

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

**DATE:** August 1, 2022

**FROM:** Sean Courtois, Division of Enforcement, Audit Staff

**SUBJECT:** Northern Utilities Inc.  
DG 22-020 Step Adjustment-2021 Additions  
**Final Audit Report**

**TO:** Thomas Frantz, Director of Regulatory, NH Department of Energy  
Deen Arif, Gas Director, NH Department of Energy  
Paul Dexter, Attorney, NH Department of Energy

**Introduction**

In Docket DG 22-020, Northern Utilities filed a petition for approval of a 2022 step increase to reflect the recovery of 2021 non-growth capital additions in the amount of \$16,442,711 per filing schedule GSL-5 Page 1. The filing schedule GSL-1 indicates there were \$3,306,623 in growth capital additions during 2021. The filing schedule GSL-1 indicates Northern spent \$19,749,334 in 2021 total capital additions that were allocated as 17% to growth and 83% non-growth. The Company on May 27, 2022 filed a Settlement Agreement reached with Department of Energy Staff and the Office of Consumer Advocate as part of the DG 21-104 rate case. The PUC Commission Order number 26,650 issued on July 20, 2022 approved the settlement agreement and permanent rates.

The Settlement Agreement reached with DOE Staff/OCA section 2.2 indicates a \$1,554,966 anticipated Revenue Requirement as of September 1, 2022 that will cover January 1-December 31, 2021 non-growth capital spending. The section 2.2 first step adjustment capital spending details are included in the Settlement Attachment 2 that are five pages. The first page is the revenue requirements for net utility plant, accumulated depreciation, property taxes, and depreciation expense. The second page is the 2021 plant in service beginning balance, additions, retirements, and ending balance. The third page is the 2021 accumulated depreciation beginning balance, depreciation expense, retirements, cost of removal, and ending balance. The fourth page is the pretax rate of return calculation. The fifth page is a \$157,739 post-test year software amortization expense adjustment. The revised GSL-5 filing is the same as the DG 21-104 Settlement Agreement Attachment 2 document.

The Company as part of the proposed DG 22-020 Step Adjustment filed schedules GSL-1 to GSL-5 on April 1, 2022 and revised schedules on June 8, 2022 for GSL-1 and GSL-5. The GSL-1 filing schedule includes a summary of projects placed into service during 2021 that are specific and blanket projects. The filing includes the install cost, cost of removal, plant in service, budgeted amounts, plant accounts, and authorization amounts. The GSL-2 filing schedule are the budget input sheets and construction authorizations for projects placed into

service in 2021. The GSL-3 filing are the cost records for specific projects placed into service during 2021. The GSL-4 filing are cost records for blanket projects placed into service during 2021.

The GSL-5 filing details include the revenue requirement, gross plant general ledger account details, accumulated depreciation, and weighted average cost equity/debt requirements. On June 8, 2022 Northern filed a revised GSL-5 page 1 that provided a more detailed breakout regarding growth and non-growth plant account details on the revenue requirement schedule that is based on net plant additions. The total revenue requirement on the step adjustment for non-growth projects is \$1,554,966.

### **General Ledger (GL)**

Audit verified the Northern 2021 Revised GSL-5 Page 2 plant balances' beginning balance, additions, retirements, and ending balances to the 2021 annual report and the GL accounts seen on the chart below.

Account #	Description	Beginning Balance	Additions	Retirements	Ending Balance
303-02	Intangible Software-10 Year	\$ 2,064,604	\$ -	\$ -	\$ 2,064,604
303-30	Intangible Misc. Plant	\$ 5,176,113	\$ 105,634	\$ -	\$ 5,281,747
303-03	Intangible Software-CIS	\$ 5,585,630			\$ 5,585,630
304-20	Land Rights	\$ 6,816			\$ 6,816
374-40	Land Rights-Other Distribution	\$ 89,111			\$ 89,111
374-50	Rights of Way	\$ 17,911			\$ 17,911
375-20	Structures City Gate Measures	\$ 43,350	\$ -		\$ 43,350
375-70	Structures Other Distribution	\$ 3,217,521	\$ 4,991	\$ -	\$ 3,222,512
376-20	Mains, Coated-Wrapped	\$ 29,746,227	\$ 4,333,003	\$ (29,269)	\$ 34,049,961
376-30	Mains, Bare Steel	\$ 190,837	\$ 320,428	\$ -	\$ 511,265
376-40	Mains, Plastic	\$ 120,342,184	\$ 9,435,649	\$ (173,121)	\$ 129,604,712
376-50	Mains, Joint Seals	\$ 542,145			\$ 542,145
376-60	Mains, Cathodic Protection	\$ 1,082,739	\$ 1,636,977	\$ (540)	\$ 2,719,176
376-80	Mains, Cast Iron	\$ 28,455	\$ -	\$ -	\$ 28,455
378-20	Measuring and Regulating St.	\$ 7,288,982	\$ (12,164)	\$ 179,725	\$ 7,456,543
379-00	Measuring and Regulating TA	\$ 39,266	\$ -	\$ -	\$ 39,266
380-00	Services	\$ 82,837,047	\$ 3,675,958	\$ (78,013)	\$ 86,434,992
381-00	Meters	\$ 4,624,610	\$ 81,333	\$ -	\$ 4,705,943
382-00	Meter Installations	\$ 26,001,685	\$ 51,900	\$ -	\$ 26,053,585
383-00	House Regulators	\$ 733,550	\$ 71,167	\$ -	\$ 804,717
386-10	Conversion Burners	\$ 998,854	\$ 550	\$ -	\$ 999,404
386-20	Water Heaters	\$ 980,041	\$ -	\$ (67,976)	\$ 912,065
389-10	Land	\$ 232,947	\$ -	\$ -	\$ 232,947
391-10	Office Furniture and Equipment	\$ 508,135	\$ 17,062	\$ -	\$ 525,197
393-00	Stores Equipment	\$ 31,520	\$ -	\$ -	\$ 31,520
394-10	Tools, Shop, and Garage	\$ 1,430,421	\$ 235,384	\$ -	\$ 1,665,805
396-00	Power Operated Equipment	\$ 75,266	\$ -	\$ -	\$ 75,266
397-00	Communications Equipment	\$ 1,873,480	\$ 69	\$ (11,227)	\$ 1,862,322
397-25	Metscan Communications Equipment	\$ 112,656	\$ -	\$ -	\$ 112,656
397-35	ERT Automatic Reading Device	\$ 3,470,146	\$ (28,187)	\$ -	\$ 3,441,959
	<b>Grand Total</b>	<b>\$ 299,372,252</b>	<b>\$ 19,929,755</b>	<b>\$ (180,421)</b>	<b>\$ 319,121,586</b>

The Company provided the following journal entries that were booked to the plant in service 101/106 plant accounts for the additions and 108.1 Accumulated Depreciation General Plant for the cost of removal/salvage. The Company provided the detailed journal entries that summarized below:

Account #	Account Name	Debits	Credits
30-40-00-00-101-00-00	Electric Plant in Service	\$ 26,701,532	
30-40-00-00-106-00-00	Completed Const. Non Class.		\$ (6,771,777)
30-40-00-00-107-00-00	CWIP		\$ (19,929,755)
	<b>Total</b>	<b>\$ 26,701,532</b>	<b>\$ (26,701,532)</b>

<b>Account #</b>	<b>Account Name</b>	<b>Debits</b>	<b>Credits</b>
30-40-00-00-108-01-00	Accum. Dep. General Plant	\$ 180,421	
30-40-00-00-101-00-00	Electric Pant in Service		\$ (180,421)
	Total	\$ 180,421	\$ (180,421)

  

<b>Account #</b>	<b>Account Name</b>	<b>Debits</b>	<b>Credits</b>
30-40-00-00-108-01-00	Accum. Dep. General Plant	\$ 642,545	
30-40-00-00-107-01-03	RWIP Gas COR		\$ (642,545)
	Total	\$ 642,545	\$ (642,545)

\$26,701,532 booked to account 101 Electric Plant in Service  
(\$6,771,778) booked to account 101 Completed Construction Not Classified  
 \$19,929,755 **Net Additions** booked to plant in Service as of 12/31/2021  
 \$642,544 Cost of Removal and Salvage Value booked to 108.1 Accum. Dep. Gen. Plant  
 \$20,572,299 Total 12/31/2021 Additions, COR, and net salvage value

Retirements

The Company provided the (\$180,421) in retirements that were booked as of December 31, 2021. The Company debited the 108.1 Accumulated Depreciation General Plant account for \$180,421 and credited the 101 Gas Plant in Service account for the same amount.

Utility Plant in Service Beginning Balance Explanation

The \$301,245,498 Utility Plant Beginning Balance on the Revised Settlement Agreement Attachment 2 Page 1 Revenue Requirement filing schedule is \$1,873,246 different than the \$299,372,252 beginning balance on the Settlement Agreement Attachment 2 Page 2 filing schedule and FERC annual report. The reason for the \$1,873,246 difference is pro forma plant adjustments. The Company on the Revised Filing Schedule GSL-1 Page 2 provides a breakout of the growth and non-growth assets. The Company indicated that based on the mass accounting of assets the accounting system is unable to separate growth/non growth assets for additions, depreciation expense, and retirements.

Continuing Property Records (CPRs)

The Company provided Continuing Property Records for 2021 that show the unitized to plant in service account beginning balance, additions, retirements, cost of removal, and ending balance. The CPRs also showed the 300-subaccount number, location, date placed into service, Asset ID, and the book cost of individual assets. The CPRs also showed the Accumulated Depreciation balances as of December 31, 2021.

Overhead/Cost Allocations

The Company provided the monthly overhead factors for the Northern Utilities NH Division for the 2021 test year. Overhead rates are set based on annual budgets at the beginning of each year and adjusted quarterly, or as necessary. The Company indicated Maine and NH

capitalized overhead rates are calculated separately. The average 2021 rate for payroll related overheads for Northern NH are listed below:

<u>Payroll</u> related overheads include:	<u>2021 Average Rate</u>
Workers Compensation Insurance	1.55%
Benefit Costs	24.92%
401k Costs	6.36%
PBOP Costs (Post-retirement Benefits other than Pension)	10.07%
Small Tools	4.59%
Pension Costs	12.38%
Payroll Taxes	9.38%

The payroll related overhead rates are applied to the monthly payroll dollars per the Company.

The average Materials and Supplies related overheads for both divisions in 2021 include:

	<u>2021 Average Rate</u>
Exempt Stock	19.17%
M&S Storeroom	42.50%

The Materials and Supplies overheads are applied (as appropriate) to Materials and Supplies specifically used for the work order. The overheads are not applied to any other work order cost category.

Transportation expenses are directly charged based on the construction work order sheets completed in the field. Vouchers are also directly charged to the work order. The expenses become part of the “base” charge against which the Construction Overheads are calculated. There were no overhead rates associated with water heaters.

Construction E&O Overheads are based on the sum of the monthly payroll and related overheads, Materials and Supplies and related overheads, transportation, and vouchers. The average rate for 2021 was 43.36%

Construction Overheads-General are applied to all charges noted in the Construction E&O above and include the E&O Overhead. The average rate for 2021 was 6.32%

**2021 E-22s**

Audit reviewed the 2021 E-22 Report of Proposed Capital Expenditures for 2021. The report indicated that as of May 11, 2021 Northern anticipated spending \$23,959,348 in capital additions. The E-22 indicated Northern did routine projects such as city/state projects, gas main extensions, system improvements, gas service upgrades, gas service renewals, and gas meter installations/replacements.

### Construction Budget Authorization Policy

The authorizations policy from October 2021 indicates a revision or supplement are only required for any major changes in scope or spending amount. This is only if the actual amount spent is 15% higher and \$5,000 when comparing the authorized dollars with the actual spending. Then a revised authorization must be prepared, and the appropriate approvals received prior to continuing work. Audit reviewed 11 individual work order additions to verify the work order/documentation complied with the Company authorization policy.

### Capital Budget Policy

Audit reviewed the DE 21-030 Staff Data Request 2-44 Unitil Capital Budget Policy from August 2014. The policy indicates budgets are done every year and each project must be justified with detailed documentation and signed/approved by Unitil management. The Capital Budget Policy indicates there are three types of priority projects. The priority 1 projects are those that are essential to distribute safe and reliable energy. This includes meter purchases and installation, new gas mains and services, water heater and burner replacement regarding Northern NH. The priority #2 projects are those that support essential priority projects such as state/municipal projects, legal/regulatory requirements, and facilities required. The priority #3 projects include system reliability, projects to improve/enhance gas service, and replacement of old/obsolete equipment.

### Payroll

Audit reviewed the Cost Record for each of the projects, which included payroll-straight time and payroll-overtime. Northern provided the Schedule of Wages, which showed the employee designation, and the associated pay rate increases for the contract period September 6, 2020 through June 7, 2025.

### Depreciation

The Company provided the Accumulated Depreciation and Depreciation Expense calculations in the Revised Schedule GSL-5 Page 3. Audit tied the annual depreciation charge totaling \$10,413,124 shown on the Settlement Agreement Attachment 2 Page 1, to supporting journal entries provided by Northern. The Company provided 14 journal entries that summed to \$9,458,253 that were booked to the accumulated depreciation general plant account # 10-30-0-0-108-1. There was \$954,871 booked to account 403 Amortization of Computer Software and account 404 Amortization of Intangible Software. The Company states that under their practice of mass asset accounting, they do not have depreciation entries for individual assets.

### Allowance for Funds Used During Construction

Northern NH calculates the monthly AFUDC using the \$9,937,232 average monthly balance during 2021. In the month in which the work order is placed in service, ½ of the final month is used in the calculation. The AFUDC rate for 2021 was 1.32%. The monthly debt rate

used for 2021 was noted to be 0.0011% that is calculated by dividing the AFUDC annual rate by 12.

**Additions Selected for Detailed Review**

Audit selected 11 projects that were unitized to plant in service as of December 31, 2021 for \$2,205,603 out of \$19,929,755 additions or 11% of all 2021 plant additions. The review of the projects is summarized below. Eight of the projects are non-growth and included within the filing proposal. Three projects are growth related and are not part of the filing, but were reviewed for accuracy of the overall plant additions.

<b>Authorization/ Work Order Number</b>	<b>Description</b>	<b>Unitized to Plant in Service</b>
N-021046-00213456	Asphalt Restoration 2020 Proj. and Carryover	\$ 407,434
N-021042-00213453	Monroe Street Station Upgrade	\$ 238,213
N-021047-00210014	Mueller Equipment	\$ 177,467
N-021026-00213441	Main and Service Replacement Ashbrook Rd., Exeter	\$ 112,794
N-020019-00200006	2020 IT Infrastructure Budget	\$ 36,932
N-021016-00210003	Tools: Normal Additions and Replacements	\$ 32,283
N-019075-00190024	FCS Upgrade	\$ 27,125
N-021071-00213479	Ocean Rd. Greenland	\$ 618,777
<b>Total Non-Growth Projects Reviewed</b>		<b>\$ 1,651,025</b>
N-021092-00213507	New Services on 7 and 8 Exeter Rd. Epping	\$ 177,173
N-020060-00203437	New Mains/Services West End Yards Portsmouth	\$ 297,756
N-021064-00213468	New Mains/ Services 75 Congress St., Portsmouth (Ben Franklin Block)	\$ 79,649
<b>Total Growth Projects Reviewed</b>		<b>\$ 554,578</b>
<b>Total All Projects Reviewed</b>		<b>\$ 2,205,603</b>

**Blanket Agreements/Special Contracts**

Audit was provided with the Annual Mains and Services contract with NEUCO. Vendor charges incurred in the sampled work orders were reviewed for compliance with the rate sheet in effect. Audit was provided with the annual maintenance and installation of new gas mains/services for SCADA Network Services and other work related to gas operations. Vendor charges incurred in the sampled work orders were reviewed for compliance with the rate sheet in effect

NEUCO - All rates were effective April 1, 2017 through March 31, 2022 and covered labor including straight time, overtime, and double time. Equipment based on hourly rates, a contractor’s percentage (overhead) and overtime/double time overheads. The contract was extended for three seasons beginning April 1, 2022 through the 2024 construction season.

SCADA Network Services. - The agreement was effective January 1, 2020 through December 31, 2020 and covered labor, overtime, overheads, equipment, trucks, and tools needed to perform services assigned. The blanket agreement was renewed for calendar year 2021 with the same terms and conditions as the 2020 contract.

**Eight Non-growth Projects Reviewed**

**2020 Asphalt Restoration Exeter Rd. N-021046-00213456 Non-growth #1 \$407,433**

Bids

This project did not go out to bid because it was part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017-March 31, 2022.

Construction Authorization Form (CAF)

Audit reviewed the February 12, 2021 work order #021046, 2020 Asphalt Restoration project. The purpose of the multi-year project is to cover the costs for asphalt restoration for 2020 projects requiring remediation for local municipal projects. This budget item captures all the paving costs for distribution projects over a multi-year time frame to allow much of the project to be closed out. The project was budgeted and authorized to spend \$762,144 based on an historical average of prior year projects for asphalt restoration. The CAF was signed/approved by Northern Utilities Plant Accounting Management, Operations, and Finance Staff in January 2021.

Cost Records

Audit reviewed the cost record for work order #N-021046-00213456 and noted the following:

<u>Cost Record Code</u>	<u>Journal Entry Description</u>	<u>Amount</u>
40-805	Vouchers	\$ 271,106
70-811	Construction E&O Overheads	\$ 107,561
70-813	Construction Overheads Capitalized	\$ 28,081
90-822	Interest Capitalized (AFUDC)	\$ 686
	<b>Net Addition to Plant in Service</b>	<b>\$ 407,433</b>

Audit reviewed all the NEUCO invoices over \$10,000 and all Construction E&O overhead transactions over \$10,000. The ten NEUCO invoices that Audit reviewed summed to \$188,844. The invoices from April to November 2021 were fieldwork labor related asphalt/paving restoration of various distribution projects done during the year. The fieldwork consisted of flagging, paving, trenching, police detail, and overlay. Audit verified the hourly rate and hours worked were calculated and in accordance with the NEUCO Annual Mains and Support Contract. Audit verified the Construction Engineering overhead to verify the rate was applied correctly for three sample transactions over \$10,000, summarized in the chart below.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
NEUCO	Fieldwork/Labor	\$ 34,367
NEUCO	Fieldwork/Labor	\$ 11,557
NEUCO	Fieldwork/Labor	\$ 10,724
NEUCO	Fieldwork/Labor	\$ 18,565
NEUCO	Fieldwork/Labor	\$ 13,975
NEUCO	Fieldwork/Labor	\$ 11,280
NEUCO	Fieldwork/Labor	\$ 37,824
NEUCO	Fieldwork/Labor	\$ 20,853
NEUCO	Fieldwork/Labor	\$ 15,643
NEUCO	Fieldwork/Labor	\$ 14,056
Cons E&O Overhead	Construction Overhead Calc.	\$ 18,459
Cons E&O Overhead	Construction Overhead Calc.	\$ 21,786
Cons E&O Overhead	Construction Overhead Calc.	\$ 61,874
<b>Total</b>		<b>\$ 290,963</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of December 1, 2021.

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-021046-00213456	2020 Asphalt Restoration Projects	101000	376.4 Mains, Plastic	\$ 335,562
		101000	380 Services	\$ 71,871
		Total		\$ 407,433

Retirements and Cost of Removal

The Company did not book any retirement or cost of removal entries in 2021 because of the nature of the asphalt restoration project there were not any mains or services to remove as the assets are new.

**Monroe St. Station Upgrade N-021042-00213453      Non-growth #2      \$238,713**

Bids

The Company indicated there were four different vendors that worked on the Monroe St. Station upgrade project. Andersen Welding Company performed the site work, fabrication, installation/painting of the Monroe St. Pressure Regulator Station as the sole contractor because of their availability. The Company inquired about two other bidders, but they were not available to do the work, as the bid was sought in the middle of 2021.

The Supervisory Control and Data Acquisition (SCADA) installation was performed by SCADA Network Services based on the annual contractual agreement Northern has with the Company. The electrical work was performed by Casco Bay Electric. They were chosen based

on their ability to work on the project with a short turnaround time. The cost of the electrical services was quoted on a time/material basis.

The tie-in to the main, as well as the sidewalk/roadway remediation work. was performed by NEUCO as part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017 through March 31, 2022.

Construction Authorization

The February 10<sup>th</sup> 2021 Construction Authorization was budgeted and authorized to spend \$375,174. The project was to replace the existing regulator station which consists of a slam-shut configuration and the installation of a new modified mini-DR style pressure regulator station that is like what is installed at McDonough St. in Portsmouth. The multi-year upgrade to the existing station improves operational performance making the station consistent with current design standards allowing for better operational performance/safety. The CAF was signed/approved by the Plant Accounting Management, Operations Management, and Finance in February 2021.

Cost Records

Audit reviewed the cost record for work order #N-021042-0021343 and noted the following:

Cost Record Code	Journal Entry Description	Amount
10-800	Payroll Straight Time	\$ 5,704
10-803	Payroll Overtime	\$ 738
27-804	Materials & Supplies Issue	\$ 1,306
40-805	Vouchers	\$ 156,635
50-807	M/S Stores Expense	\$ 419
51-850	Exempt Stock Expense	\$ 150
55-857	Exempt Stock Stores Expense	\$ 58
60-809	Workers Comp Insurance	\$ 98
60-815	Medical Costs Capitalized	\$ 909
60-816	401K Costs Capitalized	\$ 410
60-817	PBOP Costs Capitalized	\$ 656
70-811	Construction E&O Overheads	\$ 92,699
70-813	Construction Overheads Capitalized	\$ 17,057
80-814	Small Tools	\$ 263
90-822	Interest Capitalized (AFUDC)	\$ 891
90-866	Payroll Taxes Capitalized	\$ 518
90-867	Pension Costs Capitalized	\$ 818
K7-804	Issue Reversal	\$ (170)
Net Addition to Plant in Service		<b>\$ 279,159</b>

Audit reviewed two Process Pipeline Service invoices that were from April and May 2021 that summed to \$19,591 for engineering work. Audit reviewed two Anderson Welding LLC invoices that summed to \$66,736. The June 2021 invoices were for welding, construction, and installation of the regulator station at Locus St on the Monroe Station project.

Audit reviewed a July 2021 \$18,165 SCADA Network Services invoice that was labor related to the installation of the regulator station. The Company installed the setup to the Rosemount Line Transmitter Display system, wiring, mounting, pressure monitoring, controllers, telemetry, temperature gage, calibration, and multi valve instrument manifold.

Audit reviewed a \$9,125 November 2021 Invoice from Casco Bay Electric Service that was for lighting and electrical work related to the regulator station.

Audit verified the Construction Engineering overhead to verify the rate was applied correctly for two sample transactions over \$12,000 that is summarized in the chart below.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
Process Pipeline Services	Engineering Services	\$ 12,233
Process Pipeline Services	Engineering Services	\$ 7,358
Anderson Welding LLC.	Welding	\$ 41,220
Anderson Welding LLC.	Construction/Installation Labor	\$ 25,516
Scada Network Services Inc.	Labor/Installation	\$ 18,165
Casco Bay Electric Service	Electrical and Lighting Work	\$ 9,125
Cons E&O Overhead	Construction Overhead Calc.	\$ 15,088
Cons E&O Overhead	Construction Overhead Calc.	\$ 48,219
<b>Total</b>		<b>\$ 176,924</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of December 1, 2021 for \$238,213. This is a \$40,946 difference compared to the general ledger booked in December 2021. The \$40,946 difference is the cost of removal that is not booked until the project is closed to account 101 plant in service. The cost record includes the total amount spent, which includes the cost of removal. The Company booked the charges to the 376.4 Plastic Mains account because the mains include support for the regulator station.

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-021042-00213453	Monroe Street Station Upgrade	106000	376.4 Mains, Plastic	\$ 238,213

Retirements and Cost of Removal

The Company did not book any cost of removal entries because the charges were still in the Completed Construction Not-Classified account 106. The Company does not book cost of removal entries until the project is moved to account 101 plant in service. The Company

indicated they will book \$40,946 in cost of removal charges in 2022. The Company did not book any retirement entries but indicated they will be in 2022.

**N-021047-00210014 Mueller Co. Non-growth #3 \$177,467**

The Company did not go out to bid for this project as the authorization was for the purchase of specific tools designed for the natural gas industry. The Company has always utilized Mueller Equipment for the Mueller Gas tapping equipment.

Construction Authorization

Audit reviewed a February 17, 2021 Construction Authorization for the purchase of new Mueller Co. for tapping and stopping large diameter steel mains in NH. The project was justified by indicating the NH Distribution Operations Center (DOC) does not have the capability to tap and stop larger diameter steel mains. The Mueller Co. equipment will enhance the DOC’s ability to tap and stop these steel mains and will increase the capability for emergency response. The CAF was budgeted/authorized to spend \$110,000. The CAF was signed/approved by Plant Accounting, Operations, and Finance in February 2021.

On March 8, 2021 Northern NH revised the CAF that indicated the Mueller Co. was originally budgeted over a three-year period at \$110,000 per year. In that scenario the tapping equipment would not have been operational until year 3. Northern indicated that purchasing most of the major components in year one, the equipment will be operational and ready to tap and stop 4” diameter high pressure mains in 2021. Operationally it was noted to be more practical to purchase equipment in this manner, as by purchasing most of the major components in year one, the costs for years two and three will be much lower than budgeted. The revised CAF did not include the budgeted estimates for years two and three of the project. The Revised CAF was signed/approved by Plant Accounting, Operations, and Finance in March 2022.

Cost Records

Audit reviewed the cost record for work order #N-021047-00210014 and noted the following:

<u>Cost Record Code</u>	<u>Journal Entry Description</u>	<u>Amount</u>
40-805	Vouchers	\$ 177,467
	Net Addition to Plant in Service	\$ 177,467

Audit reviewed four Mueller Co. invoices that summed to \$122,187. The invoices were from April, May, and August 2021 for the purchase of a stopping machine, drilling machine, completion machine, gate valve sub assembly, extractor, parts, and cutter hub.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
Mueller Co.	Stopping Machine	\$ 31,418
Mueller Co.	Drilling Machine	\$ 25,072
Mueller Co.	Completion Machine	\$ 17,091
Mueller Co.	Gate Valve Sub Assembly	\$ 48,606
<b>Total</b>		<b>\$ 122,187</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of December 1, 2021.

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-021047-00210014	Mueller Equipment	106000	394.1 Tools, Shop, and Garage	\$ 177,467

Retirements and Cost of Removal

The Company did not book any retirement or cost of removal entries in 2021 for this work order. The Company did not book any cost of removal entries because the charges were still in the Completed Construction Not-Classified account 106 account. The Company does not book cost of removal entries until the project is moved to the 101 plant in service account. The retirement entries will be done in later 2022 to retire old drilling equipment.

**Mains/Services Replacement N-021026-00213441          Non-growth #4          \$112,794**

Bids

This project did not go out to bid because it was part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017 through March 31, 2022.

Construction Authorization

The multi-year February 5, 2021 Construction Authorization budgeted/authorized spending for \$213,130 to install 1,800' of 4" HDPE main to tie in Meadowood Dr and Hampton Rd located in Exeter. The justification for the project is that the Company has historically replaced 25 at risk farm taps per year. The Company found that there is a significant number of high-risk farm taps that run on intermediate pressure and some old farm taps run on high pressure. This creates uneven load distribution across the system. Northern Utilities, by installing 1,800 feet of 4-inch HDPE to connect the two uneven loaded sections of the system, will provide enough capacity to meet anticipated system growth for several years. The replacement of high-risk taps is a non-growth project. The CAF was signed/approved by Plant Accounting Management, Operations, and Finance in February 2022.

Cost Records

Audit reviewed the cost record for work order #N-021026-00213441 and noted the following:

Cost Record Code	Journal Entry Description	Amount
27-804	Materials & Supplies Issue	\$ 4,069
40-805	Vouchers	\$ 76,584
50-807	M/S Stores Expense	\$ 1,264
51-850	Exempt Stock Expense	\$ 574
55-857	Exempt Stock Stores Expense	\$ 253
70-811	Construction E&O Overheads	\$ 24,798
70-813	Construction Overheads Capitalized	\$ 6,370
90-822	Interest Capitalized (AFUDC)	\$ 79
K7-804	Issue Reversal	\$ (1,197)
	<b>Net Addition to Plant in Service</b>	<b>\$ 112,794</b>

Audit reviewed three NEUCO invoices that summed to \$250,016. The May-July 2021 invoices were for fieldwork on the Portsmouth Distribution Operations Center main replacement to tie in Meadowood Dr and Hampton Rd in Exeter. The fieldwork consisted of labor, truck driver labor, bobcat, backhoe, flagging, police detail, welding, dump truck, main replacement, trenching, operations, crane operations, and foreman labor. Audit verified the hourly rates/hours worked were calculated correctly. Audit reviewed a \$16,973 May 2021 Construction Engineering overhead rate. Audit verified the supporting calculations for the overhead charges were correct that were provided by the Company.

Vendor	Description	Amount
NEUCO	Field Work/Labor	\$ 10,860
NEUCO	Field Work/Labor	\$ 31,825
NEUCO	Field Work/Labor	\$ 24,825
Const. E&O Overhead	Overhead	\$ 16,973
<b>Total</b>		<b>\$ 84,483</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of December 1, 2021.

CWO	Description	GL	Utility Account	Amount
N-021026-00213441	Main and Service Replacement Ashbrook Rd., Exeter	106000	376.4 Mains, Plastic	\$ 111,120
		106000	380 Services	\$ 1,674
		Total		\$ 112,794

Retirements and Cost of Removal

The Company did not book any retirement or cost of removal entries in 2021 for this work order as the assets were for the mains extension installation only.

**IT Infrastructure Budget N-020019-00200006 Non-growth #5 \$36,932**

Bids

The 2020 IT Infrastructure Capital Project was a blanket hardware/software project for the purchase of desktop, servers, network, telecom, and mobile equipment. The Company indicated they have used Connection Inc. as a Value-Added Seller to purchase Dell computer products. The computers purchased from Connection via Dell are custom configured for the needs of the Company and are priced well below the retail price. The Company also did not experience any supply chain issues in 2021 related to Dell.

Construction Authorization

Audit reviewed the multi-year March 10, 2020 general 2020 IT Infrastructure Budget for UES, Northern NH, Northern ME, and Fitchburg Gas and Electric that budgeted \$1,389,451. The S-000243 Construction Authorization authorizes \$1,389,451 in labor and purchases to be spent on computers, servers, and network charges. The CAF was signed/approved by Accounting, IT Management, and Finance in March 2020.

Audit reviewed a revised December 7, 2020 CAF that increased the authorized spending amount to \$1,748,027 that was due to an unexpected Oracle audit finding, increased labor/project management costs, and unexpected consulting costs needed for Multi-Factor and Mobile Device Management. The Revised CAF was signed/approved by Accounting, IT Management, and Finance in December 2020.

Cost Records

Audit reviewed the cost record for work order #N-020019-00200006 and noted the following:

<u>Cost Record Code</u>	<u>Journal Entry Description</u>	<u>Amount</u>
40-805	Vouchers	\$ 24,892
95-865	Misc. Plant Adjustment	\$ 12,039
Net Addition to Plant in Service		\$ <b>36,932</b>

Audit reviewed all the invoices over \$1,000 and all Miscellaneous Plant adjustments over \$10,000. Audit reviewed 5 PC Connection Inc. invoices from January-March 2020 that were for the purchase of Dell OptiPlex Desktop Computers, a Dell PowerEdge F740xd2 server, and an RSA Secure Online Digital Identification Credential Identifier for the VPN. Audit verified the hourly rates/hours worked were calculated correctly. Audit reviewed a January 2020 invoice

for Robert Half Technology an IT contractor for IT support services for the month of January 2020.

Audit reviewed a \$10,227 Miscellaneous Plant adjustment from February 2021 that is a manual adjusting entry for 2020 IT capital budget upgrades that included the website, enhancements to mobile application, sustainability/governance metrics, and other IT customer facing enhancements. The adjusting entry was added to capture charges that were added later in the year from vendors that had submitted invoices. Audit verified the hourly rates/hours worked were calculated correctly on the supporting invoices provided by the Company.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
PC Connection	PowerEdge F740xd2 Server	\$ 5,294
PC Connection	Dell Desktop Computers	\$ 2,096
PC Connection	Dell Desktop Computers	\$ 1,442
PC Connection	RSA Secure Online ID	\$ 3,965
PC Connection	Dell Desktop Computers	\$ 4,157
Robert Half Technology	Labor/Installation	\$ 667
Misc. Plant Adj.	Manual Adjustment for IT User Experience Project	\$ 10,227
<b>Total</b>		<b>\$ 27,848</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of September 1, 2021.

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-020019-00200006	2020 IT Infrastructure Budget	101000	303.3 Intangible Plant Misc. Soft.	\$ 36,932

Retirements and Cost of Removal

The Company did not book any retirement or cost of removal entries in 2021 for this work order because they indicated the old assets retired were amortized over a 5-year period. The prior assets should still be written off and any retirement/cost of removal entries should be done.

**Tools: Additions and Replacements N-021016-00210003      Non-growth #6      \$32,283**

Bids

The Company did not go out to bid for this project as the authorization was for the purchase of specific tools designed for the natural gas industry. The Company has always utilized Mueller Equipment for the Mueller Gas tapping equipment.

Construction Authorization

Audit reviewed a February 2, 2021 021016 CAF that indicated the authorization/budgeted amount is \$33,497 for Tool additions/replacements. The CAF was for the replacement/upgrades to tools/equipment used in operations, maintenance, and construction activities during the year. The CAF was signed/approved by Accounting, Operations, and Finance Staff in February 2021.

Cost Records

Audit reviewed the cost record for work order #N-021016-00210003 and noted the following:

Cost Record Code	Journal Entry Description	Amount
40-805	Vouchers	\$ 32,283
	Net Addition to Plant in Service	\$ 32,283

Audit reviewed all the invoices over \$1,000. Audit reviewed a March 2021 Bank of America purchase card bank statement for the purchase of parts from Home Depot. The parts included an inverter, fender washer, gas can with smart controls, and concrete anchors.

Audit reviewed an April 2021 Utilitronics invoice for \$3,189 that was for the purchase of line loading equipment. Audit reviewed an April 2021 Locusview Solutions, Inc. invoice for \$1,288 that was for the purchase of an antenna, antenna cable, and battery. Audit reviewed two May 2021 Bascom-Turner Instruments, Inc. invoices that summed to \$23,341. The purchases were for a natural gas explorer that detects carbon monoxide, hydrogen sulfide, and oxygen, water stoppers, dust filters, hoses, valves, and hydrocarbon filters.

Vendor	Description	Amount
Bank of America Purchase Card	March 2021 Home Depot Needed Parts	\$ 1,135
Utilitronics	Purchase of Line Loading Equipment	\$ 3,189
Locusview Solutions	Antenna, Cable, and Battery	\$ 1,288
Bascomb-Turner Instruments Inc.	Natural Gas Explorer, CO, O2 and H2S Detector	\$ 13,372
Bascomb-Turner Instruments Inc.	Natural Gas Explorer, CO, O2 and H2S Detector	\$ 9,969
Total		\$ 28,953

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of December 1, 2021

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-021016-00210003	Tools: Normal Additons and Replacements	106000	394.1 Tools, Shop, and Garage	\$ 32,283

Retirements and Cost of Removal

The Company did not book any retirement or cost of removal entries in 2021 for this work order. The Company did not book any cost of removal entries because the charges were still in the Completed Construction Not-Classified account 106. The Company does not book cost of removal entries until the project is moved to account 101 plant in service. The Company indicated the retirement entries will be posted later in 2022.

**FCS Upgrade N-019075-00190024                      Non-growth #7                      \$27,125**

Bids

This project did not go out to bid as this was a software upgrade from Itron a vendor the Company has worked with in the past and is familiar with the FCS software products.

Construction Authorization

Audit reviewed a July 31, 2019 Field Collection System (FCS) S-000214 authorization that budgeted \$68,900. In August 2019, the budgeted amount was increased to \$77,715 due to increased IT and vendor support service costs. The CAF authorized the Company to spend \$76,615 to upgrade the current Itron Handheld MV-RS version 8.6 to Field Collection Systems (FCS). The purpose of the upgrade was Itron announced a next generation mobile tool kit that is compatible with FCS and FDM software. The new mobile tool kit can coexist with FC300 handhelds, allowing for deployment of the new technology at your own pace and to be able to get the full useful life of the FC300 handhelds. The Company indicated that this was a software and not a software update that was covered under the maintenance agreement with the vendor that expired December 31, 2021. The maintenance agreement did not cover software upgrades. So, therefore the charges were capitalized rather than expensed. The CAF was signed/approved by Accounting, IT Management, and Finance.

Cost Records

Audit reviewed the cost record for work order #N-019075-00190024 and noted the following:

<b>Cost Record Code</b>	<b>Journal Entry Description</b>	<b>Amount</b>
40-805	Vouchers	\$ 3,373
95-865	Misc. Plant Adjustment	\$ 23,752
	<b>Net Addition to Plant in Service</b>	<b>\$ 27,125</b>

Audit reviewed the Itron Inc invoice that was for \$16,865 that allocated \$3,373 for Northern NH to the N-0190075-00190024 work order that was for the Unutil Field Collection

System software upgrade. The invoice indicates Itron Inc. provided professional services that include installation/training services for the FCS system.

Audit reviewed all the Miscellaneous Plant Adjustments over \$4,000 that were manual entries from June to August 2021 for Deferred Field Collection Services software upgrades that were from a non-budgeted item that were later capitalized from a service billing that was booked to account 30-40-00-00-186-50-00 and 30-50-00-00-186-50-00.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
Itron Inc	Software Upgrade	\$ 3,373
Misc. Plant Adj.	Deferred FCS Upgrade	\$ 4,536
Misc. Plant Adj.	Deferred FCS Upgrade	\$ 4,833
Misc. Plant Adj.	Deferred FCS Upgrade	\$ 8,332
<b>Total</b>		<b>\$ 21,074</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of October 1, 2021

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-019075-00190024	FCS Upgrade	106000	303.3 Intangible Plant Misc. Soft.	\$ 27,125

Retirements and Cost of Removal

Since this was a software upgrade, and the software is still in service there were no retirement or cost of removal entries done.

**Ocean Rd Greenland N-021071-00213479                      Non-growth #8                      \$618,777**

Bids

This project did not go out to bid because it was part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017-March 31, 2022.

Construction Authorization

Audit reviewed a July 8, 2021 #021071 Construction Authorization that budgeted \$2,906,740 in main replacement costs on I-95 Ocean Rd. Bridge in Greenland. The multi-year city/state project includes additional work orders for municipal mains/services that need to be relocated/upgraded due to construction conflicts in Portsmouth. The CAF specifically authorized \$610,196 in spending for the replacement of the 8” expansion joint and replacing the cradle/roller supports on the I-95 Ocean Rd. Bridge in Greenland. This is an \$8,581 difference compared to the \$618,777 that was unitized to plant in service. The Company indicated a revised CAF increasing the authorization amount was not needed because the Company

authorization policy only require amounts more than 15% and \$5,000. The CAF was signed/approved by Accounting, Operations, and Finance.

Cost Records

Audit reviewed the cost record for work order #N-021071-00213479 and noted the following:

Cost Record Code	Journal Entry Description	Amount
10-800	Payroll Straight Time	\$ 2,276
10-803	Payroll Overtime	\$ 6,837
27-804	Materials & Supplies Issue	\$ 2,566
40-805	Vouchers	\$ 412,077
50-807	M/S Stores Expense	\$ 997
51-850	Exempt Stock Expense	\$ 453
55-857	Exempt Stock Stores Expense	\$ 199
60-809	Workers Comp Insurance	\$ 127
60-815	Medical Costs Capitalized	\$ 2,734
60-816	401K Costs Capitalized	\$ 611
60-817	PBOP Costs Capitalized	\$ 957
70-811	Construction E&O Overheads	\$ 150,822
70-813	Construction Overheads Capitalized	\$ 35,715
80-814	Small Tools	\$ 456
90-822	Interest Capitalized (AFUDC)	\$ 229
90-866	Payroll Taxes Capitalized	\$ 911
90-867	Pension Costs Capitalized	\$ 1,185
95-865	Miscellaneous Plant Adjustment	\$ (300)
Net Addition to Plant in Service		<b>\$ 618,851</b>

Audit reviewed seven invoices and sampled an overhead calculation/support that summed to \$422,828 for the main replacement costs on I-95 Ocean Rd. Bridge in Greenland.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
Collins Pipe	Pipes	\$ 10,980
NEUCO	Field Work/Labor	\$ 17,660
NEUCO	Field Work/Labor	\$ 74,623
NEUCO	Field Work/Labor	\$ 74,785
NEUCO	Field Work/Labor	\$ 36,516
NEUCO	Field Work/Labor	\$ 46,432
E.D. Swett Inc	Replaced 13 Roller Supports	\$ 75,159
Const. E&O Overhead	Overhead	\$ 86,673
<b>Total</b>		<b>\$ 422,828</b>

Audit reviewed a July 22, 2021 Collins Pipe Supply invoice for 600 four-inch pipes that were priced at \$18.30 per unit to arrive at the net cost of \$10,980 on the invoice. Audit reviewed five NEUCO invoices that summed to \$250,016. The July 12-July 31 2021 invoices were for fieldwork on the Ocean Rd. The fieldwork consisted of labor, truck driver labor, bobcat, backhoe, flagging, police detail, welding, dump truck operations, main replacement, trenching, crane operations, and foreman labor. Audit verified the hourly rates/hours worked were calculated correctly and in accordance with the Annual Mains and Services Maintenance contract.

Audit reviewed a \$75,159 E.D. Swett, Inc. July 2021 invoice that was for work performed on Ocean Rd. over the I-95 Roller Support replacement in Greenland. The scope of work on the invoice indicates E.D. Swett, Inc. replaced 13 roller supports with double roller assemblies and custom steel attachments. E.D. Swett, Inc. was responsible for the maintenance of traffic, including all labor and materials such as police and flagging services. Audit verified the hours worked and hourly rates were calculated correctly on the invoice.

Audit reviewed an \$86,673 July 2021 Construction Engineering overhead rate. Audit verified the supporting calculations for the overhead charges were correct that were provided by the Company.

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of November 1, 2021

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-021071-00213479	Ocean Rd. Greenland	101000	376.2 Coated/Wrapped	\$ 325,281
		101000	376.4 Mains, Plastic	\$ 115,155
		106000	376.4 Mains, Plastic	\$ 9,667
		101000	376.6 Mains, Cathodic Protection	\$ 96,026
		106000	376.6 Mains, Cathodic Protection	\$ 9,667
		101000	380 Services	\$ 53,315
		106000	380 Services	\$ 9,667
			<b>Total</b>	

Retirements and Cost of Removal

The Company did not book any cost of removal entries because the charges were still in the Completed Construction Not-Classified account 106. The Company does not book cost of removal entries until the project is moved to account 101 plant in service. The Company booked \$74 in retirements in August 2021. The retirement entry was part of a larger \$18,391 entry that is summarized below. The Company indicated more entries would be done in 2022.

Summary of Retirement Entry JE #84

	<u>Debits</u>	<u>Credits</u>
10-20-00-00-108-01-00 Accumulated Depreciation-General Plant	\$18,391	
10-20-00-00-101-00-00 Plant in Service		\$18,391

**Three Specific GROWTH Projects were tested**

**New Services/Mains Exeter Rd. Epping N-021092-00213507 GROWTH #1 \$177,173**

Bids

This project did not go out to bid because it was part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017 through March 31, 2022.

Construction Authorization

Audit reviewed the October 6, 2021 #021092 Construction Authorization Form (CAF) for the new growth services/mains needed along Exeter Road in Epping. The project was budgeted to cost \$2,385,028 and began in 2020. The Company authorized \$143,887 for the 021092 CAF. The authorization covered the cost of installation for 500' of 8" HDPE main. The new main is to be tied into the existing 8" HDPE main fed from Janell Ct. in Epping. The work order also included 3 1/4" HDPE Commercial Services and 3 meters. The Northern Engineering Group reviewed the project. The CAF indicates this is a growth project that was identified and evaluated by the Unitil Business Development Group in accordance with the Company's new gas main/service line rate of return policy. This means that no customer contribution was required for the project. The CAF was signed/approved by Northern Utilities Plant Accounting Management, Operations, and Finance Staff in October 2021.

The Company on January 14, 2022 increased the authorization for the work order to \$187,442. This is an increase of \$43,555. The reason for the increase is that overheads were significantly higher than anticipated. They were initially estimated to be \$39,621 but were \$79,433. The overheads increased because more detailed pricing information was learned about the project. The CAF was signed/approved by Northern Utilities Plant Accounting Management, Operations, and Finance Staff in January 2022.

Cost Records

Audit reviewed the cost record for work order #N-021092-00213507 and noted the following:

Cost Record Code	Journal Entry Description	Amount
27-804	Materials & Supplies Issue	\$ 17,100
40-805	Vouchers	\$ 77,188
50-807	M/S Stores Expense	\$ 4,414
51-850	Exempt Stock Expense	\$ 1,217
55-857	Exempt Stock Stores Expense	\$ 377
70-811	Construction E&O Overheads	\$ 66,308
70-813	Construction Overheads Capitalized	\$ 13,125
80-814	Small Tools	\$ 28
90-822	Interest Capitalized (AFUDC)	\$ 95
K7-804	Issue Reversal	\$ (2,680)
Net Addition to Plant in Service		\$ 177,173

Audit reviewed all the NEUCO invoices over \$10,000 and all Construction E&O overhead transactions over \$10,000. The three NEUCO invoices that Audit reviewed summed to \$61,241. The invoices from October and November 2021 were fieldwork labor for the installation of new mains/services along Exeter Rd. The fieldwork consisted of flagging, paving, main installation, police detail, and equipment operation. Audit verified the hourly rate and hours worked were calculated and in accordance with the NEUCO Annual Mains and Support Contract. Audit verified the Construction Engineering overhead to verify the rate was applied correctly for two sample transactions over \$10,000, summarized in the chart below:

Vendor	Description	Amount
NEUCO	Fieldwork/Labor	\$ 17,218
NEUCO	Fieldwork/Labor	\$ 14,867
NEUCO	Fieldwork/Labor	\$ 29,156
Cons E&O Overhead	Construction Overhead Calc.	\$ 31,039
Cons E&O Overhead	Construction Overhead Calc.	\$ 34,815
Total		\$ 127,095

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of December 1, 2021.

CWO	Description	GL	Utility Account	Amount
C-021092-00213507	New Services/Mains Exeter Rd. Epping	106000	376 Mains, Plastic	\$ 167,480
		106000	380 Services	\$ 9,693
Total				\$ 177,173

### Cost of Removal

The Company did not book any cost of removal entries in 2021. The Company did not book any cost of removal entries because the charges were still in the Completed Construction Not-Classified account 106. The Company does not book cost of removal entries until the project is moved to account 101 plant in service.

### Retirements

Based on the records provided to Audit there were no retirements done for project N-021092-00213507. **Audit Issue #1**

**New Mains/Services Portsmouth N-020060-00203437 GROWTH #2 \$297,756**

### Bids

This project did not go out to bid because it was part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017-March 31, 2022.

### Construction Authorization

Audit reviewed a May 22, 2020 Construction Authorization that was budgeted to cost \$3,360,439. The 020060 CAF was authorized to spend \$334,177 to cover costs associated with the installation of 550' of 6" replacement main in Cate St., Portsmouth, 1,670' of new 6" HDPE main, and 400' of 4" HDPE main in the West End Yards Development in Portsmouth. The new main is to be tied into the existing 4" main on Bartlett St. The work order also includes seven 2" residential services and 252 meters. The CAF was signed/approved by Northern Utilities Plant Accounting Management, Operations, and Finance Staff in June 2020.

### Cost Records

Audit reviewed the cost record for work order #C-020060-20201628 and noted the following:

Cost Record Code	Journal Entry Description	Amount
10-800	Payroll Straight Time	\$ 441
27-804	Materials & Supplies Issue	\$ 42,569
40-805	Vouchers	\$ 141,800
50-807	M/S Stores Expense	\$ 17,648
51-850	Exempt Stock Expense	\$ 5,723
55-857	Exempt Stock Stores Expense	\$ 2,808
60-809	Workers Comp Insurance	\$ 6
60-815	Medical Costs Capitalized	\$ 179
60-816	401K Costs Capitalized	\$ 32
60-817	PBOP Costs Capitalized	\$ 49
70-811	Construction E&O Overheads	\$ 78,118
70-813	Construction Overheads Capitalized	\$ 21,499
80-814	Small Tools	\$ 22
90-822	Interest Capitalized (AFUDC)	\$ 3,307
90-866	Payroll Taxes Capitalized	\$ 59
90-867	Pension Costs Capitalized	\$ 60
K7-804	Issue Reversal	\$ (3,511)
Net Addition to Plant in Service		<b>\$ 310,807</b>

Audit reviewed all the NEUCO invoices over \$10,000. The five NEUCO invoices that Audit reviewed summed to \$78,206. The invoices from July 2020, August 2020, October 2020, November 2020, and February 2021 were fieldwork labor for the installation of new mains/services in Portsmouth. The fieldwork consisted of flagging, paving, main installation, police detail, and equipment operation. Audit verified the hourly rate and hours worked were calculated and in accordance with the NEUCO Annual Mains and Support Contract.

Audit reviewed plant inventory transactions over \$7,000 from July 2020, October 2020, and April 2021. The plant inventory records were materials used for the installation of new mains and services. The inventory items included plastic main pipes, fittings, brackets, flanges, valves, bollards, tees, risers, elbows, and couplings. Audit verified the Construction Engineering overhead to verify the rate was applied correctly for two sample transactions over \$12,000 that is summarized in the chart below.

<b>Vendor</b>	<b>Description</b>	<b>Amount</b>
NEUCO	Fieldwork/Labor	\$ 13,799
NEUCO	Fieldwork/Labor	\$ 13,146
NEUCO	Fieldwork/Labor	\$ 24,198
NEUCO	Fieldwork/Labor	\$ 13,418
NEUCO	Fieldwork/Labor	\$ 13,645
	Inventory Records of Plastic	
Materials	Pipes, Fittings, Tees, Flange, Brackets Gaskets, and Valves	\$ 8,921
	Inventory Records of Plastic	
Materials	Pipes, Fittings, Tees, Flange, Brackets Gaskets, and Valves	\$ 9,674
	Inventory Records of Plastic	
Materials	Pipes, Fittings, Tees, Flange, Brackets Gaskets, and Valves	\$ 7,279
Cons E&O Overhead	Construction Overhead Calc.	\$ 14,541
Cons E&O Overhead	Construction Overhead Calc.	\$ 13,259
<b>Total</b>		<b>\$ 131,880</b>

GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of August 1, 2021. This is a \$13,051 difference compared to the Cost Record that is due to retirement entries that were booked in August 2021.

<b>CWO</b>	<b>Description</b>	<b>GL</b>	<b>Utility Account</b>	<b>Amount</b>
N-020060-00203437	New Mains/Services West End Yards Portsmouth	106000	376.4 Mains, Plastic	\$ 275,158
		106000	380 Services	\$ 22,598
			<b>Total</b>	<b>\$ 297,756</b>

Cost of Removal

The Company did not book any cost of removal charges in 2021 because the charges were still in account #106 Completed Construction Not Classified. The Company does not book cost of removal entries until the project is moved to account 101 plant in service.

Retirements

The Company booked \$13,052 in retirement entries in August 2021 in mains/services. The retirement entries were part of a larger August 2021 entry that is summarized below.

<u>Account #</u>	<u>Account Name</u>	<u>Debit</u>	<u>Credit</u>
10-20-00-00-108-01-00	Accum. Dep. Gen Pl.	\$18,391	
10-20-00-00-101-00-00	Plant in Service		\$18,391

**New Mains and Services Portsmouth N-021064-00213468      GROWTH #3      \$79,649**

Bids

This project did not go out to bid because it was part of the NEUCO Annual Mains and Services contract that was in effect April 1, 2017-March 31, 2022.

Construction Authorization

Audit reviewed the March 30, 2021 multi-year Construction Authorization for the installation of new main/services on Congress St. in Portsmouth. The project that includes other work orders is budgeted to cost \$2,385,028. The 021064 work order CAF was authorized to spend \$57,619 in 2021. The CAF covered the cost associated with the installation of 210' of 2" new HDPE main in Feet St. Portsmouth to serve the Ben Franklin Block Buildings known as 75 Congress St. The CAF also included 1 new residential service line and 1 meter. The project was justified due to growth in the area. There was no customer contribution needed for the project as determined by the Unitil Business Development Group as the project was in accordance with the Internal Rate of Return (IRR) in accordance with Unitil's policies addressing the installation of new gas mains/services. The CAF was signed/approved by Plant Accounting, Operations, and Finance in April 2022.

Audit reviewed a revised 021064 July 16, 2021 CAF that increased the authorization to \$78,408. The revision was due to cover costs associated with parking spot rentals, paving, traffic control, and ledge issues. The revised CAF was signed by Plant Accounting, Operations, and Finance. The project was unitized to plant in service on November 1, 2021 for \$79,649. There is a \$1,241 cost difference for the amount authorized compared to the final amount unitized to plant in service. The Company indicated per the authorization policy a revised CAF was not required as the amount was not 15% above the authorized amount and \$5,000.

Cost Records

Audit reviewed the cost record for work order #N-021064-00213468 and noted the following:

Cost Record Code	Journal Entry Description	Amount
27-804	Materials & Supplies Issue	\$ 2,252
40-805	Vouchers	\$ 54,991
50-807	M/S Stores Expense	\$ 633
51-850	Exempt Stock Expense	\$ 288
55-857	Exempt Stock Stores Expense	\$ 127
70-811	Construction E&O Overheads	\$ 17,479
70-813	Construction Overheads Capitalized	\$ 4,490
90-822	Interest Capitalized (AFUDC)	\$ 204
K7-804	Issue Reversal	\$ (814)
Net Addition to Plant in Service		\$ 79,649

Audit reviewed three NEUCO invoices that summed to \$50,777. April and July 2021 invoices were for fieldwork on main replacement on Congress St in Portsmouth. The fieldwork consisted of labor, machinery operations, flagging, police detail, main replacement, trenching, , and foreman labor. Audit verified the hourly rates/hours worked were calculated correctly and in accordance with the Annual Mains and Services Contract.

Vendor	Description	Amount
NEUCO	Field Work/Labor	\$ 31,830
NEUCO	Field Work/Labor	\$ 11,187
NEUCO	Field Work/Labor	\$ 7,760
Total		\$ 50,777

### GL Details

The chart below reflects the CPR records/GL as unitized to plant in service as of November 1, 2021.

CWO	Description	GL	Utility Account	Amount
N-021064-00213468	New Mains/ Services 75 Congress St., Portsmouth (Ben Franklin Block Buildings)	101000	376.4 Mains, Plastic	\$ 44,825
		101000	380 Services	\$ 34,824
			Total	\$ 79,649

### Cost of Removal and Retirements

The Company did not book any retirement or cost of removal entries in 2021 for this work order because they were for main extensions install only.

**Conclusion**

Audit reviewed eleven work orders totaling \$2,205,603, representing 11% of the reported \$19,929,755 in total 2021 gross plant additions. The revised filing schedule GSL-5, page two, Step Additions, agreed with the Company’s general ledger for total additions and retirements.

Audit reviewed solely 8 non-growth projects and 3 growth projects during the audit and is thus not able to provide an opinion on the other projects that were not reviewed. Audit is also not able to express an opinion on the appropriateness of the engineering or specific IT projects’ applicability for Northern-NH. Audit reviewed specific retirement entries for each project, but the Audit is not able to quantify the amount for retirement entries that need to be done in 2022 for non-growth projects #2, #3, #6, and #8, as noted in the text of this report.

Based on the review of those eleven work orders, the ending utility plant in service non growth additions figure of \$16,597,063 is correct on the revised GSL-5 page 1. Audit does not recommend any changes to the \$150,251 in 2021 non growth retirements on GSL-5 page 1 or the non-growth asset revenue requirement of \$1,554,966.

		<b>Non-Growth</b>	<b>Growth</b>		<b>Total</b>	
Beginning Plant Balance	\$	-	\$	-	\$	299,372,252
Additions	\$	16,597,063	\$	3,332,692	\$	19,929,755
Retirements	\$	(150,251)	\$	(30,170)	\$	(180,421)
Ending Plant Balance	\$	16,446,812	\$	3,302,522	\$	319,121,586
Adjusted Ending Balance	\$	16,446,812	\$	3,302,522	\$	319,094,461

## **Audit Issue #1**

### **Retirements-Growth**

#### **Background**

Audit noted that the general ledger did not reflect retirements for work orders N-021092-00213507 New Services/Mains in Exeter in 2021 that were a growth project.

#### **Issue**

Based on the records provided by the Company there were no retirements done for project N-021092-00213507 t.

#### **Recommendation**

The Company should provide any retirement entries for work order N-021092-00213507 that relates to New Services/Mains in Exeter.

There was a retirement of 11 feet of 8” Plastic pipe that was booked in 2022 when the project was closed to Plant in Service (moved from Completed Not Classified Acct 106 to Acct 101). As Audit notes, this is a Growth project and is not included in the Revenue Requirement.

#### **Audit Comment**

Audit concurs with the Company but does not know what the amount or the accounts impacted are for the plastic pipe assets that were retired in 2022 as the specific journal entry was not provided.