STATE OF NEW HAMPSHIRE

Intra-Department Communication
Department of Energy

DATE: August 18, 2023

FROM: Audit Staff, Division of Enforcement
NH Department of Energy

SUBJECT: Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
FINAL Audit Report DE 22-052

TO: Tom Frantz, Director, Regulatory
Elizabeth Nixon, Director Electric, Regulatory
Jay Dudley, Analyst, Regulatory
Paul Dexter, Attorney, NH Department of Energy

Introduction

The Enforcement division Audit staff of the Department of Energy was required to perform an audit of the revenue decoupling adjustment factor (RDAF) per PUC Order 26,748 in docket DE 22-052, issued on December 16, 2022. Specifically:

> "*Based on the record before us, it appears that Liberty accurately calculated an under-collection of $1,752,926 for the decoupling year that ran from July 1, 2021 to June 30, 2022; therefore, we approve that figure subject to the Department of Energy performing an audit of this total figure and any adjustments based on the outcome of that audit. Pursuant to the Settlement Agreement as approved by Order No. 26,376, it is therefore just and reasonable for Liberty to recover part of this under-collection by collecting up to the maximum of three percent of its distribution revenues, or $1,415,013, between November 1, 2022 and October 31, 2023 through the RDAF. The remainder of the revenue shortfall, subject to the audit condition above, may be deferred for future recovery. We therefore approve Liberty's request to implement its RDAF as proposed in its December 2, 2022, filing as a reconciling rate mechanism designed to collect $1,415,013 between January 1, 2023 and October 31, 2023. Liberty's RDAF tariff pages as filed on December 2, 2022, modified to be consistent with the changes to original pages 138–140 proposed by the DOE in its letter filed on December 9, 2022, are therefore approved.*
> ***Based upon the foregoing, it is hereby***
> ***ORDERED****, that Liberty's under-collection amount of $1,752,926 is approved, subject to adjustment based on the outcome of a Department of Energy audit; and it is*

FURTHER ORDERED*, that Liberty's request to recover $1,415,013 through the Revenue Decoupling Adjustment Factor between* ***January 1, 2023, and October 31, 2023****, as proposed in its December 2, 2022 filing, is approved; and it is*
FURTHER ORDERED*, that Liberty shall track its revenues received pursuant to the Revenue Decoupling Adjustment Factor, and reconcile its deferred Revenue Decoupling Adjustment balance based on actual revenues received and carrying charges at the prime rate as reported in the Wall Street Journal each month;…*"

A hearing was held at the PUC on 11/15/2022, at which the following was transcribed:

"*…comparing target revenues to actual revenues, and adjusting for the difference. And the target revenues were established in the last rate case. And, so, it's the actual revenues that are really at issue in this case. And the actual revenues seem to boil down to* ***three numbers, which are total revenues****,* ***total number of customers or "equivalent bills", and then the mathematical calculation of revenues per customer.*** *...The importance of the audit is that we need to -- we need to be able to verify, and this is what I'm going to ask the witnesses today, that the numbers of actual revenues that are used in the calculation and the number of actual equivalent bills can be tied back to books and records of the Company. And we've made some headway through discovery in this case, in the timeframe we have, the Company has provided an internal report called a "Sales and Volumes Report", and we have verified the numbers to this Sales and Volumes Report, which I'm going to ask them to explain. And then, the next step would be to just verify those Sales and Volumes Reports to the books*."

Audit added the **bold** to demonstrate when the first decoupling rate was approved, and what Audit was directed to verify.

Audit then reviewed the referenced discovery, specifically DoE Tech Session data requests and responses 1-1 through 1-6.

DoE Tech Session 1-1 requested an explanation regarding why and how equivalent bills are used in the decoupling tariff (Bates 58) and in the calculation of the decoupling adjustment (Bates 32 and 33), as well as an explanation of how the numbers of equivalent bills on Bates pages 32 and 33 were derived. The Company responded:

"*…When a bill is issued, it is not always for a single "month" of service, so the billed customer charge is not always equal to the tariff price. In other words, the "equivalent bills" are the number of customer charges rendered for the rate class in a given month or year and thus match the revenue stream.*
b. As stated on Bates 0058, equivalent bills are calculated on a per physical bill basis by dividing the billed customer charge by the tariff customer charge price then accumulated by customer, rate class, and period."

DoE Tech Session 1-2 requested backup worksheets and a narrative of $47,167,097 target revenue and 522,214 target equivalent bills on Bates page 32.

The Company responded that the live worksheets were included with both the 9/1/2022 and 9/13/2022 filings. The response also included:

> *"Target revenues are the approved distribution revenue requirement in effect during the decoupling period. From July 1, 2021, through October 31, 2021, the revenue requirement of $47,107,244 formed the target revenue basis, and from November 1, 2021, through September 30, 2022, the revenue requirement of $47,199,069 formed the target revenue basis. The basis for these revenue requirements is shown on Bates 0030.*
> *b. The basis for the 522,214 target equivalent bills on Bates 032, Line 13, is the Settlement Agreement in Docket No. DE 19-064, Attachment 9 (Bates 114), Lines 1 through 13."*

DoE Tech Session 1-3 requested the backup and a narrative for $47,806,373 actual revenue, 541,290 actual equivalent bills and a narrative of calculation of target equivalent bills; monthly Bills and Volumes reports for July through June. See the twelve monthly Bills and Volumes reports provided as responses DoE TS 1-3a through DoE TS 1-3a12

DoE Tech session 1-4 requested a revised Bates 34, which was provided.

DoE Tech Session 1-5 requested the Company provide a spreadsheet with billing determinants (customer charges, kWh, kW, kV, etc. for each customer class for the period), which was provided as DoE-TS 1-5.

DoE Tech Session 1-6 requested a narrative explaining what changed from the 9/1 filing to the 9/13 filing. The Company responded:

> "*As stated in the cover letter that accompanied the revised filing, the Company discovered errors in the testimony and asked the Commission to replace the original filing with the revised filing. Although the attachments did not change, the revised filing included all the original attachments as a more efficient way to proceed. There is thus no need to refer to the original filing. Note that the replacement filing did not change the requested rate adjustment nor the calculations supporting that request.*
> *The following items changed from the initial filing to the revised filing:*
> *• Bates 0007 (line 4) and 0012 (line18) – the under-collection amount was updated from $2,357,131 to $1,752,926.*
> *• Bates 0005 (line 20), 0013 (line 7), and 0016 (line 6) – the deferral amount was updated from $942,118 to $337,913.*
> *• Bates 0010 – footnote 2 was added."*

<u>Settlement Agreement</u>

The Settlement Agreement, filed on May 26, 2020 in DE 19-064, includes the following section outlining Decoupling:

> **<u>I. Decoupling</u>**
> *Liberty shall implement a decoupling mechanism effective July 1, 2021.*
>
> *In return for Liberty agreeing to a later date to implement decoupling, the parties agree*

that Liberty shall be permitted to continue the Lost Revenue Adjustment Mechanism (LRAM) for calendar years 2019 and 2020. Final determination of the LRAM and SBC for billing will be made in DE 17-136, or subsequent energy efficiency dockets. The Settling Parties shall review and approve tariff language implementing the decoupling mechanism prior to Liberty's submission of the decoupling tariff to the Commission in sufficient time for the scheduled July 1, 2021, implementation.

The Company will make a reconciliation filing by September 1 following the completion of each decoupling year (July 1 to June 30), in which Liberty will calculate the rate increase or rate refund arising from the just completed decoupling year, and request approval for any adjustment to go into effect on November 1 for the following twelve months.

Prior to the Year 1 decoupling filing of September 1, 2022, the Settling Parties shall informally discuss the preliminary reconciliation calculation of the July 1, 2021, to June 30, 2022 (Year 1) decoupling year and attempt in good faith to reach agreement as to the treatment of any atypical consequences flowing from the COVID-19 pandemic. If an agreement is reached, the Company will present that agreement to the Commission as part of the Company's September 1, 2022, filing for consideration and approval. If an agreement cannot be reached, the Settling Parties have the option to file testimony or technical statements by September 1, 2022, in conjunction with the Company's decoupling filing, presenting their preferred method for handling the impact on decoupling of COVID-19. The Settling Parties agree that the extent of recovery of COVID 19 impacts through decoupling adjustments may be impacted by any other means or mechanisms the Commission may establish for addressing COVID 19 impacts.

The decoupling mechanism will be implemented as described in the Company's original filing, with the following amendments:
1) There shall be a 3% cap on the amount refunded or charged to customers. The 3% cap shall be equal to 0.03 times the allowed revenue requirement subject to annual adjustments as shown in the Revenue Subject to Decoupling page of Attachment 9. The decoupling amount will be recovered or refunded during the following year up to the 3% cap. Any amounts in excess of the 3% cap will be deferred and recovered or refunded in future periods, as determined by the Commission. Any amounts deferred will be added to the aggregate decoupling adjustment amount of the following periods until recovered or refunded such that there is a maximum adjustment of 3% refunded or charged each year.
2) Any over- or under-collection shall carry interest at the prime rate.
3) The amounts to be refunded or collected under this decoupling mechanism shall be calculated annually using monthly accruals. These monthly accruals will be summed for each decoupling year and presented in the annual reconciliation filing. Monthly decoupling accruals are calculated as follows:

> *a) As shown in the Monthly Decoupling Calculation page of Attachment 9, the monthly target revenues per customer ("Monthly Target RPC") amounts will be determined for each of the Company's rate classes by:*

i) allocating each years' allowed revenue requirement to each rate class, by month, in proportion to the test year with the following exceptions:

(1) ***Rate classes M, LED-1, and LED-2 will not be included in the decoupling calculations****;*

(2) ***Rate classes D-11 and EV, will not be included in the decoupling calculations*** *as they are new rate classes. The inclusion of those rate classes will be reevaluated in the next rate case; and*

ii) dividing each class monthly target revenue number by the number of monthly customer bills from the test year.

b) Monthly Actual RPC will be calculated as the actual monthly revenues by rate class divided by the actual number of bills for each rate class rendered during that month.

c) The Monthly Actual RPC will be compared to the Monthly Target RPC for each rate class. The difference between the Monthly Actual RPC and the Monthly Target RPC for each rate class will then be multiplied times the actual number of bills rendered for each rate class to determine the monthly revenue shortfall/surplus for each class, the sum of which will constitute the total monthly revenue shortfall/surplus.

d) At the end of the reconciliation period, the monthly amounts will be summed to determine the cumulative annual revenue shortfall/surplus.

e) Subject to the cap described above, the Annual Allowed Adjustment revenue shortfall/surplus, will be allocated to the classes using the Rate Class Allocation identified on the Decoupling Sensitivity Example page of Attachment 9 which corresponds to the class revenue apportionment of the distribution revenue requirement contained in this Agreement, as detailed on Line 115 of Attachment 5, page 4.

f) The amount allocated to each rate class will be allocated to the kWh and kW rate adjustments for each class on the basis of the actual kWh and kW's of the decoupling year. Attachment 9 is an illustration of the above decoupling calculation, using estimated amounts. The Settling Parties agree that the dollar amounts in Attachment 9 do not embody any party's projections or proposals.

Software Change

The reader is advised that the billing system used during the first rate decoupling year was the Cogsdale system, and the general ledger program was Great Plains. Effective October 1, 2022, the Company converted from those systems to the SAP software system. As a result, the testing and description of the reports and general ledger accounts used will be different for all subsequent decoupling years.

Revised filing schedule R034

The revised filing schedule R034 shows for the 12 month period of July 2021 through June 2022 the target revenue per customer (RPC), the reported actual revenue per customer, the variance, the number of "actual bills", and the calculated decoupling ((difference between Target RPC- Actual RPC)*# actual bills). The schedule includes those calculations for rate classes:

D Domestic (individual private dwelling, individual apartment, or for farm purposes)

D-10 Domestic – Opt Peak
G-1 General TOU
G-2 General Long Hour
G-3 General Service
T Limited All Electric
V Limited Commercial Space Heating

Audit reviewed the monthly Bills and Volumes reports which summarize the Cogsdale billing system activity each month. The rate categories within Cogsdale were:

D-05- Legacy National Grid labels – combine with D-06 equates to Rate D in total.
D-06- Legacy National Grid labels – combine with D-05 equates to Rate D in total.
D-10 Domestic-Optional Peak Load
D-11 Battery Storage Pilot-**excluded** from RDAF calculation per the Settlement Agreement
G-1 General Service Time-of-Use
G-2 General Long Hour Service
G-3 General Service
M Street Lighting (governmental entities) **excluded** from RDAF calculation per the Settlement Agreement
T Limited Total Electrical Living
V Limited Commercial Space Heating

Other rates per the tariff:
U Unmetered
LED-1 Outdoor Lighting (governmental entities) for streets or highways and other areas in the public domain-**excluded** from the RDAF calculation per the Settlement Agreement
LED-2 Outdoor Lighting (governmental entities converting from high pressure sodium, mercury vapor, or incandescent lighting to Light Emitting Diode-**excluded** from the RDAF calculation per the Settlement Agreement
EV Plug in Electric Vehicle D-12-**excluded** from the RDAF

1. Total Revenue

Using the monthly Bills and Volumes reports (downloads of the Cogsdale billing system), Audit reviewed ten rate classes, twelve charge types, and seventeen general ledger accounts each month. The review has been compiled for the first decoupling year July 2021 through June 2022 total revenue as follows:

Rate Class	TOTAL Yr 1	
D-05	$ 24,267,780.48	
D-06	$ 33,924.26	
D-10	$ 340,712.46	
D-11	$ 60,932.70	
G-1	$ 10,637,107.78	
G-2	$ 5,946,217.93	
G-3	$ 5,778,637.30	
M	$ 984,996.72	
T	$ 784,039.21	
V	$ 17,953.63	
Grand Total	$ 48,852,302.47	
exclude D-11	$ (60,932.70)	
exclude M	$ (984,996.72)	
Adjusted total	$ 47,806,373.05	
Total per Bates 33	$ 47,806,372.00	
variance	$ 1.05	rounding

Audit selected the month of May 2022 as a sample month in which to ensure that the reported actual revenue and reported actual customer equivalent bills could be verified from the filing page Bates R034 to the billing system and the total revenue to the general ledger. To do so, Audit reviewed the May 2022 Cogsdale Bills and Volumes report, the Cogsdale reconciliation, the Oakville (Liberty Utilities) Great Plains reconciliation, and the detailed general ledger accounts' activity.

In general, the monthly revenue reconciliation process begins with a review of the Revenue data file, which is adjusted by the Power Purchase expense, the low income electric assistance customers who use a competitive supplier, and any other adjustments necessary to ensure that the billing system revenue agrees with the general ledger financial system.

Granite State Electric Revenue Control Summary
May 2022

	RecordCount	Billed_Amount
Revenue Data File	**1,488,362**	**$ 8,843,320.30**
Purchased Power Expense		$ 84,951.81
41-MT Correction	(2,483)	$ 26,678.95
Duplicate Records	-	$ -
Missing Cycles	121	$ 481,151.11
Miss Cycl 41-MT Correction	-	$ -
Previous Month Missing Cycles	-	$ -
Zero Amount or Purchased Power Records	(820,052)	$ -
Bills & Volume PowerPivot 'BatchesA Query0'	**665,948**	**$ 9,436,102.17**

The "Revenue Data File" figures are direct data totals from the Cogsdale billing system, adjusted (by the Billing department) by

- the Purchased Power figure, which is an expense, not revenue which is debited to account 8830-2-0000-52-5455-5552, Purchased Power-Fixed &SO;
- 41-MT is an internal Cogsdale code indicating the commodity portion of the EAP Discount for customers who receive the discount and who receive their electricity through a marketer under the retail access program. The Company noted that: "*Originally customers with marketers received the EAP Discount only on their distribution service. This changed in 2018 per Order No. 26,132 in Docket DE 18-057 Statewide Low-Income Electric Assistance Program, Order Approving Change to EAP Discount. Incorporating the change in the Cogsdale billing system resulted in duplicate records in the revenue data file necessitating a correction process to remove them.*"
- Missing Cycles line represents billing cycle 19 for May 2022 but was issued after the end of May 2022. As a result, that May billing cycle 19 had to be added into the total to ensure the monthly reported total is correct. The amount was deducted from the June Control Summary, thus not overstating revenue across the two months.
- Zero amount or Purchase Power record represent those lines within the Cogsdale system which had not activity during the month of May 2022.

Audit requested clarification of the "Record Count" vs. the Equivalent Bill count. The Company confirmed that the record count represents all customers' billing detail transaction records. That is, each line item charge for each customer. The Company also noted that there were approximately 32 transaction records per customer for May 2022. Refer to the ***Equivalent Bills*** section of this report for additional information.

An accountant then downloads an accounts receivable comparison of the Great Plains general ledger revenue accounts to the Oakville Revenue Data file (Cogsdale), which summarized below, shows a $0.04 difference, which was traced to a credit memo. The $8,954,951.06 total agrees with sum of the first three lines in the Revenue Control summary above.

NOTE: CCSM-BILL & CCSM-VOID Transactions Only			
GENERAL LEDGER (Great Plains)			
fr. <conn:Revenue Data GSE1>			
Source Document	(Multiple Items)		
Row Labels	**Sum of Credit Amount**	**Sum of Debit Amount**	**Sum of Net Amount**
8830-2-0000-20-2142-2542	$416,906.59	$48,723.54	$368,183.05
8830-2-0000-20-2142-2543	$0.00	$688.82	($688.82)
8830-2-0000-40-4290-4401	$569,198.59	$1,501.53	$567,697.06
8830-2-0000-40-4290-4402	$1,991,950.22	$6,106.96	$1,985,843.26
8830-2-0000-40-4290-4403	$2,177,342.59	$6,483.22	$2,170,859.37
8830-2-0000-40-4290-4423	$218,060.78	$623.51	$217,437.27
8830-2-0000-40-4290-4424	$1,841,169.88	$8,062.66	$1,833,107.22
8830-2-0000-40-4290-4425	$1,090,835.65	$11,295.52	$1,079,540.13
8830-2-0000-40-4290-4426	$20,892.48	$0.00	$20,892.48
8830-2-0000-40-4290-4427	$531,052.65	$0.00	$531,052.65
8830-2-0000-40-4290-4428	$78,459.91	$11,682.82	$66,777.09
8830-2-0000-40-4290-4441	$74,856.56	$8.72	$74,847.84
8830-2-0000-40-4290-4442	$14,757.08	$1.01	$14,756.07
8830-2-0000-40-4290-4443	$13,330.54	$1.35	$13,329.19
8830-2-0000-40-4290-4473	$31.77	$0.00	$31.77
8830-2-0000-40-4290-4474	$5,141.45	$0.00	$5,141.45
8830-2-0000-40-4290-4475	$6,144.02	$0.00	$6,144.02
Grand Total	**$9,050,130.76**	**$95,179.66**	**$8,954,951.10**

NOTE: "BILL", "FNAL" & "SPEC" Transactions Only	
OAKVILLE REVENUE DATA FILE	
fr. <conn:Revenue Data GSE3>	
Row Labels	**Sum of Billed_Amount**
8830-2-0000-20-2142-2542	$368,183.05
8830-2-0000-20-2142-2543	($688.82)
8830-2-0000-40-4290-4401	$567,697.06
8830-2-0000-40-4290-4402	$1,985,843.26
8830-2-0000-40-4290-4403	$2,170,859.37
8830-2-0000-40-4290-4423	$217,437.26
8830-2-0000-40-4290-4424	$1,833,107.19
8830-2-0000-40-4290-4425	$1,079,540.13
8830-2-0000-40-4290-4426	$20,892.48
8830-2-0000-40-4290-4427	$531,052.65
8830-2-0000-40-4290-4428	$66,777.09
8830-2-0000-40-4290-4441	$74,847.84
8830-2-0000-40-4290-4442	$14,756.07
8830-2-0000-40-4290-4443	$13,329.19
8830-2-0000-40-4290-4473	$31.77
8830-2-0000-40-4290-4474	$5,141.45
8830-2-0000-40-4290-4475	$6,144.02
Grand Total	**$8,954,951.06**

The data files above were verified to the May 2022 Revenue Control Summary:

Revenue Data File	$8,843,320.30
Purchased Power Expense	$ 84,951.81
41-MT Correction	$ 26,678.95
Subtotal	$8,954,951.06
Adjustment	$ .04
Total Data Files	$8,954,951.10

The accounts receivable detail of "missed cycle" invoices was provided, demonstrating the $481,151.11 of billing cycle 19, which supports the fifth line in the Revenue Control summary above.

NOTE: CCSM-BILL & CCSM-VOID Transactions Only			
GENERAL LEDGER (Great Plains)			
fr. <conn:Revenue Data GSE1>			
Source Document	CCSM-BILL		
Row Labels	**Sum of Credit Amount**	**Sum of Debit Amount**	**Sum of Net Amount**
8830-2-0000-20-2142-2542	$67,465.94	$0.00	$67,465.94
8830-2-0000-40-4290-4423	$1,351.13	$0.00	$1,351.13
8830-2-0000-40-4290-4424	$417,193.56	$4,859.96	$412,333.60
8830-2-0000-40-4290-4425	$0.44	$0.00	$0.44
Grand Total	**$486,011.07**	**$4,859.96**	**$481,151.11**

NOTE: "BILL", "FNAL" & "SPEC" Transactions Only	
OAKVILLE REVENUE DATA FILE	
fr. <conn:Revenue Data GSE3>	
Row Labels	**Sum of Billed_Amount**
8830-2-0000-20-2142-2542	$67,465.94
8830-2-0000-40-4290-4423	$1,351.13
8830-2-0000-40-4290-4424	$412,333.60
8830-2-0000-40-4290-4425	$0.44
Grand Total	**$481,151.11**

Audit then compared the reported Total revenue, seen in Column CR to the Interruptible Credits in Column BA and SRAF Revenues in Columns BE and AW, which shows a variance of $434,960.17. That figure is the net of the SBC revenue and the EAP discounts.

Total Adjusted 5/22 column CQ	5/2022 column CR	Interruptible Credits column BA and SRAF Revenue column BE and AW	BA and BE minus CR
D-05	$ 4,515,051.00	$ 4,613,163.48	$ 98,112.48
D-06	$ 9,436.85	$ 9,726.99	$ 290.14
D-10	$ 70,629.08	$ 71,771.31	$ 1,142.23
D-11	$ 11,965.92	$ 12,436.40	$ 470.48
G-1	$ 1,813,124.11	$ 2,022,079.83	$ 208,955.72
G-2	$ 1,191,909.07	$ 1,265,662.25	$ 73,753.18
G-3	$ 1,124,361.32	$ 1,168,920.56	$ 44,559.24
M	$ 103,225.85	$ 105,106.50	$ 1,880.65
T	$ 158,470.78	$ 164,126.28	$ 5,655.50
V	$ 2,968.02	$ 3,108.57	$ 140.55
Totals by Rate classes	**$ 9,001,142.00**	**$ 9,436,102.17**	**$ 434,960.17**

The net $434,960.17 represents the EAP discount and revenue, verified more specifically within the Cogsdale report as:

Rate Class	EAP Rev Discount column AR	sbc rev column AJ
D-05	$ (46,498.93)	$ 144,611.41
D-06	$ (68.74)	$ 358.88
D-10	$ (1,458.35)	$ 2,600.58
D-11	$ (12.98)	$ 483.46
G-1	$ -	$ 208,955.72
G-2	$ -	$ 73,753.18
G-3	$ -	$ 44,559.24
M	$ -	$ 1,880.65
T	$ (580.31)	$ 6,235.81
V	$ -	$ 140.55
	$ (48,619.31)	**$ 483,579.48**
		$ 434,960.17

GENERAL LEDGERS		sum of the revenues by rate class by type	variance
8830-2-0000-40-4290-4401	$ 567,697.06	$ 567,697.06	$ -
8830-2-0000-40-4290-4402	$ 1,985,843.26	$ 1,984,952.25	$ 891.01
8830-2-0000-40-4290-4403	$ 2,170,859.37	$ 2,170,859.37	$ -
8830-2-0000-40-4290-4423	$ 218,788.39	$ 218,788.39	$ -
8830-2-0000-40-4290-4424	$ 2,245,440.79	$ 2,245,440.79	$ -
8830-2-0000-40-4290-4425	$ 1,079,540.57	$ 1,079,540.57	$ -
8830-2-0000-40-4290-4426	$ 20,892.48	$ 20,892.48	$ -
8830-2-0000-40-4290-4427	$ 531,052.65	$ 531,052.65	$ -
8830-2-0000-40-4290-4428	$ 66,777.09	$ 66,777.09	$ -
8830-2-0000-40-4290-4441	$ 74,847.84	$ 74,847.84	$ -
8830-2-0000-40-4290-4442	$ 14,756.07	$ 14,756.07	$ -
8830-2-0000-40-4290-4443	$ 13,329.19	$ 13,329.19	$ -
8830-2-0000-40-4290-4473	$ 31.77	$ 31.77	$ -
8830-2-0000-40-4290-4474	$ 5,141.45	$ 5,141.45	$ -
8830-2-0000-40-4290-4475	$ 6,144.02	$ 6,144.02	$ -
Grand Adjusted Total	**$ 9,001,142.00**	$ 9,000,250.99	$ 891.01
Other GL accounts	column CN		
8830-2-0000-20-2142-2542	$ 435,648.99	$ 435,648.99	$ -
8830-2-0000-20-2142-2543	$ (688.82)	$ (688.82)	$ -
	$ 434,960.17	**$ 434,960.17**	**$ -**
TOTAL GL vs Cogsdale	**$ 9,436,102.17**	**$ 9,435,211.16**	**$ 891.01**

The $891.01 variance noted between the general ledger and the Cogsdale download was traced to rate class D-11 (which is correctly excluded from the Revenue Decoupling distribution revenue total). The Company noted that Cogsdale did not capture the entire revenue data file for that rate class, and that the file provided to the DoE staff and Audit was re-run after the error was identified.

The overall general ledger May 2022 reconciliation was then provided and reviewed. Within that file were several specific inputs into the reconciliation. Audit reviewed each data file.

Reconciliation	Used to recncile the month end revenue file back to the LU and GP general ledgers seperately
GJ_SJ_PMTRX PIVOT DETAILS	Extract from the Oakville Finance Team
(GP) GL	Smart List extract of the GP Revenue General Ledger accounts
LU- GL	Smart List extract of the LU Rvenue GLs with the Nolan entries removed
LU-NO MISC REV	Smart List extract of the LU Revenue General Ledger accounts used for comparison to Great Plains
GP vs LU	Compare GL details if variance exists
OAKVILLE REVENUE FILE	Extract from the Oakville Finance Team
Balancing	Used to identify the individual missing bills from each billing batch.
GP Smartlist Parameters	screenshots of the GP general ledger accounts and transaction period (5/1/22 - 5/31/22)
LU Smartlist Parameters	screenshots of the LU general ledger accounts and transaction period (5/1/22 - 5/31/22)

To determine the Distribution Revenue of <u>$3,598,317.17 for May 2022</u>, Audit verified the Cogsdale information to the rate classes and types of charges included in the overall Distribution revenue:

Total Adjusted 5/22 Column CQ	Customer Distrbtn (charge) Column L	Fixture and Pole Dist Rev Column P	High Voltage Discount Column BI	High Voltage Metering Cr Column BM	Optional Demand Column BQ	Demand Column BU	Energy Column BY	TOTAL Dstrtn Revenue Column T
D-05	$ 547,738.61						$ 1,196,172.45	$ 1,743,911.06
D-06	$ -						$ 2,620.82	$ 2,620.82
D-10	$ 6,477.74						$ 16,931.08	$ 23,408.82
D-11	$ 1,370.82						$ 2,382.48	$ 4,644.31
G-1	$ 67,683.34		$ (12,760.34)	$ (8,245.72)	$ 4,172.28	$ 701,849.20	$ 111,963.39	$ 864,662.15
G-2	$ 71,266.62		$ (120.20)	$ (51.93)	$ 556.86	$ 376,640.11	$ 27,902.57	$ 476,194.03
G-3	$ 99,957.27						$ 331,977.79	$ 431,935.06
M	$ -	$ 74,847.84					$ 10,285.92	$ 85,133.76
T	$ 12,625.79						$ 41,565.88	$ 54,191.67
V	$ 289.51						$ 1,104.05	$ 1,393.56
Totals by Rate classes	**$ 807,409.70**	**$ 74,847.84**	**$ (12,880.54)**	**$ (8,297.65)**	**$ 4,729.14**	**$ 1,078,489.31**	**$ 1,742,906.43**	**$ 3,688,095.24**
Deduct								
D-11	$ 1,370.82						$ 2,382.48	$ 4,644.31
M	$ -	$ 74,847.84					$ 10,285.92	$ 85,133.76
Adjusted Agrees with the filing Bates page R034								**$ 3,598,317.17**

Rate class D-11 and M are removed from the calculation for revenue decoupling, as described in the Settlement Agreement. Additional revenue types, by rate class as above, were included in the total May 2022 Cogsdale Bills and Volumes report and subsequent general ledger entries. The System Benefit Charge (SBC revenue) and Electric Assistance Program (EAP) customer discount are correctly not included as revenue:

Total Adjusted 5/22 Column CQ	Other Revenue not in Total Distribution Energy Service Rev AF	Stranded Cost Rev AB	Transmission Revenue column X
D-05	$ 2,060,629.76	$ (12,972.20)	$ 723,482.38
D-06	$ 5,048.45	$ (32.45)	$ 1,800.03
D-10	$ 38,169.25	$ (236.69)	$ 9,287.70
D-11	$ 7,035.75	$ (57.01)	$ 342.87
G-1	$ 204,409.11	$ (18,071.10)	$ 762,123.95
G-2	$ 415,696.76	$ (6,817.86)	$ 306,836.14
G-3	$ 509,350.80	$ (4,083.94)	$ 187,159.40
M	$ 13,329.19	$ (144.41)	$ 4,907.31
T	$ 81,909.74	$ (554.23)	$ 22,923.60
V	$ 1,071.43	$ (14.05)	$ 517.08
Totals by Rate classes	**$ 3,336,650.24**	**$ (42,983.94)**	**$ 2,019,380.46**

EAP Rev Discount Column AR	SBC revenue Column AJ
$ (46,498.93)	$ 144,611.41
$ (68.74)	$ 358.88
$ (1,458.35)	$ 2,600.58
$ (12.98)	$ 483.46
	$ 208,955.72
	$ 73,753.18
	$ 44,559.24
	$ 1,880.65
$ (580.31)	$ 6,235.81
	$ 140.55
$ (48,619.31)	**$ 483,579.48**
	$ 434,960.17

Audit then selected rate class V to review specific customer level invoice details to ensure the accuracy of the reported information within the Bills and Volumes report for May 2022. Rate class V was chosen, as a 100% test could be conducted. Bates page R034 shows 17 equivalent actual bills, with a revenue per customer of $81.97. That result was verified to:

May 2022 rate class V:	
Customer Charge	$ 289.51
Distribution Charge	$1,104.05
Total for RPC calculation	$1,393.56
17 equivalent bills-verified to Cogsdale	17
Calculated revenue per customer	$ 81.97
Energy Service	$1,071.43
Stranded Cost Charge	$ (14.05)
Transmission Charge	$ 517.08
Total EXCLUDED from RPC calculation	$1,574.46
Total Rate Class V May 2022 Revenue	$2,968.02

2. Total Number of Customers, also known as Equivalent Bills 541,290

The reported actual bills issued within each rate class in each month of the July 2021 through June 2022 RDAF year summed to 541,290. Using the monthly Bills and Volumes reports, Audit summed the monthly customer equivalent bills by rate class, and verified that those figures agree with the actual customer counts on the filing page Bates R034:

Rate Class	7/2021	8/2021	9/2021	10/2021	11/2021	12/2021	1/2022	2/2022	3/2022	4/2022	5/2022	6/2022	TOTAL Yr 1
D-05	36,598	36,429	37,130	36,427	36,549	36,549	37,097	36,865	37,232	37,057	37,160	36,878	441,971
D-06	2	2	2	2	2	2	2	2	-	-	-	-	16
D-10	440	439	438	436	430	442	441	428	435	461	439	439	5,268
D-11	84	80	78	77	-	138	135	93	96	93	93	93	1,060
G-1	145	145	146	150	144	151	147	155	156	149	152	163	1,803
G-2	960	966	963	982	951	979	961	982	969	976	962	1,004	11,655
G-3	5,847	5,795	5,839	5,846	5,730	5,839	5,882	5,807	5,926	5,838	5,870	5,875	70,094
M	-	-	-	-	-	-	-	-	-	-	-	-	-
T	861	861	865	852	861	860	853	859	857	850	857	855	10,291
V	16	16	15	15	18	16	16	16	16	15	17	16	192
Sum	**44,953**	**44,733**	**45,476**	**44,787**	**44,685**	**44,976**	**45,534**	**45,207**	**45,687**	**45,439**	**45,550**	**45,323**	**542,350**
Exclude D-11	(84)	(80)	(78)	(77)	-	(138)	(135)	(93)	(96)	(93)	(93)	(93)	(1,060)
Exclude M	-	-	-	-	-	-	-	-	-	-	-	-	-
R034 Total	**44,869**	**44,653**	**45,398**	**44,710**	**44,685**	**44,838**	**45,399**	**45,114**	**45,591**	**45,346**	**45,457**	**45,230**	**541,290**

Audit requested clarification of why the bills and volumes counts go out to several decimal places in the Excel version of the Bills and volumes reports, and was told that:

> "*Although about 98% of billing transactions for Granite State will result in the sum of the equivalent bills for a given transaction equal to one, this is not always the case due to initial and final bills. Initial and final bills are pro-rated. For an initial bill, the billing period for the first bill is from the move-in date until the next cycle read for that customer, or if that period is less than 10 days, the following cycle read date. Thus, an initial bill may be either short or long, although the majority are short. For final bills, the billing period is from the last cycle read date until the move-out date. Thus, final bills are almost always short. In addition to initial and final bills, there can be unusual circumstances that might result in a pro-rated bill. These types of pro-rated bills are rare*."

Audit also questioned if the Bates page R034 customer counts are reflective of the adjustments to the raw Cogsdale data (such as the Purchased Power and Missing Cycles), and was told, yes, the reported figures do reflect the adjustments.

Audit met with Liberty and selected the month of May 2022 as a sample billing month in which to test the reported revenues, customer counts, revenue per customer, etc., and to ensure that the Cogsdale billing system data was accurately reconciled to the general ledger (Great Plains). The reader is reminded that in October 2022, Liberty converted from Cogsdale and Great Plains to SAP for billing, general ledger financial statement recording, work order processing, etc. Audit was told that the SAP is a sophisticated system which has granular data, but the reporting has not yet been customized to fit all of the needs of Liberty that Cogsdale had. The Company noted that custom queries can be made of the SAP system as needed.

Within the Cogsdale system, proration of bills would be done only if the billing period for a customer was too short or too long, such as shorter than 27 days or longer than 34 days, or if there is a price change within the customer's billing cycle. Because in NH all price changes are effective on the first of a month, there are always customers who will have bills prorated. Those prorations mean that part of the billing is on one rate and part is on a different rate. It does not indicate that the customer was counted twice or received two bills.

Audit summed the rate class equivalent bill totals for each of the twelve months, using the Bills and Volumes reports. For Year 1, the sum of the calculated equivalent bills, for all rate classes was 542,350. Exclusion of rate class D-11 equivalent bills 1,060 results in the 541,290 noted on R034. Rate class M had no equivalent bills.

Audit then selected the months of November 2021 and June 2022 in which to review the specific billing detail for rate classes G-1 and G-2. 100% of customer level actual detailed billing components were reviewed:

	11/2021	RPC Target	**RPC Actual**	**06/2022**	RPC Target	**RPC Actual**
G1	144	$6,097.44	**$5,756.71**	163	$6,937.26	**$5,564.70**
G2	951	$ 527.26	**$ 498.48**	1,004	$ 571.36	**$ 509.80**

The revenue included in the calculation of the RPC Actual included the Customer Charge, Distribution Charges, and any High Voltage revenue and discount. For calculation of the November 2021 revenue per customer, for rate classes G1 and G2, Audit verified to account level detail, the following:

G-1 November 2021 Revenue Included in RPC					
Cogsdale Identifier	**Cogsdale description**	**Cogsdale Revenue**			
1	41-HVM	$	(7,740.58)	$	(7,740.58)
1	41-optdemand	$	5,930.83	$	5,930.83
9	High Voltage Discount	$	(15.00)		
22	High Voltage Discount	$	(374.40)		
28	High Voltage Discount	$	(73.08)		
30	High Voltage Discount	$	(10,573.22)	$	(11,035.70)
13	Distribution Chg (kW)	$	-		
14	Distribution Chg (kW)	$	-		
15	Distribution Chg (kW)	$	-		
27	Distribution Chg (kW)	$	-		
29	Distribution Chg (kW)	$	-		
14	Distribution Chg (kW)	$	33,319.86		
15	Distribution Chg (kW)	$	423,243.99		
21	Distribution Chg (kW)	$	7,053.70		
27	Distribution Chg (kW)	$	1,376.83		
29	Distribution Chg (kW)	$	199,422.61	$	664,416.99
365	Dist Chg Off Pk	$	(1.45)		
631	Dist Chg Off Pk	$	74.64		
638	Dist Chg Off Pk	$	18,051.55		
645	Dist Chg Off Pk	$	17,493.86	$	35,618.60
722	Dist Chg On Pk	$	15.71		
730	Dist Chg On Pk	$	25,541.26		
738	Dist Chg On Pk	$	30,524.54	$	56,081.51
690	Distribution Chg	$	-		
698	Distribution Chg				
722	Distribution Chg	$	171.89		
730	Distribution Chg	$	14,693.42		
738	Distribution Chg	$	6,861.86	$	21,727.17
689	Customer Chg	$	-		
697	Customer Chg	$	-		
705	Customer Chg	$	-		
713	Customer Chg	$	-		
721	Customer Chg	$	153.05		
729	Customer Chg	$	42,406.45		
737	Customer Chg	$	21,407.42	$	63,966.92
	Revenue included in RPC Calculation			**$**	**828,965.74**
Equivalent Bill verified to allocation of customer charges					**144**
Calculated Revenue per Customer agrees with Bates R034				**$**	**5,756.71**

G-2 November 2021 Revenue Included in RPC					
Cogsdale identifier	**Cogsdale description**	**Cogsdale Revenue**			
1	41-HVM	$	(72.38)	$	(72.38)
1	41-optdemand	$	1,045.37	$	1,045.37
9	High Voltage Discount	$	(100.80)		
22	High Voltage Discount	$	-		
28	High Voltage Discount	$	(82.50)		
30	High Voltage Discount	$	(20.12)	$	(203.42)
13	Distribution Chg (kW)	$	(9.00)		
14	Distribution Chg (kW)	$	24,596.17		
15	Distribution Chg (kW)	$	345,636.52		
27	Distribution Chg (kW)	$	1,562.55		
29	Distribution Chg (kW)	$	381.47		
14	Distribution Chg (kW)	$	-		
15	Distribution Chg (kW)	$	-		
21	Distribution Chg (kW)	$	-		
27	Distribution Chg (kW)	$	-		
29	Distribution Chg (kW)	$	-	$	372,167.71
365	Dist Chg Off Pk	$	-		
631	Dist Chg Off Pk	$	-		
638	Dist Chg Off Pk	$	-		
645	Dist Chg Off Pk	$	-	$	-
722	Dist Chg On Pk	$	-		
730	Dist Chg On Pk	$	-		
738	Dist Chg On Pk	$	-	$	-
690	Distribution Chg	$	0.02		
698	Distribution Chg	$	(0.03)		
722	Distribution Chg	$	230.47		
730	Distribution Chg	$	19,182.21		
738	Distribution Chg	$	11,294.72	$	30,707.39
689	Customer Chg	$	-		
697	Customer Chg	$	(44.81)		
705	Customer Chg	$	(75.96)		
713	Customer Chg	$	(72.89)		
721	Customer Chg	$	564.00		
729	Customer Chg	$	44,650.59		
737	Customer Chg	$	25,393.01	$	70,413.94
	Revenue included in RPC Calculation			**$**	**474,058.61**
Equivalent Bill verified to allocation of customer charges					**951**
Calculated RpC agrees with Bates R034				**$**	**498.48**

Revenue types that are excluded from the calculation of the RPC were noted to be Energy charges, System Benefits charges, and Transmission charges. By customer, Audit summarized those charges were summarized to be:

G-1 November 2021 Revenue EXCLUDED from RPC					
Cogsdale Identifier	**Cogsdale description**		**Cogsdale Revenue**		
38	Energy Service	$	-		
59	Energy Service	$	(3,630.21)		
371	Energy Service	$	(37.78)		
637	Energy Service	$	177.44		
644	Energy Service	$	54,402.98		
651	Energy Service	$	31,963.29		
696	Energy Service	$	-		
704	Energy Service	$	-		
728	Energy Service	$	232.37		
736	Energy Service	$	43,892.83		
744	Energy Service	$	24,134.31	$	151,135.23
366	Stranded Cost Chg	$	0.48		
632	Stranded Cost Chg	$	(24.68)		
639	Stranded Cost Chg	$	(5,967.47)		
646	Stranded Cost Chg	$	(5,779.54)		
691	Stranded Cost Chg	$	-		
699	Stranded Cost Chg	$	-		
723	Stranded Cost Chg	$	(22.54)		
731	Stranded Cost Chg	$	(4,833.03)		
739	Stranded Cost Chg	$	(4,483.03)	$	(21,109.81)
367	Sys Benefits Chg	$	(4.07)		
633	Sys Benefits Chg	$	209.12		
640	Sys Benefits Chg	$	50,574.19		
647	Sys Benefits Chg	$	48,981.52		
692	Sys Benefits Chg	$	-		
700	Sys Benefits Chg				
724	Sys Benefits Chg	$	190.99		
732	Sys Benefits Chg	$	40,959.71		
740	Sys Benefits Chg	$	37,993.62	$	178,905.08
368	Transmission Chg	$	(17.74)		
634	Transmission Chg	$	912.07		
641	Transmission Chg	$	220,572.01		
648	Transmission Chg	$	213,625.69		
693	Transmission Chg	$	-		
701	Transmission Chg	$	-		
725	Transmission Chg	$	832.98		
733	Transmission Chg	$	178,639.98		
741	Transmission Chg	$	165,703.61	$	780,268.60
	Excluded from Calculation of RPC				$ 1,089,199.10

G-2 November 2021 Revenue EXCLUDED from RPC					
Cogsdale identifier	**Cogsdale description**		**Cogsdale Revenue**		
38	Energy Service	$	(1,020.12)		
59	Energy Service	$	-		
371	Energy Service	$	-		
637	Energy Service	$	-		
644	Energy Service	$	-		
651	Energy Service				
696	Energy Service	$	0.50		
704	Energy Service	$	(0.46)		
728	Energy Service	$	2,070.57		
736	Energy Service	$	193,300.36		
744	Energy Service	$	137,773.78	$	332,124.63
366	Stranded Cost Chg	$	-		
632	Stranded Cost Chg	$	-		
639	Stranded Cost Chg	$	-		
646	Stranded Cost Chg	$	-		
691	Stranded Cost Chg	$	(0.01)		
699	Stranded Cost Chg	$	-		
723	Stranded Cost Chg	$	(60.84)		
731	Stranded Cost Chg	$	(5,064.82)		
739	Stranded Cost Chg	$	(2,977.32)	$	(8,102.99)
367	Sys Benefits Chg	$	-		
633	Sys Benefits Chg	$	-		
640	Sys Benefits Chg	$	-		
647	Sys Benefits Chg	$	-		
692	Sys Benefits Chg	$	0.06		
700	Sys Benefits Chg	$	(0.05)		
724	Sys Benefits Chg	$	515.70		
732	Sys Benefits Chg	$	42,922.95		
740	Sys Benefits Chg	$	25,232.98	$	68,671.64
368	Transmission Chg	$	-		
634	Transmission Chg	$	-		
641	Transmission Chg	$	-		
648	Transmission Chg	$	-		
693	Transmission Chg	$	0.29		
701	Transmission Chg	$	(0.28)		
725	Transmission Chg	$	2,599.55		
733	Transmission Chg	$	216,386.60		
741	Transmission Chg	$	127,206.86	$	346,193.02
	Excluded from Calculation of RPC			$	738,886.30

Audit verified all revenue types to a Cogsdale drill-down detailed report for November 2021:

G1 revenue included in the RPC calculation	$ 828,965.74
G1 revenue excluded from the RPC calculation	$1,089,199.10
Total November 2021 G1 revenue	$1,918,164.84
G2 revenue included in the RPC calculation	$ 474,058.61
G2 revenue excluded from the RPC calculation	$ 738,886.30
Total November 2021 G2 revenue	$1,212,944.91

For customer classes G1 and G2, the overall June 2022 revenue detail was reviewed as was done for the November 2021 calculations. Audit summarized the revenue totals more succinctly as follows:

Cogsdale Revenue Type-rate class G1	Total Revenue to INCLUDE in RPC	Total Revenue to EXCLUDE from RPC
41-HVM	$ (8,497.55)	
41-OptDemand	$ 4,935.29	
Customer Chg	$ 72,619.51	
Dist Chg Off Pk	$ 32,232.67	
Dist Chg On Pk	$ 60,507.83	
Distribution Chg	$ 24,951.11	
Distribution Chg (kW)	$ 733,007.62	
High Voltage Discount	$ (12,710.94)	
	$ 907,045.54	
Equivalent Bill count	**163**	
Revenue per Customer	**$ 5,564.70**	agrees with R034
	Revenue EXCLUDED from RPC	
Energy Service		$ 194,306.04
Stranded Cost Chg		$ (16,487.57)
Sys Benefits Chg		$ 252,999.63
Transmission Chg		$ 800,531.58
		$ 1,231,349.68
TOTAL G1 June 2022 Revenue		**$ 2,138,395.22**

Cogsdale Revenue Type-rate class G2	Total Revenue to INCLUDE in RPC	Total Revenue to EXCLUDE from RPC
41-HVM	$ (57.14)	
41-OptDemand	$ 899.72	
Customer Chg	$ 74,433.74	
Dist Chg Off Pk	$ -	
Dist Chg On Pk	$ -	
Distribution Chg	$ 27,622.02	
Distribution Chg (kW)	$ 409,058.23	
High Voltage Discount	$ (120.47)	
	$ 511,836.10	
Equivalent Bill count	**1,004**	
Revenue per Customer	**$ 509.80**	agrees with R034
	Revenue EXCLUDED from RPC	
Energy Service		$ 405,748.42
Stranded Cost Chg		$ (5,908.20)
Sys Benefits Chg		$ 90,338.16
Transmission Chg		$ 291,621.54
		$ 781,799.92
TOTAL G2 June 2022 Revenue		**$ 1,293,636.02**

3. Mathematical Calculation of Revenues per Customer

The revised filing schedule R034 shows for the 12 month period of July 2021 through June 2022 the target revenue per customer (RPC), the actual revenue per customer, the variance, the number of "actual bills", and the calculated decoupling ((difference between Target RPC-Actual RPC)*# actual bills). The schedule includes those calculations for rate classes:

D Domestic
D-10 Domestic – Opt Peak
G-1 General TOU
G-2 General Long Hour
G-3 General Service
T Limited All Electric
V Limited Commercial Space Heating

Audit compared the filing, MST-1, Reported to be a copy of the May 26, 2020 Settlement Agreement (SA) Attachment 9 in DE 19-064, to the actual Settlement Agreement. The pages accurately reflect the Settlement Agreement as approved by the PUC.

The SA Attachment 9 pages 1 through 6 demonstrate how the revenue decoupling was proposed, and the resulting target revenue per customer. The Agreement was approved by Order 26,376 on June 30, 2020.

Within the revised filing Bates page R034 of the current docket, every rate class and every month varied when compared to the Settlement Agreement target revenues. As demonstrated on MST-2, Bates page 0030 through 0032 the revenue per customer changed as a result of a Step increase to the revenue requirement, Reliability Enhancement, Recoupment, Rate Case expense recovery, and a second Step adjustment. The adjusted Target Revenue per Customer on MST-2, Bates page R034 is summarized below:

Target Revenue per Customer per Revised filing Bates page R034, Exhibit 2 in 22-052 Hearing

MONTH	Domestic D-2	Domestic Opt. Peak D-10	General ToU G-1	General Long Hour G-2	General Service G-3	Limited All Electric T	Ltd Comm Space Heating V
January 22	$ 64.59	$ 85.81	$ 6,364.45	$ 539.39	$ 96.39	$ 126.33	$ 134.57
February 22	$ 54.85	$ 79.09	$ 6,315.72	$ 538.61	$ 90.71	$ 104.27	$ 119.54
March 22	$ 51.92	$ 70.64	$ 6,337.04	$ 546.31	$ 86.77	$ 95.37	$ 106.15
April 22	$ 51.14	$ 66.31	$ 6,416.41	$ 534.80	$ 84.35	$ 84.82	$ 101.09
May 22	$ 46.20	$ 55.45	$ 6,166.40	$ 550.56	$ 79.23	$ 64.55	$ 84.52
June 22	$ 50.95	$ 53.69	$ 6,937.26	$ 571.36	$ 84.29	$ 57.77	$ 86.28
July 21	$ 57.94	$ 60.03	$ 7,291.19	$ 584.80	$ 88.76	$ 61.02	$ 105.88
August 21	$ 60.26	$ 67.09	$ 7,451.83	$ 585.09	$ 92.62	$ 61.29	$ 116.78
September 21	$ 59.78	$ 63.98	$ 7,300.39	$ 585.78	$ 92.89	$ 63.74	$ 101.20
October 21	$ 46.48	$ 51.89	$ 6,476.16	$ 555.48	$ 77.99	$ 56.35	$ 85.46
November 21	$ 47.79	$ 56.86	$ 6,097.44	$ 527.26	$ 76.30	$ 72.99	$ 79.79
December 21	$ 57.17	$ 72.28	$ 6,294.06	$ 535.83	$ 90.22	$ 101.72	$ 114.16

Audit compared 100% of the reported equivalent bills to the Bills and Volumes monthly reports, then divided the distribution revenue (discussed above), also summarized using the monthly Bills and Volumes reports, by the equivalent bills, in order to verify the calculated revenue per customer. Overall, for the first decoupling year, the mathematical accuracy of the report on R034 varied by an immaterial net $129, demonstrated below:

	Domestic D-2	Domestic Opt. Peak D-10	General ToU G-1	General Long Hour G-2	General Service G-3	Limited All Electric T	Ltd Comm Space Heating V	TOTAL
Audit Calculated Revenue	$ 393,982.26	$ (3,099.11)	$ (1,293,543.86)	$ (517,867.60)	$ (300,148.46)	$ (30,609.02)	$ (1,769.27)	$ (1,753,055.06)
Total R034 Reported Revenue	$ 394,005.00	$ (3,101.00)	$ (1,293,545.00)	$ (517,868.00)	$ (300,037.00)	$ (30,611.00)	$ (1,769.00)	$ (1,752,926.00)
Net Immaterial Variances	$ (22.74)	$ 1.89	$ 1.14	$ 0.40	$ (111.46)	$ 1.98	$ (0.27)	$ (129.06)

The monthly total revenue detail did vary within each rate class, as summarized:

Summary of the Comparison of a Recalculation of Monthly Revenue by Rate Class

	Domestic D-2	Domestic Opt. Peak D-10	General ToU G-1	General Long Hour G-2	General Service G-3	Limited All Electric T	Ltd Comm Space Heating V	TOTAL
July 2021	$ 21.00	$ (0.40)	$ 0.25	$ (8.60)	$ (15.77)	$ (3.44)	$ 0.48	$ (6.48)
August 2021	$ 181.93	$ 2.67	$ 0.35	$ 3.44	$ (20.75)	$ (3.09)	$ 0.12	$ 164.67
September 2021	$ (222.16)	$ 2.18	$ 0.20	$ (1.72)	$ (17.13)	$ (1.65)	$ (0.35)	$ (240.63)
October 2021	$ (113.05)	$ 0.04	$ -	$ 3.70	$ (28.96)	$ 3.40	$ (0.25)	$ (135.12)
November 2021	$ 292.74	$ -	$ (0.12)	$ (3.78)	$ (1.50)	$ (3.31)	$ (0.04)	$ 283.99
December 2021	$ (136.71)	$ (1.16)	$ 0.05	$ 1.85	$ (29.03)	$ -	$ (0.20)	$ (165.20)
January 2022	$ (138.52)	$ 1.54	$ 0.02	$ (1.80)	$ 22.22	$ 6.88	$ 0.52	$ (109.14)
February 2022	$ (43.73)	$ (1.76)	$ (1.20)	$ 0.90	$ 31.23	$ (3.96)	$ 0.20	$ (18.32)
March 2022	$ 13.12	$ 0.10	$ 0.88	$ (1.39)	$ (6.10)	$ 2.89	$ (0.04)	$ 9.46
April 2022	$ (29.12)	$ (2.39)	$ 0.15	$ 0.76	$ (1.92)	$ 4.00	$ (0.40)	$ (28.92)
May 2022	$ 152.00	$ (1.07)	$ (0.16)	$ 0.28	$ (48.50)	$ (4.24)	$ (0.35)	$ 97.96
June 2022	$ (0.24)	$ 2.14	$ 0.72	$ 6.76	$ 4.75	$ 4.50	$ 0.04	$ 18.67
Total Year 1	$ (22.74)	$ 1.89	$ 1.14	$ 0.40	$ (111.46)	$ 1.98	$ (0.27)	$ (129.06)

Reconciling General Ledger Account

Audit requested the general ledger account in which any reconciling balance related to the RDAF over or (under) collection is reflected. For Great Plains, the general ledger system in place throughout the first RDAF year, the account is 8830-2-0000-10-1169-1828. When the Company converted to the SAP system in October 2022, the account is 3071-10167-131100-10182300. The consistent FERC related account in both general ledger systems is 182, Other Regulatory Assets.

As of June 30, 2022, the balance in the 8830-2-0000-10-1169-1828, Deferred Decoupling Asset account was **$1,695,090.00**. Monthly activity in that balance sheet account was offset with monthly entries to revenue account 8830-2-0000-40-4460-4951, Decoupling Revenue, beginning July 2021 through March 2022. In March, the entries in that revenue account were reversed and posted instead to revenue account 8830-2-0000-40-4210-4561, where the revenue was posted through the end of the first RDAF year. Audit verified that the tariff reflected a revenue decoupling adjustment factor calculation, but for the first decoupling year, did not include an actual rate to charge customers. Effective October 2022, the revenue account used for the monthly decoupling entries is 3071-1016104561007-1016795000-400300-10456100.

For informational purposes only, Audit noted:
Per Tariff Second revised page 21, effective May 1, 2022 per DE 22-018, Order 26,619 April 28,2022:
The Revenue Decoupling Adjustment Clause (RDAC) will be included in the transmission charge annual rate filing for reconciliation. The RDAC is further described in Section 39A of the Tariff

The Third revised page 21, effective March 1, 2023 no longer refer to the RDAC. Rather, the RDAF is reflected in the Net Distribution Charge, which is the sum of the Distribution Charge, the Revenue Decoupling Adjustment Mechanism, and the REP/VMP. The Eighteenth revised page 126 reflects the RDAF, effective March 1, 2023 as

Rate D, Off-peak Water Heat, Farm	0.00281
Rate D-10	0.00180

Rate G-1	0.00104
Rate G-2	0.00151
Rate G-3	0.00253
Rate T	0.00285
Rate V	0.00001

The July 2021 through June 2022 revenue was verified to the following monthly general ledger entries, and demonstrates that the difference between the target revenue per customer and the actual calculated revenue per customer was $1,695,090:

Balance sheet Deferred Asset Account reflecting the rolling Decoupling Revenue-account is used to offset the Income Statement Revenue account

						Debit	Credit	Balance	
Balance 12/31/2020				**8830-2-0000-10-1169-1828**	**Deferral Decoupling Asset**			**$ -**	
1607523	Financial	7/31/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 18,051.00	$ -	$ 18,051.00	Decoupling Adjustment Jul 2021
1622697	Financial	8/31/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 217,054.00	$ -	$ 235,105.00	Decoupling Adjustment Aug 2021
1622695	Financial	8/31/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 15,811.00	$ -	$ 250,916.00	Revised Decoupling Adj Jul 21
1622687	Financial	8/31/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ -	$ (18,051.00)	$ 232,865.00	Reverse Decoupling Adj Jul 21
1640466	Financial	9/30/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 206,301.00	$ -	$ 439,166.00	Decoupling Adjustment Sep 2021
1657689	Financial	10/31/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 136,003.00	$ -	$ 575,169.00	Decoupling Adjustment Oct 2021
1674977	Financial	11/30/2021	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 71,518.00	$ -	$ 646,687.00	Decoupling Adjustment Nov 2021
1694316	**Financial**	**12/31/2021**	**8830**	**8830-2-0000-10-1169-1828**	**Deferral Decoupling Asset**	**$ 206,151.00**	**$ -**	**$ 852,838.00**	**Decoupling Adjustment Dec 2021**
1713386	Financial	1/31/2022	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 320,750.00	$ -	$ 1,173,588.00	Decoupling Adjustment Jan 2022
1729324	Financial	2/28/2022	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ -	$ (63,346.00)	$ 1,110,242.00	Decoupling Adjustment Feb 2022
1750036	Financial	3/31/2022	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ -	$ (4,932.00)	$ 1,105,310.00	Decoupling Adjustment Mar 2022
1767044	Financial	4/30/2022	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 116,263.00	$ -	$ 1,221,573.00	Decoupling Adjustment Apr 2022
1781390	Financial	5/31/2022	8830	8830-2-0000-10-1169-1828	Deferral Decoupling Asset	$ 124,882.00	$ -	$ 1,346,455.00	Decoupling Adjustment May 2022
1802117	**Financial**	**6/30/2022**	**8830**	**8830-2-0000-10-1169-1828**	**Deferral Decoupling Asset**	**$ 348,635.00**	**$ -**	**$ 1,695,090.00**	**Decoupling Adjustment Jun 2022**

Audit met with the Company several times to understand the process by which the monthly entries are calculated. Audit understands the process to be:

Using the settlement agreement template of the revenue decoupling year 1, the Company verifies the monthly settled revenue target per customer, then using the Cogsdale billing system reports, inputs the revenue detail into an "actual" revenue per customer template to calculate the monthly revenue per customer based on actual revenues and equivalent bills. The difference between the settlement agreement revenue per customer and the calculated actual revenue per customer is the monthly journal entry.

- A debit to the deferred account 182 indicates that the calculated actual total revenue per customer for the month is less than the target revenue per customer for that month.
- A credit to the deferred account 182 indicates that the calculated actual total revenue per customer for the month is higher than the target revenue per customer for that month.

As a result, based on the discussions and details of the calculations provided to Audit, it appears that the difference between the year one revenue per customer and the calculated year one revenue per customer is $1,695,090. However, Audit was informed that a rate change that took place <u>during the first year</u> was <u>not</u> included in the calculation, thus understating the calculated revenue per customer. Audit asked for the specifics of the error, and was provided with the highlighted shaded columns below. The "Difference" columns are linked to internal Liberty financials, to which Audit does not have access. Based on the figures below, the July 1, 2020 distribution revenue subject to decoupling is understated by an immaterial $(468.03), and the July 1, 2021 understated by $(5,215.28). That specific detail, therefore, cannot be expressly identified as accurate or not.

DE 22-XXX
Attachment MST-2
Page 1 of 6

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Distribution Revenues Subject to Decoupling

Line No.	Decoupling Year	(a)	(b)	(c.)	Per Pam's File - Data per Steve Mullen & Jim Bonner			
	Distribution Revenues	Effective July 1, 2020	Effective July 1, 2021	Effective November 1, 2021	Effective July 1, 2020	Difference	Effective July 1, 2021	Difference
1	Base	$ 43,710,962	$ 46,437,733	$ 48,300,840	$ 43,708,497.81	$ 2,464.19	$ 46,438,344.81	$ (612.31)
2	Step	$ 1,321,451	$ 1,534,738	$ 94,064	$ 1,324,527.00	$ (3,076.00)	$ 1,534,738.00	$ 0.18
3	Reliability Enhancement Program	$ 210,503	$ 213,246	$ -	$ 210,503.00	$ -	$ 213,246.00	$ -
4	Recoupment	$ 917,996	$ 103,688	$ -	$ 917,996.00	$ (0.50)	$ 103,688.00	$ -
5	Rate Case Expense	$ 276,821	$ 11,435	$ -	$ 276,821.00	$ -	$ 11,435.00	$ -
6	Additional Forecasted Revenue/Rounding	$ -	$ -	$ -				
7	Total	$ 46,437,733	$ 48,300,840	$ 48,394,904	$ 46,438,344.81	$ (612.31)	$ 48,301,451.81	$ (612.12)
	Less: Street Lighting Distribution Revenues	Effective July 1, 2020	Effective July 1, 2021	Effective November 1, 2021				
8	Base	$ 1,075,932	$ 1,142,986	$ 1,193,596	$ 1,075,932.00	$ 0.45	$ 1,143,130.14	$ (144.27)
9	Step	$ 32,501	$ 45,508	$ 2,239	$ 32,604.67	$ (103.33)	$ 37,779.24	$ 7,728.78
10	Reliability Enhancement Program	$ 5,176	$ 5,102	$ -	$ 5,181.76	$ (6.20)	$ 5,249.28	$ (147.48)
11	Recoupment	$ 29,377	$ -	$ -	$ 22,597.47	$ 6,779.06	$ 2,552.39	$(2,552.39)
12	Rate Case Expense	$ -	$ -	$ -	$ 6,814.25	$ (6,814.25)	$ 281.48	$ (281.48)
13	Additional Forecasted Revenue/Rounding	$ -	$ -	$ -				
14	Total	$ 1,142,986	$ 1,193,596	$ 1,195,835	$ 1,143,130.14	$ (144.27)	$ 1,188,992.54	$ 4,603.15
	Distribution Revenues Subject To Decoupling	Effective July 1, 2020	Effective July 1, 2021	Effective November 1, 2021				
15	Base	$ 42,635,030	$ 45,294,747	$ 47,107,244	$ 42,632,565.81	$ 2,463.74	$ 45,295,214.67	$ (468.03)
16	Step	$ 1,288,950	$ 1,489,230	$ 91,825	$ 1,291,922.33	$ (2,972.67)	$ 1,496,958.76	$(7,728.60)
17	Reliability Enhancement Program	$ 205,327	$ 208,144	$ -	$ 205,321.24	$ 6.20	$ 207,996.72	$ 147.48
18	Recoupment	$ 888,619	$ 103,688	$ -	$ 895,398.53	$ (6,779.56)	$ 101,135.61	$ 2,552.39
19	Rate Case Expense	$ 276,821	$ 11,435	$ -	$ 270,006.75	$ 6,814.25	$ 11,153.52	$ 281.48
20	Additional Forecasted Revenue/Rounding	$ -	$ -	$ -	$ -		$ -	
21	Total	$ 45,294,747	$ 47,107,244	$ 47,199,069	$ 45,295,214.67	$ (468.03)	$ 47,112,459.27	$(5,215.28)

Summary

Using the monthly Bills and Volumes reports (downloads of the Cogsdale billing system), Audit reviewed ten rate classes, twelve charge types, and seventeen general ledger accounts each month, which summed to total actual year one revenue $47,806,372, which agrees with Bates page 033. That total correctly does excludes rate classes D-11 and M.

The calculated revenue decoupling for year 1, on Bates R034 reflects an under-collection of $(1,752,926). As validated throughout this report, the math was verified. However, the reader is reminded that the actual calculated under-collection amount booked to the general ledger is $1,695,090.00. The difference of $57,836 was verified to a true-up October 31, 2022 journal entry to the deferred 182 SAP general ledger.

Audit selected the month of May 2022 as a sample month in which to ensure that the actual revenue and reported actual customer equivalent bills could be verified from the filing page Bates R034 to the billing system and the total revenue to the general ledger. To do so, Audit reviewed the May 2022 Cogsdale Bills and Volumes report, the Cogsdale reconciliation, the Oakville (Liberty Utilities) Great Plains reconciliation, and the detailed general ledger accounts' activity. There were no exceptions identified in the May 2022 reconciliation process.

Audit also selected the months of November 2021 and June 2022 for rate classes G1 and G2, given the notable variances between the target revenue per customer and the reported actual revenue per customer. The target revenues and the calculation thereof are the result of settlement. Audit verified the reported actual revenue and reported actual bills (also referenced as equivalent bills). There were no exceptions identified.

The verification of the actual revenue used in the Revenue per Customer calculation for all rate classes includes:

Customer Charge
Distribution Charge
High Voltage Charge (as applicable)
High Voltage Discount (as applicable)

Revenue types that are not part of the Revenue per Customer calculation were noted to be:

Stranded Cost Charges
Energy Service Charges
System Benefits Charges
Transmission Charges

Overall, based on the 100% review of the May 2022 rate class V, 100% review of November 2021 rate classes G1 and G2, and the 100% review of June 2022 rate classes G1 and G2, Audit finds no material issues with the revised Bates page R034 details. The total reported under-collection of $(1,752,926) was recalculated by Audit for each rate class for each month, which in total summed to within $129 of the R034 reported under-collection, which is immaterial.

Audit requested the monthly roll-forward of the deferred -182 balances, from inception July 2021 through current, 6/30/2023, which was provided. That period encompasses years 1 and 2. The roll-forward was requested to ensure this first year data was included therein, which it was, and to have access to part of year 2 that will be reviewed in conjunction with the rate case docketed as DE 23-039, test year ending December 31, 2022.

The decoupling revenue calculations done by Liberty <u>do not</u> include Unbilled Revenue, nor does it include monthly adjusting true-ups. Unbilled Revenue, conversely, <u>is</u> part of the decoupling revenue calculations done for Liberty-EnergyNorth, which also calculates the revenue decoupling entries using reported actual revenues and rolling four-month true ups. It is unclear why the two Liberty utilities' revenue decoupling calculations are different, nor is it clear which manner *should* be used. Refer to the Department of Energy testimony in docket DG 22-045, filed on June 8, 2023 at tab #87.

Docket DE 22-035, was opened on April 6, 2022 relating to a step adjustment (approved via settlement in docket DE 19-064) for assets placed in service in 2021. Order 26,661 issued on July 29, 2022 (Revenue decoupling year 2) approved an increase to rates for the asset additions, and a decrease to rates relating to elimination of Rate Case Expenses and the Recoupment of the difference between temporary rates and permanent rates. A further reduction to distribution rates was outlined in Order 26,780 issued March 1, 2023. Order 26,781 issued on March 3, 2023 approved a revised rate design to accommodate the five month recovery of the approved 2021 Step adjustment and other recoveries. Lastly, Order 26,836 issued on May 31, 2023 adjusted rates again, to increase distribution rates by $1,294,385 effective June 1, 2023 through May 31, 2024, to account for an error made by Liberty when reducing the rate case expense and recoupment figures from distribution rates. Audit understands that the timing of these Orders are outside of the first revenue decoupling year, it is important to understand that there were revenue issues that will impact revenue decoupling in years 2 and 3, as well as the rate case docketed as DE 23-039. Audit reviewed the Technical Statement submitted to the PUC by the Company, and notes that the grids on Exhibit 9, HMT-1 page 1 of 5 and HMT-2 page 1 of 3 demonstrate in column (a) the information originally provided as Bates R034 in DE 22-052. That is to say, the adjustments noted on page 22 of this report, were not incorporated into the grids.

<u>Company Comment</u>

The decoupling methodology for Granite State Electric follows the settlement agreement in DE 19-064. The EnergyNorth decoupling methodology and monthly calculations are not the subject of this audit. However, the Company follows the agreed upon methodology from discussions with the Department of Energy Gas Division Staff in Docket No. DG 20-105 and related decoupling dockets.

<u>Audit Conclusion</u>

Audit appreciates the Company's review of this report and the Comment above. While it is clear that the EnergyNorth decoupling methodology is not part of this DE 22-052 audit, the information was included above for reference only. Clarification in the Company Comment detailing the reasons for the differences between methodologies for Granite State Electric and EnergyNorth is, again, appreciated.