estimate for the 2011 program year \$79,209 as well as prior year true-ups \$26,987 for a combined total of \$106,194. Specifically:

Residential 2011 estimate	\$35,676	2010 true-up posted 11/2011	\$23,324
Low Income '11 estimate	\$ 8,800	2010 true-up posted 11/2011	\$ 6,839
C&I 2011 estimate	<u>\$34,732</u>	2010 true-up posted 11/2011	<u>(\$3,176)</u>
2011 SHI Estimate	\$79,209	2010 true-up posted 11/2011	\$26,987

The following is a breakdown of expenses using the general ledger totals. This schedule ties to totals reported on Exhibit A: Summary of Expenditures and Savings, Table 2 – Reporting Year-End Actual Expenditures, Participation, Savings.

	<u>Residential</u>	<u>Low Income</u>	<u>Commercial &amp; Industrial (C&amp;I)</u>	<u>Totals</u>
Internal – NU Allocations	\$54,188	\$13,246	\$52,985	\$120,419
Internal – USC Billings	35,740	11,325	66,893	113,958
Internal – Third Party	0	0	2,988	2,988
External Admin – NU Allocations	7,521	1,838	7,353	16,712
External Admin – Third Party	11,114	2,706	20,228	34,048
Rebates – Customer Rebates	145,320	67,355	174,666	387,341
Rebates – Energy Audits	4,720	860	10,995	16,575
Marketing – USC	31,045	0	41,150	72,195
Marketing – Third Party	449	750	4,442	5,641
Evaluation – NU Allocations	7,809	1,909	7,636	17,354
Evaluation – USC	2,186	0	0	2,186
Evaluation – Third Party	<u>2,472</u>	<u>0</u>	<u>0</u>	<u>2,472</u>
<b>TOTALS</b>	<b>\$302,564</b>	<b>\$99,989</b>	<b>\$389,336</b>	<b>\$791,889</b>

In addition to NU and USC costs, other expenses were from Rise Engineering which administers the NU Partners in Energy Program, River Energy Consultants, the Rockingham and the Strafford County Community Action Committees for measures installed and agency fees and Energy Services, Inc. (EFI) which processes rebates.

**Senate Bill 323 – Vermont Energy Investment Corporation (VEIC)**

Senate Bill 323 required the PUC, in conjunction with the Energy Efficiency and Sustainable Energy (EESE) Board, to choose an independent consultant to conduct a comprehensive review and analysis of energy efficiency, conservation, demand response, and sustainable energy programs and incentives in the state, and provide recommendations for possible improvements, among other things. Vermont Energy Investment Corporation (VEIC) was chosen in December 2010. The final report was provided to the legislature on September 30, 2011. Per legislation, the total cost of the review was not to exceed \$300,000 (statewide). Audit reviewed the VEIC records on file in the PUC Business Office and noted the total contract amount was \$282,965. Two gas utilities and four electric utilities were assessed the invoiced costs as incurred. The utilities were assessed by the PUC Business Office through February 2012:

Northern Utilities (gas)	\$ 12,623 of which \$9,931 was billed and paid in 2011
EnergyNorth (gas)	63,373
NHEC (electric)	12,428
UES (electric)	26,477
GSEC (electric)	15,852
PSNH (electric)	<u>152,213</u>
Total	\$282,965

NU reflected their costs as Evaluation expenses, split between C&I: 44%, Residential: 45%, and Low Income: 11%.

**Conclusion**

PUC Audit has traced reported revenue and expenses to the 2011 general ledger of NU. Audit concludes that the overall revenue and expenses charged to the New Hampshire Energy Efficiency Program were accurately reported.

Accrued Revenue general ledger accounts 30-40-00-00-173-41-XX reflect the ongoing balance of the Northern DSM. Audit reviewed the Accounting Department model, verified the detail to the appropriate revenue and expense accounts, and verified the following net ending balances to the general ledger 173 accounts:

173-41-01 Accrued Revenue Low Income	\$ -0-
173-41-02 Accrued Revenue Residential	\$ 4,029
173-41-06 Accrued Revenue C&I	<u>(\$149,224)</u>
Total net over-collection at 12/31/2011	(\$145,196)