

## DG 21-104 Settlement Agreement

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Settlement Attachment 5: Rate Design

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Settlement Attachment 10: Permanent Rate Settlement Revenue Requirement Discovery

Support

**REDACTED**

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DOCKET DG 21-104  
SETTLEMENT REVENUE REQUIREMENT SCHEDULES - REDACTED**

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
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12 MONTHS ENDED DECEMBER 31, 2020

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**COMPUTATION OF REVENUE DEFICIENCY AND REVENUE REQUIREMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

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LINE NO.	(1) DESCRIPTION	(2) REFERENCE	(3) AMOUNT	(4) SETTLEMENT AGREEMENT	(5) CHANGE FROM INITIAL FILING
1	Rate Base	Schedule RevReq-5	\$ 188,719,257	\$ 188,235,077	\$ (484,180)
2	Rate of Return	Schedule RevReq-6	7.75%	7.20%	-0.55%
3	Income Required	Line 1 * Line 2	14,621,110	13,557,443	(1,063,667)
4	Adjusted Net Operating Income	Schedule RevReq-2	8,946,016	9,115,721	169,705
5	Deficiency	Line 3 - Line 4	5,675,094	4,441,722	(1,233,372)
6	Income Tax Effect	Line 7 - Line 5	2,107,856	1,649,755	(458,102)
7	Revenue Deficiency	1.3714 (Schedule RevReq-1-1) * Line 5	\$ 7,782,950	\$ 6,091,477	\$ (1,691,473)

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE**  
**COMPUTATION OF GROSS-UP FACTOR FOR REVENUE REQUIREMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

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<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) RATE</b>	<b>(3) AMOUNT</b>
1	Federal Income Tax Rate	21.00%	0.2100
2	State Income Tax Rate	7.70%	0.0770
3	Federal Benefit of State Income Tax	-(Line 1 * Line 2)	<u>(0.0162)</u>
4	Northern Effective Tax Rate	(Line 1 + Line 2 + Line 3)	<u>0.2708</u>
5	Gross-Up Factor	(1 / 1 - Line 4)	<u><u>1.3714</u></u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
OPERATING INCOME STATEMENT  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2)	(3)	LESS	(4)	(5)	(6)	(7)	(8)	(9)
		TEST YEAR 12 MONTHS ENDED 12/31/2020	COST OF GAS EXCLUDING PROD. & OH. <sup>(1)</sup>		OTHER FLOWTHROUGH <sup>(2)</sup>	TEST YEAR DISTRIBUTION, PROD. & OH.	TEST YEAR DISTRIBUTION	TEST YEAR PROD. & OH.	CALENDAR YEAR 2019 <sup>(3)</sup>	CALENDAR YEAR 2018 <sup>(3)</sup>
1	Operating Revenues:									
2	Total Sales	\$ 65,455,125	\$ 22,701,750	\$	3,458,228	\$ 39,295,147	\$ 38,237,257	\$ 1,057,890	\$ 72,009,468	\$ 78,261,307
3	Total Other Operating Revenues	1,228,348	120,656		-	1,107,692	1,107,692	-	841,893	380,541
4	Total Operating Revenues	\$ 66,683,473	\$ 22,822,406	\$	3,458,228	\$ 40,402,839	\$ 39,344,949	\$ 1,057,890	\$ 72,851,361	\$ 78,641,848
5	Operating Expenses:									
6	Production	\$ 23,544,860	\$ 22,696,215	\$	398,908	\$ 449,736	\$ 449,736	\$ -	\$ 28,226,731	\$ 36,699,896
7	Transmission	63,829	-		-	63,829	63,829	-	72,713	54,452
8	Distribution	3,733,377	-		-	3,733,377	3,733,377	-	3,509,448	3,547,813
9	Customer Accounting	2,608,189	99,544		-	2,508,645	2,508,645	-	2,768,758	2,548,545
10	Customer Service	2,341,706	(0)		2,268,632	73,074	73,074	-	2,319,375	1,946,672
11	Sales Expense	69,178	-		-	69,178	69,178	-	64,467	62,224
12	Administrative & General	6,740,777	-		58,225	6,682,552	6,682,552	-	7,679,291	7,670,327
13	Depreciation	8,876,582	-		-	8,876,582	8,876,582	-	8,166,463	7,482,080
14	Amortizations	816,977	-		-	816,977	816,977	-	838,480	196,816
15	Taxes Other Than Income	4,867,774	-		-	4,867,774	4,867,774	-	4,306,298	4,242,098
16	Federal Income Tax	(30,211)	-		-	(30,211)	(30,211)	-	52,380	(353,526)
17	State Income Tax	(384,644)	-		-	(384,644)	(384,644)	-	(309,547)	(463,245)
18	Deferred Federal & State Income Taxes	2,600,179	-		-	2,600,179	2,600,179	-	2,975,683	3,341,111
19	Interest on Customer Deposits	9,258	-		-	9,258	9,258	-	14,374	18,486
20	Total Operating Expenses	\$ 55,857,829	\$ 22,795,759	\$	2,725,765	\$ 30,336,305	\$ 30,336,305	\$ -	\$ 60,684,915	\$ 66,993,749
21	Net Operating Income	\$ 10,825,644	\$ 26,647	\$	732,463	\$ 10,066,533	\$ 9,008,643	\$ 1,057,890	\$ 12,166,447	\$ 11,648,100

**Notes**

(1) Refer to Workpaper - Cost of Gas

(2) Refer to Workpaper - Flowthrough Detail. Consists of Energy Efficiency, Environmental Response Costs, Residential Low Income Assistance, Rate Case Costs, Recoupment, Lost Revenue, and On Bill Financing

(3) Calendar Years 2019 and 2018 represents Total Company (i.e., Flowthrough and Distribution).

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE**  
**PRO FORMA DISTRIBUTION OPERATING INCOME STATEMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

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LINE NO.	(1) DESCRIPTION	(2)	(3)	(4)	(5)	(6)
		TEST YEAR DISTRIBUTION, PROD. & OH.	PRO FORMA ADJUSTMENTS	TEST YEAR DISTRIBUTION, PROD. & OH. PRO FORMA	PROOF REVENUE REQUIREMENT      PRO FORMA RATE RELIEF	
1	Operating Revenues:					
2	Total Sales	\$ 39,295,147	\$ 2,757,397	\$ 42,052,544	\$ 6,091,477	\$ 48,144,021
3	Total Other Operating Revenues	1,107,692	40,013	1,147,705	-	1,147,705
4	Total Operating Revenues	\$ 40,402,839	\$ 2,797,410	\$ 43,200,249	\$ 6,091,477	\$ 49,291,726
5	Operating Expenses:					
6	Production	\$ 449,736	\$ 76,191	\$ 525,927	\$ -	\$ 525,927
7	Transmission	63,829	-	63,829	-	63,829
8	Distribution	3,733,377	283,760	4,017,137	-	4,017,137
9	Customer Accounting	2,508,645	(21,396)	2,487,249	-	2,487,249
10	Customer Service	73,074	-	73,074	-	73,074
11	Sales Expense	69,178	-	69,178	-	69,178
12	Administrative & General	6,682,552	131,653	6,814,204	-	6,814,204
13	Depreciation	8,876,582	3,161,956	12,038,538	-	12,038,538
14	Amortizations	816,977	(286,359)	530,618	-	530,618
15	Taxes Other Than Income	4,867,774	910,372	5,778,146	-	5,778,146
16	Federal Income Tax	(30,211)	(418,759)	(448,970)	1,180,711	731,741
17	State Income Tax	(384,644)	(981,457)	(1,366,101)	469,044	(897,057)
18	Deferred Federal & State Income Taxes	2,600,179	892,262	3,492,441	-	3,492,441
19	Interest on Customer Deposits	9,258	-	9,258	-	9,258
20	Total Operating Expenses	\$ 30,336,305	\$ 3,748,223	\$ 34,084,528	\$ 1,649,755	\$ 35,734,283
21	Net Operating Income	\$ 10,066,533	\$ (950,813)	\$ 9,115,721	\$ 4,441,722	\$ 13,557,443

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
SUMMARY OF ADJUSTMENTS  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) CLASSIFICATION	(3) SCHEDULE NO.	(4) AMOUNT	(5) SETTLEMENT AGREEMENT	(6) TOTAL ADJUSTMENT
1	Revenue Adjustments					
2	Weather Normalization	Dist Rev	Schedule RevReq-3-1	\$ 1,994,374	\$ -	\$ 1,994,374
3	New Customer Revenue Annualization	Dist Rev	Schedule RevReq-3-2	278,301	-	278,301
4	Residential Low Income	Dist Rev	Schedule RevReq-3-2	264,523	-	264,523
5	Unbilled Revenue	Dist Rev	Schedule RevReq-3-2	294,543	-	294,543
6	Non-Distribution Bad Debt	Dist Rev	Schedule RevReq-3-2	(97,468)	-	(97,468)
7	Misc. Revenue Adjustment	Dist Rev	Schedule RevReq-3-2	4,788	-	4,788
8	Late Fee Adjustment	Oth Rev	Schedule RevReq-3-2	40,013	-	40,013
9	Billed Accuracy Adjustment	Dist Rev	Schedule RevReq-3-2	367	-	367
10	Special Contract Customer Revenue Adjustment	Dist Rev	Schedule RevReq-3-2	17,968	-	17,968
11	Total Revenue Adjustments			<u>\$ 2,797,410</u>	<u>\$ -</u>	<u>\$ 2,797,410</u>
12	Operating & Maintenance Expense Adjustments					
13	Production Expense (O&M)	Prod	Schedule RevReq-3-3	\$ 76,191	\$ -	\$ 76,191
14	Payroll	Dist	Schedule RevReq-3-4	554,442	(270,682)	283,760
15	Distribution Bad Debt	Cust Acct	Schedule RevReq-3-5	88,160	(12,089)	76,071
16	Non-Distribution Bad Debt	Cust Acct	Schedule RevReq-3-2	(97,468)	-	(97,468)
17	Medical & Dental Insurances	A&G	Schedule RevReq-3-6	404,594	(65,986)	338,607
18	Pension	A&G	Schedule RevReq-3-7	(2,185)	-	(2,185)
19	PBOP	A&G	Schedule RevReq-3-7	(19,749)	-	(19,749)
20	SERP	A&G	Schedule RevReq-3-7	58,798	-	58,798
21	401K	A&G	Schedule RevReq-3-7	30,095	(15,352)	14,742
22	Deferred Comp Expense	A&G	Schedule RevReq-3-7	44,415	-	44,415
23	Property & Liability Insurances	A&G	Schedule RevReq-3-8	60,699	(9,564)	51,135
24	NH PUC Assessment	A&G	Schedule RevReq-3-9	116,230	67,118	183,348
25	Dues & Subscriptions	A&G	Schedule RevReq-3-10	(1,774)	-	(1,774)
26	Pandemic Costs	A&G	Schedule RevReq-3-11	(107,125)	-	(107,125)
27	Severance Expense	A&G	Schedule RevReq-3-12	(29,947)	-	(29,947)
28	Rent Expense	A&G	Schedule RevReq-3-13	51,913	(4,549)	47,363
29	Arrearage Management Program (AMP) Implementation Cost	Cust Acct	Schedule RevReq-3-14	92,480	(92,480)	-
30	Inflation Allowance	A&G	Schedule RevReq-3-15	165,684	(165,684)	-
31	Update for 2021 Lease Payments	A&G	Schedule RevReq-3-22	-	17,554	17,554
32	NH DOE Audit Adjustment #4	A&G	Schedule RevReq-3-22	-	(69)	(69)
33	Settlement Adjustment	A&G		-	(463,461)	(463,461)
34	Total Operating & Maintenance Expense Adjustments			<u>\$ 1,485,451</u>	<u>\$ (1,015,243)</u>	<u>\$ 470,207</u>
35	Depreciation And Amortization Expense Adjustments					
36	Depreciation Annualization	Depr	Schedule RevReq-3-16 P1	\$ 469,003	\$ -	\$ 469,003
37	Settled Depreciation Rates	Depr	Schedule RevReq-3-16 P2 Revised	1,847,988	(766,983)	1,081,005
38	Amortize Reserve Imbalance	Depr	Schedule RevReq-3-16 P3	-	1,574,083	1,574,083
39	Production Expense (Depreciation)	Depr	Schedule RevReq-3-3	37,865	-	37,865
40	Software Amortization	Amort	Schedule RevReq-3-17 Revised	189,288	(167,429)	21,859
41	Excess ADIT Flowback	Amort	Schedule RevReq-3-18	(308,218)	-	(308,218)
42	Total Depreciation And Amortization Expense Adjustments			<u>\$ 2,235,925</u>	<u>\$ 639,672</u>	<u>\$ 2,875,597</u>
43	Taxes Other Than Income Adjustments					
44	Property Taxes	Oth Tax	Schedule RevReq-3-19	\$ 617,939	\$ 177,134	\$ 795,073
45	Payroll Taxes - Wage Increases	Oth Tax	Schedule RevReq-3-20 P1	42,415	(22,373)	20,042
46	Payroll Taxes - Employee Retention Credit	Oth Tax	Schedule RevReq-3-20 P2	95,258	-	95,258
47	Total Taxes Other Than Income Adjustments			<u>\$ 755,611</u>	<u>\$ 154,761</u>	<u>\$ 910,372</u>
48	Income Taxes Adjustments					
49	Federal Income Tax	FIT	Schedule RevReq-3-21 P1	\$ (405,701)	\$ 36,576	\$ (369,125)
50	NH State Tax	SIT	Schedule RevReq-3-21 P1	(161,167)	14,530	(146,637)
51	Remove Prior Year Federal Income Tax	FIT	Schedule RevReq-3-21 P4	(49,634)	-	(49,634)
52	Remove Prior Year State Income Tax	SIT	Schedule RevReq-3-21 P4	(834,820)	-	(834,820)
53	Remove Prior Year Deferred Federal Income Tax	DIT	Schedule RevReq-3-21 P4	57,442	-	57,442
54	Remove Prior Year Deferred State Income Tax	DIT	Schedule RevReq-3-21 P4	834,820	-	834,820
55	Total Income Taxes Adjustments			<u>\$ (559,060)</u>	<u>\$ 51,106</u>	<u>\$ (507,954)</u>
56	Rate Base Adjustments					
57	NH Supplemental Plant Adjustment	Plant	Schedule RevReq-5-3	\$ 1,873,246	\$ -	\$ 1,873,246
58	NH Supplemental Plant Adjustment	Acc Depr	Schedule RevReq-5-3	1,350,190	-	1,350,190
59	DIT Settlement Adjustment	RB DIT	Schedule RevReq-5-4	-	-	-
60	Cash Working Capital (Due To Pro Forma Adjustments)	CWC	Schedule RevReq-5-2	189,427	(93,382)	96,045
61	Total Rate Base Adjustments			<u>\$ 712,483</u>	<u>\$ (93,382)</u>	<u>\$ 619,101</u>



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
WEATHER NORMALIZATION  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-1  
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LINE NO.	(1)	(2)
	DESCRIPTION	TOTAL
1	To Increase Test Year Base Revenue to Normalize for the Effect of Warmer than Normal Weather <sup>(1)</sup>	\$ 1,994,374

Notes  
(1) Refer to Direct Testimony of Ron Amen & John Taylor

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
REVENUE ADJUSTMENTS  
12 MONTHS ENDED DECEMBER 31, 2020**

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LINE NO.	(1) DESCRIPTION	(2) TOTAL
1	<u>Customer Growth Revenue Adjustment</u>	
2	To Increase Test Year Base Revenue for 2020 Customer Growth <sup>(1)</sup>	\$ 278,301
3	<u>Residential Low Income Assistance Revenue Adjustment</u>	
4	To Reflect Recovery Of The Low Income Discount Through the LDAC <sup>(2)</sup>	\$ 264,523
5	<u>Unbilled Revenue Adjustment</u>	
6	Remove Unbilled Revenue	\$ 294,543
7	<u>Non Distribution Bad Debt Adjustment (Revenue &amp; Expense)</u>	
8	Remove: Accrued Revenue - Non Dist Bad Debt	\$ (97,468)
9	Remove: Provision For Doubtful Accts - Non-Dist - NH	\$ (97,468)
10	<u>Misc. Revenue Adjustment</u>	
11	Clear Remaining Rate Case Expense And Recoupment Balances	\$ 4,788
12	<u>Late Payment Revenue Adjustment</u>	
13	Normalized Late Payment Revenue <sup>(3)</sup>	\$ 76,773
14	Test Year Late Payment Revenue	36,761
15	Late Payment Revenue Adjustment	\$ 40,013
16	<u>Billed Accuracy Adjustment</u>	
17	Booked to Calculated Bill Adjustment <sup>(1)</sup>	\$ 367
18	<u>Special Contract Customer Revenue Adjustment</u>	
19	Full Year Special Contract Customer Revenue at Special Contract Rate <sup>(4)</sup>	\$ 1,197,813
20	Test Year Special Contract Customer Actual Revenue <sup>(4)</sup>	1,179,845
21	Net Special Contract Customer Revenue Adjustment	\$ 17,968

**Notes**

(1) Refer to Direct Testimony of Ron Amen & John Taylor

(2) See Workpaper - Flowthrough Detail

(3) Normalized Late Payment Revenue based on 2019 calendar year activity

(4) Refer to Workpaper 1.1 and Workpaper 1.2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PRODUCTION EXPENSE ADJUSTMENTS  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) NH	(3) ME	(4) TOTAL	(5) NH PR ALLOC. 40.88%	(6) ME PR ALLOC. 59.12%	(7) NH REVREQ ADJUST.	(8) ME REVREQ ADJUST.
1	Operation & Maintenance Expense							
2	Liquefied Propane Gas Production							
3	Operation Expense							
4	710 - Operation Supervision and Engineering	\$ -	\$ 29,447	\$ 29,447	\$ 12,038	\$ 17,409		
5	717 - Production Operation Labor	-	24,228	24,228	9,904	14,324		
6	735 - Production Operation Miscellaneous	-	59,588	59,588	24,360	35,228		
7	Total Operation Expense	-	113,263	113,263	46,302	66,961		
8	Maintenance							
9	740 - Production Maintenance Supervision	-	29,447	29,447	12,038	17,409		
10	741 - Maintenance of Plant	-	8,464	8,464	3,460	5,004		
11	742 - Maint of Equipment	-	28,588	28,588	11,687	16,901		
12	Total Maintenance Expense	-	66,499	66,499	27,185	39,314		
13	769 - Maint of Scada - Product	-	6,615	6,615	2,704	3,911		
14	Total Manuf Gas Prod Exp	\$ -	\$ 186,377	\$ 186,377	\$ 76,191	\$ 110,186	\$ 76,191	\$ (76,191)
15	Depreciation Expense							
16	Production Plant							
17	305 - Structures	\$ -	\$ 2,277	\$ 2,277	\$ 931	\$ 1,346		
18	Total Production Plant	-	2,277	2,277	931	1,346		
19	Other Storage Plant							
20	361 - Structures & Improve	-	11,705	11,705	4,785	6,920		
21	362 - Gas Holders	-	78,642	78,642	32,149	46,493		
22	Total Other Storage Plant	-	90,347	90,347	36,934	53,413		
23	Total Depreciation & Amortization	\$ -	\$ 92,624	\$ 92,624	\$ 37,865	\$ 54,759	\$ 37,865	\$ (37,865)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2)	(3)	(4)	(5)	(6)
		NONUNION	NuNH UNION	SUBTOTAL	FROM USC	TOTAL
1	Test Year Payroll, Adjusted for Target Incentive Compensation	\$ 946,912	\$ 3,475,844	\$ 4,422,756	\$ 6,330,920	\$ 10,753,676
2	2020 Rate Increase, Annualized <sup>(1)</sup>	-	57,071	57,071	-	57,071
3	Payroll Annualized for 2020 Union Wage Increase	946,912	3,532,915	4,479,827	6,330,920	10,810,747
4	2021 Salary & Wage Increase <sup>(2)</sup>	29,544	105,987	135,531	278,560	414,091
5	Payroll Proformed for 2020 and 2021 Wage Increases	976,456	3,638,903	4,615,358	6,609,480	11,224,838
6	2022 Salary & Wage Increase <sup>(3)</sup>	30,465	109,167	139,632	290,817	430,449
7	Payroll Proformed for 2020, 2021 and 2022 Wage Increases	1,006,921	3,748,070	4,754,991	6,900,297	11,655,288
8	Less Amounts Chargeable to Capital <sup>(4)</sup>	470,131	1,749,974	2,220,105	2,243,977	4,464,082
9	O&M Payroll Proformed	536,790	1,998,096	2,534,886	4,656,320	7,191,206
10	Less: Test Year O&M Payroll <sup>(5)</sup>			2,364,660	4,272,105	6,636,764
11	Increase in O&M Payroll due to Annual Salary and Wage Increases			170,226	384,216	554,442
12	Incentive Compensation Target Adjustment <sup>(6)</sup>			\$ -	-	-
13	Net Adjustment to O&M Payroll / Compensation			170,226	384,216	554,442

**Notes**

(1) NuNH Union increase of 3.0% effective June 1, 2020

(2) NuNH Non-union increase of 3.12% effective January 1, 2021, Union increase of 3.0% effective September 6, 2021 and USC increase of 4.40% effective January 1, 2021

(3) NuNH Non-union increase of 3.12% effective January 1, 2022, Union increase of 3.0% effective September 6, 2022 and USC increase of 4.40% effective January 1, 2022

(4) Test Year Payroll Capitalization Rates:

NuNH	46.69%
USC	32.52%

(5) Refer to Workpaper 2.2 and Schedule RevReq-3-4, page 2.

(6) Refer to Workpaper 2.4

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2)	(3)	(4)	(5)	(6)
		NONUNION	NuNH UNION	SUBTOTAL	FROM USC	TOTAL
1	Test Year Payroll, Adjusted for Target Incentive Compensation	\$ 946,912	\$ 3,475,844	\$ 4,422,756	\$ 6,330,920	\$ 10,753,676
2	2020 Rate Increase, Annualized <sup>(1)</sup>	-	57,071	57,071	-	57,071
3	Payroll Annualized for 2020 Union Wage Increase	946,912	3,532,915	4,479,827	6,330,920	10,810,747
4	2021 Salary & Wage Increase <sup>(2)</sup>	29,544	105,987	135,531	278,560	414,091
5	Payroll Proformed for 2020 and 2021 Wage Increases	976,456	3,638,903	4,615,358	6,609,480	11,224,838
6	2022 Salary & Wage Increase <sup>(3)</sup>	-	-	-	-	-
7	Payroll Proformed for 2020, 2021 and 2022 Wage Increases	976,456	3,638,903	4,615,358	6,609,480	11,224,838
8	Less Amounts Chargeable to Capital <sup>(4)</sup>	455,907	1,699,004	2,154,911	2,149,403	4,304,314
9	O&M Payroll Proformed	520,549	1,939,899	2,460,447	4,460,077	6,920,524
10	Less: Test Year O&M Payroll <sup>(5)</sup>			2,364,660	4,272,105	6,636,764
11	Increase in O&M Payroll due to Annual Salary and Wage Increases			95,788	187,972	283,760
12	Incentive Compensation Target Adjustment <sup>(6)</sup>			\$ -	-	-
13	Net Adjustment to O&M Payroll / Compensation			95,788	187,972	283,760

**Notes**

(1) NuNH Union increase of 3.0% effective June 1, 2020

(2) NuNH Non-union increase of 3.12% effective January 1, 2021, Union increase of 3.0% effective September 6, 2021 and USC increase of 4.40% effective January 1, 2021

(3) NuNH Non-union increase of 3.24% effective January 1, 2022, Union increase of 3.0% effective September 6, 2022 and USC increase of 4.56% effective January 1, 2022

(4) Test Year Payroll Capitalization Rates:

NuNH	46.69%
USC	32.52%

(5) Refer to Workpaper 2.2 and Schedule RevReq-3-4, page 2 Revised.

(6) Refer to Workpaper 2.4

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
UNITIL SERVICE CORP PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-4  
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(1)		(2)
LINE NO.	DESCRIPTION	TOTAL
1	Test Year USC Labor Charges to Northern Utilities - New Hampshire Division <sup>(1)</sup>	\$ 6,330,920
2	2021 Salary & Wage Increase % <sup>(2)</sup>	4.40%
3	Payroll Increase	278,560
4	Proforma Payroll for 2019 Increase	6,609,480
5	2022 Salary & Wage Increase % <sup>(2)</sup>	4.40%
6	Payroll Increase	290,817
7	Proforma Payroll for 2019 and 2020 Increase	6,900,297
8	Payroll Capitalization Ratio for 2021 and 2022 Increase	32.52%
9	Proforma Payroll Capitalization	2,243,977
10	Proforma Amount to O&M Expense	4,656,320
11	Test Year O&M Payroll Amount of USC Charge	4,272,105
12	O&M Payroll Increase	\$ 384,216

**Notes**

(1) Includes Incentive Compensation at Target of \$688,442

(2) Average Increase of 4.40% Effective January 1, 2021 and Average Increase of 4.40% Effective January 1, 2022

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
UNITIL SERVICE CORP PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

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<b>(1)</b>		<b>(2)</b>
<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
1	Test Year USC Labor Charges to Northern Utilities - New Hampshire Division <sup>(1)</sup>	\$ 6,330,920
2	2021 Salary & Wage Increase % <sup>(2)</sup>	4.40%
3	Payroll Increase	278,560
4	Proforma Payroll for 2019 Increase	6,609,480
5	2022 Salary & Wage Increase % <sup>(2)</sup>	0.00%
6	Payroll Increase	-
7	Proforma Payroll for 2019 and 2020 Increase	6,609,480
8	Payroll Capitalization Ratio for 2021 and 2022 Increase	32.52%
9	Proforma Payroll Capitalization	2,149,403
10	Proforma Amount to O&M Expense	4,460,077
11	Test Year O&M Payroll Amount of USC Charge	4,272,105
12	O&M Payroll Increase	\$ 187,972

**Notes**

(1) Includes Incentive Compensation at Target of \$688,442

(2) Average Increase of 4.40% Effective January 1, 2021 and Average Increase of 4.56% Effective January 1, 2022

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DISTRIBUTION BAD DEBT ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-5  
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LINE NO.	(1) DESCRIPTION	(2) AMOUNT	(3) SETTLEMENT AGREEMENT	(4) TOTAL
1	Calendar Year 2019 Write-Offs as a % of Retail Delivery Billed Revenue <sup>(1)</sup>	0.71%	0.71%	0.71%
2	Per Books Based Distribution Billed Revenue - Calendar Year 2019 <sup>(1)</sup>	\$ 39,254,737	\$ -	\$ 39,254,737
3	Revenue Increase from Rate Case	7,782,950	(1,691,473)	6,091,477
4	2020 Total Normalized Delivery Retail Billed Revenue	\$ 47,037,687	\$ (1,691,473)	\$ 45,346,214
5	Uncollectible Delivery Revenue	\$ 336,170	\$ (12,089)	\$ 324,081
6	Less: Test Year Bad Debt Expense	\$ 248,010	\$ -	\$ 248,010
7	Increase in Bad Debt Expense	\$ 88,160	\$ (12,089)	\$ 76,071

Notes

(1) Normalized write offs and per books base distribution billed revenue by using 2019 calendar year activity



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL AND DENTAL INSURANCE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-6  
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	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	TOTAL	NuNH <sup>(1)</sup>	UNITIL SERVICE CORP. <sup>(2)</sup>
1	Proformed Medical and Dental O&M Expense	\$ 871,431	\$ 318,565	\$ 552,866
2	Less: Test Year Medical And Dental Insurance O&M Expense	466,837	182,055	284,783
3	Proformed 2021 And 2022 O&M Increase	\$ 404,594	\$ 136,510	\$ 268,083

Notes  
(1) See Workpapers W3.1  
(2) See Workpapers W3.2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL AND DENTAL INSURANCE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-6 Revised  
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LINE NO.	(1) DESCRIPTION	(2) TOTAL	(3) NuNH <sup>(1)</sup>	(4) UNITIL SERVICE CORP. <sup>(2)</sup>
1	Proformed Medical and Dental O&M Expense	\$ 805,445	\$ 293,606	\$ 511,839
2	Less: Test Year Medical And Dental Insurance O&M Expense	466,837	182,055	284,783
3	Proformed 2021 And 2022 O&M Increase	\$ 338,607	\$ 111,551	\$ 227,056

Notes  
(1) See Workpapers W3.1  
(2) See Workpapers W3.2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
Pension, PBOP, SERP, 401(K) and Deferred Compensation Expense  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-7  
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LINE NO.	(1) DESCRIPTION	(2) TOTAL	(3) NuNH	(4) UNITIL SERVICE CORP.
1	Test Year Pension Expense, as Pro-Formed	\$ 690,223	\$ 250,740	\$ 439,483
2	Test Year PBOP Expense, as Pro-Formed	389,446	204,698	184,748
3	Test Year SERP Expense, as Pro-Formed	320,475	-	320,475
4	Test Year 401K Expense, as Pro-Formed	394,059	98,571	295,488
5	Test Year Deferred Comp Expense, as Pro-Formed	52,717	-	52,717
6	Total Test Year Pension, PBOP, SERP and 401K Expense, as Pro-Formed	1,846,920	554,009	1,292,911
7	Test Year Pension Expense	\$ 692,409	\$ 280,117	\$ 412,291
8	Test Year PBOP Expense	409,195	203,878	205,317
9	Test Year SERP Expense	261,677	-	261,677
10	Test Year 401K Expense	363,965	92,859	271,106
11	Test Year Deferred Comp Expense	8,302	-	8,302
12	Total Test Year Pension, PBOP, SERP and 401K Expense	1,735,547	576,854	1,158,693
13	Test Year Pension Expense, Pro-Forma Adjustment <sup>(1)</sup>	(2,185)	(29,377)	27,192
14	Test Year PBOP Expense, Pro-Forma Adjustment <sup>(2)</sup>	(19,749)	819	(20,569)
15	Test Year SERP Expense, Pro-Forma Adjustment <sup>(3)</sup>	58,798	-	58,798
16	Test Year 401K Expense, Pro-Forma Adjustment <sup>(4)</sup>	30,095	5,712	24,382
17	Test Year Deferred Comp Expense, Pro-Forma Adjustment <sup>(5)</sup>	44,415	-	44,415
18	Total Test Year Retirement Costs Pro-Forma Adjustment	\$ 111,373	\$ (22,845)	\$ 134,218

Notes  
(1) Refer to Workpaper 4.1  
(2) Refer to Workpaper 4.2  
(3) Refer to Workpaper 4.3  
(4) Refer to Workpaper 4.4  
(5) Refer to Workpaper 4.6

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
Pension, PBOP, SERP, 401(K) and Deferred Compensation Expense  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-7 Revised  
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LINE NO.	(1) DESCRIPTION	(2) TOTAL	(3) NuNH	(4) UNITIL SERVICE CORP.
1	Test Year Pension Expense, as Pro-Formed	\$ 690,223	\$ 250,740	\$ 439,483
2	Test Year PBOP Expense, as Pro-Formed	389,446	204,698	184,748
3	Test Year SERP Expense, as Pro-Formed	320,475	-	320,475
4	Test Year 401K Expense, as Pro-Formed	378,707	95,672	283,035
5	Test Year Deferred Comp Expense, as Pro-Formed	52,717	-	52,717
6	Total Test Year Pension, PBOP, SERP and 401K Expense, as Pro-Formed	1,831,567	551,110	1,280,457
7	Test Year Pension Expense	\$ 692,409	\$ 280,117	\$ 412,291
8	Test Year PBOP Expense	409,195	203,878	205,317
9	Test Year SERP Expense	261,677	-	261,677
10	Test Year 401K Expense	363,965	92,859	271,106
11	Test Year Deferred Comp Expense	8,302	-	8,302
12	Total Test Year Pension, PBOP, SERP and 401K Expense	1,735,547	576,854	1,158,693
13	Test Year Pension Expense, Pro-Forma Adjustment <sup>(1)</sup>	(2,185)	(29,377)	27,192
14	Test Year PBOP Expense, Pro-Forma Adjustment <sup>(2)</sup>	(19,749)	819	(20,569)
15	Test Year SERP Expense, Pro-Forma Adjustment <sup>(3)</sup>	58,798	-	58,798
16	Test Year 401K Expense, Pro-Forma Adjustment <sup>(4)</sup>	14,742	2,814	11,929
17	Test Year Deferred Comp Expense, Pro-Forma Adjustment <sup>(5)</sup>	44,415	-	44,415
18	Total Test Year Retirement Costs Pro-Forma Adjustment	\$ 96,020	\$ (25,744)	\$ 121,764

Notes  
(1) Refer to Workpaper 4.1  
(2) Refer to Workpaper 4.2  
(3) Refer to Workpaper 4.3  
(4) Refer to Workpaper 4.4  
(5) Refer to Workpaper 4.6

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**PROPERTY & LIABILITY INSURANCE**  
**12 MONTHS ENDED DECEMBER 31, 2020**

<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) TOTAL</b>	<b>(3) NuNH <sup>(1)</sup></b>	<b>(4) UNITIL SERVICE CORP. <sup>(2)</sup></b>
1	Proformed Property & Liability Insurances O&M Expense	\$ 319,949	\$ 289,097	\$ 30,851
2	Less: Test Year Property & Liability Insurances O&M Expense	259,250	241,873	17,377
3	Proformed 2021 And 2022 O&M Increase	<u>\$ 60,699</u>	<u>\$ 47,224</u>	<u>\$ 13,475</u>

**Notes**

(1) Refer to Workpaper 5.1

(2) Refer to Workpaper 5.2

**Schedule RevReq-3-8 Revised**  
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**PROPERTY & LIABILITY INSURANCE**  
**12 MONTHS ENDED DECEMBER 31, 2020**

<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) TOTAL</b>	<b>(3) NuNH <sup>(1)</sup></b>	<b>(4) UNITIL SERVICE CORP. <sup>(2)</sup></b>
1	Proformed Property & Liability Insurances O&M Expense	\$ 310,385	\$ 277,077	\$ 33,308
2	Less: Test Year Property & Liability Insurances O&M Expense	259,250	241,873	17,377
3	Proformed 2021 And 2022 O&M Increase	<u>\$ 51,135</u>	<u>\$ 35,204</u>	<u>\$ 15,931</u>

**Notes**

(1) Refer to Workpaper 5.1 Revised

(2) Refer to Workpaper 5.2 Revised

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
NH PUC ASSESSMENT  
12 MONTHS ENDED DECEMBER 31, 2020

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	(1)	(2)	(3)
LINE NO.	DESCRIPTION	FY 2021 AS FILED	FY 2022 UPDATE
1	Regulatory Assessments	\$ 485,194	\$ 552,312
2	Test Year Total PUC Assessment Recovered Through Base Rates	368,964	368,964
3	Adjustment for 2021 NH PUC Assessment	<u>\$ 116,230</u>	<u>\$ 183,348</u>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DUES & SUBSCRIPTION ADJUSTEMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-10  
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(1)		(2)
LINE NO.	DESCRIPTION	AMOUNT
1	AGA Membership Dues	\$ 84,145
2	Amount allocated to NuNH	34%
3	Test Year NuNH Dues & Subscriptions	28,609
4	Adjustment to remove lobbying portion of Dues & Subscriptions <sup>(1)</sup>	(1,774)

**Notes**

(1) The portion of 2020 membership that is allocable to lobbying is 6.2%



**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PANDEMIC COST ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-11  
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(1)		(2)
LINE NO.	DESCRIPTION	AMOUNT
1	Pandemic Cost Adjustment - NuNH	\$ 100,284
2	<u>Unitil Service Expense Allocated to NuNH</u>	
3	Total Unitil Service Pandemic Costs	\$ 49,496
4	NuNH Apportionment	20.18%
5	Expense Apportioned to NuNH	\$ 9,988
6	Capitalization Rate	31.51%
7	NuNH Capitalization	3,147
8	NuNH Net O&M Medical Expense	\$ 6,841
9	Removal of Total Pandemic Costs from Test Year	\$ (107,125)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
SEVERANCE EXPENSE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

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	(1)	(2)
LINE NO.	DESCRIPTION	AMOUNT
1	Test year severance normalization <sup>(1)</sup>	\$ (29,947)

Notes  
(1) Normalized using 5-year historical amounts

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RENT EXPENSE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

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(1)		(2)	
LINE NO.	DESCRIPTION	AMOUNT	
1	Rent Expense Charged to Unitil Service Corp.	\$	381,843
2	NuNH Apportionment		19.85%
3	Expense Apportioned to NuNH	\$	75,796
4	Capitalization Rate		31.51%
5	NuNH Capitalization		23,883
6	NuNH Net O&M Rent Expense	\$	51,913

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RENT EXPENSE ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-13 Revised  
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(1)		(2)	
LINE NO.	DESCRIPTION	AMOUNT	
1	Rent Expense Charged to Unitil Service Corp.	\$	348,382
2	NuNH Apportionment		19.85%
3	Expense Apportioned to NuNH	\$	69,154
4	Capitalization Rate		31.51%
5	NuNH Capitalization		21,790
6	NuNH Net O&M Rent Expense	\$	47,363

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE**  
**ARREARAGE MANGAEMENT PROGRAM (AMP) IMPLEMENTATION ADJUSTMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-14**  
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(1)		(2)
LINE NO.	DESCRIPTION	AMOUNT
1	Required AMP Full Time Employee	\$ 84,000
2	Allocable to NuNH	22%
3	Expense Allocable to NuNH	\$ 18,480
4	Annual AMP Forgiveness <sup>(1)</sup>	74,000
5	Total AMP Implementation Costs	\$ 92,480
6	AMP Costs Agreed Upon in Settlement Agreement <sup>(2)</sup>	\$ -

**Notes**

- (1) Annual over/under recovery of AMP forgiveness to be reconciled through Company's proposed Regulatory Cost Adjustment Mechanism as a component of the Local Delivery Adjustment Charge
- (2) Settlement Parties Agree to Remove AMP

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
INFLATION ALLOWANCE  
12 MONTHS ENDED DECEMBER 31, 2020**

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<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) AMOUNT AS FILED</b>
1	Test Year Distribution O&M Expenses	\$ 13,580,391
	Less Normalizing Adjustments Items:	
2	Payroll	\$ 6,636,764
3	Medical and Dental Insurance	466,837
4	401K Costs	363,965
5	Property & Liability Insurance	259,250
6	PUC Assessment	368,964
7	Total Normalizing Adjustment Items	\$ 8,095,780
	Less Items not Subject to Inflation:	
8	Pension	\$ 692,409
9	Postemployment Benefits Other than Pensions	409,195
10	Supplemental Executive Retirement Plan	261,677
11	Deferred Comp Expense	8,302
12	Bad Debts	345,477
13	Postage	135,037
14	Amortizations - USC Charge	75,914
15	Facility Leases - USC Charge	320,591
16	Total Items not Subject to Inflation	\$ 2,248,602
17	Residual O&M Expenses	\$ 3,236,009
18	Projected Inflation Rate <sup>(1)</sup>	5.12%
19	Increase in Other O&M Expense for Inflation	\$ 165,684
20	Inflation Allowance Agreed Upon in Settlement Agreement <sup>(2)</sup>	\$ -

**Notes**

(1) Refer to Schedule RevReq-3-15, Page 2 of 2

(2) Settlement Parties Agree to Remove Inflation Allowance

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
INFLATION ALLOWANCE  
12 MONTHS ENDED DECEMBER 31, 2020**

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LINE NO.	(1) DESCRIPTION	(2) INDEX <sup>(1)</sup>
	<b>GDPIPD Index Value at the end of the Test Year:</b>	
1	June 2020 Index-GDP	113.0
2	July 2020 Index-GDP	113.6
3	July 1, 2020 (Midpoint of Test Year) Index	113.3
	<b>GDPIPD Index Value at date of permanent rates :</b>	
4	July 2022 Index-GDP	119.0
5	August 2022 Index-GDP	119.2
6	August 1, 2022 (Date of Permanent Rates) Index	119.1
7	Projected Inflation Rate	5.12%

**Notes**

(1) Refer to Workpaper 6.1 for GDPIPD Indices

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DEPRECIATION ANNUALIZATION  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) PLANT BALANCE 12/31/2020	(3) CURRENT DEPRECIATION RATES	(4) ANNUAL DEPRECIATION EXPENSE
1	Amortizable Plant:			
2	303 Misc Intangible Plant	\$ 12,826,347	N/A	N/A
3	Total Amortizable Plant	12,826,347	N/A	-
4	Mfg. Gas Produc. Plant:			
5	304.2 Land & Rights - Mfg Gas Prod. PI	6,816	N/A	N/A
6	305 Struct. And Improvements	-	N/A	N/A
7	320 Other Equipment	-	N/A	N/A
8	321 LNG Equipment	-	N/A	N/A
9	Total Mfg Gas Prod. Plant	6,816	N/A	-
10	Distribution Plant:			
11	374.4 Land Rgts, Other Distr Sy	89,111	N/A	N/A
12	374.5 Land Rgts, Rights Of Way	17,911	N/A	N/A
13	375.2 Structures - City Gate Meas & Reg	43,350	1.43%	620
14	375.7 Structures - Other Dist Sys	3,217,521	1.43%	46,011
15	376.2 Mains - Coated/Wrapped	29,746,227	2.66%	791,250
16	376.3 Mains - Bare Steel	190,837	N/A	N/A
17	376.4 Mains - Plastic	120,342,184	2.87%	3,453,821
18	376.5 Mains - Joint Seals	542,145	N/A	N/A
19	376.6 Mains - Cathodic Protection	1,082,739	4.17%	45,150
20	376.8 Mains - Cast Iron	28,455	N/A	N/A
21	378.2 Mea & Reg Station Eq, Regulating	7,288,982	3.50%	255,114
22	379 Mea & Reg Ta-G	39,266	3.50%	1,374
23	380 Services	82,837,047	3.67%	3,040,120
24	381 Meters	4,624,610	3.33%	154,000
25	382 Meter Installations	26,001,685	3.33%	865,856
26	383 House Regulators	733,550	3.33%	24,427
27	386 Water Heaters/Conversion Burners	1,978,895	7.41%	146,636
28	Total Distribution Plant	278,804,516	3.17%	8,824,379
29	General Plant:			
30	389.1 Land	232,947	N/A	N/A
31	391.10 Off Furn & Eq.- Unspecified	508,135	8.70%	44,208
32	393 Stores Equipment	31,520	N/A	N/A
33	394.10 Tools, Garage & Service Equipment	1,430,421	5.26%	75,240
34	396 Power Operated Equipment	75,266	N/A	N/A
35	397 Communication Equipment	1,873,480	9.09%	170,299
36	397.25 Metscan Communication Equip	112,656	N/A	N/A
37	397.35 ERT Automatic Reading Dev	3,470,146	6.67%	231,459
38	Total General Plant	7,734,572	7.16%	521,206
39	Total Plant in Service	\$ 299,372,252	3.28%	\$ 9,345,585
40	Test Year Expense			\$ 8,876,582
41	Increase In Depreciation Expense			\$ 469,003



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PROPOSED DEPRECIATION RATES  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) PLANT BALANCE 12/31/2020	(3) PROPOSED DEPRECIATION RATES	(4) PROPOSED DEPRECIATION EXPENSE
1	Amortizable Plant:			
2	303 Misc Intangible Plant	\$ 12,826,347	N/A	N/A
3	Total Amortizable Plant	12,826,347	N/A	-
4	Mfg. Gas Produc. Plant:			
5	304.2 Land & Rights - Mfg Gas Prod. PI	6,816	N/A	N/A
6	305 Struct. And Improvements	-	N/A	N/A
7	320 Other Equipment	-	N/A	N/A
8	321 LNG Equipment	-	N/A	N/A
9	Total Mfg Gas Prod. Plant	6,816	N/A	-
10	Distribution Plant:			
11	374.4 Land Rgts, Other Distr Sy	89,111	N/A	N/A
12	374.5 Land Rgts, Rights Of Way	17,911	N/A	N/A
13	375.2 Structures - City Gate Meas & Reg	43,350	2.74%	1,188
14	375.7 Structures - Other Dist Sys	3,217,521	2.74%	88,160
15	376.2 Mains - Coated/Wrapped	29,746,227	3.78%	1,124,407
16	376.3 Mains - Bare Steel	190,837	N/A	N/A
17	376.4 Mains - Plastic	120,342,184	2.88%	3,465,855
18	376.5 Mains - Joint Seals	542,145	N/A	N/A
19	376.6 Mains - Cathodic Protection	1,082,739	4.64%	50,239
20	376.8 Mains - Cast Iron	28,455	N/A	N/A
21	378.2 Mea & Reg Station Eq, Regulating	7,288,982	4.87%	354,973
22	379 Mea & Reg Ta-G	39,266	4.87%	1,912
23	380 Services	82,837,047	4.41%	3,653,114
24	381 Meters	4,624,610	5.34%	246,954
25	382 Meter Installations	26,001,685	4.23%	1,099,871
26	383 House Regulators	733,550	3.32%	24,354
27	386 Water Heaters/Conversion Burners	1,978,895	11.36%	224,802
28	Total Distribution Plant	278,804,516	3.72%	10,335,829
29	General Plant:			
30	389.1 Land	232,947	N/A	N/A
31	391.10 Off Furn & Eq.- Unspecified	508,135	6.67%	33,893
32	393 Stores Equipment	31,520	N/A	N/A
33	394.10 Tools, Garage & Service Equipment	1,430,421	3.67%	52,496
34	396 Power Operated Equipment	75,266	N/A	N/A
35	397 Communication Equipment	1,873,480	5.36%	100,419
36	397.25 Metscan Communication Equip	112,656	N/A	N/A
37	397.35 ERT Automatic Reading Dev	3,470,146	3.18%	110,351
38	Total General Plant	7,734,572	4.08%	297,159
39	Total Plant in Service	\$ 299,372,252	3.73%	\$ 10,632,988
40	<u>Reserve Adjustment For Amortization <sup>(1)</sup></u>			
41	391.10 Off Furn & Eq.- Unspecified			(3,628)
42	394.10 Tools, Garage & Service Equipment			(27,132)
43	397 Communication Equipment			(80,592)
44	397.35 ERT Automatic Reading Dev			(35,960)
45	Total Reserve Adjustment for Amortization			(147,312)
46	<u>Leak Prone Pipe <sup>(1)</sup></u>			
47	376.3 Mains - Bare Steel			464,724
48	376.8 Mains - Cast Iron			243,173
49	Total Leak Prone Pipe Amortization			707,897
50	Total Pro Forma Depreciation Expense (Line 39 + Line 45 + Line 49)			11,193,573
51	Annualized Test Year Expense <sup>(2)</sup>			\$ 9,345,585
52	Increase in Depreciation Expense			\$ 1,847,988

Notes

(1) Refer to testimony and schedules of Mr. Allis

(2) Refer to Schedule RevReq-3-16, Page 1 of 2, Line 39

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
SETTLED DEPRECIATION RATES  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) PLANT BALANCE 12/31/2020	(3) SETTLED DEPRECIATION RATES <sup>(3)</sup>	(4) PROPOSED PROFORMED EXPENSE
1	Amortizable Plant:			
2	303 Misc Intangible Plant	\$ 12,826,347	N/A	N/A
3	Total Amortizable Plant	12,826,347	N/A	-
4	Mfg. Gas Produc. Plant:			
5	304.2 Land & Rights - Mfg Gas Prod. PI	6,816	N/A	N/A
6	305 Struct. And Improvements	-	N/A	N/A
7	320 Other Equipment	-	N/A	N/A
8	321 LNG Equipment	-	N/A	N/A
9	Total Mfg Gas Prod. Plant	6,816	N/A	-
10	Distribution Plant:			
11	374.4 Land Rgts, Other Distr Sy	89,111	N/A	N/A
12	374.5 Land Rgts, Rights Of Way	17,911	N/A	N/A
13	375.2 Structures - City Gate Meas & Reg	43,350	2.00%	867
14	375.7 Structures - Other Dist Sys	3,217,521	2.00%	64,350
15	376.2 Mains - Coated/Wrapped	29,746,227	2.91%	865,615
16	376.3 Mains - Bare Steel	190,837	N/A	N/A
17	376.4 Mains - Plastic	120,342,184	2.91%	3,501,958
18	376.5 Mains - Joint Seals	542,145	N/A	N/A
19	376.6 Mains - Cathodic Protection	1,082,739	5.33%	57,710
20	376.8 Mains - Cast Iron	28,455	N/A	N/A
21	378.2 Mea & Reg Station Eq, Regulating	7,288,982	3.99%	290,830
22	379 Mea & Reg Ta-G	39,266	3.99%	1,567
23	380 Services	82,837,047	4.22%	3,495,723
24	381 Meters	4,624,610	3.83%	177,123
25	382 Meter Installations	26,001,685	3.66%	951,662
26	383 House Regulators	733,550	3.33%	24,427
27	386 Water Heaters/Conversion Burners	1,978,895	6.84%	135,356
28	Total Distribution Plant	278,804,516	3.44%	9,567,188
29	General Plant:			
30	389.1 Land	232,947	N/A	N/A
31	391.10 Off Furn & Eq.- Unspecified	508,135	6.67%	33,893
32	393 Stores Equipment	31,520	N/A	N/A
33	394.10 Tools, Garage & Service Equipment	1,430,421	3.68%	52,640
34	396 Power Operated Equipment	75,266	N/A	N/A
35	397 Communication Equipment	1,873,480	5.36%	100,419
36	397.25 Metscan Communication Equip	112,656	N/A	N/A
37	397.35 ERT Automatic Reading Dev	3,470,146	3.18%	110,351
38	Total General Plant	7,734,572	4.08%	297,303
39	Total Plant in Service	\$ 299,372,252	3.46%	\$ 9,864,491
40	<u>Reserve Adjustment For Amortization <sup>(1)</sup></u>			
41	391.10 Off Furn & Eq.- Unspecified			(3,627)
42	394.10 Tools, Garage & Service Equipment			(26,530)
43	397 Communication Equipment			(79,858)
44	397.35 ERT Automatic Reading Dev			(35,782)
45	Total Reserve Adjustment for Amortization			(145,798)
46	<u>Leak Prone Pipe <sup>(1)</sup></u>			
47	376.3 Mains - Bare Steel			464,724
48	376.8 Mains - Cast Iron			243,173
49	Total Leak Prone Pipe Amortization			707,897
50	Total Pro Forma Depreciation Expense (Line 39 + Line 45 + Line 49)			10,426,590
51	Annualized Test Year Expense <sup>(2)</sup>			\$ 9,345,585
52	Increase in Depreciation Expense			\$ 1,081,005

Notes

- (1) Refer to testimony and schedules of Mr. Allis  
(2) Refer to Schedule RevReq-3-16, Page 1 of 2, Line 39  
(3) Refer to Energy 4-36 Attachment 2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
AMORTIZATION OF THEORETICAL DEPRECIATION RESERVE IMBALANCE  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-16  
Page 3 of 3

LINE NO.	(1) DESCRIPTION	(2) TOTAL
1	Depreciation Reserve Imbalance <sup>(1)</sup>	\$ 15,740,832
2	Recovery Period	10 years
3	Annual Recovery	\$ 1,574,083

Notes

(1) Refer to Energy 4-36 Attachment 1

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
AMORTIZATION ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

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LINE NO.	(1) DESCRIPTION	(2) TOTAL
1	NU-NH Rate Year Software Amortization <sup>(1)</sup>	\$ 669,511
2	USC Allocated Rate Year Software Amortization <sup>(2)</sup>	118,959
3	Total Rate Year Software Amortization	<u>788,470</u>
4	NU-NH Test Year Software Amortization <sup>(3)</sup>	\$ 522,006
5	USC Allocated Test Year Software Amortization <sup>(4)</sup>	77,176
6	Total 2020 Test Year Software Amortization	<u>599,182</u>
7	Test Year Amortization Expense Adjustment (Line 3 - Line 7)	<u>\$ 189,288</u>

**Notes**

(1) Workpaper W7.2 Line 76

(2) Workpaper W7.4 Line 20

(3) Workpaper W7.1 Line 89

(4) Workpaper W7.3 Line 20

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
AMORTIZATION ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

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<b>LINE NO.</b>	<b>(1)</b>		<b>(2)</b>	
	<b>DESCRIPTION</b>		<b>TOTAL</b>	
1	NU-NH Rate Year Software Amortization <sup>(1)</sup>		\$	529,365
2	USC Allocated Rate Year Software Amortization <sup>(2)</sup>			91,676
3	Total Rate Year Software Amortization			621,041
4	NU-NH Test Year Software Amortization <sup>(3)</sup>		\$	522,006
5	USC Allocated Test Year Software Amortization <sup>(4)</sup>			77,176
6	Total 2020 Test Year Software Amortization			599,182
7	Test Year Amortization Expense Adjustment (Line 3 - Line 7)		\$	21,859

**Notes**

(1) Workpaper W7.2 Revised

(2) Workpaper W7.4 Revised

(3) Workpaper W7.1

(4) Workpaper W7.3

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
EXCESS ACCUMULATED DEFERRED INCOME TAX ("ADIT") FLOW BACK  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-18  
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LINE NO.	(1) DESCRIPTION	(2) TOTAL
1	Annual Amortization Expense Reduction Related to Excess ADIT Flowback <sup>(1)</sup>	\$ (308,218)

Notes  
(1) Refer to Exhibit JAG-6

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PROPERTY TAXES  
12 MONTHS ENDED DECEMBER 31, 2020

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	(1)	(2)	(3)	(4)	(5)
LINE NO.	MUNICIPALITY & STATE	TAXATION PERIOD	LOCAL TAX RATE	ASSESSED VALUATION	TOTAL TAXES <sup>(1)</sup>
1	Atkinson	4/1 - 3/31	\$ 16.24	1,564,100	25,401
2	Brentwood	4/1 - 3/31	\$ 21.36	1,489,600	31,818
3	Brentwood	4/1 - 3/31	\$ 23.19	400	9
4	Dover	4/1 - 3/31	\$ 24.85	1,200	30
5	Dover	4/1 - 3/31	\$ 22.92	37,150,600	851,492
6	Durham	4/1 - 3/31	\$ 25.73	7,742,400	199,212
7	East Kingston	4/1 - 3/31	\$ 20.50	746,700	15,307
8	Epping	4/1 - 3/31	\$ 23.64	1,079,900	25,529
9	Exeter	4/1 - 3/31	\$ 22.50	13,803,800	310,586
10	Greenland	4/1 - 3/31	\$ 14.58	733,400	10,693
11	Hampton--Class 4000	4/1 - 3/31	\$ 13.93	18,884,700	263,064
12	Hampton--Class 5000	4/1 - 3/31	\$ 14.43	9,301,400	134,219
13	Hampton Falls	4/1 - 3/31	\$ 19.33	36,400	704
14	Kensington	4/1 - 3/31	\$ 18.61	1,442,400	26,843
15	Madbury	4/1 - 3/31	\$ 23.41	347,000	8,123
16	Newington	4/1 - 3/31	\$ 8.02	2,848,900	22,848
17	North Hampton	4/1 - 3/31	\$ 14.80	1,822,800	26,977
18	Plaistow	4/1 - 3/31	\$ 19.60	9,849,580	193,052
19	Portsmouth	4/1 - 3/31	\$ 12.80	47,562,000	608,794
20	Rochester	4/1 - 3/31	\$ 22.67	26,840,200	608,468
21	Rollinsford	4/1 - 3/31	\$ 22.57	194,600	4,392
22	Rollinsford	4/1 - 3/31	\$ 24.68	20,000	494
23	Salem	4/1 - 3/31	\$ 19.82	9,478,700	187,867
24	Seabrook	4/1 - 3/31	\$ 13.90	12,142,100	168,775
25	Somersworth	4/1 - 3/31	\$ 25.91	9,713,200	251,669
26	Somersworth	4/1 - 3/31	\$ 27.85	62,000	1,727
27	Stratham	4/1 - 3/31	\$ 17.14	497,200	8,522
28	State Of NH <sup>(2)</sup>	4/1 - 3/31			1,359,585
29	Total			\$ 215,355,280	\$ 5,346,199
30	Test Year Property Taxes <sup>(3)</sup>				\$ 4,728,948
31	Less: Test Year Property Tax Abatements <sup>(4)</sup>				688
32	Total Test Year Property Tax Expense				\$ 4,728,260
33	Total Property Tax Increase (Line 29 - Line 32)				\$ 617,939

Notes

(1) Based on final 2020 property tax bills. Company will update for final 2021 property tax bills during pendency of case

(2) Based on current estimated 2021 State Property Tax. Amount will be updated during pendency of case

(3) Test Year Property Taxes adjusted to exclude Greenland 2019 bill correction of \$317

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PROPERTY TAXES  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-19 Revised  
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	(1)	(2)	(3)	(4)	(5)
LINE NO.	MUNICIPALITY & STATE	TAXATION PERIOD	LOCAL TAX RATE	ASSESSED VALUATION	TOTAL TAXES <sup>(1)</sup>
1	Atkinson	4/1 - 3/31	\$ 10.94	1,999,400	21,873
2	Brentwood	4/1 - 3/31	\$ 20.46	1,423,000	29,115
3	Dover	4/1 - 3/31	\$ 20.08	40,155,200	806,316
4	Durham	4/1 - 3/31	\$ 25.93	7,155,300	185,537
5	East Kingston	4/1 - 3/31	\$ 20.16	714,400	14,402
6	Epping	4/1 - 3/31	\$ 20.55	4,745,700	97,524
7	Exeter	4/1 - 3/31	\$ 22.02	13,081,500	288,055
8	Greenland	4/1 - 3/31	\$ 16.73	795,800	13,314
9	Hampton--Class 4000	4/1 - 3/31	\$ 13.90	18,884,700	262,497
10	Hampton--Class 5000	4/1 - 3/31	\$ 14.69	9,301,400	136,638
11	Hampton Falls	4/1 - 3/31	\$ 19.10	91,500	1,748
12	Kensington	4/1 - 3/31	\$ 16.80	1,410,000	23,688
13	Madbury	4/1 - 3/31	\$ 23.59	336,100	7,929
14	Newington	4/1 - 3/31	\$ 8.20	2,811,000	23,050
15	North Hampton	4/1 - 3/31	\$ 14.60	1,822,800	26,613
16	Plaistow	4/1 - 3/31	\$ 17.29	9,922,000	171,551
17	Portsmouth	4/1 - 3/31	\$ 13.09	50,847,408	665,593
18	Rochester	4/1 - 3/31	\$ 22.81	34,423,000	785,188
19	Rollinsford	4/1 - 3/31	\$ 22.33	284,500	6,353
20	Salem	4/1 - 3/31	\$ 14.35	13,096,000	187,927
21	Seabrook	4/1 - 3/31	\$ 12.09	13,121,300	158,637
22	Somersworth	4/1 - 3/31	\$ 25.72	8,953,600	230,287
23	Stratham	4/1 - 3/31	\$ 16.73	539,100	9,019
24	State Of NH	4/1 - 3/31			1,370,478
25	Total			\$ 235,914,708	\$ 5,523,332
26	Test Year Property Taxes <sup>(2)</sup>				\$ 4,728,948
27	Less: Test Year Property Tax Abatements				688
28	Total Test Year Property Tax Expense				\$ 4,728,260
29	Total Property Tax Increase (Line 25 - Line 28)				\$ 795,073

Notes

(1) Based on final 2021 property tax bills

(2) Test Year Property Taxes adjusted to exclude Greenland 2019 bill correction of \$317



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL TAX ADJUSTMENT - WAGE INCREASES  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-20  
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	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	SOCIAL SECURITY	MEDICARE	TOTAL
1	Increase in O&M Payroll / Compensation due to Annual Rate Increases <sup>(1)</sup>	\$ 554,442	\$ 554,442	
2	Payroll Tax Rates	6.20%	1.45%	
3	Increase in Payroll Taxes	<u>\$ 34,375</u>	<u>\$ 8,039</u>	<u>\$ 42,415</u>

Notes

(1) Refer to Schedule RevReq-3-4, Page 1 of 2

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL TAX ADJUSTMENT - WAGE INCREASES  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-20 Revised  
Page 1 of 2 Revised  
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LINE NO.	(1) DESCRIPTION	(2) SOCIAL SECURITY	(3) MEDICARE	(4) TOTAL
1	Increase in O&M Payroll / Compensation due to Annual Rate Increases <sup>(1)</sup>	\$ 283,760	\$ 283,760	
2	Less Pay Increase Amounts in Excess of Taxable Limit <sup>(2)</sup>			
3	Northern Utilities, Inc. <sup>(3)</sup>	\$ (2,564)		
4	Unitil Service Corp. <sup>(4)</sup>	\$ (24,305)		
5	O&M Payroll / Compensation Increase Subject to Payroll Taxes	256,891	283,760	
6	Payroll Tax Rates	6.20%	1.45%	
7	Increase in Payroll Taxes	\$ 15,927	\$ 4,115	\$ 20,042

**Notes**

(1) Refer to Schedule RevReq-3-4, Page 1 of 2 Revised

(2) 2021 Social Security Wage Limit of \$142,800

(3) Refer to Workpaper 8.1

(4) Refer to Workpaper 8.2

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE**  
**PAYROLL TAX ADJUSTMENT - EMPLOYEE RETENTION CREDIT**  
**EMPLOYEE RETENTION CREDIT ("ERC") & FAMILY FIRST CORONAVIRUS RESPONSE ACT ("FFCRA")**  
**12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-3-20**  
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LINE NO.	(1)  DESCRIPTION	(2)  SOCIAL SECURITY
1	ERC & FFCRA - NuNH	\$ (107,364)
2	Capitalization Rate	46.69%
3	Capitalized Amount	(50,128)
4	Net Expense - NuNH	(57,236)
5	<u>Unitil Service ERC Allocated to NuNH</u>	
6	Total Unitil Service ERC	\$ (279,213)
7	NUNH Apportionment	20.18%
8	Expense Apportioned to NuNH	\$ (56,345)
9	Capitalization Rate	32.52%
10	NuNH Capitalization	(18,323)
11	NuNH Net ERC	\$ (38,022)
12	Removal of Total ERC & FFCRA from Test Year	\$ 95,258

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
COMPUTATION OF FEDERAL AND STATE INCOME TAXES  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) AMOUNT	(3) SETTLEMENT AGREEMENT	(4) TEST YEAR AS PROFORMED
1	<u>Increases / (Decreases) To Revenue</u>			
2	Weather Normalization	\$ 1,994,374	\$ -	\$ 1,994,374
3	New Customer Revenue Annualization	278,301	-	278,301
4	Residential Low Income	264,523	-	264,523
5	Unbilled Revenue	294,543	-	294,543
6	Non-Distribution Bad Debt	(97,468)	-	(97,468)
7	Misc. Revenue Adjustment	4,788	-	4,788
8	Late Fee Adjustment	40,013	-	40,013
9	Billed Accuracy Adjustment	367	-	367
10	Special Contract Customer Revenue Adjustment	17,968	-	17,968
11	Total Revenue Adjustments	\$ 2,797,410	\$ -	\$ 2,797,410
12	<u>Increases / (Decreases) To Expenses</u>			
13	Production Expense (O&M)	\$ 76,191	\$ -	\$ 76,191
14	Payroll	554,442	(270,682)	283,760
15	Medical & Dental Insurances	404,594	(65,986)	338,607
16	Distribution Bad Debt	88,160	(12,089)	76,071
17	Non-Distribution Bad Debt	(97,468)	-	(97,468)
18	Pension	(2,185)	-	(2,185)
19	PBOP	(19,749)	-	(19,749)
20	SERP	58,798	-	58,798
21	401K	30,095	(15,352)	14,742
22	Deferred Comp Expense	44,415	-	44,415
23	Property & Liability Insurances	60,699	(9,564)	51,135
24	NH PUC Assessment	116,230	67,118	183,348
25	Dues & Subscriptions	(1,774)	-	(1,774)
26	Pandemic Costs	(107,125)	-	(107,125)
27	Severance Expense	(29,947)	-	(29,947)
28	Rent Expense	51,913	(4,549)	47,363
29	Arrearage Management Program (AMP) Implementation Cost	92,480	(92,480)	-
30	Inflation Allowance	165,684	(165,684)	-
31	Update for 2021 Lease Payments	-	17,554	17,554
32	NH DOE Audit Adjustment #4	-	(69)	(69)
33	Settlement Adjustment	-	(463,461)	(463,461)
34	Depreciation Annualization	469,003	-	469,003
35	Proposed Depreciation Rates	1,847,988	(766,983)	1,081,005
36	Amortize Reserve Imbalance	-	1,574,083	1,574,083
37	Production Expense (Depreciation)	37,865	-	37,865
38	Software Amortization	189,288	(167,429)	21,859
39	Excess ADIT Flowback	(308,218)	-	(308,218)
40	Property Taxes	617,939	177,134	795,073
41	Payroll Taxes - Wage Increases	42,415	(22,373)	20,042
42	Payroll Taxes - Employee Retention Credits	95,258	-	95,258
43	Flowthrough Net Operating Income	759,111	-	759,111
44	Change In Interest Exp (Refer To Schedule RevReq 3-21 Page 2)	(345,611)	32,109	(313,502)
45	Total Expense Adjustments	\$ 4,890,487	\$ (188,702)	\$ 4,701,785
46	Increase / (Decrease) In Taxable Income	\$ (2,093,077)	\$ 188,702	\$ (1,904,375)
47	Effective Federal Income Tax Rate <sup>(1)</sup>	19.38%	19.38%	19.38%
48	NH State Tax Rate <sup>(2)</sup>	7.70%	7.70%	7.70%
	<u>Federal Income &amp; NH State Tax</u>			
49	Effective Federal Income Tax	\$ (405,701)	\$ 36,576	\$ (369,125)
50	NH State Tax	(161,167)	14,530	(146,637)
51	Increase (Decrease) In Income Taxes	\$ (566,868)	\$ 51,106	\$ (515,762)
	<u>Notes</u>			
52	Federal Income Tax Rate	21.00%	21.00%	21.00%
53	Federal Benefit of State Tax - (Line 52 * Line 55)	-1.62%	-1.62%	-1.62%
54	(1) Effective Federal Income Tax Rate	19.38%	19.38%	19.38%
55	(2) State Income Tax Rate	7.70%	7.70%	7.70%
56	Northern New Hampshire Tax Rate (Line 54 + Line 55)	27.08%	27.08%	27.08%

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
CHANGE IN INTEREST EXPENSE APPLICABLE TO INCOME TAX COMPUTATION  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-3-21  
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LINE NO.	(1) DESCRIPTION	(2) AMOUNT	(3) SETTLEMENT AGREEMENT	(5) TEST YEAR AS PROFORMED
1	Ratemaking Interest Synchronization			
2	Rate Base <sup>(1)</sup>	\$ 188,719,257	\$ (484,180)	\$ 188,235,077
3	Cost Of Debt In Proposed Rate Of Return <sup>(2)</sup>	2.34%	0.02%	2.37%
4	Interest Expense for Ratemaking	\$ 4,422,286	32,109	4,454,395
5	Test Year Interest Expense			
6	Interest Charges (427-431)	\$ 4,767,897	\$ -	\$ 4,767,897
7	Increase / (Decrease) in Interest Expense	\$ (345,611)	\$ 32,109	\$ (313,502)

**Notes**  
(1) Refer to Schedule RevReq-5  
(2) Refer to Schedule RevReq-6

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
COMPUTATION OF FEDERAL AND STATE INCOME TAXES  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO	(1) DESCRIPTION	(2) TEST YEAR ACTUAL	(3) PRO-FORMA ADJUSTMENTS	(4) TEST YEAR UTILITY
1	Net Income	\$ 6,096,270	\$ -	\$ 6,096,270
2	Federal Income Tax-Current	(19,629)	-	(19,629)
3	NH State Income Tax-Current	(380,440)	-	(380,440)
4	NH State Business Enterprise Credit Against NH BPT	63,600	-	63,600
5	Deferred Federal Income Tax	1,637,521	-	1,637,521
6	Deferred State Income Tax	962,658	-	962,658
7	Net Income Before Income Taxes	8,359,980	-	8,359,980
8	<u>Permanent Items</u>			
9	Lobbying	22,225	-	22,225
10	Parking Lot Disallowance	2,543	-	2,543
11	Penalties	2,500	-	2,500
12	Total Permanent Items	27,268	-	27,268
13	<u>Temporary Differences</u>			
14	Accrued Revenue	(3,295,760)	-	(3,295,760)
15	Bad Debt	81,370	-	81,370
16	FASB 87-Pensions	(211,016)	-	(211,016)
17	PBOP SFAS 106	96,936	-	96,936
18	Remediation	267,789	-	267,789
19	Utility Plant Differences	(5,924,514)	-	(5,924,514)
20	Total Temporary Differences	(8,985,195)	-	(8,985,195)
21	<u>Federal And State Tax Differences</u>			
22	Tax Depreciation	(2,123,819)	-	(2,123,819)
23	Total Federal And State Tax Differences	(2,123,819)	-	(2,123,819)
24	State Taxable Base Income	(2,721,766)	-	(2,721,766)
25	State Business Profits Tax - Current	(209,576)	-	(209,576)
26	Less: Business Enterprise Tax	63,600	-	63,600
27	Total State Tax Expense	(273,176)	-	(273,176)
28	Federal Taxable Income Base Before Federal And State Tax Differences	(2,512,190)	-	(2,512,190)
29	Less: Federal And State Tax Differences	(2,123,819)	-	(2,123,819)
30	Federal Taxable Income Base	(388,371)	-	(388,371)
31	Federal Income Tax-Current	(81,558)	-	(81,558)
32	<u>Summary Of Utility Income Taxes:</u>			
33	Federal Income Tax-Current	(92,140)	-	(92,140)
34	Federal Income Tax-Prior	49,634	-	49,634
35	Federal Income Tax-NOL	12,295	-	12,295
36	Federal Amount To Non-Distribution Operations	10,582	(10,582)	-
37	State Business Profits Tax-Current	(277,380)	-	(277,380)
38	State Business Profits Tax-Prior	834,820	-	834,820
39	State Business Profits Tax-NOL	(942,084)	-	(942,084)
40	State Amount To Non-Distribution Operations	4,204	(4,204)	-
41	Deferred Federal Income Tax	1,707,258	-	1,707,258
42	Deferred Federal Income Tax-Prior	(57,442)	-	(57,442)
43	Deferred Federal Income Tax-NOL	(12,295)	-	(12,295)
44	Deferred State Business Profits Tax	855,394	-	855,394
45	Deferred State Business Profits Tax-Prior	(834,820)	-	(834,820)
46	Deferred State Business Profits Tax-NOL	942,084	-	942,084
47	Total Income Taxes	\$ 2,200,110	\$ (14,786)	\$ 2,185,324

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PRIOR YEAR INCOME TAXES  
12 MONTHS ENDED DECEMBER 31, 2020**

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(1)		(2)
<b>LINE NO</b>	<b>DESCRIPTION</b>	<b>ACTUAL</b>
1	Remove Prior Year Federal Income Taxes	\$ (49,634)
2	Remove Prior Year State Income Taxes	(834,820)
3	Remove Prior Year Deferred Federal Income Taxes	57,442
4	Remove Prior Year Deferred State Income Taxes	834,820
5	Total	<u>\$ 7,808</u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
NEW HAMPSHIRE DOE AUDIT ADJUSTMENTS & OTHER  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) AMOUNT
1	<u>Audit Issue #4</u> <sup>(1)</sup>	
2	Audit Issue #4 Reduction (Inadvertent Allocator Used)	\$ (69)
3	<u>Lease Payment Increase</u> <sup>(2)</sup>	
4	2020 Lease Payments	\$ 211,251
5	2021 Lease Payments	228,806
6	Lease Payment Increase	\$ 17,554

Notes:

(1) Refer to NHDOE Audit Report, Page 148

(2) Refer to Energy 4-28



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
ASSETS & DEFERRED CHARGES  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) Category	(3) New Hampshire	(2) Maine	(4) Common	(5) Consolidated December 31, 2020	(6) Consolidated December 31, 2019	(7) Consolidated December 31, 2018
1	<u>Gas Plant</u>						
2	In Service	\$ 299,372,252	\$ 390,755,625	\$ -	\$ 690,127,877	\$ 623,207,033	\$ 560,519,339
3	Construction Work in Progress	6,411,145	6,890,804	-	13,301,949	12,576,742	11,064,887
4	Less: Reserve for Depreciation	(88,023,262)	(87,391,662)	-	(175,414,925)	(143,066,942)	(131,806,854)
5	Total Gas Plant	217,760,135	310,254,767	-	528,014,901	492,716,833	439,777,371
6	<u>Other Property</u>						
7	Total Other Net Property	-	86,855	-	86,855	29,819	(24,914)
8	Total Other & Non Operating Plant	-	86,855	-	86,855	29,819	(24,914)
9	<u>Current Assets</u>						
10	Cash	1,500	250	370,260	372,010	341,847	672,243
11	Accounts Receivable - Gas	9,102,182	14,492,785	-	23,594,967	21,416,443	28,512,317
12	Accounts Receivable - Other	181,592	14,495	3,377	199,464	154,773	34,597
13	Uncollectible Accounts	(294,933)	(863,075)	-	(1,158,008)	(441,588)	(836,962)
14	Notes Receivable	-	-	8,913,185	8,913,185	5,559,766	3,137,369
15	Material and Supplies	2,416,575	2,048,155	-	4,464,730	4,162,206	3,892,225
16	Stores Expense Undistributed	356,883	351,217	-	708,100	655,826	481,856
17	Inventory	267,731	40,348	-	308,079	448,104	391,250
18	Prepayments	963,040	1,128,283	70,044	2,161,367	4,450,029	3,400,561
19	Accrued Revenue	3,803,680	4,731,203	-	8,534,883	9,587,864	8,319,787
20	Miscellaneous Current Assets	4,530,525	93,747	-	4,624,272	5,666,176	7,622,013
21	Total Current Assets	21,328,775	22,037,408	9,356,866	52,723,049	52,001,444	55,627,256
22	<u>Deferred Charges</u>						
23	Unamortized Debt Expense	-	-	1,359,851	1,359,851	1,208,586	1,092,517
24	Other - Deferred Debits	13,872,478	20,353,943	98,736	34,325,157	27,066,138	32,928,903
25	Total Deferred Charges	13,872,478	20,353,943	1,458,587	35,685,008	28,274,724	34,021,420
26	Total Assets & Deferred Charges	\$ 252,961,387	\$ 352,732,973	\$ 10,815,453	\$ 616,509,813	\$ 573,022,820	\$ 529,401,133

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
STOCKHOLDERS EQUITY & LIABILITIES  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) Category	(3) New Hampshire	(2) Maine	(4) Common	(5) Consolidated December 31, 2020	(6) Consolidated December 31, 2019	(7) Consolidated December 31, 2018
1	<u>Capitalization</u>						
2	Common Stock	\$ -	\$ -	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
3	Paid in Capital	-	-	207,074,000	207,074,000	200,699,000	175,199,000
4	Earned Surplus	6,096,270	8,643,131	9,713,702	24,453,103	24,380,042	22,032,465
5	Stockholders Equity	6,096,270	8,643,131	216,788,702	231,528,103	225,080,042	197,232,465
6	<u>Long Term Debt</u>						
7	Bonds and Notes	-	-	230,000,000	230,000,000	198,200,000	166,600,000
8	Total	-	-	230,000,000	230,000,000	198,200,000	166,600,000
9	<u>Current and Accrued Liabilities</u>						
10	Accounts Payable	639,411	538,256	6,001,159	7,178,826	8,651,894	10,471,212
11	Notes Payable to Associated Co.	-	-	26,747,022	26,747,022	28,494,680	58,154,005
12	A/P to Associated Co's	-	-	7,400,409	7,400,409	6,497,178	3,145,273
13	Customer Deposits	249,677	342,624	-	592,301	640,562	738,651
14	Taxes Accrued	67,648	(4,613)	-	63,035	292,534	14,450
15	Interest Accrued	-	-	2,094,467	2,094,467	1,824,919	1,503,714
16	Dividends Declared	-	-	3,666,585	3,666,585	3,304,600	1,229,300
17	Other Tax Liabilities	750,955	(609,964)	33,532	174,523	94,759	130,422
18	Other Current and Accrued Liabilities	811,427	576,546	7,636,657	9,024,630	11,636,693	15,472,163
19	Total Current and Accrued Liabilities	2,519,118	842,849	53,579,831	56,941,798	61,437,819	90,859,190
20	<u>Deferred Credits</u>						
21	Other Deferred Credits	18,639,799	21,537,277	-	40,177,076	35,921,434	27,893,528
22	Other Regulatory Liabilities	6,608,392	8,917,471	-	15,525,863	15,874,493	15,992,896
23	Accumulated Deferred Income Taxes	16,892,861	25,444,116	-	42,336,977	36,509,031	30,823,054
24	Total Deferred Credits	42,141,052	55,898,864	-	98,039,916	88,304,958	74,709,478
25	Total Stockholders Equity & Liabilities	\$ 50,756,440	\$ 65,384,844	\$ 500,368,533	\$ 616,509,817	\$ 573,022,819	\$ 529,401,133

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
UTILITY PLANT IN SERVICE  
12 MONTHS ENDED DECEMBER 31, 2020

Schedule RevReq-4-3  
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LINE NO.	(1) Account Name	(2) CAPITAL 1/1	(3) ADDITIONS	(4) RETIREMENTS	(5) TRANSFER ADJ	(6) PLANT IN SERVICE 12/31	(7) COMPLETED CONSTRUCTION NOT CLASSIFIED 12/31
1	Amortizable Plant:						
2	303 Misc Intangible Plant	\$ 11,262,452	\$ 960,046	\$ -	\$ -	\$ 12,222,498	\$ 603,849
3	Total Amortizable Plant	11,262,452	960,046	-	-	12,222,498	603,849
4	Mfg. Gas Produc. Plant:						
5	304.2 Land & Rights - Mfg Gas Prod. PI	6,816	-	-	-	6,816	-
6	305 Struct. And Improvements	161,860	-	(75,459)	(86,401)	-	-
7	320 Other Equipment	7,640	-	(7,006)	(634)	-	-
8	321 LNG Equipment	84,156	-	(84,156)	-	-	-
9	Total Mfg Gas Prod. Plant	260,472	-	(166,621)	(87,035)	6,816	-
10	Distribution Plant:						
11	374.4 Land Rgts, Other Distr Sy	89,111	-	-	-	89,111	-
12	374.5 Land Rgts, Rights Of Way	17,911	-	-	-	17,911	-
13	375.2 Structures - City Gate Meas & Reg	45,256	-	(1,906)	-	43,350	-
14	375.7 Structures - Other Dist Sys	3,124,357	4,495	-	87,035	3,215,887	1,634
15	376.2 Mains - Coated/Wrapped	24,602,506	5,182,813	(78,525)	-	29,706,795	39,433
16	376.3 Mains - Bare Steel	190,837	-	-	-	190,837	-
17	376.4 Mains - Plastic	104,050,393	9,284,825	(600,390)	-	112,734,828	7,607,356
18	376.5 Mains - Joint Seals	542,145	-	-	-	542,145	-
19	376.6 Mains - Cathodic Protection	1,005,475	54,885	-	-	1,060,360	22,380
20	376.8 Mains - Cast Iron	28,455	-	-	-	28,455	-
21	378.2 Mea & Reg Station Eq, Regulating	4,400,294	3,002,141	(279,719)	-	7,122,716	166,266
22	379 Mea & Reg Ta-G	39,266	-	-	-	39,266	-
23	380 Services	74,470,438	5,463,157	(87,804)	-	79,845,791	2,991,256
24	381 Meters	4,086,446	493,715	(241,099)	-	4,339,063	285,548
25	382 Meter Installations	23,126,115	2,038,526	(1,108,186)	-	24,056,455	1,945,231
26	383 House Regulators	685,777	43,536	-	-	729,313	4,237
27	386 Water Heaters/Conversion Burners	1,823,459	159,350	(88,909)	-	1,893,900	84,996
28	Total Distribution Plant	242,328,242	25,727,443	(2,486,538)	87,035	265,656,182	13,148,334
29	General Plant:						
30	389-1 Land	232,947	-	-	-	232,947	-
31	391.10 Off Furn & Eq.- Unspecified	431,834	65,465	-	-	497,299	10,836
32	393 Stores Equipment	31,520	-	-	-	31,520	-
33	394.10 Tools, Garage & Service Equipment	1,314,945	54,709	-	-	1,369,654	60,767
34	396 Power Operated Equipment	75,266	-	-	-	75,266	-
35	397 Communication Equipment	1,639,792	237,572	(37,264)	-	1,840,100	33,380
36	397.25 Comm EQ, Metscan/Telemet	112,656	-	-	-	112,656	-
37	397.35 ERT Automatic Reading Dev-G	3,126,899	212,363	-	-	3,339,262	130,884
38	Total General Plant	6,965,859	570,110	(37,264)	-	7,498,705	235,867
39	Total Plant in Service	\$ 260,817,025	\$ 27,257,599	\$ (2,690,423)	\$ (0)	\$ 285,384,202	\$ 13,988,050

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
ACCUMULATED DEPRECIATION & AMORTIZATION  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) Account Name	(2) RESERVE BALANCE 1/1	(3) RETIREMENTS	(4) TRANSFER ADJ	(5) COST OF REMOVAL	(6) SALVAGE	(7) DEPRECIATION	(8) RESERVE BALANCE 12/31
1	Amortizable Plant:							
2	303 Misc Intangible Plant	\$ 4,080,484	\$ -	\$ -	\$ -	\$ -	816,977	\$ 4,897,461
3	Total Amortizable Plant	4,080,484	-	-	-	-	816,977	4,897,461
4	Mfg. Gas Produc. Plant:							
5	305 Struct. And Improvements	129,465	(75,459)	(54,380)	-	-	-	(374)
6	320 Other Equipment	2,756	(7,006)	(188)	-	-	-	(4,438)
7	321 LNG Equipment	56,611	(84,156)	-	-	-	-	(27,544)
8	Total Mfg Gas Prod. Plant	188,832	(166,621)	(54,568)	-	-	-	(32,357)
9	Distribution Plant:							
10	375.2 Structures - City Gate Meas & Reg	23,676	(1,906)	-	(144,400)	-	636	(121,994)
11	375.7 Structures - Other Dist Sys	618,738	-	54,568	-	-	44,850	718,156
12	376.2 Mains - Coated/Wrapped	3,615,660	(78,525)	-	(96,639)	-	783,669	4,224,164
13	376.3 Mains - Bare Steel	(2,132,784)	-	-	-	-	-	(2,132,784)
14	376.4 Mains - Plastic	33,956,974	(600,390)	-	(220,844)	-	3,247,143	36,382,883
15	376.5 Mains - Joint Seals	542,145	-	-	-	-	-	542,145
16	376.6 Mains - Cathodic Protection	638,564	-	-	-	-	44,096	682,660
17	376.8 Mains - Cast Iron	(1,187,409)	-	-	-	-	-	(1,187,409)
18	378.2 Mea & Reg Station Eq, Regulating	988,517	(279,719)	-	(272,577)	-	230,155	666,376
19	379 Mea & Reg Ta-G	5,058	-	-	-	-	1,374	6,432
20	380 Services	25,894,274	(87,804)	-	(227,967)	-	2,900,993	28,479,497
21	381 Meters	1,376,120	(241,099)	-	(52,894)	-	144,485	1,226,613
22	382 Meter Installations	7,216,618	(1,108,186)	-	(94,033)	-	844,898	6,859,297
23	383 House Regulators	188,268	-	-	-	-	24,134	212,402
24	386 Water Heaters/Conversion Burners	941,396	(88,909)	-	(13,917)	11,358	109,637	959,565
25	Total Distribution Plant	72,685,816	(2,486,538)	54,568	(1,123,270)	11,358	8,376,070	77,518,004
26	General Plant:							
27	391.10 Off Furn & Eq.- Unspecified	256,028	-	-	-	-	42,050	298,078
28	393 Stores Equipment	31,511	-	-	-	-	-	31,511
29	394.10 Tools, Garage & Service Equipment	713,214	-	-	-	-	72,528	785,741
30	396 Power Operated Equipment	75,266	-	-	-	-	-	75,266
31	397 Communication Equipment	1,453,916	(37,264)	-	(5,020)	-	158,970	1,570,602
32	397.25 Comm EQ, Metscan/Telemet	112,656	-	-	-	-	-	112,656
33	397.35 Comm EQ, Itron Equip	2,550,675	-	-	(11,340)	-	226,965	2,766,299
34	Total General Plant	5,193,266	(37,264)	-	(16,360)	-	500,512	5,640,154
4	Total Accumulated Depreciation & Amortization	\$ 82,148,399	\$ (2,690,423)	\$ -	\$ (1,139,630)	\$ 11,358	\$ 9,693,559	\$ 88,023,263

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RATE BASE  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(3) TEST YEAR AVERAGE <sup>(1)</sup>	(4) 5 QUARTER AVERAGE	(5) RATE BASE AT DECEMBER 31, 2020	(6) PRO FORMA ADJUSTMENTS	(7) PRO FORMA RATE BASE AT DECEMBER 31, 2020
1	Utility Plant In Service	\$ 289,824,481	\$ 286,491,423	\$ 299,372,252	\$ 1,873,246	\$ 301,245,498
2	Less: Reserve for Depreciation	85,085,831	85,651,383	88,023,262	1,350,190	89,373,452
3	Net Utility Plant	204,738,650	200,840,040	211,348,990	523,056	211,872,045
4	Add: M&S Inventories	2,671,150	2,770,028	2,773,457	-	2,773,457
5	Prepayments	740,275	1,213,708	64,895	-	64,895
6	Cash Working Capital <sup>(2)</sup>	1,428,160	1,428,160	1,428,160	96,045	1,524,205
7	Sub-Total	4,839,585	5,411,896	4,266,513	96,045	4,362,558
8	Less: Net Deferred Income Taxes	\$ 20,221,877	\$ 20,784,379	\$ 21,177,756	\$ -	\$ 21,177,756
9	Excess Deferred Income Taxes	6,572,092	6,572,092	6,572,092	-	6,572,092
10	Customer Advances	-	-	-	-	-
11	Customers Deposits	269,548	264,461	249,677	-	249,677
12	Sub-Total	27,063,517	27,620,932	27,999,526	-	27,999,526
13	Rate Base	\$ 182,514,718	\$ 178,631,004	\$ 187,615,976	\$ 619,101	\$ 188,235,077
14	Net Operating Income Applicable To Rate Base	\$ 10,066,533	\$ 10,066,533	\$ 10,066,533		\$ 9,115,721
15	Rate of Return	5.52%	5.64%	5.37%		4.84%

Notes

(1) Two Point Average

(2) Computed Working Capital Based on Test Year O&M Expenses. Refer to Schedule RevReq-5-2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RATE BASE ITEMS  
QUARTERLY BALANCES

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LINE NO.	(1) DESCRIPTION	(2) DECEMBER 31 2019	(3) MARCH 31 2020	(4) JUNE 30 2020	(5) SEPTEMBER 30 2020	(6) DECEMBER 31 2020	(7) 5 QUARTER AVERAGE
1	Utility Plant in Service						
2	Plant In Service	\$ 260,817,025	\$ 266,498,877	\$ 269,468,172	\$ 272,008,852	\$ 285,384,202	\$ 270,835,426
3	Completed Construction not Classified	19,459,684	16,390,088	14,114,541	14,327,620	13,988,050	15,655,997
4	Total Utility Plant in Service	280,276,709	282,888,965	283,582,713	286,336,471	299,372,252	286,491,423
5	Depreciation Reserve	\$ (82,148,399)	\$ (84,295,016)	\$ (86,310,091)	\$ (87,480,144)	\$ (88,023,262)	\$ (85,651,383)
6	Add:						
7	M&S Inventories						
8	Material and Supplies	\$ 2,268,328	\$ 2,387,075	\$ 2,514,326	\$ 2,569,166	\$ 2,416,575	\$ 2,431,094
9	Stores Expense Undistributed	300,515	417,170	334,238	285,865	356,883	338,934
10	Total M&S Inventories	\$ 2,568,843	\$ 2,804,245	\$ 2,848,563	\$ 2,855,032	\$ 2,773,457	\$ 2,770,028
11	Prepayments	\$ 1,415,655	\$ 1,415,655	\$ 1,415,655	\$ 1,756,682	\$ 64,895	\$ 1,213,708
12	Cash Working Capital	\$ 1,428,160	\$ 1,428,160	\$ 1,428,160	\$ 1,428,160	\$ 1,428,160	\$ 1,428,160
13	Less:						
14	Total Deferred Income Taxes						
15	Def Inc Tax - Accel Depr	\$ 20,062,817	\$ 22,388,845	\$ 22,014,104	\$ 21,283,095	\$ 22,009,122	\$ 21,551,597
16	Def Inc Tax - FAS 87 / 106	(775,910)	(788,563)	(774,047)	(591,877)	(788,419)	(743,763)
17	Def Inc Tax - Bad Debt	(19,095)	(26,052)	(10,935)	(10,989)	(41,133)	(21,641)
18	Def Inc Tax - Def Rate Case Costs	0	0	0	0	0	-
19	Def Inc Tax - Insurance Claim	(1,814)	(1,814)	(1,814)	(1,814)	(1,814)	(1,814)
20	Total Deferred Income Taxes	\$ 19,265,998	\$ 21,572,415	\$ 21,227,308	\$ 20,678,415	\$ 21,177,756	\$ 20,784,379
21	Less: Excess Deferred Income Taxes	\$ 6,572,092	\$ 6,572,092	\$ 6,572,092	\$ 6,572,092	\$ 6,572,092	\$ 6,572,092
22	Less: Customer Advances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	Less: Customer Deposits	\$ 289,419	\$ 269,680	\$ 263,516	\$ 250,011	\$ 249,677	\$ 264,461
24	Rate Base	\$ 177,413,459	\$ 175,827,821	\$ 174,902,084	\$ 177,395,682	\$ 187,615,976	\$ 178,631,004

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
CASH WORKING CAPITAL  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-5-2  
Table of Contents**

	(1)	(2)	(3)	(4)	(5)	(6)
LINE NO.	DESCRIPTION	REFERENCE	TEST YEAR ACTUAL	PRO FORMA ADJUSTMENTS	SETTLEMENT AGREEMENT	TEST YEAR PRO FORMA
1	Distribution O&M Expense	Schedule RevReq-2	\$ 13,332,381	\$ 946,840	\$ (910,675)	\$ 13,368,546
2	Tax Expense	Schedule RevReq-2	4,452,919	1,412,146	(252,235)	5,612,830
3	Total		\$ 17,785,300	\$ 2,358,986	\$ (1,162,910)	\$ 18,981,376
4	Cash Working Capital Requirement:					
5	Other O&M Expense Days Lag <sup>(1)</sup> / 366	29 days	8.03%	8.03%	8.03%	8.03%
6	Total Cash Working Capital	Line 5 X Line 3	\$ 1,428,160	\$ 189,427	\$ (93,382)	\$ 1,524,205

**Notes**

(1) As Agreed to in Settlement Agreement

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
SUPPLEMENTAL PLANT PRO FORMA ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-5-3  
Table of Contents**

LINE NO.	(1) DESCRIPTION	(2) BALANCE 12/31/2020
1	Plant In Service:	
2	<u>New Hampshire</u>	
3	304 Land - Barberry Lane	\$ 6,816
4	Total NH	\$ 6,816
5	<u>Maine</u>	
6	360 Land - Lewiston	\$ 58,301
7	361 Structures & Improvements	568,201
8	362 Gas Holders	3,878,347
9	363 Other Equipment	87,313
10	Total ME	\$ 4,592,161
11	Total Plant In Service NH And ME	\$ 4,598,977
12	NH Allocation Via Annual Proportional Responsibility Factor	40.88% \$ 1,880,062
13	ME Allocation Via Annual Proportional Responsibility Factor	59.12% \$ 2,718,915
14	Depreciation Reserve:	
15	<u>New Hampshire</u>	
16	Total NH	\$ -
17	<u>Maine</u>	
18	361 Structures & Improvements	\$ 267,178
19	362 Gas Holders	2,943,652
20	363 Other Equipment	91,983
21	Total ME	\$ 3,302,812
22	Total Depreciation Reserve NH And ME	\$ 3,302,812
23	NH Allocation Via Annual Proportional Responsibility Factor	40.88% \$ 1,350,190
24	ME Allocation Via Annual Proportional Responsibility Factor	59.12% \$ 1,952,623
25	Supplemental Plant Adjustment	
26	NH Supplemental Plant Adjustment (Line 12 - Line 4)	\$ 1,873,246
27	ME Supplemental Plant Adjustment (Line 13 - Line 10)	\$ (1,873,246)
28	Supplemental Depreciation Reserve Adjustment	
29	NH Supplemental Plant Adjustment (Line 23 - Line 16)	\$ 1,350,190
30	ME Supplemental Plant Adjustment (Line 24 - Line 21)	\$ (1,350,190)



**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DEFERRED INCOME TAX PRO FORMA ADJUSTMENT  
SETTLEMENT ADJUSTMENT PURSUANT TO DOCKET 2008-155  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-5-4  
Table of Contents**

LINE NO.	(1) DESCRIPTION	(2) DECEMBER 31 2020
1	Nisource Original Plant Federal and State DIT Basis	\$ 4,053,514
2	Unitil Acquired Plant Federal and State DIT Basis	5,319,173
3	Greater of Line 1 or Line 2 to be Utilized as DIT Basis per Stipulation	<u>\$ 5,319,173</u>
4	Post-Acquisition Capital Expenditures Federal and State DIT Basis	\$ 29,619,418
5	Net Operating Loss DIT Related to Rate Base at 12/31/20	(12,929,468)
6	Total Plant and Capex Federal and State DIT to be Used in Rate Base (Line 3 + Line 4 + Line 5)	<u>\$ 22,009,122</u>
7	Less Test Year: Def Inc Tax - Accel Depr	<u>22,009,122</u>
8	Required Pro Forma Adjustment (Line 6 - Line 7)	<u>\$ -</u>

**NORTHERN UTILITIES, INC.**  
**WEIGHTED AVERAGE COST OF CAPITAL**  
**5 QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA**

**Schedule RevReq-6**  
**Table of Contents**

LINE NO.	(1) DESCRIPTION	(2) AMOUNT	(3) PROFORMA ADJUSTMENT	(4) PROFORMED AMOUNT	(5) WEIGHT	(6) COST OF CAPITAL	(7) WEIGHTED COST OF CAPITAL	(8) REFERENCE
1	Common Stock Equity	\$ 229,204,938	\$ -	\$ 229,204,938	52.00%	9.30%	4.84%	Schedule RevReq 6-1 and 6-2
2	Preferred Stock Equity	-	-	-	0.00%	0.00%	0.00%	Schedule RevReq 6-1 and 6-3
3	Long Term Debt	207,640,000	-	207,640,000	48.00%	4.93%	2.37%	Schedule RevReq 6-1 and 6-4
4	Short Term Debt	-	-	-	0.00%	1.69%	0.00%	Schedule RevReq 6-1 and 6-5
5	Total	<u>\$ 436,844,938</u>	<u>\$ -</u>	<u>\$ 436,844,938</u>	<u>100.00%</u>		<u>7.20%</u>	

NORTHERN UTILITIES, INC.  
CAPITAL STRUCTURE FOR RATEMAKING PURPOSES  
5-QUARTER AVERAGE ENDED DECEMBER 31, 2020 PRO FORMA

Schedule RevReq-6-1  
[Table of Contents](#)

LINE NO.	(1) DESCRIPTION	(2) DECEMBER 31 2019	(3) MARCH 31 2020	(4) JUNE 30 2020	(5) SEPTEMBER 30 2020	(6) DECEMBER 31 2020	(7) 5 QUARTER AVERAGE	(3) PROFORMA ADJUSTMENT	(8) PROFORMA AMOUNT
1	Common Stock Equity								
2	Common Stock	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ -	\$ 1,000
3	Misc. Paid In Capital	200,699,000	200,699,000	205,699,000	205,699,000	207,074,000	203,974,000	-	203,974,000
4	Retained Earnings	24,380,042	29,943,726	26,634,154	20,738,662	24,453,104	25,229,938	-	25,229,938
5	Total Common Stock Equity	225,080,042	230,643,726	232,334,154	226,438,662	231,528,104	229,204,938	-	229,204,938
6	Preferred Stock Equity	-	-	-	-	-	-	-	-
7	Long-Term Debt	198,200,000	190,000,000	190,000,000	230,000,000	230,000,000	207,640,000	-	207,640,000
8	Short-Term Debt <sup>(1)</sup>	-	-	-	-	-	-	-	-
9	Total	\$ 423,280,042	\$ 420,643,726	\$ 422,334,154	\$ 456,438,662	\$ 461,528,104	\$ 436,844,938	\$ -	\$ 436,844,938
10	<u>Capital Structure Ratios</u>								
11	Common Stock Equity	53.18%	54.83%	55.01%	49.61%	50.17%	52.47%		52.47%
12	Preferred Stock Equity	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%
13	Long-Term Debt	46.82%	45.17%	44.99%	50.39%	49.83%	47.53%		47.53%
14	Short-Term Debt <sup>(1)</sup>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%
15	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%

Notes

(1) For ratemaking purposes the Company has imputed zero short-term debt

**NORTHERN UTILITIES, INC.  
COST OF COMMON EQUITY CAPITAL  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-6-2  
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**THE INFORMATION CONCERNING THE COST OF COMMON EQUITY CAPITAL IS PROVIDED  
IN THE TESTIMONY AND EXHIBITS OF MR. JOHN COCHRANE**

**NORTHERN UTILITIES, INC.  
WEIGHTED AVERAGE COST OF PREFERRED STOCK  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-6-3  
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**NORTHERN UTILITIES, INC. DOES NOT HAVE PREFERRED STOCK OUTSTANDING**

NORTHERN UTILITIES, INC.  
WEIGHTED AVERAGE COST OF LONG-TERM DEBT  
DECEMBER 31, 2020 PRO FORMA

Schedule RevReq-6-4  
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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
LINE NO.	ISSUE	DATE ISSUED	TERM	FACE VALUE	OUTSTANDING AMOUNT	PROFORMA ADJUSTMENT	PROFORMED OUTSTANDING AMOUNT	ISSUANCE COSTS	NET PROCEEDS RATIO [(5)-(9)/(5)]	UNAMORTIZED ISSUANCE COSTS	NET PROCEEDS OUTSTANDING (8)-(11)	ANNUAL ISSUANCE COST	ANNUAL INTEREST COST Rate * (8)	TOTAL ANNUAL COST (13)+(14)	COST RATE BASED ON NET PROCEEDS (15)/[(8)-(11)]	
1	7.72%	Sr. Notes	12/3/2008	30 Yrs	\$ 50,000,000	\$ 50,000,000	\$ -	\$ 50,000,000	\$ 435,899	99.13%	\$ 260,401	\$ 49,739,599	\$ 14,534	\$ 3,860,000	\$ 3,874,534	7.79%
2	4.42%	Sr. Notes	10/15/2014	30 Yrs	50,000,000	50,000,000	-	50,000,000	482,981	99.03%	383,031	49,616,969	16,099	2,210,000	2,226,099	4.49%
3	3.52%	Sr. Notes	11/1/2017	10 Yrs	20,000,000	20,000,000	-	20,000,000	148,352	99.26%	101,374	19,898,626	14,835	704,000	718,835	3.61%
4	4.32%	Sr. Notes	11/1/2017	30 Yrs	30,000,000	30,000,000	-	30,000,000	222,528	99.26%	199,039	29,800,961	7,418	1,296,000	1,303,418	4.37%
5	4.04%	Sr. Notes	9/12/2019	30 Yrs	40,000,000	40,000,000	-	40,000,000	208,040	99.48%	225,229	39,774,771	6,954	1,616,000	1,622,954	4.08%
6	3.78%	Sr. Notes	9/15/2020	20 Yrs	40,000,000	40,000,000	-	40,000,000	227,434	99.43%	190,778	39,809,222	11,372	1,512,000	1,523,372	3.83%
7	Total				\$ 230,000,000	\$ 230,000,000	\$ -	\$ 230,000,000	\$ 1,725,233		\$ 1,359,851	\$ 228,640,149	\$ 71,212	\$ 11,198,000	\$ 11,269,212	4.93%

**NORTHERN UTILITIES, INC.  
COST OF SHORT-TERM DEBT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Schedule RevReq-6-5  
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	(1)	(2)	(3)	(4)	(5)
LINE NO.	MONTH	MONTH-END AMOUNT OUTSTANDING	AVERAGE DAILY BORROWINGS	MONTHLY SHORT-TERM INTEREST	INTEREST RATE <sup>(1)</sup>
1	January 2020	28,666,840	\$ 25,109,148	\$ 60,854	2.86%
2	February 2020	24,794,114	23,351,619	52,155	2.82%
3	March 2020	28,316,841	27,127,612	49,312	2.15%
4	April 2020	27,939,753	25,053,060	39,502	1.92%
5	May 2020	26,822,898	25,283,108	29,299	1.37%
6	June 2020	25,298,270	24,327,028	26,512	1.33%
7	July 2020	33,152,219	29,181,116	32,655	1.32%
8	August 2020	37,754,315	34,429,766	38,141	1.31%
9	September 2020	4,906,721	20,504,100	21,844	1.30%
10	October 2020	18,132,923	9,559,681	10,476	1.29%
11	November 2020	22,751,664	19,566,665	20,656	1.29%
12	December 2020	26,747,022	24,606,907	27,020	1.30%
13	Average for the Year		24,008,317		1.69%

**Notes**

(1) The Interest Rate is calculated as follows: [Column (4) / # of days in month \* 366] / Column (3).

**NORTHERN UTILITIES, INC.  
HISTORICAL CAPITAL STRUCTURE  
DECEMBER 31, 201X**

**Schedule RevReq-6-6  
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<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) 2015</b>	<b>(3) 2016</b>	<b>(4) 2017</b>	<b>(5) 2018</b>	<b>(6) 2019</b>
1	Common Stock Equity	\$ 123,556,063	\$ 155,183,729	\$ 191,323,791	\$ 197,232,465	\$ 225,080,042
2	Preferred Stock Equity	-	-	-	-	-
3	Long-Term Debt	<u>155,000,000</u>	<u>145,000,000</u>	<u>185,000,000</u>	<u>166,600,000</u>	<u>198,200,000</u>
4	Total	<u>\$ 278,556,063</u>	<u>\$ 300,183,729</u>	<u>\$ 376,323,791</u>	<u>\$ 363,832,465</u>	<u>\$ 423,280,042</u>
5	Short-Term Debt (Year-End)	17,820,632	36,977,214	2,994,930	58,154,005	28,494,680



**NORTHERN UTILITIES, INC.**  
**HISTORICAL CAPITALIZATION RATIOS**  
**DECEMBER 31, 201X**

**Schedule RevReq-6-7**  
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<b>LINE NO.</b>	<b>(1) DESCRIPTION</b>	<b>(2) 2015</b>	<b>(3) 2016</b>	<b>(4) 2017</b>	<b>(5) 2018</b>	<b>(6) 2019</b>
<b>1</b>	<b>Common Stock Equity</b>	<b>44.36%</b>	<b>51.70%</b>	<b>50.84%</b>	<b>54.21%</b>	<b>53.18%</b>
<b>2</b>	<b>Preferred Stock Equity</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
<b>3</b>	<b>Long-Term Debt</b>	<b>55.64%</b>	<b>48.30%</b>	<b>49.16%</b>	<b>45.79%</b>	<b>46.82%</b>
<b>4</b>	<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
WORKPAPERS SUPPORTING REVENUE REQUIREMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

Northern Utilities, Inc.  
Gas Inc Stmt - NH - YTD  
R\_NU\_4\_BF\_NH

Workpaper - Income Statement  
Schedule 4 NH  
4/20/2021  
10:26:24 AM  
For Periods Ending December 31, 2020

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	2019 Base	2019 Flowthru	Total	2020 Base	2020 Flowthru	Total
OPERATING REVENUES						
Sales:						
Residential (480)	19,612,987	14,904,240	34,517,227	19,232,153	10,809,182	30,041,335
General Service (481)	11,028,771	17,278,063	28,306,834	10,623,702	11,698,198	22,321,900
Firm Transport Revenues (484, 489) (External Sup)	8,612,979	1,216,889	9,829,867	8,583,266	1,156,548	9,739,814
Sales for Resale (483)	-	2,870,979	2,870,979	-	1,107,459	1,107,459
Other Sales (495)	236,169	(3,751,608)	(3,515,439)	(201,864)	2,446,481	2,244,617
Total Sales	39,490,906	32,518,563	72,009,468	38,237,257	27,217,869	65,455,125
Other Operating Revenues:						
Late Charge (487)	76,773	-	76,773	36,761	-	36,761
Misc. Service Revenues (488)	875,755	-	875,755	852,304	-	852,304
Rent from Property (493 & 457)	200,952	-	200,952	218,628	-	218,628
Other Revenues	-	(311,587)	(311,587)	-	120,656	120,656
Total Other Operating Revenues	1,153,480	(311,587)	841,893	1,107,692	120,656	1,228,348
TOTAL OPERATING REVENUES	40,644,386	32,206,975	72,851,361	39,344,949	27,338,525	66,683,473
OPERATING EXPENSES						
Operation & Maint. Expenses:						
Production (710-813)	477,446	27,749,285	28,226,731	449,736	23,095,124	23,544,860
Transmission (850-857)	72,713	-	72,713	63,829	-	63,829
Distribution (870-894) (586)	3,509,448	-	3,509,448	3,733,377	-	3,733,377
Cust. Accounting (901-905)	2,580,251	188,507	2,768,758	2,508,645	99,544	2,608,189
Cust. Service & Info (906-910)	71,870	2,247,505	2,319,375	73,074	2,268,632	2,341,706
Sales Expenses (911-916)	64,467	-	64,467	69,178	-	69,178
Admin. & General (920-935)	7,607,751	71,540	7,679,291	6,682,552	58,225	6,740,777
Total O & M Expenses	14,383,947	30,256,837	44,640,784	13,580,391	25,521,524	39,101,915
Other Operating Expenses:						
Deprtn. & Amort. (403-407)	8,884,559	120,384	9,004,943	9,693,559	(0)	9,693,559
Taxes-Other Than Inc. (408)	4,306,298	-	4,306,298	4,867,774	-	4,867,774
Federal Income Tax (409)	52,380	-	52,380	(30,211)	-	(30,211)
State Franchise Tax (409)	(309,547)	-	(309,547)	(384,644)	-	(384,644)
Def. Income Taxes (410,411)	2,975,683	-	2,975,683	2,600,179	-	2,600,179
Total Other Operating Expenses	15,909,373	120,384	16,029,757	16,746,657	(0)	16,746,657
TOTAL OPERATING EXPENSES	30,293,320	30,377,221	60,670,541	30,327,047	25,521,524	55,848,571
NET UTILITY OPERATING INCOME	10,351,066	1,829,755	12,180,820	9,017,901	1,817,001	10,834,902
OTHER INCOME & DEDUCTIONS						
Other Income:						
AFUDC - Other Funds (41901)	-	-	-	-	-	-
Other (415- 421)	280,289	(37,502)	242,787	231,700	(25,362)	206,339
Other Income Deduc. (425, 426)	232,636	-	232,636	151,744	-	151,744
Taxes Other than Income Taxes:						
Income Tax, Other Inc & Ded	2,752	-	2,752	14,786	-	14,786
Net Other Income (Deductions)	44,901	(37,502)	7,400	65,170	(25,362)	39,809
GROSS INCOME	10,395,967	1,792,253	12,188,220	9,083,072	1,791,639	10,874,711
Interest Charges (427 - 432)	4,670,265	3,717	4,673,982	4,777,155	1,286	4,778,441
NET INCOME	5,725,702	1,788,536	7,514,238	4,305,917	1,790,353	6,096,270

Northern Utilities, Inc.  
Gas Inc Stmt - NH - YTD  
R\_NU\_4\_B\_FTxM\_NH

Workpaper - Flowthrough Detail  
4/20/2021  
10:21:09 AM  
For Periods Ending December 31, 2020

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	Commodity Demand COG	Working Capital	Bad Debt	Residential Low Income Assistance	Energy Efficiency	Environ Response Costs	Rate Case Exp	Recoup	Lost Revenue	On-Bill Financing	Total Flowthru	Total Base	Total New Hampshire Division	Cost of Gas Total	LDAC Flowthrough Total
OPERATING REVENUES															
Sales:															
Residential (480)	\$ 9,402,656	\$ 6,775	\$ 66,784	\$ 15,479	\$ 977,734	\$ 103,733	\$ 0	\$ (0)	\$ 236,021	\$ -	\$ 10,809,182	\$ 19,232,153	\$ 30,041,335	\$ 9,476,216	\$ 1,332,967
General Service (481)	10,833,043	7,005	75,810	77,272	542,605	119,301	(25)	11	43,177	-	11,698,198	10,623,702	22,321,900	10,915,858	782,341
Firm Transport Revenues (484, 489) (External Sup)	-	-	-	114,130	802,535	175,875	25	(11)	63,995	-	1,156,548	8,583,266	9,739,814	0	1,156,548
Sales for Resale (483)	1,107,459	-	-	-	-	-	-	-	-	-	1,107,459	-	1,107,459	1,107,459	-
Other Sales (495)	2,291,577	11,582	(43,051)	115,868	41,657	-	-	-	15,896	12,952	2,446,481	(201,864)	2,244,617	2,260,108	186,373
Total Sales	23,634,735	25,362	99,544	322,748	2,364,531	398,908	(0)	-	359,089	12,952	27,217,869	38,237,257	65,455,125	23,759,640	3,458,228
Other Operating Revenues:															
Late Charge (487)	-	-	-	-	-	-	-	-	-	-	-	36,761	36,761	-	-
Misc. Service Revenues (488)	-	-	-	-	-	-	-	-	-	-	-	852,304	852,304	-	-
Rent from Property (493 & 457)	-	-	-	-	-	-	-	-	-	-	-	218,628	218,628	-	-
Other Revenues	120,656	-	-	-	-	-	-	-	-	-	120,656	-	120,656	120,656	-
Total Other Operating Revenues	120,656	-	-	-	-	-	-	-	-	-	120,656	1,107,692	1,228,348	120,656	-
TOTAL OPERATING REVENUES	23,755,391	25,362	99,544	322,748	2,364,531	398,908	(0)	-	359,089	12,952	27,338,525	39,344,949	66,683,473	23,880,296	3,458,228
OPERATING EXPENSES															
Operation & Maint. Expenses:															
Production (710-813)	22,696,215	-	-	-	-	398,908	-	-	-	-	23,095,124	449,736	23,544,860	22,696,215	398,908
Transmission (850-857)	-	-	-	-	-	-	-	-	-	-	-	63,829	63,829	-	-
Distribution (870-894) (586)	-	-	-	-	-	-	-	-	-	-	-	3,733,377	3,733,377	-	-
Cust. Accounting (901-905)	-	-	99,544	-	-	-	-	-	-	-	99,544	2,508,645	2,608,189	99,544	-
Cust. Service & Info (906-910)	-	-	-	-	2,255,679	-	-	-	-	12,952	2,268,632	73,074	2,341,706	(0)	2,268,632
Sales Expenses (911-916)	-	-	-	-	-	-	-	-	-	-	-	69,178	69,178	-	-
Admin. & General (920-935)	-	-	-	58,225	-	-	-	-	-	-	58,225	6,682,552	6,740,777	-	58,225
Total O & M Expenses	22,696,215	-	99,544	58,225	2,255,679	398,908	-	-	-	12,952	25,521,524	13,580,391	39,101,915	22,795,759	2,725,765
Other Operating Expenses:															
Deptrtn. & Amort. (403-407)	-	-	-	-	-	-	(0)	-	-	-	(0)	9,693,559	9,693,559	-	(0)
Taxes-Other Than Inc. (408)	-	-	-	-	-	-	-	-	-	-	-	4,867,774	4,867,774	-	-
Federal Income Tax (409)	-	-	-	-	-	-	-	-	-	-	-	(30,211)	(30,211)	-	-
State Franchise Tax (409)	-	-	-	-	-	-	-	-	-	-	-	(384,644)	(384,644)	-	-
Def. Income Taxes (410,411)	-	-	-	-	-	-	-	-	-	-	-	2,600,179	2,600,179	-	-
Total Other Operating Expenses	-	-	-	-	-	-	(0)	-	-	-	(0)	16,746,657	16,746,657	-	(0)
TOTAL OPERATING EXPENSES	22,696,215	-	99,544	58,225	2,255,679	398,908	(0)	-	-	12,952	25,521,524	30,327,047	55,848,571	22,795,759	2,725,765
NET UTILITY OPERATING INCOME	1,059,176	25,362	-	264,523	108,852	-	-	-	359,089	-	1,817,001	9,017,901	10,834,902	1,084,537	732,463
OTHER INCOME & DEDUCTIONS															
Other Income:															
Other (415- 421)	-	(25,362)	-	-	-	-	-	-	-	-	(25,362)	231,700	206,339	(25,362)	-
Other Income Deduc. (425, 426)	-	-	-	-	-	-	-	-	-	-	-	151,744	151,744	-	-
Taxes Other than Income Taxes:															
Income Tax, Other Inc & Ded	-	-	-	-	-	-	-	-	-	-	-	14,786	14,786	-	-
Net Other Income (Deductions)	-	(25,362)	-	-	-	-	-	-	-	-	(25,362)	65,170	39,809	(25,362)	-
GROSS INCOME	1,059,176	-	-	264,523	108,852	-	-	-	359,089	-	1,791,639	9,083,072	10,874,711	1,059,176	732,463
Interest Charges (427 - 432)	1,286	-	-	-	-	-	-	-	-	-	1,286	4,777,155	4,778,441	1,286	-
NET INCOME	\$ 1,057,890	\$ -	\$ -	\$ 264,523	\$ 108,852	\$ -	\$ -	\$ -	\$ 359,089	\$ -	\$ 1,790,353	\$ 4,305,917	\$ 6,096,270	\$ 1,057,890	\$ 732,463

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
COST OF GAS OPERATING INCOME STATEMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper - Cost of Gas  
Table of Contents**

(1)		(2)	(3)	(4)
LINE NO.	DESCRIPTION	TEST YEAR COST OF GAS	LESS: INDIRECT PRODUCTION & O.H.	COST OF GAS EXCL. PROD. & O.H.
	OPERATING REVENUES			
1	TOTAL SALES	23,759,640	1,057,890	22,701,750
2	TOTAL OTHER OPERATING REVENUES	120,656	-	120,656
3	TOTAL OPERATING REVENUES	23,880,296	1,057,890	22,822,406
4	OPERATING EXPENSES:			
5	PRODUCTION	22,696,215	-	22,696,215
6	TRANSMISSION	-	-	-
7	DISTRIBUTION	-	-	-
8	CUSTOMER ACCOUNTING	99,544	-	99,544
9	CUSTOMER SERVICE	(0)	-	(0)
10	SALES EXPENSE	-	-	-
11	ADMINISTRATIVE & GENERAL	-	-	-
12	DEPRECIATION	-	-	-
13	AMORTIZATIONS	-	-	-
14	TAXES OTHER THAN INCOME	-	-	-
15	FEDERAL INCOME TAX	-	-	-
16	STATE INCOME TAX	-	-	-
17	DEFERRED FEDERAL & STATE INCOME TAXES	-	-	-
18	INTEREST ON CUSTOMER DEPOSITS	-	-	-
19	TOTAL OPERATING EXPENSES	22,795,759	-	22,795,759
20	NET OPERATING INCOME	1,084,537	1,057,890	26,647

Workpaper 1.1  
**REDACTED**  
[Table of Contents](#)

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Workpaper 1.2  
**REDACTED**  
[Table of Contents](#)

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NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
UNION PAYROLL ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 2.1  
Table of Contents

LINE NO.	(1)	(2)
	DESCRIPTION	TOTAL
1	Payroll - Five Months Ended May 31, 2020	\$ 1,902,372
2	2020 Salary & Wage Increase <sup>(1)</sup>	3.00%
3	Union Payroll Annualization	<u>\$ 57,071</u>

Notes  
(1) Average Union increase of 3% effective June 1, 2020



NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
UNION AND NONUNION PAYROLL/COMPENSATION <sup>(1)</sup>  
12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 2.2  
Table of Contents

LINE NO.	(1)	(2)
	DESCRIPTION	TOTAL
1	Union Weekly Payroll <sup>(1)</sup>	\$ 3,475,844
2	Total Nonunion Payroll <sup>(1)</sup>	<u>946,912</u>
3	Total Payroll <sup>(2)</sup>	<u>4,422,757</u>
4	Payroll Capitalization <sup>(3)</sup>	<u>(2,058,097)</u>
5	Test Year O&M Payroll	<u>\$ 2,364,660</u>

Notes  
(1) Payroll Allocation to Union and Non-Union based on ADP 2020 Year End Payroll Registers  
(2) Includes Incentive Compensation at Target of \$58,992  
(3) Refer to Workpaper 2.3

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL SUMMARY  
FOR COMPUTATION OF PAYROLL BENEFIT RELATED OVERHEADS**

**Workpaper 2.3  
Table of Contents**

(1)		(2)
LINE NO.	DESCRIPTION	2020 INCENTIVE COMP AT TARGET
1	O&M PAYROLL:	
2	OPERATIONS	1,325,952
3	MAINTENANCE	168,179
4	TOTAL O&M PAYROLL	1,494,131
5	CONSTRUCTION PAYROLL:	
6	DIRECT	687,402
7	INDIRECT	1,007,550
8	TOTAL CONSTRUCTION PAYROLL	1,694,952
9	OTHER PAYROLL:	
10	JOBGING	18,867
11	CLEARING ACCOUNTS	193,033
12	UNPRODUCTIVE TIME	165,091
13	MOBILE DATA SYSTEMS (MDS)	816,759
14	INCENTIVE COMPENSATION at TARGET	58,992
15	OTHER	23,646
16	TOTAL OTHER PAYROLL	1,276,387
17	TOTAL PAYROLL	4,465,470
18	O&M PAYROLL:	
19	OPERATIONS	1,325,952
20	MAINTENANCE	168,179
21	ALLOCATED CLEARING	54,513
22	ALLOCATED UNPRODUCTIVE	26,415
23	ALLOCATED MDS	780,163
24	ALLOCATED INCENTIVE COMPENSATION	9,439
25	TOTAL O&M PAYROLL	2,364,660
26	CONSTRUCTION PAYROLL:	
27	DIRECT	687,402
28	INDIRECT	1,007,550
29	ALLOCATED CLEARING	138,521
30	ALLOCATED UNPRODUCTIVE	138,676
31	ALLOCATED MDS	36,395
32	ALLOCATED INCENTIVE COMPENSATION	49,553
33	TOTAL CONSTRUCTION PAYROLL	2,058,097
34	TOTAL PAYROLL, NET OF OTHER PAYROLL	4,422,757
35	TOTAL OTHER PAYROLL:	
36	JOBGING	18,867
37	BELOW THE LINE MDS	201
38	OTHER	23,646
39	TOTAL OTHER PAYROLL	42,713
40	TOTAL PAYROLL, WITH INCENTIVE COMP ADJ TO TARGET	4,465,470

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL - INCENTIVE COMPENSATION ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 2.4  
Table of Contents**

LINE NO.	(1)	(2)
	Description	Amount
1	<u>Northern Utilities, Inc. Payroll:</u>	
2	Adjustment to reflect Incentive Compensation at Target	
3	Test Year Accrued Incentive Compensation	\$ 58,992
4	Incentive Compensation at Target	<u>58,992</u>
5	Test Year Accounting Adjustment to reflect Incentive Compensation at Target	-
6	Capitalized Incentive Compensation at	84.00% <u>-</u>
7	Test Year Incentive Comp Accounting Adjustment to O&M	<u>-</u>
8	<u>USC Payroll, Allocated to Northern Utilities, Inc. - NH Division:</u>	
9	Adjustment to reflect Incentive Compensation at Target	
10	Test Year Accrued Incentive Compensation at USC	3,412,143
11	Test Year Accrued Incentive Compensation Percentage Billed to NuNH In 2020	20.18% 688,571
12	Incentive Compensation at Target	<u>688,571</u>
13	Test Year Accounting Adjustment to reflect Incentive Compensation at Target	-
14	Capitalized Incentive Compensation at	32.52% <u>-</u>
15	Test Year Incentive Comp Accounting Adjustment to O&M	<u>-</u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL AND DENTAL INSURANCE  
FOR THE 12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 3.1  
Table of Contents

Line No.	Coverage	Employee Census <sup>(1)</sup>				2021 Rates <sup>(2)</sup>				- Cost -				
		- Medical -		- Dental -		- Medical -		- Dental -		- Medical -		- Dental -		Total
		CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	
1	Individual	6	5	11	-	\$ 792.45	\$ 1,090.53	\$ 46.56	\$ 45.21	\$ 4,755	\$ 5,453	\$ 512	\$ -	\$ 10,720
2	Two Person	2	8	11	-	1,362.76	1,966.94	83.34	80.82	2,726	15,736	917	-	19,378
3	Family	9	9	20	-	1,849.91	2,714.18	147.21	141.43	16,649	24,428	2,944	-	44,021
4	Total	17	22	42	-					24,129	45,616	4,373	-	74,118
5	2021 Annual Cost Based on Employee Enrollments at December 31, 2020										289,553	547,389	52,477	889,420
6	Employee Contribution <sup>(3)</sup>										(57,911)	(109,478)	(10,495)	(177,884)
7	Net Cost										231,642	437,912	41,982	711,536
8	Plus: Company Contribution to HSA										14,000	-	-	14,000
9	Payments to Employees to Opt out										11,840	4,900	-	16,740
10	Total HSA and Opt out Payments										25,840	4,900	-	30,740
11	Proformed 2021 Medical Cost										257,482	442,812	41,982	742,276
12	Projected Increase in Premium Rates Effective January 1, 2022 <sup>(4)</sup>										21,913	39,853	1,679	63,446
13	Proformed 2021 and 2022 Medical and Dental Cost										279,396	482,665	43,661	805,721
14	Amount Chargeable to Capital <sup>(5)</sup>										(167,012)	(293,533)	(26,611)	(487,156)
15	Total Pro-formed Medical and Dental Insurance O&M Expense													318,565
16	Less Test Year O&M Expense <sup>(6)</sup>													182,055
17	Total O&M Medical & Dental Insurance Adjustment													\$ 136,510

Notes

(1) Employee Benefit Census as of December 31, 2020

(2) Anthem and Northeast Delta Dental monthly insurance rates, effective January 1, 2021

(3) Employee Contributions: 20%

(4) Estimated increase effective January 1, 2022

Medical Increase 9.00%

Dental Increase 4.00%

(5) Capitalization Rate: 48.76%

(6) Refer to Workpaper 3.2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL AND DENTAL INSURANCE  
FOR THE 12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 3.1 Revised  
Table of Contents

Line No.	Coverage	Employee Census <sup>(1)</sup>				2021 Rates <sup>(2)</sup>				- Cost -				
		- Medical -		- Dental -		- Medical -		- Dental -		- Medical -		- Dental -		Total
		CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	
1	Individual	6	5	11	-	\$ 792.45	\$ 1,090.53	\$ 46.56	\$ 45.21	\$ 4,755	\$ 5,453	\$ 512	\$ -	\$ 10,720
2	Two Person	2	8	11	-	1,362.76	1,966.94	83.34	80.82	2,726	15,736	917	-	19,378
3	Family	9	9	20	-	1,849.91	2,714.18	147.21	141.43	16,649	24,428	2,944	-	44,021
4	Total	17	22	42	-					24,129	45,616	4,373	-	74,118
5	2021 Annual Cost Based on Employee Enrollments at December 31, 2020										289,553	547,389	52,477	889,420
6	Employee Contribution <sup>(3)</sup>										(57,911)	(109,478)	(10,495)	(177,884)
7	Net Cost										231,642	437,912	41,982	711,536
8	Plus: Company Contribution to HSA										14,000	-	-	14,000
9	Payments to Employees to Opt out										11,840	4,900	-	16,740
10	Total HSA and Opt out Payments										25,840	4,900	-	30,740
11	Proformed 2021 Medical Cost										257,482	442,812	41,982	742,276
12	Projected Increase in Premium Rates Effective January 1, 2022 <sup>(4)</sup>										-	-	-	-
13	Proformed 2021 and 2022 Medical and Dental Cost										257,482	442,812	41,982	742,276
14	Amount Chargeable to Capital <sup>(5)</sup>										(153,786)	(269,296)	(25,588)	(448,670)
15	Total Pro-formed Medical and Dental Insurance O&M Expense													293,606
16	Less Test Year O&M Expense <sup>(6)</sup>													182,055
17	Total O&M Medical & Dental Insurance Adjustment													\$ 111,551

Notes

(1) Employee Benefit Census as of December 31, 2020

(2) Anthem and Northeast Delta Dental monthly insurance rates, effective January 1, 2021

(3) Employee Contributions: 20%

(4) Actual rate change effective January 1, 2022

Medical Increase 0.00%

Dental Increase 0.00%

(5) Capitalization Rate: 48.76%

(6) Refer to Workpaper 3.2

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL INSURANCE  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 3.2  
Table of Contents**

<b>LINE NO.</b>	<b>(1) Description</b>	<b>(2) Amount</b>
1	Medical Insurance Expense	\$ 665,259
2	Benefits Cost Capitalized at	48.76% (324,380)
3	Subtotal Medical Costs	340,879
4	Employee Contribution	(160,868)
5	Drug Subsidy	(10,252)
6	Subtotal	(171,121)
7	Net Test Year Medical Insurance Expense	169,758
8	Dental Insurance Expense	44,042
9	Benefits Cost Capitalized at	48.76% (21,475)
10	Subtotal Dental Costs	22,567
11	Employee Contribution	(10,270)
12	Net Test Year Dental Costs	12,297
13	Net Test Year Medical & Dental Costs	\$ 182,055

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL AND DENTAL INSURANCE - UNITIL SERVICE CORP  
FOR THE 12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 3.3  
Table of Contents

Line No.	Coverage	Employee Census <sup>(1)</sup>				2021 Rates <sup>(2)</sup>				Costs					
		Medical		Dental		Medical		Dental		Medical		Dental			
		CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	Total	
1	Individual	80	-	79	48	\$ 792.45	\$ 1,033.07	\$ 46.56	\$ 45.21	\$ 63,396	\$ -	\$ 3,678	\$ 2,170	\$ 69,244	
2	Two Person	64	1	77	36	1,362.76	1,859.73	83.34	80.82	87,217	1,860	6,417	2,910	98,403	
3	Family	82	1	100	79	1,849.91	2,564.50	147.21	141.43	151,693	2,565	14,721	11,173	180,151	
4	Total	226	2	256	163					302,305	4,424	24,816	16,253	347,798	
5	2021 Annual Cost Based on Employee Enrollments at December 31, 2020										3,627,663	53,091	297,797	195,031	4,173,582
6	Employee Contribution <sup>(3)</sup>										(725,533)	(10,618)	(59,559)	(39,006)	(834,716)
7	Net Cost										2,902,130	42,473	238,238	156,025	3,338,865
8	Plus: Company Contribution to HSA										186,000	-	-	-	186,000
9	Payments to Employees to Opt out										178,400	-	-	-	178,400
10	Total HSA and Opt out Payments										364,400	-	-	-	364,400
11	Proformed 2021 Medical Cost										3,266,531	42,473	238,238	156,025	3,703,266
12	Projected Increase in Premium Rates Effective January 1, 2022 <sup>(4)</sup>										277,248	3,823	9,530	6,241	296,841
13	Proformed 2021 and 2022 Medical and Dental Cost										3,543,778	46,295	247,767	162,266	4,000,106
12	Apportionment to NuNH at 20.18%										715,134	9,342	49,999	32,745	807,221
13	Amount Chargeable to Capital at 31.51%										(225,339)	(2,944)	(15,755)	(10,318)	(254,355)
14	Total Pro-formed Medical and Dental Insurance O&M Expense														552,866
15	Less Test Year O&M Expense <sup>(5)</sup>														284,783
16	Total O&M Medical & Dental Insurance Adjustment														\$ 268,083

**Notes**

- (1) Employee Benefit Census as of December 31, 2020.  
(2) Health Plans, Inc. and Northeast Delta Dental monthly insurance rates, effective January 1, 2021.  
(3) Employee Contributions: 20%  
(4) Estimated increase effective January 1, 2022  
    Medical Increase      9.00%  
    Dental Increase      4.00%  
(5) Refer to Workpaper 3.4

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
MEDICAL AND DENTAL INSURANCE - UNITIL SERVICE CORP  
FOR THE 12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 3.3 Revised  
Table of Contents

Line No.	Coverage	Employee Census <sup>(1)</sup>				2021 Rates <sup>(2)</sup>				Costs					
		Medical		Dental		Medical		Dental		Medical		Dental			
		CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	CDHP	PPO	Plus	Standard	Total	
1	Individual	80	-	79	48	\$ 792.45	\$ 1,033.07	\$ 46.56	\$ 45.21	\$ 63,396	\$ -	\$ 3,678	\$ 2,170	\$ 69,244	
2	Two Person	64	1	77	36	1,362.76	1,859.73	83.34	80.82	87,217	1,860	6,417	2,910	98,403	
3	Family	82	1	100	79	1,849.91	2,564.50	147.21	141.43	151,693	2,565	14,721	11,173	180,151	
4	Total	226	2	256	163					302,305	4,424	24,816	16,253	347,798	
5	2021 Annual Cost Based on Employee Enrollments at December 31, 2020										3,627,663	53,091	297,797	195,031	4,173,582
6	Employee Contribution <sup>(3)</sup>										(725,533)	(10,618)	(59,559)	(39,006)	(834,716)
7	Net Cost										2,902,130	42,473	238,238	156,025	3,338,865
8	Plus: Company Contribution to HSA										186,000	-	-	-	186,000
9	Payments to Employees to Opt out										178,400	-	-	-	178,400
10	Total HSA and Opt out Payments										364,400	-	-	-	364,400
11	Proformed 2021 Medical Cost										3,266,531	42,473	238,238	156,025	3,703,266
12	Projected Increase in Premium Rates Effective January 1, 2022 <sup>(4)</sup>										-	-	-	-	-
13	Proformed 2021 and 2022 Medical and Dental Cost										3,266,531	42,473	238,238	156,025	3,703,266
12	Apportionment to NuNH at 20.18%										659,186	8,571	48,076	31,486	747,319
13	Amount Chargeable to Capital at 31.51%										(207,709)	(2,701)	(15,149)	(9,921)	(235,480)
14	Total Pro-formed Medical and Dental Insurance O&M Expense														511,839
15	Less Test Year O&M Expense <sup>(5)</sup>														284,783
16	Total O&M Medical & Dental Insurance Adjustment														\$ 227,056

**Notes**

- (1) Employee Benefit Census as of December 31, 2020.  
(2) Health Plans, Inc. and Northeast Delta Dental monthly insurance rates, effective January 1, 2021.  
(3) Employee Contributions: 20%  
(4) Actual rate change effective January 1, 2022  
    Medical Increase      0.00%  
    Dental Increase      0.00%  
(5) Refer to Workpaper 3.4



UNITIL SERVICE CORP.  
MEDICAL INSURANCE  
12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 3.4  
Table of Contents

LINE NO.	(1) Description	(2) Medical	(3) Dental	(4) Total
1	Medical Insurance	\$ 2,587,331	\$ 304,575	\$ 2,891,906
2	Employee Contribution	(703,135)	(59,946)	(763,081)
3	Drug Subsidy	(34,106)	-	(34,106)
4	Subtotal	1,850,090	244,629	2,094,719
5	NuNH Apportionment at	19.85%	19.85%	19.85%
6	Expense Apportioned to NuNH	367,243	48,559	415,802
7	Capitalization Rate at	31.51%	31.51%	31.51%
8	NuNH Capitalization	(115,718)	(15,301)	(131,019)
9	Net USC Test Year Medical & Dental Costs Allocated to NuNH	\$ 251,525	\$ 33,258	\$ 284,783

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PENSION EXPENSE  
2020 ACTUAL EXPENSE RECORDED AND 2021 FORECAST EXPENSE**

**Workpaper 4.1  
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	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	2020 TEST YEAR	2021 FORECAST EXPENSE	PROFORMA ADJUSTMENT
A1	USC Labor & Overhead Charged to NU-NH	19.85%	19.85%	
A2	NU-NH Capitalization Rates	48.76%	48.76%	
A3	USC Labor & Overhead to Construction	31.51%	31.51%	
A4	Total USC Pension Expense	\$ 3,032,609	\$ 3,232,617	
<b><u>Calculation of Pension Expense, net of Amounts Chargeable to Construction</u></b>				
<b><u>A. NU-NH Pension Expense, net:</u></b>				
1	NU-NH Pension Expense	\$ 546,677	\$ 489,345	\$ (57,332)
2	Less: Amounts Chargeable to Construction	(266,560)	(238,605)	27,955
3	NU-NH Pension Expense, net	<u>\$ 280,117</u>	<u>\$ 250,740</u>	<u>\$ (29,377)</u>
<b><u>B. Unitil Service Pension Expense Allocated to NU-NH, net:</u></b>				
4	Unitil Service Pension Expense	\$ 601,973	\$ 641,674	\$ 39,702
5	Less: Amounts Chargeable to Construction	(189,682)	(202,192)	(12,510)
6	Total Unitil Service Pension Expense Allocated to NU-NH, net	<u>\$ 412,291</u>	<u>\$ 439,483</u>	<u>\$ 27,192</u>
7	Total NU-NH Pension Expense	<u>\$ 692,409</u>	<u>\$ 690,223</u>	<u>\$ (2,185)</u>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PBOP EXPENSE  
2020 ACTUAL EXPENSE RECORDED AND 2021 FORECAST EXPENSE**

**Workpaper 4.2  
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	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	2020 TEST YEAR	2021 FORECAST EXPENSE	PROFORMA ADJUSTMENT
A1	USC Labor & Overhead Charged to NU-NH	19.85%	19.85%	
A2	NU-NH Capitalization Rates	48.76%	48.76%	
A3	USC Labor & Overhead to Construction	31.51%	31.51%	
A4	Total USC PBOP Expense	\$ 1,510,206	\$ 1,358,914	
<u>Calculation of PBOP Expense, net of Amounts Chargeable to Construction</u>				
<u>A. NU-NH PBOP Expense, net:</u>				
1	NU-NH PBOP Expense	\$ 397,889	\$ 399,488	\$ 1,599
2	Less: Amounts Chargeable to Construction	(194,011)	(194,790)	(780)
3	NU-NH PBOP Expense, net	<u>\$ 203,878</u>	<u>\$ 204,698</u>	<u>\$ 819</u>
<u>B. Unutil Service PBOP Expense Allocated to NU-NH, net:</u>				
4	Unutil Service PBOP Expense	\$ 299,776	\$ 269,744	\$ (30,031)
5	Less: Amounts Chargeable to Construction	(94,459)	(84,996)	9,463
6	Total Unutil Service PBOP Expense Allocated to NU-NH, net	<u>\$ 205,317</u>	<u>\$ 184,748</u>	<u>\$ (20,569)</u>
7	Total NU-NH PBOP Expense	<u>\$ 409,195</u>	<u>\$ 389,446</u>	<u>\$ (19,749)</u>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
SERP EXPENSE  
2020 ACTUAL EXPENSE RECORDED AND 2021 FORECAST EXPENSE**

**Workpaper 4.3  
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	(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	2020 TEST YEAR	2021 FORECAST EXPENSE	PROFORMA ADJUSTMENT
A1	USC Labor & Overhead Charged to NU-NH	19.85%	19.85%	
A2	NU-NH Capitalization Rates	48.76%	48.76%	
A3	USC Labor & Overhead to Construction	31.51%	31.51%	
A4	Total USC SERP Expense	\$ 1,924,767	\$ 2,357,253	
 <u>Calculation of SERP Expense, net of Amounts Chargeable to Construction</u>				
 <u>A. NU-NH SERP Expense, net:</u>				
1	NU-NH SERP Expense	\$ -	\$ -	\$ -
2	Less: Amounts Chargeable to Construction	-	-	-
3	NU-NH SERP Expense, net	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
 <u>B. Unitil Service SERP Expense Allocated to NU-NH, net:</u>				
4	Unitil Service SERP Expense	\$ 382,066	\$ 467,915	\$ 85,848
5	Less: Amounts Chargeable to Construction	(120,389)	(147,440)	(27,051)
6	Total Unitil Service SERP Expense Allocated to NU-NH, net	<u>\$ 261,677</u>	<u>\$ 320,475</u>	<u>\$ 58,798</u>
7	Total NU-NH SERP Expense	<u>\$ 261,677</u>	<u>\$ 320,475</u>	<u>\$ 58,798</u>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
401(K) EXPENSE  
2020 ACTUAL EXPENSE RECORDED AND 2021 FORECAST EXPENSE**

**Workpaper 4.4  
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LINE NO.	(1) DESCRIPTION	(2) 2020 TEST YEAR	(3) 2017 & 2018 FORECAST EXPENSE	(4) PROFORMA ADJUSTMENT
A1	USC Labor & Overhead Charged to NU-NH	19.85%	19.85%	
A2	NU-NH Capitalization Rates	48.76%	48.76%	
A3	USC Labor & Overhead to Construction	31.51%	31.51%	
A4	Total USC 401k Expense <sup>(1)</sup>	\$ 1,994,120	\$ 2,081,861	
 <u>Calculation of 401k Expense, net of amounts chargeable to construction</u>				
 A. Northern 401k Expense, net:				
1	Northern-401k Expense 2021 Proformed <sup>(2)</sup>	\$ 181,223	\$ 186,714	\$ 5,491
2	NU-NH 401(k) Expense Adjusted for 2022 Wage Increase <sup>(2)</sup>	-	5,657	5,657
3	Total NU-NH 401(k) Expense - Proformed	181,223	192,371	11,148
4	Less: Amounts Chargeable to Construction	(88,364)	(93,800)	(5,436)
5	Northern 401k Expense, net	\$ 92,859	\$ 98,571	\$ 5,712
 B. Unitil Service 401k Expense Allocated to Northern, net:				
6	Unitil Service 401K Expense 2021 Proformed	\$ 395,833	\$ 413,250	\$ 17,417
7	Unitil Service 401K Adjusted for 2022 Wage Increase <sup>(1)</sup>	-	18,183	18,183
8	Total USC 401(k) Expense - Proformed	395,833	431,432	35,600
9	Less: Amounts Chargeable to Construction	(124,727)	(135,944)	(11,217)
10	Unitil Service 401k Expense Allocated to Northern, net	271,106	295,488	24,382
11	Total Northern 401k Expense	\$ 363,965	\$ 394,059	\$ 30,095

**Notes**

(1) Unitil Service Corp. - Average 2020/2021 Payroll Increase of 4.40%

(2) See Workpaper 3.5

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
401(K) EXPENSE  
2020 ACTUAL EXPENSE RECORDED AND 2021 FORECAST EXPENSE**

Workpaper 4.4 Revised  
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LINE NO.	(1) DESCRIPTION	(2) 2020 TEST YEAR	(3) 2017 & 2018 FORECAST EXPENSE	(4) PROFORMA ADJUSTMENT
A1	USC Labor & Overhead Charged to NU-NH	19.85%	19.85%	
A2	NU-NH Capitalization Rates	48.76%	48.76%	
A3	USC Labor & Overhead to Construction	31.51%	31.51%	
A4	Total USC 401k Expense <sup>(1)</sup>	\$ 1,994,120	\$ 2,081,861	
 <u>Calculation of 401k Expense, net of amounts chargeable to construction</u>				
 A. Northern 401k Expense, net:				
1	Northern-401k Expense 2021 Proformed <sup>(2)</sup>	\$ 181,223	\$ 186,714	\$ 5,491
2	NU-NH 401(k) Expense Adjusted for 2022 Wage Increase <sup>(2)</sup>	-	-	-
3	Total NU-NH 401(k) Expense - Proformed	181,223	186,714	5,491
4	Less: Amounts Chargeable to Construction	(88,364)	(91,042)	(2,677)
5	Northern 401k Expense, net	\$ 92,859	\$ 95,672	\$ 2,814
 B. Unitil Service 401k Expense Allocated to Northern, net:				
6	Unitil Service 401K Expense 2021 Proformed	\$ 395,833	\$ 413,250	\$ 17,417
7	Unitil Service 401K Adjusted for 2022 Wage Increase <sup>(1)</sup>	-	-	-
8	Total USC 401(k) Expense - Proformed	395,833	413,250	17,417
9	Less: Amounts Chargeable to Construction	(124,727)	(130,215)	(5,488)
10	Unitil Service 401k Expense Allocated to Northern, net	271,106	283,035	11,929
11	Total Northern 401k Expense	\$ 363,965	\$ 378,707	\$ 14,742

Notes

(1) Unitil Service Corp. - Actual 2022 Payroll Increase of 4.56%

(2) See Workpaper 3.5

Workpaper 4.5  
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401K ADJUSTMENT  
2020 & 2021 WEIGHTED AVERAGE PAY INCREASE

	(1)	(2)	(3)	(4)	(5)	(6)
LINE NO.	DESCRIPTION	2020 ANNUALIZED PAYROLL	2021 AVERAGE PAY INCREASE <sup>(1)</sup>	WEIGHTED AVERAGE INCREASE	2022 AVERAGE PAY INCREASE <sup>(2)</sup>	WEIGHTED AVERAGE INCREASE
1	Nonunion	\$ 946,912	3.12%	0.66%	3.12%	0.66%
2	Union	3,532,915	3.00%	2.37%	3.00%	2.37%
3	Total	<u>\$ 4,479,827</u>		<u>3.03%</u>		<u>3.03%</u>

Notes  
(1) Refer to Schedule RevReq-3-4, Page 1 of 2 for 2021 Payroll Increases  
(2) Refer to Schedule RevReq-3-4, Page 1 of 2 for 2022 Payroll Increase

Workpaper 4.5 Revised  
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401K ADJUSTMENT  
2020 & 2021 WEIGHTED AVERAGE PAY INCREASE

	(1)	(2)	(3)	(4)	(5)	(6)
LINE NO.	DESCRIPTION	2020 ANNUALIZED PAYROLL	2021 AVERAGE PAY INCREASE <sup>(1)</sup>	WEIGHTED AVERAGE INCREASE	2022 AVERAGE PAY INCREASE <sup>(2)</sup>	WEIGHTED AVERAGE INCREASE
1	Nonunion	\$ 946,912	3.12%	0.66%	3.24%	0.68%
2	Union	3,532,915	3.00%	2.37%	3.00%	2.37%
3	Total	<u>\$ 4,479,827</u>		<u>3.03%</u>		<u>3.05%</u>

Notes  
(1) Refer to Schedule RevReq-3-4, Page 1 of 2 Revised for 2021 Payroll Increases  
(2) Refer to Schedule RevReq-3-4, Page 1 of 2 Revised for 2022 Payroll Increase



Workpaper 4.6  
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DEFERRED COMPENSATION PLAN EXPENSE  
2020 ACTUAL EXPENSE RECORDED AND 2021 & 2022 FORECAST EXPENSE

Line No.	(1) Description	(2)	(3)	(4)
		2020 TEST YEAR	2021 & 2022 FORECAST EXPENSE	PROFORMA ADJUSTMENT
A1	USC Labor & Overhead Charged to NU-NH	19.85%	19.85%	
A2	NU-NH Capitalization Rates	48.76%	48.76%	
A3	USC Labor & Overhead to Construction	31.51%	31.51%	
A4	Total USC Eligible Base Compensation	\$ 369,511	\$ 2,802,136	
A5	Total USC Eligible Incentive Compensation (at target)	\$ 241,091	\$ 952,203	
<u>Calculation of Deferred Compensation Expense, net of Amounts Chargeable to Construction</u>				
<u>A. NU-NH Deferred Compensation Expense, net:</u>				
1	NU-NH Deferred Comp Expense 2021 Proformed	\$ -	\$ -	\$ -
2	NU-NH Deferred Comp Expense adjusted for 2022 wage increase	-	-	-
3	Total NU-NH Deferred Comp Expense - Proformed	-	-	-
4	Less: Amounts chargeable to capital	-	-	-
5	Total NU-NH Deferred Comp Expense, net	\$ -	\$ -	\$ -
<u>B. Unitil Service Deferred Comp Expense allocated to NU-NH, net:</u>				
6	Unitil Service 2020 Deferred Comp. Expense	\$ 36,951	\$ 280,214	\$ 243,263
7	Unitil Service Deferred Comp Expense Allocated to NU-NH	7,335	55,622	48,287
8	Unitil Service Deferred Incentive Compensation Expense	24,109	95,220	71,111
9	Unitil Service Deferred Incentive Compensation Expense Allocated to NU-NH	4,786	18,901	14,115
10	Unitil Service Deferred Comp. Adjusted for 2021 Wage Increase <sup>(1)</sup>	-	2,447	2,447
11	Total Unitil Service Deferred Comp Expense Allocated to NU-NH - Proformed	12,121	76,970	64,849
12	Less: Amounts Chargeable to Construction	(3,819)	(24,253)	(20,434)
13	Unitil Service Deferred Comp Expense Allocated to NU-NH, net	\$ 8,302	\$ 52,717	\$ 44,415
14	Total NU-NH Deferred Comp Expense	\$ 8,302	\$ 52,717	\$ 44,415

Notes

(1) Unitil Service Corp - Estimated 2020 Average Payroll Increase of 4.40%

**Workpaper 5.1**  
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**PROPERTY AND LIABILITY INSURANCES ADJUSTMENT**  
**12 MONTHS ENDED DECEMBER 31, 2020**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT <sup>(1)</sup></b>
	<b>Current Coverage Periods</b>	
	<b>Property:</b>	
1	All Risk	\$ 18,989
2	Crime	3,256
3	K&E	285
4	Total Property	<u>\$ 22,531</u>
	<b>Liability:</b>	
5	Workers' Compensation	\$ 53,618
6	Excess	355,650
7	Cyber	17,698
8	Automobile	43,038
9	Directors & Officers	74,021
10	Fiduciary	5,044
11	Total Liability	<u>\$ 549,069</u>
12	<b>Total NuNH Property &amp; Liability Insurances</b>	<b>571,600</b>
13	<b>Less: Amounts Chargeable to Capital</b>	<u><b>282,502</b></u>
14	<b>Amount to O&amp;M Expense</b>	<b>289,097</b>
15	<b>Less Test Year O&amp;M Expense</b>	<u><b>241,873</b></u>
16	<b>O&amp;M Property and Liability Insurance Increase</b>	<u><u><b>\$ 47,224</b></u></u>

**Notes**  
**(1) Refer to Workpaper 5.3**

PROPERTY AND LIABILITY INSURANCES ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020

Workpaper 5.1 Revised  
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LINE NO.	DESCRIPTION	AMOUNT <sup>(1)</sup>
	Current Coverage Periods	
	Property:	
1	All Risk	\$ 17,726
2	Crime	1,912
3	K&E	266
4	Total Property	<u>\$ 19,904</u>
	Liability:	
5	Workers' Compensation	\$ 54,922
6	Excess	331,990
7	Cyber	25,559
8	Automobile	41,827
9	Directors & Officers	69,096
10	Fiduciary	4,709
11	Total Liability	<u>\$ 528,104</u>
12	Total NuNH Property & Liability Insurances	548,008
13	Less: Amounts Chargeable to Capital	<u>270,930</u>
14	Amount to O&M Expense	277,077
15	Less Test Year O&M Expense	<u>241,873</u>
16	O&M Property and Liability Insurance Increase	<u><u>\$ 35,204</u></u>

Notes  
(1) Refer to Workpaper 5.3 Revised

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PROPERTY AND LIABILITY INSURANCES ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 5.2  
Table of Contents**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>UNITIL SERVICE CORP. TOTAL <sup>(1)</sup></b>	<b>AMOUNT TO NuNH <sup>(2)</sup></b>	<b>NuNH TOTAL</b>
1	USC Cost For Current Coverage Periods			
2	Property:			
3	All Risk	\$ 6,952		\$ 1,403
4	Crime	968		195
5	K&E	124		25
6	Total Property	<u>\$ 8,044</u>	20.18%	<u>\$ 1,623</u>
7	Liability:			
8	Workers' Compensation	\$ 62,142		\$ 12,540
9	Excess	113,172		22,838
10	Automobile	8,799		1,776
11	Directors and Officers	23,554		4,753
12	Cyber	5,898		1,190
13	Fiduciary	1,605		324
14	Total Liability	<u>\$ 215,170</u>	20.18%	<u>\$ 43,421</u>
15	Total USC Property & Liability Insurances			45,045
16	Less Amount Chargeable to Capital		31.51%	<u>14,194</u>
17	Total Property & Liability Insurances to O&M Expense			<u><u>30,851</u></u>
18	Less Test Year O&M Expense <sup>(3)</sup>			<u>17,377</u>
19	O&M Property and Liability Insurance Increase			<u><u>\$ 13,475</u></u>

**Notes**

(1) Refer to Workpaper 5.3

(2) Refer to Workpaper 5.1

(2) Refer to Workpaper 5.4

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PROPERTY AND LIABILITY INSURANCES ADJUSTMENT  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 5.2 Revised  
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<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>UNITIL SERVICE CORP. TOTAL <sup>(1)</sup></b>	<b>AMOUNT TO NuNH</b>	<b>NuNH TOTAL</b>
1	USC Cost For Current Coverage Periods			
2	Property:			
3	All Risk	\$ 7,274		\$ 1,468
4	Crime	682		138
5	K&E	130		26
6	Total Property	<u>\$ 8,085</u>	20.18%	<u>\$ 1,632</u>
7	Liability:			
8	Workers' Compensation	\$ 71,346		\$ 14,398
9	Excess	118,410		23,895
10	Automobile	7,708		1,555
11	Directors and Officers	24,644		4,973
12	Cyber	9,116		1,840
13	Fiduciary	1,679		339
14	Total Liability	<u>\$ 232,904</u>	20.18%	<u>\$ 47,000</u>
15	Total USC Property & Liability Insurances			48,632
16	Less Amount Chargeable to Capital		31.51%	<u>15,324</u>
17	Total Property & Liability Insurances to O&M Expense			<u><u>33,308</u></u>
18	Less Test Year O&M Expense <sup>(2)</sup>			<u>17,377</u>
19	O&M Property and Liability Insurance Increase			<u><u>\$ 15,931</u></u>

**Notes**

(1) Refer to Workpaper 5.3 Revised

(2) Refer to Workpaper 5.4

Casualty & Property Insurance

Workpaper 5.3  
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		CASUALTY												PROPERTY				
		AL	NH-WC	XL*	XL	XL	Cyber	FL	D&O	D&O	D&O	D&O	CASUALTY	ARP	CRIME	K&E	TOTAL	
		(prem)	(prem)	(prem)	(brkr) <sup>(2)</sup>	Surplus Tax	(prem)	(prem)	(prem)	Surplus Tax	(brkr) <sup>(2)</sup>	Side A	TOTAL	(prem)	(prem)	(prem)	PROP	
NuNH	2018a	26,696	90,284	239,335	7,351	7,180	8,376	3,481	34,907	1,047	4,420	-	423,077	10,171	1,468	255	11,894	434,971
	2019a	29,196	84,634	273,415	8,843	8,202	8,399	3,876	35,820	1,093	4,544	-	458,024	8,778	1,503	266	10,547	468,571
	2020a	33,155	66,093	285,336	13,321	8,560	10,467	3,876	42,690	1,281	-	-	464,779	12,588	1,520	266	14,373	479,152
	2021a	40,175	50,051	309,521	13,184	9,286	17,698	4,709	51,976	1,559	-	15,561	513,720	17,726	3,039	266	21,032	534,752
	2022e <sup>(1)</sup>	43,038	53,618	331,579	14,124	9,947		5,044	55,680	1,670	-	16,670	549,069	18,989	3,256	285	22,531	571,600
	2018a	5,933	97,653	123,302	3,787	3,699	3,948	1,794	17,983	540	2,277	-	260,917	5,399	756	116	6,270	267,187
	2019a	8,029	92,581	133,432	4,316	4,003	4,327	1,892	17,481	533	2,218	-	268,811	5,581	733	130	6,444	275,255
USC	2020a	7,120	85,858	95,093	4,439	2,853	3,488	1,892	14,227	427	-	-	215,397	6,489	506	130	7,125	222,522
	2021a	9,206	65,019	110,396	4,702	3,312	5,898	1,679	18,538	556	-	5,550	224,857	7,274	1,013	130	8,416	233,273
	2022e <sup>(1)</sup>	8,799	62,142	105,512	4,494	3,165		1,605	17,718	532	-	5,305	215,170	6,952	968	124	8,044	223,214

Notes

(1) Estimated 2022 premiums reflect annual growth rate from 2018 to 2021. All 2022 policies, except for Cyber will updated with actuals during pendency of case

(2) In 2020 the Company changed brokers and now the D&O broker fee is included in the XL broker fee

## Casualty & Property Insurance

**Workpaper 5.3 Revised**

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		CASUALTY													PROPERTY				TOTAL	
		AL	NH-WC	XL*	XL	XL	Cyber	Cyber	FL	D&O	D&O	D&O	D&O	CASUALTY	ARP	CRIME	K&E	TOTAL		
		(prem)	(prem)	(prem)	(brkr) <sup>(2)</sup>	Surplus Tax	(prem)	Surplus Tax	(prem)	(prem)	Surplus Tax	(brkr) <sup>(1)</sup>	Side A	TOTAL	(prem)	(prem)	(prem)	PROP		
NuNH	2018a	26,696	90,284	239,335	7,351	7,180	8,376		3,481	34,907	1,047	4,420	-	423,077	10,171	1,468	255	11,894	434,971	
	2019a	29,196	84,634	273,415	8,843	8,202	8,399		3,876	35,820	1,093	4,544	-	458,024	8,778	1,503	266	10,547	468,571	
	2020a	33,155	66,093	285,336	13,321	8,560	10,467		3,876	42,690	1,281	-	-	464,779	12,588	1,520	266	14,373	479,152	
	2021a	41,827	54,922	309,521	13,184	9,286	24,813	746	4,709	51,976	1,559	-	15,561	528,104	17,726	1,912	266	19,904	548,008	
USC	2018a	5,933	97,653	123,302	3,787	3,699	3,948		1,794	17,983	540	2,277	-	260,917	5,399	756	116	6,270	267,187	
	2019a	8,029	92,581	133,432	4,316	4,003	4,327		1,892	17,481	533	2,218	-	268,811	5,581	733	130	6,444	275,255	
	2020a	7,120	85,858	95,093	4,439	2,853	3,488		1,892	14,227	427	-	-	215,397	6,489	506	130	7,125	222,522	
	2021a	7,708	71,346	110,396	4,702	3,312	8,850	266	1,679	18,538	556	-	5,550	232,904	7,274	682	130	8,085	240,989	

## Notes

(1) In 2020 the Company changed brokers and now the D&O broker fee is included in the XL broker fee

**UNITIL SERVICE CORP.  
PROPERTY & LIABILITY INSURANCE TEST YEAR COSTS  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 5.4  
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<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>TOTAL</b>
	<b>USC O&amp;M Test Year</b>	
<b>1</b>	<b>12-30-08-00-9240100 PROPERTY INSURANCE</b>	<b>\$ 5,519</b>
<b>2</b>	<b>12-30-08-00-9250100 INJURIES &amp; DAMAGES</b>	<b>120,204</b>
<b>3</b>	<b>Total</b>	<b>\$ 125,723</b>
<b>4</b>	<b>NuNH Apportionment</b>	<b>20.18%</b>
<b>5</b>	<b>NuNH Amount</b>	<b>\$ 25,371</b>
<b>6</b>	<b>Capitalization Rate</b>	<b>31.51%</b>
<b>7</b>	<b>Capitalization Amount</b>	<b>\$ 7,994</b>
<b>8</b>	<b>O&amp;M Expense Amount</b>	<b>17,377</b>



**NuNH - OPERATING FACILITY  
COMPUTATION OF BUILDING OVERHEAD  
12 MONTHS ENDED DECEMBER 31, 2020**

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<b><u>SQUARE FOOTAGE OF SERVICE CENTER UPDATED:</u></b>		<b>Dec-20</b>	<b>ALLOCATION OF</b>
<b>DESCRIPTION</b>	<b>SQ FT</b>	<b>%</b>	<b>SERVICE CENTER OVERHEADS</b>
<b>SERVICE CENTER ALLOCATED:</b>			
General Area Capitalized (184.00.00)	13,864	54.51%	6,384
Ratio of Payroll Capitalized			48.76%
General Area Capitalized (184.00.01)			3,113
Stock Area Capitalized (163.00.00)	5,741	22.57%	2,643
Ratio of Stock Capitalized			90.00%
Stock Area Capitalized			2,379
<b><u>Garage Area Capitalized:</u></b>			
Auto-184.01.00	-	0.00%	-
Light Truck-184.02.00	-	0.00%	-
Heavy Truck-184.03.00	-	0.00%	-
Sub-Total Garage Area	-	0.00%	-
Ratio of Garage Area Capitalized			48.76%
Garage Area Capitalized			-
Total Service Center to DOC	19,605	77.09%	5,492
<b><u>Non-DOC Space:</u></b>			
Exclude: USC & Usource	5,827	22.91%	2,683
Ratio of Non-DOC Space Capitalized			0.00%
Non-DOC Space Capitalized			-
TOTAL SERVICE CENTER	25,432	100.00%	5,492

**(b) DETERMINATION OF SERVICE CENTER PROPERTY INSURANCE:**

BUDGETED ALL RISK PROPERTY INSURANCE	11,723
RATIO OF SERVICE CENTER TO TOTAL PROPERTY	99.89%
TOTAL SERVICE CENTER PROPERTY INSURANCE	11,710

Service Center Property Insurance Capitalization Ratio 46.90%

	<b>Asset 1000c or Asset 1020</b>		
	<b>SERVICE CENTER</b>	<b>ALL STRUCTURE</b>	<b>SERVICE RATIO</b>
GAS STRUCTURES - DIST. ACCT. 375.20	39,504	45,256	
STRUCTURES-OTHER DIST SYS 375.70	3,128,853	3,128,853	
GENERAL PLANT - (TOTAL LESS COMMUN. EQ)	1,923,719	1,923,719	
(ACCT. 391,393,394,395,396,398)	-	-	
TOTAL COST	5,092,075	5,097,827	99.89%

**VEHICLE CLEARING ACCOUNT**  
**TOTAL CHARGES & TOTAL CLEARINGS TO EXPENSE & CAPITAL**  
**12 MONTHS ENDED DECEMBER 31, 2020**

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**Total Clearings from Clearing Account:**

	Expense	Capital	NuNH Total GL	Total Sch 12	Variance
Jan-20	28,022	47,758	75,780	75,780	-
Feb-20	29,141	31,696	60,837	60,837	-
Mar-20	29,755	29,979	59,735	59,735	-
Apr-20	26,484	25,236	51,719	51,719	-
May-20	30,248	31,224	61,473	61,473	-
Jun-20	36,093	51,333	87,427	87,427	-
Jul-20	23,989	40,521	64,510	64,510	-
Aug-20	20,998	29,112	50,111	50,111	-
Sep-20	25,188	32,644	57,832	57,832	-
Oct-20	83,045	146,259	229,304	229,304	-
Nov-20	1,576	4,394	5,970	5,970	-
Dec-20	1,505	4,908	6,413	6,413	-
	<u>336,045</u>	<u>475,064</u>	<u>811,109</u>	<u>811,109</u>	

Capitalization Rate 58.57%

**VEHICLE CLEARING ACCOUNT**  
**AUTO LIABILITY INSURANCE**

**Auto Liability Insurance Payments into Clearing Account <sup>(1)</sup>**

Jan-20	3,316
Feb-20	3,316
Mar-20	3,316
Apr-20	3,316
May-20	3,316
Jun-20	3,316
Jul-20	3,316
Aug-20	
Sep-20	
Oct-20	
Nov-20	8,035
Dec-20	4,018
Total	<u><u>35,261</u></u>

(1) Payments during test year (Jan-Jul) were for 2019-2020 coverage year 10/1/19-9/30/20  
Payments in November & December 2020 are for 10/1/20 - 9/30/21 coverage year

**Auto Liability Insurance Expense through Clearing Account**

	<u><b>NuNH</b></u>
Gross Amount	35,261
Cap. Rates	58.57%
Cap. Amount	<u>20,652</u>
O&M Amount	<u><u>14,609</u></u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
INFLATION ALLOWANCE  
12 MONTHS ENDED DECEMBER 31, 2020

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Source: Energy Information Administration  
Short-Term Energy Outlook  
Publication Date: June 8, 2021

Publication Date: June 8, 2021

Table 1. U.S. Energy Markets Summary

	2019												2020											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Macroeconomic</b>																								
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	18,915	18,953	18,984	18,990	19,019	19,053	19,103	19,142	19,180	19,269	19,267	19,226	19,309	19,065	18,658	17,427	17,191	17,289	18,328	18,637	18,825	18,714	18,791	18,878
Percent change from prior year	2.3	2.3	2.2	2	1.9	1.9	2	2.1	2.1	2.6	2.4	2	2.1	0.6	-1.7	-8.2	-9.6	-9.3	-4.1	-2.6	-1.9	-2.9	-2.5	-1.8
GDP Implicit Price Deflator (Index, 2005=100)	111.3	111.5	111.7	112.0	112.2	112.4	112.5	112.6	112.7	112.9	113.0	113.1	113.4	113.4	113.3	112.8	112.8	113.0	113.6	113.9	114.1	114.1	114.4	114.7
Percent change from prior year	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.8	1.7	1.5	0.7	0.5	0.5	1.0	1.1	1.2	1.1	1.2	1.4
Real Disposable Personal Income (billion chained 2005 dollars - SAAR)	14,841	14,864	14,856	14,817	14,810	14,827	14,840	14,912	14,934	14,936	14,997	14,960	15,070	15,163	14,949	17,287	16,454	16,150	16,204	15,636	15,715	15,574	15,349	15,378
Percent change from prior year	3.5	3.4	2.9	2.4	2.0	1.9	1.6	1.8	2.0	1.8	2.1	0.8	1.5	2.0	0.6	16.7	11.1	8.9	9.2	4.9	5.2	4.3	2.3	2.8
Manufacturing Production Index (Index, 2012=100)	106.9	106.3	106.3	105.4	105.5	106.1	105.7	106.4	105.7	105.1	106.1	106.4	106.2	106.1	100.8	84.8	88.1	95.0	99.0	100.7	100.6	102.1	103.1	104.0
Percent change from prior year	2.7	1.1	1	-0.4	0.5	0.3	-0.5	-0.3	-1	-1.5	-0.7	-1.1	-0.7	-0.2	-5.2	-19.5	-16.5	-10.5	-6.3	-5.4	-4.7	-2.8	-2.8	-2.2
<b>Weather</b>																								
U.S. Heating Degree-Days	859	719	632	288	158	34	5	10	41	254	589	715	739	652	483	359	156	25	5	7	58	247	421	749
U.S. Cooling Degree-Days	9	18	18	42	130	227	373	336	243	75	16	14	15	13	43	43	105	247	398	357	181	83	32	7
	2021												2022											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Macroeconomic</b>																								
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	18,976	19,084	19,203	19,375	19,505	19,629	19,728	19,848	19,971	20,128	20,237	20,329	20,389	20,454	20,512	20,560	20,603	20,639	20,660	20,689	20,718	20,744	20,773	20,803
Percent change from prior year	-1.7	0.1	2.9	11.2	13.5	13.5	7.6	6.5	6.1	7.6	7.7	7.7	7.4	7.2	6.8	6.1	5.6	5.1	4.7	4.2	3.7	3.1	2.6	2.3
GDP Implicit Price Deflator (Index, 2005=100)	115.1	115.5	116.0	116.2	116.5	116.7	116.9	117.0	117.2	117.4	117.5	117.7	117.8	118.0	118.2	118.4	118.6	118.8	119.0	119.2	119.4	119.6	119.8	120.0
Percent change from prior year	1.5	1.9	2.4	3	3.3	3.3	2.9	2.8	2.7	2.8	2.7	2.6	2.4	2.1	1.8	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2	2
Real Disposable Personal Income (billion chained 2005 dollars - SAAR)	17,114	15,725	19,336	16,406	16,100	15,908	15,969	15,895	15,829	15,726	15,706	15,724	15,843	15,894	15,939	15,971	16,006	16,038	16,070	16,096	16,117	16,121	16,143	16,170
Percent change from prior year	13.6	3.7	29.3	-5.1	-2.1	-1.5	-1.5	1.7	0.7	1	2.3	2.3	-7.4	1.1	-17.6	-2.6	-0.6	0.8	0.6	1.3	1.8	2.5	2.8	2.8
Manufacturing Production Index (Index, 2012=100)	105.2	100.9	104.2	104.6	104.8	105.5	106.2	107.0	107.8	109.0	109.8	110.4	110.9	111.4	111.8	112.1	112.4	112.6	112.6	112.7	112.8	112.9	113.0	113.1
Percent change from prior year	-0.9	-4.9	3.3	23.3	19	11	7.2	6.3	7.1	6.8	6.4	6.2	5.4	10.4	7.3	7.2	7.2	6.7	6	5.4	4.6	3.6	2.9	2.4
<b>Weather</b>																								
U.S. Heating Degree-Days	802	791	505	305	147	28	7	10	55	243	490	777	848	685	558	312	137	30	7	11	55	243	490	777
U.S. Cooling Degree-Days	10	12	28	37	116	244	355	331	184	67	22	11	11	12	23	41	124	243	353	326	184	67	22	11

**Notes:** Prices are not adjusted for inflation.  
The approximate break between historical and forecast values is shown with estimates and forecasts in italics.  
**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: Petroleum Supply Monthly , DOE/EIA-0109; Petroleum Supply Annual , DOE/EIA-0340/2; Weekly Petroleum Status Report , DOE/EIA-0208; Petroleum Marketing Monthly , DOE/EIA-0380; Natural Gas Monthly , DOE/EIA-0130; Electric Power Monthly , DOE/EIA-0226; Quarterly Coal Report , DOE/EIA-0121; and International Petroleum Monthly , DOE/EIA-0520.  
Minor discrepancies with published historical data are due to independent rounding.  
**Projections:** EIA Regional Short-Term Energy Model. Macroeconomic projections are based on Global Insight Model of the U.S. Economy.  
Weather projections from National Oceanic and Atmospheric Administration.

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
INFLATION ADJUSTMENT - TEST YEAR USC AMORTIZATIONS  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 6.2  
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LINE NO.	(1) DESCRIPTION	(2) 2020
1	12-30-10-00-404-03-00 SOFTWARE AMORT - OTHER	\$ 343,313
2	12-30-10-00-404-04-00 FINANCIAL REPORT WRITER AMORTIZATION	7,350
3	12-30-10-00-404-23-00 POWER TAX SYSTEM AMORT	30,284
4	12-30-10-00-404-25-00 AMORTIZATION - PAYMENT SYSTEM	1,492
5	Total	<u>\$ 382,438</u>
6	NuNH Allocation	<u>19.85%</u>
7	Amount Billed to NuNH	<u><u>75,914</u></u>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
INFLATION ADJUSTMENT - TEST YEAR FACILITY LEASES  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 6.3  
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LINE NO.	(1) DESCRIPTION	(2) 2020
1	12-30-10-00-9310100 BUILDING RENT	\$ 1,252,284
2	12-30-10-00-9310700 CALL CENTER RENT	158,796
3	12-30-10-00-9310800 PORTSMOUTH RENT EXPENSE	203,988
4	Total	<u>\$ 1,615,068</u>
5	NuNH Allocation	<u>19.85%</u>
6	Amount Billed to NuNH	<u><u>320,591</u></u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
TEST YEAR AMORTIZATION EXPENSE  
12 MONTHS ENDED DECEMBER 31, 2020

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LINE NO.	(1) DESCRIPTION	(2) BEGINNING UNAMORTIZED BALANCE 2020 <sup>(1)</sup>	(3) 2020 AMORTIZATION EXPENSE	(4) ENDING UNAMORTIZED BALANCE 2020
1	Northern Utilities 303-Intangible Plant:			
2	Power Plant	\$ 36,832	\$ 15,785	\$ 21,047
3	Power Plan Upgrade	15,843	4,045	11,798
4	Meter Data Management	1,093,248	138,095	955,154
5	2019 Voice System Repl	239,694	23,321	214,318
6	2019 Interface Enhancements	13,177	1,355	11,706
7	Customer Facing Enhancements	232,484	23,543	207,039
8	CIS Billing Integration	202,420	69,401	133,018
9	2014 Infrastructure	586	586	-
10	2014 Desktop Client Mgmt	76	76	-
11	2014 Enhance Critical Financial	769	769	-
12	2014 CMS Rewrite	1,113	1,113	-
13	Gen Software enhancements	160	160	-
14	2014 EETS Enhancements	58	58	-
15	Gas Construction Estimating Model	4,875	4,875	-
16	Electronic Large Vol. Meter Form	1,868	1,868	-
17	2014 AMI/SCADA Cyber Project	3,235	3,235	-
18	AMI Vers Updt PLX Functionality	1,837	1,837	-
19	Milsoft IVR Upgrade	186	186	-
20	2015 Infrastructure	6,105	4,884	1,221
21	SalesForce App for Gas Sales	12,609	7,964	4,645
22	First Responder - iRestore	26,280	13,140	13,140
23	General Software Enhancements	2,792	1,289	1,503
24	2016 IT Infrastructure	15,367	6,830	8,537
25	Gas Inspections	5,264	2,339	2,924
26	CMS 2015 Rewrite	7,397	3,288	4,110
27	2015 Cyber Security Enhancements	99	44	55
28	2016 Cyber Security Enhancements	144	64	80
29	Unify Workforce Management System	4,046	1,798	2,248
30	2016 General Software Enhancements	2,274	1,011	1,264
31	Verotrack Upgrade to myWorld	8,985	3,267	5,718
32	Itron MVRs Upgrade	1,262	459	803
33	New Century Dist Risk Alg. Upgrade	5,340	1,942	3,398
34	EETS Enhancements	11,139	3,819	7,320
35	CMS NH/ME Isolation	1,410	484	927
36	Power Plant Upgrade 2016.1	37,818	12,966	24,852
37	LocusView GPS/GIS Track & Trace	75,602	23,262	52,340
38	2017 Cyber Security Enhancements	1,291	387	903
39	2017 IT Infrastructure	5,831	1,749	4,081
40	SalesForce for Gas Sales Phase II	31,670	9,269	22,401
41	Electronic Time Sheet - Phase One	3,504	978	2,526
42	2017 General Software Enhancements	6,778	1,891	4,886
43	UPC/GEM Enhancements	11,339	3,164	8,175
44	Upgrade to MyWorld Insepction	9,754	2,601	7,153
45	Meter Data Archiving Plan	1,566	408	1,157
46	Sales Force Application	12,770	3,331	9,438
47	OMS Web Page Upgrade	3,103	760	2,343
48	Power Plan License Update	45,014	11,024	33,990
49	GIS Version Upgrade	44,529	10,477	34,052
50	IS Project Tracker Replacement	4,233	996	3,237
51	Comp Mgmt Sys Enhncmnts	27,228	6,407	20,821
52	Legacy Interface Job Rewrite	2,337	550	1,787
53	Gen. Software Enhancements 2018	11,362	2,673	8,689
54	TESS Replacement	3,716	874	2,842
55	Salesforce App for Gas Sales	13,714	3,227	10,487
56	UPS Reporting	558	131	427
57	2018 IT Infrastructure	24,422	5,529	18,892
58	WebOps Replacement - Year 1 of 3	11,750	2,564	9,186
59	2018 Cyber Security Enhancements	3,787	826	2,961
60	DEV Staging Refresh	5,309	1,098	4,211
61	Microsoft Exchange Upgrade	2,425	502	1,923
62	Electronic Timesheet - Phase 2	13,540	2,801	10,738
63	CMS Data Reports	1,616	334	1,282
64	ODI Plant Records - GIS Recon	2,323	481	1,843
65	Metersense Upgrade 4.2 to 4.3	267	55	212
66	FCS Upgrade	770	155	615
67	FCS Upgrade	451	75	376
68	FCS Upgrade	9,038	847	8,191
69	MARS/GEM Enhancements	25,798	2,150	23,648
70	General Software Enchancements 2019	11,825	2,209	9,476
71	WebOps Replacement	13,547	2,408	10,948
72	2019 Reporting Blanket	22,028	1,836	20,193
73	Infrastructure PC & Network 2019	196,345	39,585	154,000
74	2019 Regulatory Work Blanket	5,608	467	5,140
75	LocusView Mobile Data Collections	10,880	907	9,973
76	Compliance Mgmt Sys Enhancements	17,992	3,246	14,625
77	GIS Enhancements	3,998	333	3,665
78	Gas SCADA-Historical Database	5,219	435	4,784
79	Metersense Upgrade 2020	6,725	112	6,613
80	Power Plan Upgrade	68,580	1,143	67,437
81	Cyber Security Enhancements	21,917	365	21,552
82	2020 IT Infrastructure Budget	301,181	5,020	296,162
83	2020 Customer Facing Enhancements	138,605	2,310	136,295
84	2020 Interface Enhancements	29,156	486	28,670
85	2020 General Software Enhancements	829	14	815
86	Reporting Blanket	26,585	443	26,142
87	Pipeline Compliance Syst. Integ.	71,157	1,186	69,971
88	EE Tracking & Reporting System	36,085	601	35,483
89	MV-90xi Upgrade v 4.5 to 6.0	9,579	160	9,419
90	MV-90 Comm Bank Module	3,327	577	2,715
91	Salesforce Gas Sales Reporting	15,123	252	14,871
92	LocusView Paperless Work Flows	26,180	436	25,744
93	Total NuNH Amortization Expense for Account 303	\$ 3,456,660	\$ 522,006	\$ 2,927,332

**NOTES**

(1) Projects Installed in 2020 Reflect Total Project Cost

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RATE YEAR AMORTIZATION EXPENSE

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LINE NO.	(1) DESCRIPTION	(2) TOTAL PROJECT COST	(3) ANNUAL AMORTIZATION EXPENSE
1	Northern Utilities 303-Intangible Plant:		
2	Power Plant	\$ 157,853	\$ 15,785
3	Power Plan Upgrade	40,449	4,045
4	Meter Data Management	1,380,945	138,095
5	2019 Voice System Repl	239,694	24,036
6	2019 Interface Enhancements	13,177	1,313
7	Customer Facing Enhancements	232,484	23,219
8	CIS Billing Integration	902,212	69,401
9	2015 Infrastructure	24,419	4,884
10	SalesForce App for Gas Sales	39,818	7,964
11	First Responder - iRestore	65,700	13,140
12	General Software Enhancements	6,443	1,289
13	2016 IT Infrastructure	34,149	6,830
14	Gas Inspections	11,697	2,340
15	CMS 2015 Rewrite	16,438	3,288
16	2015 Cyber Security Enhancements	220	44
17	2016 Cyber Security Enhancements	321	64
18	Unify Workforce Management System	8,991	1,798
19	2016 General Software Enhancements	5,054	1,011
20	Verotrack Upgrade to myWorld	16,336	3,267
21	Itron MVRs Upgrade	2,295	459
22	New Century Dist Risk Alg. Upgrade	9,709	1,942
23	EETS Enhancements	19,095	3,819
24	CMS NH/ME Isolation	2,418	484
25	Power Plant Upgrade 2016.1	64,831	12,966
26	LocusView GPS/GIS Track & Trace	116,310	23,262
27	2017 Cyber Security Enhancements	1,936	387
28	2017 IT Infrastructure	8,746	1,749
29	SalesForce for Gas Sales Phase II	46,347	9,269
30	Electronic Time Sheet - Phase One	4,890	978
31	2017 General Software Enhancements	9,457	1,891
32	UPC/GEM Enhancements	15,822	3,164
33	Upgrade to MyWorld Insepction	13,005	2,601
34	Meter Data Archiving Plan	2,042	408
35	Sales Force Application	16,656	3,331
36	OMS Web Page Upgrade	3,800	760
37	Power Plan License Update	55,120	11,024
38	GIS Version Upgrade	52,387	10,477
39	IS Project Tracker Replacement	4,980	996
40	Comp Mgmt Sys Enhncmnts	31,938	6,407
41	Legacy Interface Job Rewrite	2,749	550
42	Gen. Software Enhancements 2018	13,313	2,673
43	TESS Replacement	4,372	874
44	Salesforce App for Gas Sales	16,134	3,227
45	UPS Reporting	657	131
46	2018 IT Infrastructure	27,627	5,529
47	WebOps Replacement - Year 1 of 3	12,818	2,564
48	2018 Cyber Security Enhancements	4,131	826
49	DEV Staging Refresh	5,492	1,098
50	Microsoft Exchange Upgrade	2,508	502
51	Electronic Timesheet - Phase 2	14,006	2,801
52	CMS Data Reports	1,672	334
53	ODI Plant Records - GIS Recon	2,403	481
54	Metersense Upgrade 4.2 to 4.3	277	55
55	FCS Upgrade	779	157
56	FCS Upgrade	451	90
57	FCS Upgrade	9,038	1,927
58	MARS/GEM Enhancements	25,798	5,160
59	General Software Enhancements 2019	11,825	2,230
60	WebOps Replacement	13,547	2,479
61	2019 Reporting Blanket	22,028	4,406
62	Infrastructure PC & Network 2019	196,345	39,319
63	2019 Regulatory Work Blanket	5,608	1,122
64	LocusView Mobile Data Collections	10,880	2,176
65	Compliance Mgmt Sys Enhancements	17,992	3,510
66	GIS Enhancements	3,998	800
67	Gas SCADA-Historical Database	5,219	1,044
68	Metersense Upgrade 2020	6,725	1,345
69	Power Plan Upgrade	68,580	14,205
70	Cyber Security Enhancements	21,917	4,383
71	2020 IT Infrastructure Budget	301,181	63,804
72	2020 Customer Facing Enhancements	138,605	28,287
73	2020 Interface Enhancements	29,156	5,831
74	2020 General Software Enhancements	829	166
75	Reporting Blanket	26,585	5,317
76	Pipeline Compliance Syst. Integ.	71,157	14,231
77	EE Tracking & Reporting System	36,085	7,217
78	MV-90xi Upgrade v 4.5 to 6.0	9,579	1,916
79	MV-90 Comm Bank Module	3,327	639
80	Salesforce Gas Sales Reporting	15,123	3,024
81	LocusView Paperless Work Flows	26,180	5,236
82	FCS Upgrade	1,041	174
83	2020 IT Infrastructure Budget	19,607	3,268
84	2020 Customer Facing Enhancements	25,018	4,170
85	2020 Interface Enhancements	1,800	300
86	2020 General Software Enhancements	874	146
87	Reporting Blanket	7,763	1,294
88	Power Plan Upgrade	1,840	307
89	Total NuNH Amortization Expense for Account 303	\$ 4,922,826	\$ 669,511

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RATE YEAR AMORTIZATION EXPENSE

Workpaper 7.2  
Table of Contents

LINE NO.	(1) DESCRIPTION	(2) TOTAL PROJECT COST	(3) ANNUAL AMORTIZATION EXPENSE
1	Northern Utilities 303-Intangible Plant:		
2	Power Plant	\$ 157,853	\$ 15,785
3	Power Plan Upgrade	40,449	4,045
4	Meter Data Management	1,380,945	138,095
5	2019 Voice System Repl	239,694	24,036
6	2019 Interface Enhancements	13,177	1,313
7	Customer Facing Enhancements	232,484	23,219
8	CIS Billing Integration	902,212	69,401
9	First Responder - iRestore	65,700	13,140
10	General Software Enhancements	6,443	1,289
11	2016 IT Infrastructure	34,149	6,830
12	Gas Inspections	11,697	2,340
13	CMS 2015 Rewrite	16,438	3,288
14	2015 Cyber Security Enhancements	220	44
15	2016 Cyber Security Enhancements	321	64
16	Unify Workforce Management System	8,991	1,798
17	2016 General Software Enhancements	5,054	1,011
18	Verotrack Upgrade to myWorld	16,336	3,267
19	Itron MVRS Upgrade	2,295	459
20	New Century Dist Risk Alg. Upgrade	9,709	1,942
21	EETS Enhancements	19,095	3,819
22	CMS NH/ME Isolation	2,418	484
23	Power Plant Upgrade 2016.1	64,831	12,966
24	LocusView GPS/GIS Track & Trace	116,310	23,262
25	2017 Cyber Security Enhancements	1,936	387
26	2017 IT Infrastructure	8,746	1,749
27	SalesForce for Gas Sales Phase II	46,347	9,269
28	Electronic Time Sheet - Phase One	4,890	978
29	2017 General Software Enhancements	9,457	1,891
30	UPC/GEM Enhancements	15,822	3,164
31	Upgrade to MyWorld Insepction	13,005	2,601
32	Meter Data Archiving Plan	2,042	408
33	Sales Force Application	16,656	3,331
34	OMS Web Page Upgrade	3,800	760
35	Power Plan License Update	55,120	11,024
36	GIS Version Upgrade	52,387	10,477
37	IS Project Tracker Replacement	4,980	996
38	Comp Mgmt Sys Enhncmnts	31,938	6,407
39	Legacy Interface Job Rewrite	2,749	550
40	Gen. Software Enhancements 2018	13,313	2,673
41	TESS Replacement	4,372	874
42	Salesforce App for Gas Sales	16,134	3,227
43	UPS Reporting	657	131
44	2018 IT Infrastructure	27,627	5,529
45	WebOps Replacement - Year 1 of 3	12,818	2,564
46	2018 Cyber Security Enhancements	4,131	826
47	DEV Staging Refresh	5,492	1,098
48	Microsoft Exchange Upgrade	2,508	502
49	Electronic Timesheet - Phase 2	14,006	2,801
50	CMS Data Reports	1,672	334
51	ODI Plant Records - GIS Recon	2,403	481
52	Metersense Upgrade 4.2 to 4.3	277	55
53	FCS Upgrade	779	157
54	FCS Upgrade	451	90
55	FCS Upgrade	9,038	1,927
56	MARS/GEM Enhancements	25,798	5,160
57	General Software Enhancements 2019	11,825	2,230
58	WebOps Replacement	13,547	2,479
59	2019 Reporting Blanket	22,028	4,406
60	Infrastructure PC & Network 2019	196,345	39,319
61	2019 Regulatory Work Blanket	5,608	1,122
62	LocusView Mobile Data Collections	10,880	2,176
63	Compliancy Mgmt Sys Enhancements	17,992	3,510
64	GIS Enhancements	3,998	800
65	Gas SCADA-Historical Database	5,219	1,044
66	Pipeline Compliance Syst. Integ.	71,157	14,231
67	EE Tracking & Reporting System	36,085	7,217
68	MV-90xi Upgrade v 4.5 to 6.0	9,579	1,916
69	MV-90 Comm Bank Module	3,327	639
70	Salesforce Gas Sales Reporting	15,227	2,789
71	LocusView Paperless Work Flows	26,180	5,236
72	FCS Upgrade	25,628	-
73	2020 IT Infrastructure	338,113	-
74	Customer Facing Enhancements	163,139	-
75	Metersense Upgrade 2020	1,549	236
76	2020 Interface Enhancements	32,566	-
77	Regulatory Work Blanket	6,568	1,314
78	General Software Enhancements	1,952	-
79	2020 Reporting Blanket	25,045	-
80	Cyber Security Enhancements	21,917	4,383
81	Powerplan Upgrade	81,136	-
82	Total NuNH Amortization Expense for Account 303	\$ 4,904,784	\$ 529,365



**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
TEST YEAR USC AMORTIZATION EXPENSE  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 7.3  
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		(1)	(2)	(3)	(4)
LINE NO.	DESCRIPTION	BEGINNING UNAMORTIZED BALANCE 2020 <sup>(1)</sup>	2020 AMORTIZATION EXPENSE	ENDING UNAMORTIZED BALANCE 2020	
1	Financial Report Writer Replacement	\$ 7,350	\$ 7,350	\$ -	
2	Flexi Upgrade	10,798	5,890	4,908	
3	Dataview Upgrade	4,553	2,602	1,951	
4	Powertax Repair Module	75,709	30,284	45,425	
5	USC Time & Billing Enhancements	32,287	12,108	20,179	
6	PC & Furniture 032018	310,955	143,517	167,437	
7	Software - Facilities WO&PM Tracking/Reporting	17,052	4,991	12,061	
8	PC & Furniture 082018	312,111	120,817	191,294	
9	Upgrade C-Series Bottomline Check Printing	5,597	1,492	4,104	
10	ADP Vacation Enhancements	2,635	687	1,948	
11	General Infrastructure Enhancements	9,113	2,377	6,736	
12	2018 Flexi upgrade	16,530	4,048	12,482	
13	Flexi Report Writer	6,370	1,560	4,810	
14	USC Furn & Equipment - Hamp&CSC	4,263	867	3,396	
15	IT Control Testing Automation	320,088	21,339	298,749	
16	HR & Payroll Record Scanning	26,917	1,794	25,122	
17	USC 2019 Furniture & PC's	310,711	20,714	289,996	
18	Total	\$ 1,473,037	\$ 382,438	\$ 1,090,598	
19	NuNH Apportionment		20.18%		
20	Total Billed to NuNH		77,176		

**NOTES**

(1) Projects Installed in 2020 Reflect Total Project Cost

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RATE YEAR USC AMORTIZATION EXPENSE**

**Workpaper 7.4  
Table of Contents**

LINE NO.	(1) DESCRIPTION	(2)	(3)
		TOTAL PROJECT COST	ANNUAL AMORTIZATION EXPENSE
1	Powertax Repair Module	151,418	30,284
2	USC Time & Billing Enhancements	58,522	12,108
3	PC & Furniture 032018	574,070	143,517
4	Software - Facilities WO&PM Tracking/Reporting	24,953	4,991
5	PC & Furniture 082018	483,268	120,817
6	Upgrade C-Series Bottomline Check Printing	7,462	1,492
7	ADP Vacation Enhancements	3,437	115
8	General Infrastructure Enhancements	11,887	396
9	2018 Flexi upgrade	20,241	4,048
10	Flexi Report Writer	7,800	1,560
11	USC Furn & Equipment - Hamp&CSC	4,335	867
12	IT Control Testing Automation	320,088	64,018
13	HR & Payroll Record Scanning	26,917	5,383
14	USC 2019 Furniture & PC's	310,711	62,142
15	SOX Modernization	75,517	15,103
16	USC Time & Billing Upgrade/Replacement	587,704	117,541
17	2020 Flexi Upgrade	25,531	5,106
18	Total	<u>\$ 2,693,861</u>	<u>\$ 589,489</u>
19	NuNH Apportionment		20.18%
20	Total Billed to NuNH		<u>118,959</u>

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
RATE YEAR USC AMORTIZATION EXPENSE**

**Workpaper 7.4 Revised  
Table of Contents**

LINE NO.	DESCRIPTION	(1)	(2)	(3)
			TOTAL PROJECT COST	ANNUAL AMORTIZATION EXPENSE
1	Powertax Repair Module		151,418	30,284
2	USC Time & Billing Enhancements		58,522	12,108
3	PC & Furniture 032018		574,070	143,517
4	Software - Facilities WO&PM Tracking/Reporting		24,953	4,991
5	PC & Furniture 082018		483,268	120,817
6	Upgrade C-Series Bottomline Check Printing		7,462	1,492
7	ADP Vacation Enhancements <sup>(1)</sup>		3,437	687
8	General Infrastructure Enhancements <sup>(1)</sup>		11,887	2,377
9	2018 Flexi upgrade		20,241	4,048
10	Flexi Report Writer		7,800	1,560
11	USC Furn & Equipment - Hamp&CSC		4,335	867
12	IT Control Testing Automation		320,088	64,018
13	HR & Payroll Record Scanning		26,917	5,383
14	USC 2019 Furniture & PC's		310,711	62,142
15	SOX Modernization		75,517	-
16	USC Time & Billing Upgrade/Replacement <sup>(1)</sup>		625,663	-
17	2020 Flexi Upgrade		25,531	-
18	Total		<u>\$ 2,731,820</u>	<u>\$ 454,292</u>
19	NuNH Apportionment			20.18%
20	Total Billed to NuNH			<u>91,676</u>

**Notes:**

(1) Refer to Company's response to Energy 4-37

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL TAX ADJUSTMENT  
12 MONTHS ENDED DECEMBER 21, 2020**

**Workpaper 8.1  
Table of Contents**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LINE NO.	2020 Wages Subj. to Pay Increase <sup>(1)</sup>	Union Increases			Nonunion Increases		Total Proformed Wages	Wage Increase Exclusion
		2020 3.0%	2021 3.0%	2022 3.0%	2021 3.12%	2022 3.12%		
1	\$ 160,382	-	-	-	\$ 5,004	\$ 5,004	\$ 170,390	\$ 5,004
2	Amount Chargeable to Capital at		48.76%					(2,440)
3	Pay Increase to O&M not subject to SS tax - above 2021 annual limit of \$142,800							\$ 2,564

**Notes**

(1) For Northern Utilities, Inc. - New Hampshire division employees whose pay increases exceed the wage limit of \$142,800 subject to Social Security tax

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
PAYROLL TAX ADJUSTMENT  
UNITIL SERVICE CORP.  
12 MONTHS ENDED DECEMBER 31, 2020**

**Workpaper 8.2  
Table of Contents**

LINE NO.	(1) 2020 Wages Subj. to Pay Increase <sup>(1)</sup>	(2) Pay Increases		(3)	(4) Total Proformed Payroll	(5) Payroll Increase Exclusion
		2021 4.40%	2022 4.40%			
1	\$ 7,922,472	\$ 348,589	\$ 363,927	\$ 8,634,988	\$ 178,772	
2	Amount Charged to NuNH at		19.85%			35,486
3	Amount Chargeable to Capital at		31.51%			<u>(11,182)</u>
4	Pay Increase to O&M not subject to SS Tax above 2021 annual limit of \$142,800					<u>\$ 24,305</u>

**Notes**

(1) For Unitil Service Corp. employees whose pay increases exceed the wage limit of \$142,800 subject

Northern Utilities, Inc. - New Hampshire  
2022 Step Adjustment  
Illustrative Revenue Requirement

Northern Utilities, Inc.  
Docket No. DG 21-104  
Settlement Attachment 2  
Page 1 of 5

Rate Effective Date		9/1/2022				
Line No.	Description	Total Investment Year 2021	Growth Investment Year 2021	Non-Growth Investment Year 2021	Growth Source	Non-Growth Source
		(a)	(b)	(c)	(d)	(e)
	<u>Rate Base:</u>					
1	Beginning Utility Plant <sup>(1)</sup>	\$ 301,245,498				
2	Plant Additions	19,929,755	3,332,692	16,597,063	DG 22-020 Rev. Sch. GSL-1, Line 119	DG 22-020 Rev. Sch. GSL-1, Line 120
3	Retirements	(180,421)	(30,170)	(150,251)	Total x DG 22-020 Rev Sch GSL-1, Line 124	Total x DG 22-020 Rev Sch GSL-1, Line 125
4	Ending Utility Plant	320,994,831	3,302,522	16,446,812		
5	Beginning Accumulated Depreciation <sup>(2)</sup>	89,373,452				
6	Depreciation Expense	10,413,124	1,741,303	8,671,822	Total x DG 22-020 Rev Sch GSL-1, Line 124	Total x DG 22-020 Rev Sch GSL-1, Line 125
7	Retirements	(180,421)	(30,170)	(150,251)	Total x DG 22-020 Rev Sch GSL-1, Line 124	Total x DG 22-020 Rev Sch GSL-1, Line 125
8	Cost of Removal, Salvage and Transfers	(642,545)	(40,873)	(601,671)	DG 22-020 Rev. Sch. GSL-1, Line 119	DG 22-020 Rev. Sch. GSL-1, Line 120
9	Ending Accumulated Depreciation	98,963,611	1,670,259	7,919,900		
10	Ending Net Utility Plant	222,031,220	1,632,263	8,526,912		
11	Change in Net Plant	10,159,175	1,632,263	8,526,912		
12	Change in Net Plant	10,159,175	1,632,263	8,526,912		
13	Pre-Tax Rate of Return	8.99%	8.99%	8.99%		
14	Return and Taxes	913,454	146,764	766,691		
15	Depreciation Expense at <sup>(3)</sup>	3.46% 689,570	115,311	574,258		
16	Property Taxes on Change in Net Plant at <sup>(4)</sup>	0.66% 67,051	10,773	56,278		
17	Amortization on Post-Test-Year Projects	157,739	-	157,739		
18	Revenue Requirement Increase	\$ 1,827,814	\$ 272,848	\$ 1,554,966		

Notes:

- (1) Beginning utility plant corresponds to Schedule RevReq-5, Column 7, Line 1  
(2) Beginning accumulated depreciation corresponds to Schedule RevReq-5, Column 7, Line 2  
(3) Book Depreciation Rate Based on the Average Depreciation Rate in Docket No. DG 21-104  
(4) Property Taxes shall include State utility property taxes for all Non-Growth Plant Additions, calculated using the statutory tax rate in RSA 83-F:2, currently \$6.60 per \$1,000 of investment. Local property taxes shall not be included in the calculation and will be recovered through the Company's Property Tax Adjustment Mechanism ("PTAM")

2021 Gross Plant Detail

Description	Beginning Balance	Additions	Retirements	Ending Balance
303-02 Intangible Software-10 Yea-G	2,064,604	-	-	2,064,604
303-30 Intangible Plant, Misc So-G	5,176,113	105,634	-	5,281,748
303-03 Intangible Software-CIS	5,585,630	-	-	5,585,630
304-20 Land Rights-G	6,816	-	-	6,816
374-40 Land Rights, Other Distr -G	89,111	-	-	89,111
374-50 Rights of Way-G	17,911	-	-	17,911
375-20 Structures City Gate Mea -G	43,350	-	-	43,350
375-70 Structures Other Distribu-G	3,217,521	4,991	-	3,222,512
376-20 Mains, Coated/Wrapped-G	29,746,227	4,333,003	(29,269)	34,049,960
376-30 Mains, Bare Steel-G	190,837	320,428	-	511,265
376-40 Mains, Plastic-G	120,342,184	9,435,649	(173,121)	129,604,713
376-50 Mains, Joint Seals-G	542,145	-	-	542,145
376-60 Mains, Cathodic Protectio-G	1,082,739	1,636,977	(540)	2,719,176
376-80 Mains, Cast Iron-G	28,455	-	-	28,455
378-20 Measuring & Regulating St-G	7,288,982	(12,164)	179,725	7,456,543
379-00 Measuring & Regulating Ta-G	39,266	-	-	39,266
380-00 Services-G	82,837,047	3,675,958	(78,013)	86,434,992
381-00 Meters-G	4,624,610	81,333	-	4,705,943
382-00 Meter Installations-G	26,001,685	51,900	-	26,053,585
383-00 House Regulators-G	733,550	71,167	-	804,717
386-10 Conversion Burners-G	998,854	550	-	999,404
386-20 Water Heaters-G	980,041	-	(67,976)	912,066
389-10 Land -G	232,947	-	-	232,947
391-10 Office Furniture & Equip-G	508,135	17,062	-	525,197
393-00 Stores Equipment-G	31,520	-	-	31,520
394-10 Tools, Shop & Garage-G	1,430,421	235,384	-	1,665,806
396-00 Power Operated Equipment-G	75,266	-	-	75,266
397-00 Communication Equipment-G	1,873,480	69	(11,227)	1,862,322
397-25 Metscan Communication Equ-G	112,656	-	-	112,656
397-35 ERT Automatic Reading Dev-G	3,470,146	(28,187)	-	3,441,960
Grand Total	299,372,252	19,929,755	(180,421)	319,121,586

2021 Accumulated Depreciation Detail

Description	Beginning Balance	Provision	Retirements	Cost of Removal	Salvage	Ending Balance
303-02 Intangible Software-10 Year	643,542	206,493	-	-	-	850,035
303-30 Intangible Plant, Misc Softw	3,669,843	453,408	-	-	-	4,123,250
303-03 Intangible Software-CIS	584,076	294,971	-	-	-	879,047
305-00 Structures	(374)	-	-	-	-	(374)
320-00 Other Equipment	(4,438)	-	-	-	-	(4,438)
321-00 Propane Vaporizer	(27,544)	-	-	-	-	(27,544)
375-20 Structures City Gate Mea & R	(121,994)	620	-	-	-	(121,374)
375-70 Structures Other Distributio	718,156	46,016	-	-	-	764,173
376-20 Mains, Coated/Wrapped	4,224,164	836,333	(29,269)	(158,530)	-	4,872,699
376-30 Mains, Bare Steel	(2,132,784)	-	-	-	-	(2,132,784)
376-40 Mains, Plastic	36,382,883	3,510,152	(173,121)	(264,181)	-	39,455,733
376-50 Mains, Joint Seals	542,145	-	-	-	-	542,145
376-60 Mains, Cathodic Protection	682,660	77,070	(540)	(2,087)	-	757,102
376-80 Mains, Cast Iron	(1,187,409)	-	-	-	-	(1,187,409)
378-20 Measuring & Regulating Stati	666,376	258,232	179,725	(6,737)	-	1,097,597
379-00 Measuring & Regulating Ta-G	6,432	1,374	-	-	-	7,806
380-00 Services	28,479,497	3,085,372	(78,013)	(164,912)	-	31,321,944
381-00 Meters	1,226,613	156,031	-	-	-	1,382,643
382-00 Meter Installations	6,859,297	867,330	-	(39,427)	-	7,687,201
383-00 House Regulators	212,402	25,184	-	-	-	237,586
386-10 Conversion Burners	995,117	4,287	-	-	-	999,404
386-20 Water Heaters	(35,552)	69,683	(67,976)	(5,991)	-	(39,836)
391-10 Office Furniture & Equip	298,078	44,372	-	-	-	342,450
393-00 Stores Equipment	31,511	-	-	-	-	31,511
394-10 Tools, Shop & Garage	785,741	76,592	-	-	-	862,333
396-00 Power Operated Equipment	75,266	-	-	-	-	75,266
397-00 Communication Equipment	1,570,602	169,540	(11,227)	(681)	-	1,728,234
397-25 Metscan Communication Equip	112,656	-	-	-	-	112,656
397-35 ERT Automatic Reading Device	2,766,299	230,065	-	-	-	2,996,364
Grand Total	88,023,262	10,413,124	(180,421)	(642,545)	-	97,613,421



**Northern Utilities, Inc. - New Hampshire**  
**Pre Tax Rate of Return**  
**5 Quarter Average Ended December 31, 2020 Pro Forma**

**Northern Utilities, Inc.**  
**Docket No. DG 21-104**  
**Settlement Attachment 2**  
**Page 4 of 5**

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Line No.</b>	<b>Description</b>	<b>Weight</b>	<b>Cost of Capital</b>	<b>Weighted Cost of Capital</b>	<b>Tax Factor</b>	<b>Pre-Tax Cost</b>
1	Common Stock Equity	52.00%	9.30%	4.84%	1.3699	6.63%
2	Long Term Debt	48.00%	4.93%	2.37%		2.37%
3	Short Term Debt	<u>0.00%</u>	1.69%	<u>0.00%</u>		<u>0.00%</u>
4	Total	<u>100.00%</u>		<u>7.20%</u>		<u>8.99%</u>

Northern Utilities, Inc. - New Hampshire Division  
Post-Test-Year Projects Amortization Expense Recovered through Step Adjustment

Line No.	Description	Total Project Cost	Annual Amortization Expense
1	Northern Utilities Post-Test-Year Projects Amortization Expense Adjustment <sup>(1)</sup>		
2	FCS Upgrade	\$ 25,628	\$ 5,882
3	2020 IT Infrastructure	338,113	64,472
4	Customer Facing Enhancements	163,139	31,197
5	2020 Interface Enhancements	32,566	6,222
6	General Software Enhancements	1,952	383
7	2020 Reporting Blanket	25,045	4,707
8	Powerplan Upgrade	81,136	15,546
9	Total NuNH Amortization Expense Adjustment		<u>\$ 128,409</u>
10	Unitil Service Corp. ("USC") Post-Test-Year Projects Amortization Expense Adjustment <sup>(1)</sup>		
11	SOX Modernization	\$ 75,517	\$ 15,103
12	USC Time & Billing Upgrade/Replacement	625,663	125,133
13	2020 Flexi Upgrade	25,531	5,106
14	Total	<u>726,711</u>	<u>145,342</u>
15	NuNH Apportionment		20.18%
16	Total Billed to NuNH		<u>\$ 29,330</u>
17	Total Post-Test-Year Project Amortization Expense Adjustment		<u><u>\$ 157,739</u></u>

Notes:

(1) Refer to DOE Witness Donna H. Mullinax Testimony, Page 41 of 47

**Northern Utilities, Inc. - New Hampshire Division  
Decoupling  
Target Distribution Revenues**

Description	Effective August 1, 2022	Effective September 1, 2022
Test Year Adjusted Distribution Revenues	\$ 39,796,840	
Permanent Rate Increase <sup>(1)</sup>	6,321,881	
Distribution Revenues	\$ 46,118,721	\$ 46,118,721
Add: Step Adjustment (Illustrative)	-	1,554,966
Target Distribution Revenues	\$ 46,118,721	\$ 47,673,687

**Notes:**

(1) Reflects permanent rate increase of \$6,091,477 plus \$231,477 related to the reduction of indirect production and A&G costs recovered as a part of the Company's Cost of Gas Clause

**Northern Utilities, Inc. - New Hampshire Division  
Decoupling  
Target Revenues by Class**

Distribution Revenues		Residential			Commercial and Industrial						
August 1, 2022-July 31, 2023		R6	R5-R10	G40	G50	G41	G51	G42	G52	Total	
Test Year Distribution Revenues	\$	493,626	\$ 20,731,783	\$ 6,745,829	\$ 1,024,226	\$ 5,235,691	\$ 1,396,947	\$ 1,545,114	\$ 2,623,624	\$	39,796,840
Rate Increase		156,858	4,153,139	803,485	81,431	623,639	111,074	183,925	208,329		6,321,881
Distribution Revenues	\$	650,484	\$ 24,884,923	\$ 7,549,314	\$ 1,105,657	\$ 5,859,330	\$ 1,508,021	\$ 1,729,040	\$ 2,831,954	\$	46,118,721
Add: Step Increase (Illustrative)		-	-	-	-	-	-	-	-		-
Target Distribution Revenues	\$	650,484	\$ 24,884,923	\$ 7,549,314	\$ 1,105,657	\$ 5,859,330	\$ 1,508,021	\$ 1,729,040	\$ 2,831,954	\$	46,118,721

Distribution Revenues		Residential			Commercial and Industrial						
September 1, 2022-July 31, 2023		R6	R5-R10	G40	G50	G41	G51	G42	G52	Total	
Distribution Revenues	\$	650,484	\$ 24,884,923	\$ 7,549,314	\$ 1,105,657	\$ 5,859,330	\$ 1,508,021	\$ 1,729,040	\$ 2,831,954	\$	46,118,721
Add: Step Increase (Illustrative)		21,932	839,035	254,537	37,279	197,557	50,845	58,297	95,484		1,554,966
Target Distribution Revenues	\$	672,416	\$ 25,723,957	\$ 7,803,851	\$ 1,142,936	\$ 6,056,886	\$ 1,558,867	\$ 1,787,337	\$ 2,927,437	\$	47,673,687

Northern Utilities, Inc. - New Hampshire Division  
Decoupling  
Target Revenue Per Customer (August 1, 2022 - July 31, 2023)

Effective August 1, 2022-July 31, 2023	Residential				Commercial and Industrial				
Target Distribution Revenues	R6	R5-R10	G40	G50	G41	G51	G42	G52	Total
August	\$ 43,469	869,904	\$ 440,087	\$ 90,360	\$ 224,198	\$ 109,671	\$ 81,872	\$ 179,237	\$ 2,038,797
September	45,061	1,065,619	471,242	89,712	266,617	110,685	90,199	193,243	2,332,378
October	49,036	1,544,043	546,135	89,697	386,028	117,578	121,777	197,663	3,051,958
November	56,938	2,380,112	676,041	92,963	571,508	129,681	162,326	285,141	4,354,712
December	67,596	3,410,170	841,505	99,163	784,836	145,866	205,766	313,238	5,868,140
January	70,787	3,822,380	907,302	101,082	864,510	150,812	232,479	273,823	6,423,175
February	65,398	3,461,729	848,677	98,465	785,679	143,803	212,555	303,245	5,919,552
March	61,346	3,013,885	773,827	94,858	686,417	139,369	194,882	281,262	5,245,846
April	53,002	2,015,950	617,331	86,058	466,208	121,141	149,170	279,727	3,788,586
May	49,588	1,435,099	527,417	86,742	347,432	118,302	109,412	177,511	2,851,503
June	45,129	1,022,468	463,646	87,704	257,466	112,031	87,286	175,188	2,250,918
July	43,134	843,564	436,103	88,852	218,430	109,081	81,314	172,675	1,993,154
12ME July	\$ 650,484	\$ 24,884,923	\$ 7,549,314	\$ 1,105,657	\$ 5,859,330	\$ 1,508,021	\$ 1,729,040	\$ 2,831,954	\$ 46,118,721

Effective August 1, 2022-July 31, 2023	Residential				Commercial and Industrial				
Customers in Authorized Rate Design	R6	R5-R10	G40	G50	G41	G51	G42	G52	
August	\$ 1,277	\$ 26,815	\$ 5,234	\$ 831	\$ 704	\$ 267	\$ 31	\$ 33	
September	1,277	26,815	5,234	831	704	267	31	33	
October	1,277	26,815	5,234	831	704	267	31	33	
November	1,277	26,815	5,234	831	704	267	31	33	
December	1,277	26,815	5,234	831	704	267	31	33	
January	1,277	26,815	5,234	831	704	267	31	33	
February	1,277	26,815	5,234	831	704	267	31	33	
March	1,277	26,815	5,234	831	704	267	31	33	
April	1,277	26,815	5,234	831	704	267	31	33	
May	1,277	26,815	5,234	831	704	267	31	33	
June	1,277	26,815	5,234	831	704	267	31	33	
July	1,277	26,815	5,234	831	704	267	31	33	

Effective August 1, 2022-July 31, 2023	Residential				Commercial and Industrial				
Monthly Revenue Per Customer	R6	R5-R10	G40	G50	G41	G51	G42	G52	
August	\$ 34.05	\$ 32.44	\$ 84.08	\$ 108.68	\$ 318.36	\$ 411.52	\$ 2,641.02	\$ 5,431.42	
September	35.29	39.74	90.03	107.90	378.59	415.33	2,909.65	5,855.83	
October	38.41	57.58	104.34	107.88	548.15	441.19	3,928.30	5,989.80	
November	44.60	88.76	129.16	111.81	811.53	486.61	5,236.34	8,640.65	
December	52.95	127.17	160.77	119.26	1,114.46	547.34	6,637.61	9,492.05	
January	55.45	142.55	173.34	121.57	1,227.59	565.90	7,499.33	8,297.66	
February	51.22	129.10	162.14	118.42	1,115.65	539.60	6,856.63	9,189.26	
March	48.05	112.40	147.84	114.09	974.70	522.96	6,286.51	8,523.10	
April	41.51	75.18	117.94	103.50	662.01	454.56	4,811.93	8,476.58	
May	38.84	53.52	100.76	104.32	493.35	443.91	3,529.42	5,379.12	
June	35.35	38.13	88.58	105.48	365.60	420.38	2,815.68	5,308.73	
July	33.79	31.46	83.32	106.86	310.17	409.31	2,623.05	5,232.57	
Total	\$ 509.50	\$ 928.03	\$ 1,442.27	\$ 1,329.77	\$ 8,320.15	\$ 5,658.62	\$ 55,775.47	\$ 85,816.77	

Northern Utilities New Hampshire  
Target Revenue Per Customer (August 1, 2022 - July 31, 2023)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Calendar Month Revenue		
				Pro Forma Test Year Customers	Winter Therms	Summer Therms	Total Calendarized Therms	Total Calendarized Revenue	Calendarized Revenue Per Customer
1	R-5	Residential Heating	January	26,171	3,569,155	0	3,569,155	\$ 3,736,488	\$ 142.77
2			February	26,171	3,167,143	0	3,167,143	\$ 3,381,069	\$ 129.19
3		<i>Rates</i>	March	26,171	2,668,501	0	2,668,501	\$ 2,940,220	\$ 112.35
4		<i>Customer</i>	April	26,171	1,566,216	0	1,566,216	\$ 1,965,690	\$ 75.11
5		<i>\$22.20</i>	May	26,171	0	926,189	926,189	\$ 1,399,842	\$ 53.49
6		<i>Per Therm</i>	June	26,171	0	471,753	471,753	\$ 998,075	\$ 38.14
7		<i>\$0.8841</i>	July	26,171	0	274,716	274,716	\$ 823,875	\$ 31.48
8			August	26,171	0	303,731	303,731	\$ 849,527	\$ 32.46
9			September	26,171	0	519,219	519,219	\$ 1,040,040	\$ 39.74
10			October	26,171	0	1,047,855	1,047,855	\$ 1,507,407	\$ 57.60
11			November	26,171	1,975,568	0	1,975,568	\$ 2,327,598	\$ 88.94
12			December	26,171	3,115,886	0	3,115,886	\$ 3,335,753	\$ 127.46
13					16,062,468	3,543,464	19,605,931	\$ 24,305,585	\$ 928.72
14	R-10	Res. Heating, Low Income	January	644	80,989	0	80,989	\$ 85,892	\$ 133.44
15			February	644	75,070	0	75,070	\$ 80,660	\$ 125.31
16		<i>Rates</i>	March	644	67,158	0	67,158	\$ 73,665	\$ 114.44
17		<i>Customer</i>	April	644	40,685	0	40,685	\$ 50,260	\$ 78.08
18		<i>\$22.20</i>	May	644	0	23,715	23,715	\$ 35,257	\$ 54.77
19		<i>Per Therm</i>	June	644	0	11,427	11,427	\$ 24,393	\$ 37.90
20		<i>\$0.8841</i>	July	644	0	6,106	6,106	\$ 19,688	\$ 30.59
21			August	644	0	6,885	6,885	\$ 20,377	\$ 31.66
22			September	644	0	12,769	12,769	\$ 25,579	\$ 39.74
23			October	644	0	25,275	25,275	\$ 36,636	\$ 56.92
24			November	644	43,235	0	43,235	\$ 52,514	\$ 81.58
25			December	644	68,009	0	68,009	\$ 74,417	\$ 115.61
26					375,147	86,179	461,326	\$ 579,338	\$ 900.02
27	R-6	Residential Non-Heating	January	1,277	32,447	0	32,447	\$ 70,787	\$ 55.45
28			February	1,277	28,328	0	28,328	\$ 65,398	\$ 51.22
29		<i>Rates</i>	March	1,277	25,230	0	25,230	\$ 61,346	\$ 48.05
30		<i>Customer</i>	April	1,277	18,851	0	18,851	\$ 53,002	\$ 41.51
31		<i>\$22.20</i>	May	1,277	0	16,241	16,241	\$ 49,588	\$ 38.84
32		<i>Per Therm</i>	June	1,277	0	12,833	12,833	\$ 45,129	\$ 35.35
33		<i>\$1.3081</i>	July	1,277	0	11,308	11,308	\$ 43,134	\$ 33.79
34			August	1,277	0	11,564	11,564	\$ 43,469	\$ 34.05
35			September	1,277	0	12,781	12,781	\$ 45,061	\$ 35.29
36			October	1,277	0	15,819	15,819	\$ 49,036	\$ 38.41
37			November	1,277	21,860	0	21,860	\$ 56,938	\$ 44.60
38			December	1,277	30,008	0	30,008	\$ 67,596	\$ 52.95
39					156,724	80,545	237,269	\$ 650,484	\$ 509.50

Northern Utilities New Hampshire  
Target Revenue Per Customer (August 1, 2022 - July 31, 2023)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Calendar Month Revenue		
				Pro Forma Test Year Customers	Winter Therms	Summer Therms	Total Calendarized Therms	Total Calendarized Revenue	Calendarized Revenue Per Customer
40	G-40/T-40	Low Annual, High Winter	January	5,234	2,105,842	0	2,105,842	\$ 907,302	\$ 173.34
41			February	5,234	1,853,148	0	1,853,148	\$ 848,677	\$ 162.14
42		Rates	March	5,234	1,530,519	0	1,530,519	\$ 773,827	\$ 147.84
43		Customer	April	5,234	855,965	0	855,965	\$ 617,331	\$ 117.94
44		\$80.00	May	5,234	0	468,408	468,408	\$ 527,417	\$ 100.76
45		Per Therm	June	5,234	0	193,531	193,531	\$ 463,646	\$ 88.58
46		\$0.2320	July	5,234	0	74,813	74,813	\$ 436,103	\$ 83.32
47			August	5,234	0	91,982	91,982	\$ 440,087	\$ 84.08
48			September	5,234	0	226,274	226,274	\$ 471,242	\$ 90.03
49			October	5,234	0	549,088	549,088	\$ 546,135	\$ 104.34
50			November	5,234	1,109,028	0	1,109,028	\$ 676,041	\$ 129.16
51			December	5,234	1,822,234	0	1,822,234	\$ 841,505	\$ 160.77
52					9,276,737	1,604,096	10,880,833	\$ 7,549,314	\$ 1,442.27
53	G-50/T-50	Low Annual, Low Winter	January	831	165,778	0	165,778	\$ 101,082	\$ 121.57
54			February	831	153,226	0	153,226	\$ 98,465	\$ 118.42
55		Rates	March	831	135,926	0	135,926	\$ 94,858	\$ 114.09
56		Customer	April	831	93,720	0	93,720	\$ 86,058	\$ 103.50
57		\$80.00	May	831	0	97,002	97,002	\$ 86,742	\$ 104.32
58		Per Therm	June	831	0	101,613	101,613	\$ 87,704	\$ 105.48
59		\$0.2085	July	831	0	107,123	107,123	\$ 88,852	\$ 106.86
60			August	831	0	114,352	114,352	\$ 90,360	\$ 108.68
61			September	831	0	111,245	111,245	\$ 89,712	\$ 107.90
62			October	831	0	111,176	111,176	\$ 89,697	\$ 107.88
63			November	831	126,839	0	126,839	\$ 92,963	\$ 111.81
64			December	831	156,573	0	156,573	\$ 99,163	\$ 119.26
65					832,063	642,511	1,474,573	\$ 1,105,657	\$ 1,329.77
66	G-41/T-41	Med. Annual, High Winter	January	704	2,573,095	0	2,573,095	\$ 864,510	\$ 1,227.59
67			February	704	2,285,810	0	2,285,810	\$ 785,679	\$ 1,115.65
68		Rates	March	704	1,924,069	0	1,924,069	\$ 686,417	\$ 974.70
69		Customer	April	704	1,121,559	0	1,121,559	\$ 466,208	\$ 662.01
70		\$225.00	May	704	0	688,701	688,701	\$ 347,432	\$ 493.35
71		Per Therm	June	704	0	360,838	360,838	\$ 257,466	\$ 365.60
72		\$0.2744	July	704	0	218,577	218,577	\$ 218,430	\$ 310.17
73			August	704	0	239,596	239,596	\$ 224,198	\$ 318.36
74			September	704	0	394,184	394,184	\$ 266,617	\$ 378.59
75			October	704	0	829,358	829,358	\$ 386,028	\$ 548.15
76			November	704	1,505,305	0	1,505,305	\$ 571,508	\$ 811.53
77			December	704	2,282,740	0	2,282,740	\$ 784,836	\$ 1,114.46
78					11,692,577	2,731,254	14,423,832	\$ 5,859,330	\$ 8,320.15

Northern Utilities New Hampshire  
Target Revenue Per Customer (August 1, 2022 - July 31, 2023)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Total Calendarized Therms	Calendar Month Revenue	
				Pro Forma Test Year Customers	Winter Therms	Summer Therms		Total Calendarized Revenue	Calendarized Revenue Per Customer
79	G-51/T-51	Med. Annual, Low Winter	January	267	548,609	0	548,609	\$ 150,812	\$ 565.90
80			February	267	506,285	0	506,285	\$ 143,803	\$ 539.60
81		<i>Rates</i>	March	267	479,510	0	479,510	\$ 139,369	\$ 522.96
82		<i>Customer</i>	April	267	369,435	0	369,435	\$ 121,141	\$ 454.56
83		<i>\$225.00</i>	May	267	0	352,292	352,292	\$ 118,302	\$ 443.91
84		<i>Per Therm</i>	June	267	0	314,422	314,422	\$ 112,031	\$ 420.38
85		<i>\$0.1656</i>	July	267	0	296,610	296,610	\$ 109,081	\$ 409.31
86			August	267	0	300,172	300,172	\$ 109,671	\$ 411.52
87			September	267	0	306,298	306,298	\$ 110,685	\$ 415.33
88			October	267	0	347,918	347,918	\$ 117,578	\$ 441.19
89			November	267	421,008	0	421,008	\$ 129,681	\$ 486.61
90			December	267	518,741	0	518,741	\$ 145,866	\$ 547.34
91					2,843,588	1,917,712	4,761,300	\$ 1,508,021	\$ 5,658.62
92	G-42/T-42	High Annual, High Winter	January	31	915,167	0	915,167	\$ 232,479	\$ 7,499.33
93			February	31	819,517	0	819,517	\$ 212,555	\$ 6,856.63
94		<i>Rates</i>	March	31	734,670	0	734,670	\$ 194,882	\$ 6,286.51
95		<i>Customer</i>	April	31	515,218	0	515,218	\$ 149,170	\$ 4,811.93
96		<i>\$1,350.00</i>	May	31	0	324,350	324,350	\$ 109,412	\$ 3,529.42
97		<i>Per Therm</i>	June	31	0	218,129	218,129	\$ 87,286	\$ 2,815.68
98		<i>\$0.2083</i>	July	31	0	189,460	189,460	\$ 81,314	\$ 2,623.05
99			August	31	0	192,134	192,134	\$ 81,872	\$ 2,641.02
100			September	31	0	232,113	232,113	\$ 90,199	\$ 2,909.65
101			October	31	0	383,712	383,712	\$ 121,777	\$ 3,928.30
102			November	31	578,379	0	578,379	\$ 162,326	\$ 5,236.34
103			December	31	786,923	0	786,923	\$ 205,766	\$ 6,637.61
104					4,349,875	1,539,897	5,889,772	\$ 1,729,040	\$ 55,775.47
105	G-52/T-52	High Annual, Low Winter	January	33	1,332,981	0	1,332,981	\$ 273,823	\$ 8,297.66
106			February	33	1,504,043	0	1,504,043	\$ 303,245	\$ 9,189.26
107		<i>Rates</i>	March	33	1,376,235	0	1,376,235	\$ 281,262	\$ 8,523.10
108		<i>Customer</i>	April	33	1,342,269	41,018	1,383,288	\$ 279,727	\$ 8,476.58
109		<i>\$1,350.00</i>	May	33	5,650	1,257,039	1,262,689	\$ 177,511	\$ 5,379.12
110		<i>Per Therm Summer</i>	June	33	12,462	1,223,757	1,236,219	\$ 175,188	\$ 5,308.73
111		<i>\$0.1050</i>	July	33	0	1,220,236	1,220,236	\$ 172,675	\$ 5,232.57
112		<i>Per Therm Winter</i>	August	33	0	1,282,733	1,282,733	\$ 179,237	\$ 5,431.42
113		<i>\$0.1720</i>	September	33	0	1,416,119	1,416,119	\$ 193,243	\$ 5,855.83
114			October	33	43,229	1,387,409	1,430,639	\$ 197,663	\$ 5,989.80
115			November	33	1,381,287	28,665	1,409,953	\$ 285,141	\$ 8,640.65
116			December	33	1,562,138	0	1,562,138	\$ 313,238	\$ 9,492.05
117					8,560,295	7,856,979	16,417,274	\$ 2,831,954	\$ 85,816.77
118		Total			54,149,473	20,002,636	74,152,109	\$ 46,118,721	



Northern Utilities, Inc. - New Hampshire Division  
Decoupling  
Target Revenue Per Customer (September 1, 2022 - July 31, 2023)

Effective September 1, 2022-July 31, 2023	Residential			Commercial and Industrial					
Target Distribution Revenues	R6	R5-R10	G40	G50	G41	G51	G42	G52	Total
August (at August 1, 2022 Rates)	\$ 43,469	869,904	\$ 440,087	\$ 90,360	\$ 224,198	\$ 109,671	\$ 81,872	\$ 179,237	\$ 2,038,797
September	46,303	1,088,212	476,581	92,761	272,107	114,176	92,574	199,807	2,382,521
October	50,573	1,589,617	559,090	92,744	397,580	121,543	125,703	204,424	3,141,274
November	59,063	2,465,848	702,206	96,439	592,474	134,480	168,244	295,764	4,514,517
December	70,512	3,545,385	884,496	103,454	816,630	151,778	213,818	325,101	6,111,174
January	73,940	3,977,396	956,985	105,625	900,348	157,065	241,843	283,945	6,697,147
February	68,151	3,599,421	892,398	102,664	817,515	149,574	220,941	314,667	6,165,330
March	63,797	3,130,064	809,936	98,583	713,215	144,835	202,399	291,713	5,454,543
April	54,833	2,084,192	637,525	88,627	481,829	125,352	154,442	290,111	3,916,910
May	51,166	1,475,440	538,468	89,401	357,024	122,317	112,731	183,381	2,929,929
June	46,376	1,042,988	468,212	90,489	262,492	115,614	89,518	180,956	2,296,645
July	44,233	855,490	437,868	91,788	221,474	112,462	83,253	178,332	2,024,900
11ME July	\$ 672,416	\$ 25,723,957	\$ 7,803,851	\$ 1,142,936	\$ 6,056,886	\$ 1,558,867	\$ 1,787,337	\$ 2,927,437	\$ 47,673,687

Effective September 1, 2022-July 31, 2023	Residential			Commercial and Industrial					
Customers in Authorized Rate Design	R6	R5-R10	G40	G50	G41	G51	G42	G52	
September	\$ 1,277	\$ 26,815	\$ 5,234	\$ 831	\$ 704	\$ 267	\$ 31	\$ 33	
October	1,277	26,815	5,234	831	704	267	31	33	
November	1,277	26,815	5,234	831	704	267	31	33	
December	1,277	26,815	5,234	831	704	267	31	33	
January	1,277	26,815	5,234	831	704	267	31	33	
February	1,277	26,815	5,234	831	704	267	31	33	
March	1,277	26,815	5,234	831	704	267	31	33	
April	1,277	26,815	5,234	831	704	267	31	33	
May	1,277	26,815	5,234	831	704	267	31	33	
June	1,277	26,815	5,234	831	704	267	31	33	
July	1,277	26,815	5,234	831	704	267	31	33	

Effective September 1, 2022-July 31, 2023	Residential			Commercial and Industrial					
Monthly Revenue Per Customer	R6	R5-R10	G40	G50	G41	G51	G42	G52	
September	\$ 36.27	\$ 40.58	\$ 91.05	\$ 111.56	\$ 386.39	\$ 428.43	\$ 2,986.26	\$ 6,054.77	
October	39.61	59.28	106.81	111.54	564.56	456.07	4,054.95	6,194.65	
November	46.26	91.96	134.15	115.99	841.30	504.61	5,427.24	8,962.53	
December	55.23	132.22	168.98	124.42	1,159.60	569.52	6,897.34	9,851.53	
January	57.91	148.33	182.83	127.04	1,278.48	589.36	7,801.39	8,604.40	
February	53.38	134.23	170.49	123.47	1,160.86	561.25	7,127.11	9,535.37	
March	49.97	116.73	154.74	118.57	1,012.75	543.47	6,529.00	8,839.80	
April	42.95	77.73	121.80	106.59	684.19	470.36	4,981.99	8,791.23	
May	40.08	55.02	102.87	107.52	506.97	458.98	3,636.48	5,557.01	
June	36.32	38.90	89.45	108.83	372.73	433.83	2,887.68	5,483.51	
July	34.65	31.90	83.65	110.39	314.49	422.00	2,685.58	5,403.99	
Total	\$ 492.63	\$ 926.88	\$ 1,406.82	\$ 1,265.93	\$ 8,282.32	\$ 5,437.88	\$ 55,015.01	\$ 83,278.80	

Northern Utilities New Hampshire  
Target Revenue Per Customer (September 1, 2022 - July 31, 2023)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Calendar Month Revenue		
				Pro Forma Test Year Customers	Winter Therms	Summer Therms	Total Calendarized Therms	Total Calendarized Revenue	Calendarized Revenue Per Customer
1	R-5	Residential Heating	January	26,171	3,569,155	0	3,569,155	\$ 3,888,065	\$ 148.56
2			February	26,171	3,167,143	0	3,167,143	\$ 3,515,573	\$ 134.33
3		<i>Rates</i>	March	26,171	2,668,501	0	2,668,501	\$ 3,053,547	\$ 116.68
4		<i>Customer</i>	April	26,171	1,566,216	0	1,566,216	\$ 2,032,205	\$ 77.65
5		<i>\$22.20</i>	May	26,171	0	926,189	926,189	\$ 1,439,176	\$ 54.99
6		<i>Per Therm</i>	June	26,171	0	471,753	471,753	\$ 1,018,110	\$ 38.90
7		<i>\$0.9266</i>	July	26,171	0	274,716	274,716	\$ 835,542	\$ 31.93
8			August	26,171	0	303,731	303,731	\$ 862,426	\$ 32.95
9			September	26,171	0	519,219	519,219	\$ 1,062,090	\$ 40.58
10			October	26,171	0	1,047,855	1,047,855	\$ 1,551,908	\$ 59.30
11			November	26,171	1,975,568	0	1,975,568	\$ 2,411,497	\$ 92.14
12			December	26,171	3,115,886	0	3,115,886	\$ 3,468,080	\$ 132.52
13					16,062,468	3,543,464	19,605,931	\$ 25,138,219	\$ 960.53
14	R-10	Res. Heating, Low Income	January	644	80,989	0	80,989	\$ 89,331	\$ 138.78
15			February	644	75,070	0	75,070	\$ 83,848	\$ 130.26
16		<i>Rates</i>	March	644	67,158	0	67,158	\$ 76,517	\$ 118.87
17		<i>Customer</i>	April	644	40,685	0	40,685	\$ 51,988	\$ 80.76
18		<i>\$22.20</i>	May	644	0	23,715	23,715	\$ 36,264	\$ 56.34
19		<i>Per Therm</i>	June	644	0	11,427	11,427	\$ 24,878	\$ 38.65
20		<i>\$0.9266</i>	July	644	0	6,106	6,106	\$ 19,948	\$ 30.99
21			August	644	0	6,885	6,885	\$ 20,670	\$ 32.11
22			September	644	0	12,769	12,769	\$ 26,122	\$ 40.58
23			October	644	0	25,275	25,275	\$ 37,709	\$ 58.58
24			November	644	43,235	0	43,235	\$ 54,350	\$ 84.43
25			December	644	68,009	0	68,009	\$ 77,305	\$ 120.10
26					375,147	86,179	461,326	\$ 598,929	\$ 930.46
27	R-6	Residential Non-Heating	January	1,277	32,447	0	32,447	\$ 73,940	\$ 57.91
28			February	1,277	28,328	0	28,328	\$ 68,151	\$ 53.38
29		<i>Rates</i>	March	1,277	25,230	0	25,230	\$ 63,797	\$ 49.97
30		<i>Customer</i>	April	1,277	18,851	0	18,851	\$ 54,833	\$ 42.95
31		<i>\$22.20</i>	May	1,277	0	16,241	16,241	\$ 51,166	\$ 40.08
32		<i>Per Therm</i>	June	1,277	0	12,833	12,833	\$ 46,376	\$ 36.32
33		<i>\$1.4053</i>	July	1,277	0	11,308	11,308	\$ 44,233	\$ 34.65
34			August	1,277	0	11,564	11,564	\$ 44,593	\$ 34.93
35			September	1,277	0	12,781	12,781	\$ 46,303	\$ 36.27
36			October	1,277	0	15,819	15,819	\$ 50,573	\$ 39.61
37			November	1,277	21,860	0	21,860	\$ 59,063	\$ 46.26
38			December	1,277	30,008	0	30,008	\$ 70,512	\$ 55.23
39					156,724	80,545	237,269	\$ 673,540	\$ 527.56

Northern Utilities New Hampshire  
Target Revenue Per Customer (September 1, 2022 - July 31, 2023)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Calendar Month Revenue		
				Pro Forma Test Year Customers	Winter Therms	Summer Therms	Total Calendarized Therms	Total Calendarized Revenue	Calendarized Revenue Per Customer
40	G-40/T-40	Low Annual, High Winter	January	5,234	2,105,842	0	2,105,842	\$ 956,985	\$ 182.83
41			February	5,234	1,853,148	0	1,853,148	\$ 892,398	\$ 170.49
42		Rates	March	5,234	1,530,519	0	1,530,519	\$ 809,936	\$ 154.74
43		Customer	April	5,234	855,965	0	855,965	\$ 637,525	\$ 121.80
44		\$80.00	May	5,234	0	468,408	468,408	\$ 538,468	\$ 102.87
45		Per Therm	June	5,234	0	193,531	193,531	\$ 468,212	\$ 89.45
46		\$0.2556	July	5,234	0	74,813	74,813	\$ 437,868	\$ 83.65
47			August	5,234	0	91,982	91,982	\$ 442,257	\$ 84.49
48			September	5,234	0	226,274	226,274	\$ 476,581	\$ 91.05
49			October	5,234	0	549,088	549,088	\$ 559,090	\$ 106.81
50			November	5,234	1,109,028	0	1,109,028	\$ 702,206	\$ 134.15
51			December	5,234	1,822,234	0	1,822,234	\$ 884,496	\$ 168.98
52					9,276,737	1,604,096	10,880,833	\$ 7,806,021	\$ 1,491.31
53	G-50/T-50	Low Annual, Low Winter	January	831	165,778	0	165,778	\$ 105,625	\$ 127.04
54			February	831	153,226	0	153,226	\$ 102,664	\$ 123.47
55		Rates	March	831	135,926	0	135,926	\$ 98,583	\$ 118.57
56		Customer	April	831	93,720	0	93,720	\$ 88,627	\$ 106.59
57		\$80.00	May	831	0	97,002	97,002	\$ 89,401	\$ 107.52
58		Per Therm	June	831	0	101,613	101,613	\$ 90,489	\$ 108.83
59		\$0.2359	July	831	0	107,123	107,123	\$ 91,788	\$ 110.39
60			August	831	0	114,352	114,352	\$ 93,494	\$ 112.44
61			September	831	0	111,245	111,245	\$ 92,761	\$ 111.56
62			October	831	0	111,176	111,176	\$ 92,744	\$ 111.54
63			November	831	126,839	0	126,839	\$ 96,439	\$ 115.99
64			December	831	156,573	0	156,573	\$ 103,454	\$ 124.42
65					832,063	642,511	1,474,573	\$ 1,146,070	\$ 1,378.37
66	G-41/T-41	Med. Annual, High Winter	January	704	2,573,095	0	2,573,095	\$ 900,348	\$ 1,278.48
67			February	704	2,285,810	0	2,285,810	\$ 817,515	\$ 1,160.86
68		Rates	March	704	1,924,069	0	1,924,069	\$ 713,215	\$ 1,012.75
69		Customer	April	704	1,121,559	0	1,121,559	\$ 481,829	\$ 684.19
70		\$225.00	May	704	0	688,701	688,701	\$ 357,024	\$ 506.97
71		Per Therm	June	704	0	360,838	360,838	\$ 262,492	\$ 372.73
72		\$0.2883	July	704	0	218,577	218,577	\$ 221,474	\$ 314.49
73			August	704	0	239,596	239,596	\$ 227,535	\$ 323.10
74			September	704	0	394,184	394,184	\$ 272,107	\$ 386.39
75			October	704	0	829,358	829,358	\$ 397,580	\$ 564.56
76			November	704	1,505,305	0	1,505,305	\$ 592,474	\$ 841.30
77			December	704	2,282,740	0	2,282,740	\$ 816,630	\$ 1,159.60
78					11,692,577	2,731,254	14,423,832	\$ 6,060,223	\$ 8,605.42

Northern Utilities New Hampshire  
Target Revenue Per Customer (September 1, 2022 - July 31, 2023)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Total Calendarized Therms	Calendar Month Revenue	
				Pro Forma Test Year Customers	Winter Therms	Summer Therms		Total Calendarized Revenue	Calendarized Revenue Per Customer
79	G-51/T-51	Med. Annual, Low Winter	January	267	548,609	0	548,609	\$ 157,065	\$ 589.36
80			February	267	506,285	0	506,285	\$ 149,574	\$ 561.25
81		<i>Rates</i>	March	267	479,510	0	479,510	\$ 144,835	\$ 543.47
82		<i>Customer</i>	April	267	369,435	0	369,435	\$ 125,352	\$ 470.36
83		<i>\$225.00</i>	May	267	0	352,292	352,292	\$ 122,317	\$ 458.98
84		<i>Per Therm</i>	June	267	0	314,422	314,422	\$ 115,614	\$ 433.83
85		<i>\$0.1770</i>	July	267	0	296,610	296,610	\$ 112,462	\$ 422.00
86			August	267	0	300,172	300,172	\$ 113,092	\$ 424.36
87			September	267	0	306,298	306,298	\$ 114,176	\$ 428.43
88			October	267	0	347,918	347,918	\$ 121,543	\$ 456.07
89			November	267	421,008	0	421,008	\$ 134,480	\$ 504.61
90			December	267	518,741	0	518,741	\$ 151,778	\$ 569.52
91					2,843,588	1,917,712	4,761,300	\$ 1,562,288	\$ 5,862.24
92	G-42/T-42	High Annual, High Winter	January	31	915,167	0	915,167	\$ 241,843	\$ 7,801.39
93			February	31	819,517	0	819,517	\$ 220,941	\$ 7,127.11
94		<i>Rates</i>	March	31	734,670	0	734,670	\$ 202,399	\$ 6,529.00
95		<i>Customer</i>	April	31	515,218	0	515,218	\$ 154,442	\$ 4,981.99
96		<i>\$1,350.00</i>	May	31	0	324,350	324,350	\$ 112,731	\$ 3,636.48
97		<i>Per Therm</i>	June	31	0	218,129	218,129	\$ 89,518	\$ 2,887.68
98		<i>\$0.2185</i>	July	31	0	189,460	189,460	\$ 83,253	\$ 2,685.58
99			August	31	0	192,134	192,134	\$ 83,837	\$ 2,704.43
100			September	31	0	232,113	232,113	\$ 92,574	\$ 2,986.26
101			October	31	0	383,712	383,712	\$ 125,703	\$ 4,054.95
102			November	31	578,379	0	578,379	\$ 168,244	\$ 5,427.24
103			December	31	786,923	0	786,923	\$ 213,818	\$ 6,897.34
104					4,349,875	1,539,897	5,889,772	\$ 1,789,303	\$ 57,719.44
105	G-52/T-52	High Annual, Low Winter	January	33	1,332,981	0	1,332,981	\$ 283,945	\$ 8,604.40
106			February	33	1,504,043	0	1,504,043	\$ 314,667	\$ 9,535.37
107		<i>Rates</i>	March	33	1,376,235	0	1,376,235	\$ 291,713	\$ 8,839.80
108		<i>Customer</i>	April	33	1,342,269	41,018	1,383,288	\$ 290,111	\$ 8,791.23
109		<i>\$1,350.00</i>	May	33	5,650	1,257,039	1,262,689	\$ 183,381	\$ 5,557.01
110		<i>Per Therm Summer</i>	June	33	12,462	1,223,757	1,236,219	\$ 180,956	\$ 5,483.51
111		<i>\$0.1096</i>	July	33	0	1,220,236	1,220,236	\$ 178,332	\$ 5,403.99
112		<i>Per Therm Winter</i>	August	33	0	1,282,733	1,282,733	\$ 185,184	\$ 5,611.62
113		<i>\$0.1796</i>	September	33	0	1,416,119	1,416,119	\$ 199,807	\$ 6,054.77
114			October	33	43,229	1,387,409	1,430,639	\$ 204,424	\$ 6,194.65
115			November	33	1,381,287	28,665	1,409,953	\$ 295,764	\$ 8,962.53
116			December	33	1,562,138	0	1,562,138	\$ 325,101	\$ 9,851.53
117					8,560,295	7,856,979	16,417,274	\$ 2,933,384	\$ 88,890.42
118		Total			54,149,473	20,002,636	74,152,109	\$ 47,707,977	

Northern Utilities, Inc. - New Hampshire Division  
Decoupling  
Target Revenue Per Customer (August 1, 2023 - July 31, 2024)

Effective August 1, 2023-July 31, 2024	Residential				Commercial and Industrial				
Target Distribution Revenues	R6	R5-R10	G40	G50	G41	G51	G42	G52	Total
August	\$ 44,538	\$ 882,891	\$ 442,238	\$ 93,251	\$ 227,479	\$ 112,876	\$ 83,773	\$ 184,835	\$ 2,071,883
September	46,242	1,087,862	476,536	92,524	272,016	113,956	92,497	199,423	2,381,056
October	50,498	1,588,912	558,980	92,508	397,388	121,293	125,575	204,027	3,139,181
November	58,959	2,464,520	701,985	96,170	592,126	134,177	168,051	295,141	4,511,129
December	70,370	3,543,292	884,133	103,121	816,102	151,406	213,555	324,405	6,106,384
January	73,786	3,974,997	956,565	105,273	899,752	156,671	241,538	283,352	6,691,933
February	68,017	3,597,290	892,028	102,339	816,986	149,210	220,667	313,998	6,160,534
March	63,678	3,128,266	809,631	98,294	712,770	144,490	202,154	291,101	5,450,383
April	54,744	2,083,136	637,354	88,427	481,570	125,086	154,270	289,502	3,914,089
May	51,089	1,474,815	538,375	89,195	356,865	122,064	112,622	183,037	2,928,063
June	46,315	1,042,671	468,173	90,273	262,409	115,389	89,445	180,618	2,295,292
July	44,179	855,305	437,854	91,561	221,424	112,249	83,190	178,000	2,023,761
12ME July	\$ 672,416	\$ 25,723,957	\$ 7,803,851	\$ 1,142,936	\$ 6,056,886	\$ 1,558,867	\$ 1,787,337	\$ 2,927,437	\$ 47,673,687

Effective August 1, 2023-July 31, 2024	Residential				Commercial and Industrial				
Customers in Authorized Rate Design	R6	R5-R10	G40	G50	G41	G51	G42	G52	
August	\$ 1,277	\$ 26,815	\$ 5,234	\$ 831	\$ 704	\$ 267	\$ 31	\$ 33	
September	1,277	26,815	5,234	831	704	267	31	33	
October	1,277	26,815	5,234	831	704	267	31	33	
November	1,277	26,815	5,234	831	704	267	31	33	
December	1,277	26,815	5,234	831	704	267	31	33	
January	1,277	26,815	5,234	831	704	267	31	33	
February	1,277	26,815	5,234	831	704	267	31	33	
March	1,277	26,815	5,234	831	704	267	31	33	
April	1,277	26,815	5,234	831	704	267	31	33	
May	1,277	26,815	5,234	831	704	267	31	33	
June	1,277	26,815	5,234	831	704	267	31	33	
July	1,277	26,815	5,234	831	704	267	31	33	

Effective August 1, 2023-July 31, 2024	Residential				Commercial and Industrial				
Monthly Revenue Per Customer	R6	R5-R10	G40	G50	G41	G51	G42	G52	
August	\$ 34.89	\$ 32.93	\$ 84.49	\$ 112.15	\$ 323.02	\$ 423.55	\$ 2,702.37	\$ 5,601.06	
September	36.22	40.57	91.04	111.28	386.26	427.60	2,983.76	6,043.11	
October	39.55	59.26	106.79	111.26	564.28	455.13	4,050.81	6,182.64	
November	46.18	91.91	134.11	115.66	840.81	503.48	5,421.01	8,943.66	
December	55.12	132.14	168.91	124.02	1,158.85	568.13	6,888.87	9,830.46	
January	57.79	148.24	182.75	126.61	1,277.63	587.88	7,791.54	8,586.42	
February	53.28	134.15	170.42	123.08	1,160.11	559.89	7,118.29	9,515.08	
March	49.88	116.66	154.68	118.22	1,012.12	542.18	6,521.09	8,821.23	
April	42.88	77.69	121.76	106.35	683.82	469.37	4,976.44	8,772.78	
May	40.02	55.00	102.85	107.27	506.74	458.03	3,632.98	5,546.58	
June	36.28	38.88	89.44	108.57	372.62	432.98	2,885.33	5,473.26	
July	34.60	31.90	83.65	110.12	314.42	421.20	2,683.54	5,393.94	
Total	\$ 526.68	\$ 959.32	\$ 1,490.90	\$ 1,374.60	\$ 8,600.68	\$ 5,849.41	\$ 57,656.03	\$ 88,710.22	

Northern Utilities New Hampshire  
Target Revenue Per Customer (August 1, 2023 - July 31, 2024)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Calendar Month Revenue		
				Pro Forma Test Year Customers	Winter Therms	Summer Therms	Total Calendarized Therms	Total Calendarized Revenue	Calendarized Revenue Per Customer
1	R-5	Residential Heating	January	26,171	3,569,155	0	3,569,155	\$ 3,885,718	\$ 148.47
2			February	26,171	3,167,143	0	3,167,143	\$ 3,513,491	\$ 134.25
3		<i>Rates</i>	March	26,171	2,668,501	0	2,668,501	\$ 3,051,793	\$ 116.61
4		<i>Customer</i>	April	26,171	1,566,216	0	1,566,216	\$ 2,031,175	\$ 77.61
5		<i>\$22.20</i>	May	26,171	0	926,189	926,189	\$ 1,438,567	\$ 54.97
6		<i>Per Therm</i>	June	26,171	0	471,753	471,753	\$ 1,017,800	\$ 38.89
7		<i>\$0.9259</i>	July	26,171	0	274,716	274,716	\$ 835,361	\$ 31.92
8			August	26,171	0	303,731	303,731	\$ 862,226	\$ 32.95
9			September	26,171	0	519,219	519,219	\$ 1,061,749	\$ 40.57
10			October	26,171	0	1,047,855	1,047,855	\$ 1,551,219	\$ 59.27
11			November	26,171	1,975,568	0	1,975,568	\$ 2,410,199	\$ 92.09
12			December	26,171	3,115,886	0	3,115,886	\$ 3,466,032	\$ 132.44
13					16,062,468	3,543,464	19,605,931	\$ 25,125,331	\$ 960.04
14	R-10	Res. Heating, Low Income	January	644	80,989	0	80,989	\$ 89,278	\$ 138.70
15			February	644	75,070	0	75,070	\$ 83,798	\$ 130.18
16		<i>Rates</i>	March	644	67,158	0	67,158	\$ 76,473	\$ 118.80
17		<i>Customer</i>	April	644	40,685	0	40,685	\$ 51,961	\$ 80.72
18		<i>\$22.20</i>	May	644	0	23,715	23,715	\$ 36,248	\$ 56.31
19		<i>Per Therm</i>	June	644	0	11,427	11,427	\$ 24,871	\$ 38.64
20		<i>\$0.9259</i>	July	644	0	6,106	6,106	\$ 19,944	\$ 30.98
21			August	644	0	6,885	6,885	\$ 20,665	\$ 32.10
22			September	644	0	12,769	12,769	\$ 26,113	\$ 40.57
23			October	644	0	25,275	25,275	\$ 37,693	\$ 58.56
24			November	644	43,235	0	43,235	\$ 54,322	\$ 84.39
25			December	644	68,009	0	68,009	\$ 77,261	\$ 120.03
26					375,147	86,179	461,326	\$ 598,626	\$ 929.99
27	R-6	Residential Non-Heating	January	1,277	32,447	0	32,447	\$ 73,786	\$ 57.79
28			February	1,277	28,328	0	28,328	\$ 68,017	\$ 53.28
29		<i>Rates</i>	March	1,277	25,230	0	25,230	\$ 63,678	\$ 49.88
30		<i>Customer</i>	April	1,277	18,851	0	18,851	\$ 54,744	\$ 42.88
31		<i>\$22.20</i>	May	1,277	0	16,241	16,241	\$ 51,089	\$ 40.02
32		<i>Per Therm</i>	June	1,277	0	12,833	12,833	\$ 46,315	\$ 36.28
33		<i>\$1.4005</i>	July	1,277	0	11,308	11,308	\$ 44,179	\$ 34.60
34			August	1,277	0	11,564	11,564	\$ 44,538	\$ 34.89
35			September	1,277	0	12,781	12,781	\$ 46,242	\$ 36.22
36			October	1,277	0	15,819	15,819	\$ 50,498	\$ 39.55
37			November	1,277	21,860	0	21,860	\$ 58,959	\$ 46.18
38			December	1,277	30,008	0	30,008	\$ 70,370	\$ 55.12
39					156,724	80,545	237,269	\$ 672,416	\$ 526.68

Northern Utilities New Hampshire  
Target Revenue Per Customer (August 1, 2023 - July 31, 2024)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Total Calendarized Therms	Calendar Month Revenue	
				Pro Forma Test Year Customers	Winter Therms	Summer Therms		Total Calendarized Revenue	Calendarized Revenue Per Customer
40	G-40/T-40	Low Annual, High Winter	January	5,234	2,105,842	0	2,105,842	\$ 956,565	\$ 182.75
41			February	5,234	1,853,148	0	1,853,148	\$ 892,028	\$ 170.42
42		Rates	March	5,234	1,530,519	0	1,530,519	\$ 809,631	\$ 154.68
43		Customer	April	5,234	855,965	0	855,965	\$ 637,354	\$ 121.76
44		\$80.00	May	5,234	0	468,408	468,408	\$ 538,375	\$ 102.85
45		Per Therm	June	5,234	0	193,531	193,531	\$ 468,173	\$ 89.44
46		\$0.2554	July	5,234	0	74,813	74,813	\$ 437,854	\$ 83.65
47			August	5,234	0	91,982	91,982	\$ 442,238	\$ 84.49
48			September	5,234	0	226,274	226,274	\$ 476,536	\$ 91.04
49			October	5,234	0	549,088	549,088	\$ 558,980	\$ 106.79
50			November	5,234	1,109,028	0	1,109,028	\$ 701,985	\$ 134.11
51			December	5,234	1,822,234	0	1,822,234	\$ 884,133	\$ 168.91
52					9,276,737	1,604,096	10,880,833	\$ 7,803,851	\$ 1,490.90
53	G-50/T-50	Low Annual, Low Winter	January	831	165,778	0	165,778	\$ 105,273	\$ 126.61
54			February	831	153,226	0	153,226	\$ 102,339	\$ 123.08
55		Rates	March	831	135,926	0	135,926	\$ 98,294	\$ 118.22
56		Customer	April	831	93,720	0	93,720	\$ 88,427	\$ 106.35
57		\$80.00	May	831	0	97,002	97,002	\$ 89,195	\$ 107.27
58		Per Therm	June	831	0	101,613	101,613	\$ 90,273	\$ 108.57
59		\$0.2338	July	831	0	107,123	107,123	\$ 91,561	\$ 110.12
60			August	831	0	114,352	114,352	\$ 93,251	\$ 112.15
61			September	831	0	111,245	111,245	\$ 92,524	\$ 111.28
62			October	831	0	111,176	111,176	\$ 92,508	\$ 111.26
63			November	831	126,839	0	126,839	\$ 96,170	\$ 115.66
64			December	831	156,573	0	156,573	\$ 103,121	\$ 124.02
65					832,063	642,511	1,474,573	\$ 1,142,936	\$ 1,374.60
66	G-41/T-41	Med. Annual, High Winter	January	704	2,573,095	0	2,573,095	\$ 899,752	\$ 1,277.63
67			February	704	2,285,810	0	2,285,810	\$ 816,986	\$ 1,160.11
68		Rates	March	704	1,924,069	0	1,924,069	\$ 712,770	\$ 1,012.12
69		Customer	April	704	1,121,559	0	1,121,559	\$ 481,570	\$ 683.82
70		\$225.00	May	704	0	688,701	688,701	\$ 356,865	\$ 506.74
71		Per Therm	June	704	0	360,838	360,838	\$ 262,409	\$ 372.62
72		\$0.2881	July	704	0	218,577	218,577	\$ 221,424	\$ 314.42
73			August	704	0	239,596	239,596	\$ 227,479	\$ 323.02
74			September	704	0	394,184	394,184	\$ 272,016	\$ 386.26
75			October	704	0	829,358	829,358	\$ 397,388	\$ 564.28
76			November	704	1,505,305	0	1,505,305	\$ 592,126	\$ 840.81
77			December	704	2,282,740	0	2,282,740	\$ 816,102	\$ 1,158.85
78					11,692,577	2,731,254	14,423,832	\$ 6,056,886	\$ 8,600.68

Northern Utilities New Hampshire  
Target Revenue Per Customer (August 1, 2023 - July 31, 2024)  
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Rate Class	Description	Month	Billing Determinants			Total Calendarized Therms	Calendar Month Revenue	
				Pro Forma Test Year Customers	Winter Therms	Summer Therms		Total Calendarized Revenue	Calendarized Revenue Per Customer
79	G-51/T-51	Med. Annual, Low Winter	January	267	548,609	0	548,609	\$ 156,671	\$ 587.88
80			February	267	506,285	0	506,285	\$ 149,210	\$ 559.89
81		<i>Rates</i>	March	267	479,510	0	479,510	\$ 144,490	\$ 542.18
82		<i>Customer</i>	April	267	369,435	0	369,435	\$ 125,086	\$ 469.37
83		<i>\$225.00</i>	May	267	0	352,292	352,292	\$ 122,064	\$ 458.03
84		<i>Per Therm</i>	June	267	0	314,422	314,422	\$ 115,389	\$ 432.98
85		<i>\$0.1763</i>	July	267	0	296,610	296,610	\$ 112,249	\$ 421.20
86			August	267	0	300,172	300,172	\$ 112,876	\$ 423.55
87			September	267	0	306,298	306,298	\$ 113,956	\$ 427.60
88			October	267	0	347,918	347,918	\$ 121,293	\$ 455.13
89			November	267	421,008	0	421,008	\$ 134,177	\$ 503.48
90			December	267	518,741	0	518,741	\$ 151,406	\$ 568.13
91					2,843,588	1,917,712	4,761,300	\$ 1,558,867	\$ 5,849.41
92	G-42/T-42	High Annual, High Winter	January	31	915,167	0	915,167	\$ 241,538	\$ 7,791.54
93			February	31	819,517	0	819,517	\$ 220,667	\$ 7,118.29
94		<i>Rates</i>	March	31	734,670	0	734,670	\$ 202,154	\$ 6,521.09
95		<i>Customer</i>	April	31	515,218	0	515,218	\$ 154,270	\$ 4,976.44
96		<i>\$1,350.00</i>	May	31	0	324,350	324,350	\$ 112,622	\$ 3,632.98
97		<i>Per Therm</i>	June	31	0	218,129	218,129	\$ 89,445	\$ 2,885.33
98		<i>\$0.2182</i>	July	31	0	189,460	189,460	\$ 83,190	\$ 2,683.54
99			August	31	0	192,134	192,134	\$ 83,773	\$ 2,702.37
100			September	31	0	232,113	232,113	\$ 92,497	\$ 2,983.76
101			October	31	0	383,712	383,712	\$ 125,575	\$ 4,050.81
102			November	31	578,379	0	578,379	\$ 168,051	\$ 5,421.01
103			December	31	786,923	0	786,923	\$ 213,555	\$ 6,888.87
104					4,349,875	1,539,897	5,889,772	\$ 1,787,337	\$ 57,656.03
105	G-52/T-52	High Annual, Low Winter	January	33	1,332,981	0	1,332,981	\$ 283,352	\$ 8,586.42
106			February	33	1,504,043	0	1,504,043	\$ 313,998	\$ 9,515.08
107		<i>Rates</i>	March	33	1,376,235	0	1,376,235	\$ 291,101	\$ 8,821.23
108		<i>Customer</i>	April	33	1,342,269	41,018	1,383,288	\$ 289,502	\$ 8,772.78
109		<i>\$1,350.00</i>	May	33	5,650	1,257,039	1,262,689	\$ 183,037	\$ 5,546.58
110		<i>Per Therm Summer</i>	June	33	12,462	1,223,757	1,236,219	\$ 180,618	\$ 5,473.26
111		<i>\$0.1094</i>	July	33	0	1,220,236	1,220,236	\$ 178,000	\$ 5,393.94
112		<i>Per Therm Winter</i>	August	33	0	1,282,733	1,282,733	\$ 184,835	\$ 5,601.06
113		<i>\$0.1791</i>	September	33	0	1,416,119	1,416,119	\$ 199,423	\$ 6,043.11
114			October	33	43,229	1,387,409	1,430,639	\$ 204,027	\$ 6,182.64
115			November	33	1,381,287	28,665	1,409,953	\$ 295,141	\$ 8,943.66
116			December	33	1,562,138	0	1,562,138	\$ 324,405	\$ 9,830.46
117					8,560,295	7,856,979	16,417,274	\$ 2,927,437	\$ 88,710.22
118		Total			54,149,473	20,002,636	74,152,109	\$ 47,673,687	



**Northern Utilities, Inc.**  
**Docket No. DG 21-104**  
**Settlement Attachment 4**  
**Page 1 of 1**

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Northern Utilities New Hampshire  
Revenue Proof and Rate Design - Settlement  
Test Year: January 1, 2020 Through December 31, 2020

				Adjustments			Pro Forma at Current Rates		Permanent Rates, August 1, 2022			
				Weather Normalization & Annualization Adjustments (bills or therms)	Weather Normalization & Annualization Revenue Adjustment	R-10 Rate Change Annualization	2020 Adjusted Billing Determinants (bills or therms)	2020 Adjusted Base Year Revenue ("Margin")	Projected Billing Determinants (bills or therms)	Pemanent Rates	Total Revenue ("Margin")	
Line No.	Rate Description	2020 Billing Units (bills or therms)	Current Rates	Calculated Revenue	(E)	(F) [C * E]	(G)	(H) [B + E]	(I) [D + F]	(J) [=H]	(K)	(L) [J * K]
	(A)	(B)	(C)	(D) [B * C]								
1	R-5: Residential Heating											
2	Customer Charge	306,525	\$22.20	\$6,804,865	7,528	\$167,116		314,053	\$6,971,981	314,053	\$22.20	\$6,971,981
3	Summer First 50 therms	2,947,284	\$0.6099	\$1,797,548	148,552	\$90,602		3,095,836	\$1,888,150	3,095,836	\$0.8841	\$2,737,029
4	Summer Excess therms	459,480	\$0.6099	\$280,237	-	\$0		459,480	\$280,237	459,480	\$0.8841	\$406,227
5	Winter First 50 therms	6,432,280	\$0.6920	\$4,451,138	182,063	\$125,988		6,614,343	\$4,577,125	6,614,343	\$0.8841	\$5,847,741
6	Winter Excess therms	7,449,509	\$0.6920	\$5,155,060	1,986,762	\$1,374,840		9,436,272	\$6,529,900	9,436,272	\$0.8841	\$8,342,608
7	Total	17,288,553		\$18,488,849	2,317,378	\$1,758,545		19,605,931	\$20,247,394	19,605,931		\$24,305,585
8	R-10: Residential Heating, Low Income											
9	January through October											
10	Customer Charge	7,409	\$8.88	\$65,795	(972)	(\$21,587)	\$98,692					
11	Summer First 50 therms	60,977	\$0.2440	\$14,878	(4,875)	(\$2,973)	\$22,311					
12	Summer Excess therms	4,657	\$0.2440	\$1,136	-	\$0	\$1,704					
13	Winter First 50 therms	164,671	\$0.2760	\$45,449	(31,181)	(\$21,578)	\$68,503					
14	Winter Excess therms	154,635	\$0.2760	\$42,679	24,940	\$17,258	\$64,328					
15	Total	384,939		\$169,938	(11,116)	(\$28,879)	\$255,538					
16	November, December											
17	Customer Charge before rate change	335	\$8.88	\$2,979			\$4,468					
18	Customer Charge after rate change	938	\$22.20	\$20,822	14	\$311						
19	Summer First 50 therms b/f change	11,932	\$0.2440	\$2,911	1,843	\$1,124	\$4,366					
20	Summer Excess therms b/f change	2,539	\$0.2440	\$620		\$0	\$929					
21	Winter First 50 therms	40,114	\$0.6920	\$27,759	701	\$485	\$0					
22	Winter Excess therms	25,775	\$0.6920	\$17,836	4,598	\$3,182	\$0					
23	Total	80,360		\$72,927	7,142	\$5,102	\$9,763					
24	Test Year											
25	Customer Charge	8,683		\$89,595	(958)	(\$21,276)	\$103,160	7,724	\$171,480	7,724	\$22.20	\$171,480
26	Summer First 50 therms	72,909		\$17,790	(3,032)	(\$1,849)	\$26,677	69,877	\$42,618	69,877	\$0.8841	\$61,778
27	Summer Excess therms	7,196		\$1,756	-	\$0	\$2,633	7,196	\$4,389	7,196	\$0.8841	\$6,362
28	Winter First 50 therms	204,785		\$73,208	(30,481)	(\$21,093)	\$68,503	174,305	\$120,619	174,305	\$0.8841	\$154,103
29	Winter Excess therms	180,409		\$60,515	29,538	\$20,441	\$64,328	209,948	\$145,284	209,948	\$0.8841	\$185,615
30	Total	465,300		\$242,865	(3,974)	(\$23,777)	\$265,302	461,326	\$484,389	461,326		\$579,338

Northern Utilities New Hampshire  
Revenue Proof and Rate Design - Settlement  
Test Year: January 1, 2020 Through December 31, 2020

				Adjustments			Pro Forma at Current Rates		Permanent Rates, August 1, 2022			
				Weather Normalization & Annualization Adjustments								
Line No.	Rate Description	2020 Billing Units (bills or therms)	Current Rates	Calculated Revenue [B * C]	(bills or therms)	Weather Normalization & Annualization Revenue Adjustment	R-10 Rate Change Annualization	2020 Adjusted Billing Determinants (bills or therms)	2020 Adjusted Base Year Revenue ("Margin")	Projected Billing Determinants (bills or therms)	Pemanent Rates	Total Revenue ("Margin")
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
				[B * C]		[C * E]		[B + E]	[D + F]	[=H]		[J * K]
31	R-6: Residential Non-Heating											
32	Customer Charge	15,776	\$22.20	\$350,236	(456)	(\$10,123)		15,320	\$340,113	15,320	\$22.20	\$340,113
33	Summer First 10 therms	51,805	\$0.6470	\$33,518	(3,321)	(\$2,149)		48,484	\$31,369	48,484	\$1.3081	\$63,421
34	Summer Excess therms	32,928	\$0.6470	\$21,304	-	\$0		32,928	\$21,304	32,928	\$1.3081	\$43,073
35	Winter First 10 therms	52,602	\$0.6470	\$34,034	(599)	(\$388)		52,003	\$33,646	52,003	\$1.3081	\$68,025
36	Winter Excess therms	94,282	\$0.6470	\$61,001	9,571	\$6,193		103,854	\$67,193	103,854	\$1.3081	\$135,851
37	Total	231,617		\$500,092	5,651	(\$6,467)		237,269	\$493,626	237,269		\$650,484
38	G-40/T-40: Low Annual, High Winter Use											
39	Customer Charge	60,528	\$75.09	\$4,545,034	2,284	\$171,520		62,812	\$4,716,554	62,812	\$80.00	\$5,024,961
40	Summer First 75 therms	749,335	\$0.1865	\$139,751	130,670	\$24,370		880,005	\$164,121	880,005	\$0.2320	\$204,161
41	Summer Excess therms	728,589	\$0.1865	\$135,882	-	\$0		728,589	\$135,882	728,589	\$0.2320	\$169,033
42	Winter First 75 therms	1,918,684	\$0.1865	\$357,835	51,517	\$9,608		1,970,201	\$367,443	1,970,201	\$0.2320	\$457,087
43	Winter Excess therms	6,048,253	\$0.1865	\$1,127,999	1,253,784	\$233,831		7,302,037	\$1,361,830	7,302,037	\$0.2320	\$1,694,073
44	Total	9,444,862		\$6,306,501	1,435,971	\$439,328		10,880,833	\$6,745,829	10,880,833		\$7,549,314
45	G-50/T-50: Low Annual, Low Winter Use											
46	Customer Charge	9,988	\$75.09	\$749,978	(10)	(\$760)		9,978	\$749,218	9,978	\$80.00	\$798,208
47	Summer First 75 therms	211,366	\$0.1865	\$39,420	(7,547)	(\$1,408)		203,819	\$38,012	203,819	\$0.2085	\$42,496
48	Summer Excess therms	444,727	\$0.1865	\$82,942	-	\$0		444,727	\$82,942	444,727	\$0.2085	\$92,726
49	Winter First 75 therms	216,653	\$0.1865	\$40,406	3,516	\$656		220,169	\$41,061	220,169	\$0.2085	\$45,905
50	Winter Excess therms	601,017	\$0.1865	\$112,090	4,841	\$903		605,858	\$112,993	605,858	\$0.2085	\$126,321
51	Total	1,473,763		\$1,024,835	810	(\$609)		1,474,573	\$1,024,226	1,474,573		\$1,105,657
52	G-41/T-41: Medium Annual, High Winter Use											
53	Customer Charge	8,741	\$222.64	\$1,946,116	(290)	(\$64,630)		8,451	\$1,881,486	8,451	\$225.00	\$1,901,430
54	Summer All therms	2,627,539	\$0.1895	\$497,919	81,420	\$15,429		2,708,960	\$513,348	2,708,960	\$0.2744	\$743,339
55	Winter All therms	11,121,406	\$0.2425	\$2,696,941	593,466	\$143,916		11,714,872	\$2,840,856	11,714,872	\$0.2744	\$3,214,561
56	Total	13,748,945		\$5,140,976	674,887	\$94,715		14,423,832	\$5,235,691	14,423,832		\$5,859,330

Northern Utilities New Hampshire  
Revenue Proof and Rate Design - Settlement  
Test Year: January 1, 2020 Through December 31, 2020

				Adjustments			Pro Forma at Current Rates		Permanent Rates, August 1, 2022			
				Weather Normalization & Annualization Adjustments (bills or therms)	Weather Normalization & Annualization Revenue Adjustment	R-10 Rate Change Annualization	2020 Adjusted Billing Determinants (bills or therms)	2020 Adjusted Base Year Revenue ("Margin")	Projected Billing Determinants (bills or therms)	Pemanent Rates	Total Revenue ("Margin")	
Line No.	Rate Description	2020 Billing Units (bills or therms)	Current Rates	Calculated Revenue [B * C]	(E)	(F) [C * E]	(G)	(H) [B + E]	(I) [D + F]	(J) [=H]	(K)	(L) [J * K]
57	<b>G-51/T-51: Medium Annual, Low Winter Use</b>											
58	Customer Charge	3,318	\$222.64	\$738,727	(120)	(\$26,725)		3,198	\$712,003	3,198	\$225.00	\$719,550
59	Summer First 1,000 therms	1,231,175	\$0.1337	\$164,608	(61,835)	(\$8,267)		1,169,340	\$156,341	1,169,340	\$0.1656	\$193,643
60	Summer Excess therms	515,635	\$0.1087	\$56,050	254,848	\$27,702		770,483	\$83,752	770,483	\$0.1656	\$127,592
61	Winter First 1,300 therms	1,677,170	\$0.1712	\$287,131	(75,660)	(\$12,953)		1,601,510	\$274,178	1,601,510	\$0.1656	\$265,210
62	Winter Excess therms	1,045,521	\$0.1399	\$146,268	174,446	\$24,405		1,219,967	\$170,673	1,219,967	\$0.1656	\$202,027
63	Total	4,469,501		\$1,392,785	291,799	\$4,162		4,761,300	\$1,396,947	4,761,300		\$1,508,021
64	<b>G-42/T-42: High Annual, High Winter Use</b>											
65	Customer Charge	413	\$1,335.81	\$551,022	(41)	(\$54,100)		372	\$496,921	372	\$1,350.00	\$502,200
66	Summer All therms	1,589,451	\$0.1206	\$191,688	(42,692)	(\$5,149)		1,546,759	\$186,539	1,546,759	\$0.2083	\$322,190
67	Winter All therms	4,234,069	\$0.1984	\$840,039	108,944	\$21,614		4,343,013	\$861,654	4,343,013	\$0.2083	\$904,650
68	Total	5,823,520		\$1,582,749	66,252	(\$37,635)		5,889,772	\$1,545,114	5,889,772		\$1,729,040
69	<b>G-52/T-52: High Annual, Low Winter Use</b>											
70	Customer Charge	391	\$1,335.81	\$521,901	5	\$7,080		396	\$528,981	396	\$1,350.00	\$534,600
71	Summer All therms	7,827,306	\$0.0792	\$619,923	29,672	\$2,350		7,856,979	\$622,273	7,856,979	\$0.1050	\$824,983
72	Winter All therms	8,356,912	\$0.1720	\$1,437,389	203,384	\$34,982		8,560,295	\$1,472,371	8,560,295	\$0.1720	\$1,472,371
73	Total	16,184,218		\$2,579,212	233,061	\$44,412		16,417,274	\$2,623,624	16,417,274		\$2,831,954
74	<b>Total</b>											
75	Customer Charge	414,362		\$16,297,475	7,942	\$168,102	\$103,160	422,304	\$16,568,737	422,304		\$16,964,523
76	Summer First Block therms	17,308,170		\$3,502,164	271,888	\$113,930	\$26,677	17,580,058	\$3,642,771	17,580,058		\$5,193,040
77	Summer Excess therms	2,188,556		\$578,170	254,848	\$27,702	\$2,633	2,443,404	\$608,505	2,443,404		\$845,012
78	Winter First Block therms	34,214,561		\$10,218,121	1,036,150	\$302,330	\$68,503	35,250,711	\$10,588,954	35,250,711		\$12,429,652
79	Winter Excess therms	15,418,993		\$6,662,934	3,458,944	\$1,660,611	\$64,328	18,877,936	\$8,387,873	18,877,936		\$10,686,494
80	Total	69,130,280		\$37,258,864	5,021,830	\$2,272,675	\$265,302	74,152,109	\$39,796,840	74,152,109		\$46,118,721

Northern Utilities New Hampshire  
Step Adjustment Rate Design

Step Adjustment	\$	1,554,966
Total Revenue	\$	46,118,721
3.37%		

		Permanent Rates, August 1, 2022			September 1, 2022 - July 31, 2023				Step Adjustment, September 1, 2022		Step Adjustment, August 1, 2023		Step Allocation	Current Revenue Excl Cust Chg	Increase to Vol. Rates	Check Total Revenue
Line No.	Rate Description	Projected Billing Determinants (bills or therms)	Permanent Rates	Total Revenue ("Margin") [B * C]	August Billing Determinants	Sep-Jul Billing Determinants	August 1 Rates	Total Revenue ("Margin") [F * G]	Permanent Rates	Total Revenue ("Margin") [F * I]	Permanent Rates	Total Revenue ("Margin") [B * K]				
(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)				
				[B * C]		[B - E]	[=C]	[F * G]		[F * I]		[B * K]				
1	<b>R-5: Residential Heating</b>															
2	Customer Charge	314,053	\$22.20	\$ 6,971,981	26,171	287,882	\$22.20	\$ 6,390,983	\$22.20	\$ 6,390,983	\$22.20	\$ 6,971,981				
3	Summer First 50 therms	3,095,836	\$0.8841	\$ 2,737,029	303,731	2,792,105	\$0.8841	\$ 2,468,500	\$0.9266	\$ 2,587,076	\$0.9259	\$ 2,866,469				
4	Summer Excess therms	459,480	\$0.8841	\$ 406,227	-	459,480	\$0.8841	\$ 406,227	\$0.9266	\$ 425,740	\$0.9259	\$ 425,438				
5	Winter First 50 therms	6,614,343	\$0.8841	\$ 5,847,741	-	6,614,343	\$0.8841	\$ 5,847,741	\$0.9266	\$ 6,128,642	\$0.9259	\$ 6,124,294				
6	Winter Excess therms	9,436,272	\$0.8841	\$ 8,342,608	-	9,436,272	\$0.8841	\$ 8,342,608	\$0.9266	\$ 8,743,352	\$0.9259	\$ 8,737,149				
7	Total	19,605,931		\$ 24,305,585	303,731			\$ 23,456,058		\$ 24,275,793		\$ 25,125,331	\$ 839,035	\$ 17,466,846	4.80%	\$ 24,854,053
										3.49%		3.37%	\$ 839,035	\$ 17,741,462	4.73%	\$ 25,723,957
8	<b>R-10: Residential Heating, Low Income</b>															
9	Customer Charge	7,724	\$22.20	\$ 171,480	644	7,081	\$22.20	\$ 157,190	\$22.20	\$ 157,190	\$22.20	\$ 171,480				
10	Summer First 50 therms	69,877	\$0.8841	\$ 61,778	6,885	62,992	\$0.8841	\$ 55,691	\$0.9266	\$ 58,366	\$0.9259	\$ 64,700				
11	Summer Excess therms	7,196	\$0.8841	\$ 6,362	-	7,196	\$0.8841	\$ 6,362	\$0.9266	\$ 6,668	\$0.9259	\$ 6,663				
12	Winter First 50 therms	174,305	\$0.8841	\$ 154,103	-	174,305	\$0.8841	\$ 154,103	\$0.9266	\$ 161,505	\$0.9259	\$ 161,391				
13	Winter Excess therms	209,948	\$0.8841	\$ 185,615	-	209,948	\$0.8841	\$ 185,615	\$0.9266	\$ 194,531	\$0.9259	\$ 194,393				
14	Total	461,326		\$ 579,338	6,885			\$ 558,961		\$ 578,260		\$ 598,626				
										3.45%		3.33%				
15	<b>R-6: Residential Non-Heating</b>															
16	Customer Charge	15,320	\$22.20	\$ 340,113	1,277	14,044	\$22.20	\$ 311,770	\$22.20	\$ 311,770	\$22.20	\$ 340,113				
17	Summer First 10 therms	48,484	\$1.3081	\$ 63,421	11,564	36,920	\$1.3081	\$ 48,295	\$1.4053	\$ 51,882	\$1.4005	\$ 67,903				
18	Summer Excess therms	32,928	\$1.3081	\$ 43,073	-	32,928	\$1.3081	\$ 43,073	\$1.4053	\$ 46,273	\$1.4005	\$ 46,117				
19	Winter First 10 therms	52,003	\$1.3081	\$ 68,025	-	52,003	\$1.3081	\$ 68,025	\$1.4053	\$ 73,079	\$1.4005	\$ 72,832				
20	Winter Excess therms	103,854	\$1.3081	\$ 135,851	-	103,854	\$1.3081	\$ 135,851	\$1.4053	\$ 145,943	\$1.4005	\$ 145,451				
21	Total	237,269		\$ 650,484	11,564			\$ 607,014		\$ 628,947		\$ 672,416	\$ 21,932	\$ 295,244	7.43%	\$ 628,947
										3.61%		3.37%	\$ 21,932	\$ 310,371	7.07%	\$ 672,416
22	<b>G-40/T-40: Low Annual, High Winter Use</b>															
23	Customer Charge	62,812	\$80.00	\$ 5,024,961	5,234	57,578	\$80.00	\$ 4,606,214	\$80.00	\$ 4,606,214	\$80.00	\$ 5,024,961				
24	Summer First 75 therms	880,005	\$0.2320	\$ 204,161	91,982	788,023	\$0.2320	\$ 182,821	\$0.2556	\$ 201,413	\$0.2554	\$ 224,747				
25	Summer Excess therms	728,589	\$0.2320	\$ 169,033	-	728,589	\$0.2320	\$ 169,033	\$0.2556	\$ 186,222	\$0.2554	\$ 186,077				
26	Winter First 75 therms	1,970,201	\$0.2320	\$ 457,087	-	1,970,201	\$0.2320	\$ 457,087	\$0.2556	\$ 503,569	\$0.2554	\$ 503,176				
27	Winter Excess therms	7,302,037	\$0.2320	\$ 1,694,073	-	7,302,037	\$0.2320	\$ 1,694,073	\$0.2556	\$ 1,866,347	\$0.2554	\$ 1,864,890				
28	Total	10,880,833		\$ 7,549,314	91,982			\$ 7,109,228		\$ 7,363,765		\$ 7,803,851	\$ 254,537	\$ 2,503,013	10.17%	\$ 7,363,765

		Permanent Rates, August 1, 2022			September 1, 2022 - July 31, 2023				Step Adjustment, September 1, 2022		Step Adjustment, August 1, 2023		Allocation	Excl Cust Chg	Vol. Rates	Total Revenue
Line No.	Rate Description	Projected Billing Determinants (bills or therms)	Permanent Rates	Total Revenue ("Margin")	August Billing Determinants	Sep-Jul Billing Determinants	August 1 Rates	Total Revenue ("Margin")	Permanent Rates	Total Revenue ("Margin")	Permanent Rates	Total Revenue ("Margin")				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)				
29	<b>G-50/T-50: Low Annual, Low Winter Use</b>									3.58%		3.37%	\$ 254,537	\$ 2,524,353	10.08%	\$ 7,803,851
30	Customer Charge	9,978	\$80.00	\$ 798,208	831	9,146	\$80.00	\$ 731,691	\$80.00	\$ 731,691	\$80.00	\$ 798,208				
31	Summer First 75 therms	203,819	\$0.2085	\$ 42,496	114,352	89,467	\$0.2085	\$ 18,654	\$0.2359	\$ 21,106	\$0.2338	\$ 47,649				
32	Summer Excess therms	444,727	\$0.2085	\$ 92,726	-	444,727	\$0.2085	\$ 92,726	\$0.2359	\$ 104,914	\$0.2338	\$ 103,969				
33	Winter First 75 therms	220,169	\$0.2085	\$ 45,905	-	220,169	\$0.2085	\$ 45,905	\$0.2359	\$ 51,939	\$0.2338	\$ 51,471				
34	Winter Excess therms	605,858	\$0.2085	\$ 126,321	-	605,858	\$0.2085	\$ 126,321	\$0.2359	\$ 142,926	\$0.2338	\$ 141,638				
35	Total	1,474,573		\$ 1,105,657	114,352			\$ 1,015,297		\$ 1,052,576		\$ 1,142,936	\$ 37,279	\$ 283,606	13.14%	\$ 1,052,576
36	<b>G-41/T-41: Medium Annual, High Winter Use</b>									3.67%		3.37%	\$ 37,279	\$ 307,448	12.13%	\$ 1,142,936
37	Customer Charge	8,451	\$ 225.00	\$ 1,901,430	704	7,747	\$ 225.00	\$ 1,742,978	\$225.00	\$ 1,742,978	\$225.00	\$ 1,901,430				
38	Summer All therms	2,708,960	\$ 0.2744	\$ 743,339	239,596	2,469,364	\$ 0.2744	\$ 677,593	\$0.2883	\$ 711,987	\$0.2881	\$ 780,442				
39	Winter All therms	11,714,872	\$ 0.2744	\$ 3,214,561	-	11,714,872	\$ 0.2744	\$ 3,214,561	\$0.2883	\$ 3,377,724	\$0.2881	\$ 3,375,014				
40	Total	14,423,832		\$ 5,859,330	239,596			\$ 5,635,132		\$ 5,832,689		\$ 6,056,886	\$ 197,557	\$ 3,892,154	5.08%	\$ 5,832,689
41	<b>G-51/T-51: Medium Annual, Low Winter Use</b>									3.51%		3.37%	\$ 197,557	\$ 3,957,899	4.99%	\$ 6,056,886
42	Customer Charge	3,198	\$225.00	\$ 719,550	267	2,932	\$225.00	\$ 659,588	\$225.00	\$ 659,588	\$225.00	\$ 719,550				
43	Summer First 1,000 therms	1,169,340	\$0.1656	\$ 193,643	300,172	869,169	\$0.1656	\$ 143,934	\$0.1770	\$ 153,841	\$0.1763	\$ 206,130				
44	Summer Excess therms	770,483	\$0.1656	\$ 127,592	-	770,483	\$0.1656	\$ 127,592	\$0.1770	\$ 136,374	\$0.1763	\$ 135,820				
45	Winter First 1,300 therms	1,601,510	\$0.1656	\$ 265,210	-	1,601,510	\$0.1656	\$ 265,210	\$0.1770	\$ 283,463	\$0.1763	\$ 282,312				
46	Winter Excess therms	1,219,967	\$0.1656	\$ 202,027	-	1,219,967	\$0.1656	\$ 202,027	\$0.1770	\$ 215,931	\$0.1763	\$ 215,054				
47	Total	4,761,300		\$ 1,508,021				\$ 1,398,350		\$ 1,449,196		\$ 1,558,867	\$ 50,845	\$ 738,763	6.88%	\$ 1,449,196
48	<b>G-42/T-42: High Annual, High Winter Use</b>									3.64%		3.37%	\$ 50,845	\$ 788,471	6.45%	\$ 1,558,867
49	Customer Charge	372	\$1,350.00	\$ 502,200	31	341	\$1,350.00	\$ 460,350	\$1,350.00	\$ 460,350	\$1,350.00	\$ 502,200				
50	Summer All therms	1,546,759	\$0.2083	\$ 322,190	192,134	1,354,625	\$0.2083	\$ 282,168	\$0.2185	\$ 296,029	\$0.2182	\$ 337,500				
51	Winter All therms	4,343,013	\$0.2083	\$ 904,650	-	4,343,013	\$0.2083	\$ 904,650	\$0.2185	\$ 949,087	\$0.2182	\$ 947,637				
52	Total	5,889,772		\$ 1,729,040				\$ 1,647,168		\$ 1,705,465		\$ 1,787,337	\$ 58,297	\$ 1,186,818	4.91%	\$ 1,705,465
53	<b>G-52/T-52: High Annual, Low Winter Use</b>									3.54%		3.37%	\$ 58,297	\$ 1,226,840	4.75%	\$ 1,787,337
54	Customer Charge	396	\$1,350.00	\$ 534,600	33	363	\$1,350.00	\$ 490,050	\$1,350.00	\$ 490,050	\$1,350.00	\$ 534,600				
55	Summer All therms	7,856,979	\$0.1050	\$ 824,983	1,282,733	6,574,245	\$0.1050	\$ 690,296	\$0.1096	\$ 720,773	\$0.1094	\$ 859,271				
56	Winter All therms	8,560,295	\$0.1720	\$ 1,472,371	-	8,560,295	\$0.1720	\$ 1,472,371	\$0.1796	\$ 1,537,377	\$0.1791	\$ 1,533,566				
57	Total	16,417,274		\$ 2,831,954				\$ 2,652,717		\$ 2,748,200		\$ 2,927,437	\$ 95,484	\$ 2,162,667	4.42%	\$ 2,748,200
58	<b>Total</b>									3.60%		3.37%	\$ 95,484	\$ 2,297,354	4.16%	\$ 2,927,437
59	Customer Charge	422,304		\$ 16,964,523	35,192	387,112		\$ 15,550,813		\$ 15,550,813		\$ 16,964,523				
60	Summer First Block therms	17,580,058		\$ 5,193,040	2,543,149	15,036,909		\$ 4,567,953		\$ 4,802,473		\$ 5,454,811				
61	Summer Excess therms	2,443,404		\$ 845,012	-	2,443,404		\$ 845,012		\$ 906,190		\$ 904,083				
62	Winter First Block therms	35,250,711		\$ 12,429,652	-	35,250,711		\$ 12,429,652		\$ 13,066,386		\$ 13,051,694				
63	Winter Excess therms	18,877,936		\$ 10,686,494	-	18,877,936		\$ 10,686,494		\$ 11,309,029		\$ 11,298,576				
64	Total	74,152,109		\$ 46,118,721	2,543,149	71,608,960		\$ 44,079,924		45,634,890		47,673,687	\$ 1,554,966	\$ 28,529,111		\$ 45,634,890
													\$ 1,554,966	\$ 29,154,198		\$ 47,673,687

Northern Utilities - NH Division  
Residential Heating Customer - R5  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	5.91	\$32.51	\$33.65	\$1.13	3.5%
20.0%	22.05	\$60.69	\$64.93	\$4.24	7.0%
30.0%	37.57	\$87.78	\$94.99	\$7.22	8.2%
40.0%	52.37	\$113.61	\$123.68	\$10.06	8.9%
50.0%	67.18	\$139.46	\$152.37	\$12.91	9.3%
60.0%	82.99	\$167.06	\$183.00	\$15.94	9.5%
70.0%	101.23	\$198.90	\$218.34	\$19.45	9.8%
80.0%	124.00	\$238.65	\$262.47	\$23.82	10.0%
90.0%	155.63	\$293.85	\$323.75	\$29.90	10.2%
100.0%	240.82	\$442.54	\$488.80	\$46.26	10.5%
Average	88.98	\$177.51	\$194.60	\$17.09	9.6%
<u>Distribution Only</u>					
10.0%	5.91	\$26.29	\$27.42	\$1.13	4.3%
20.0%	22.05	\$37.46	\$41.70	\$4.24	11.3%
30.0%	37.57	\$48.20	\$55.42	\$7.22	15.0%
40.0%	52.37	\$58.44	\$68.50	\$10.06	17.2%
50.0%	67.18	\$68.69	\$81.59	\$12.91	18.8%
60.0%	82.99	\$79.63	\$95.57	\$15.94	20.0%
70.0%	101.23	\$92.25	\$111.70	\$19.45	21.1%
80.0%	124.00	\$108.01	\$131.83	\$23.82	22.1%
90.0%	155.63	\$129.90	\$159.79	\$29.90	23.0%
100.0%	240.82	\$188.84	\$235.10	\$46.26	24.5%
Average	88.98	\$83.77	\$100.86	\$17.09	20.4%

Present Rates

Customer Charge (\$/customer)	\$22.20 (1)
Distribution Charge - First 50 therms (\$/thm)	\$0.6920 (1)
Distribution Charge - Excess 50 therms (\$/thm)	\$0.6920 (1)
LDAC (\$/thm)	\$0.0816 (1)
COGC (\$/thm)	\$0.9719 (2)

Proposed Rates

Customer Charge (\$/customer)	\$22.20 (3)
Distribution Charge - All therms (\$/thm)	\$0.8841 (3)
LDAC (\$/thm)	\$0.0816 (1)
COGC (\$/thm)	\$0.9719 (2)

- (1) Current seasonal rates  
(2) Prior winter 6 month average seasonal COG  
(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
Residential Heating Customer - R5  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$22.20	\$22.20	\$0.00	0.0%
20.0%	1.76	\$24.95	\$25.43	\$0.48	1.9%
30.0%	5.79	\$31.22	\$32.81	\$1.59	5.1%
40.0%	9.28	\$36.66	\$39.20	\$2.54	6.9%
50.0%	12.82	\$42.17	\$45.69	\$3.51	8.3%
60.0%	16.63	\$48.10	\$52.66	\$4.56	9.5%
70.0%	21.15	\$55.15	\$60.95	\$5.80	10.5%
80.0%	27.57	\$65.15	\$72.71	\$7.56	11.6%
90.0%	39.21	\$83.29	\$94.04	\$10.75	12.9%
100.0%	83.07	\$151.62	\$174.39	\$22.78	15.0%
Average	21.73	\$56.05	\$62.01	\$5.96	10.6%
<u>Distribution Only</u>					
10.0%	0.00	\$22.20	\$22.20	\$0.00	0.0%
20.0%	1.76	\$23.28	\$23.76	\$0.48	2.1%
30.0%	5.79	\$25.73	\$27.32	\$1.59	6.2%
40.0%	9.28	\$27.86	\$30.40	\$2.54	9.1%
50.0%	12.82	\$30.02	\$33.53	\$3.51	11.7%
60.0%	16.63	\$32.34	\$36.90	\$4.56	14.1%
70.0%	21.15	\$35.10	\$40.90	\$5.80	16.5%
80.0%	27.57	\$39.01	\$46.57	\$7.56	19.4%
90.0%	39.21	\$46.11	\$56.87	\$10.75	23.3%
100.0%	83.07	\$72.86	\$95.64	\$22.78	31.3%
Average	21.73	\$35.45	\$41.41	\$5.96	16.8%

Present Rates

Customer Charge (\$/customer)	\$22.20 (1)
Distribution Charge - First 50 therms (\$/thm)	\$0.6099 (1)
Distribution Charge - Excess 50 therms (\$/thm)	\$0.6099 (1)
LDAC (\$/thm)	\$0.0816 (1)
COGC (\$/thm)	\$0.8665 (2)

Proposed Rates

Customer Charge (\$/customer)	\$22.20 (3)
Distribution Charge - All therms (\$/thm)	\$0.8841 (3)
LDAC (\$/thm)	\$0.0816 (1)
COGC (\$/thm)	\$0.8665 (2)

- (1) Current seasonal rates  
(2) Projected 6 month average summer COG  
(3) Proposed Rates, Settlement Schedule 5



Northern Utilities - NH Division  
Residential Low Income Heating Customer - R10  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	14.96	\$27.12	\$28.70	\$1.58	5.8%
20.0%	31.25	\$43.36	\$46.66	\$3.30	7.6%
30.0%	43.22	\$55.29	\$59.86	\$4.57	8.3%
40.0%	54.61	\$66.64	\$72.41	\$5.77	8.7%
50.0%	65.94	\$77.93	\$84.90	\$6.97	8.9%
60.0%	77.14	\$89.09	\$97.25	\$8.15	9.2%
70.0%	90.21	\$102.13	\$111.66	\$9.54	9.3%
80.0%	108.11	\$119.97	\$131.40	\$11.43	9.5%
90.0%	135.38	\$147.15	\$161.46	\$14.31	9.7%
100.0%	205.88	\$217.42	\$239.18	\$21.76	10.0%
Average	82.67	\$94.61	\$103.35	\$8.74	9.2%
<u>Distribution Only</u>					
10.0%	14.96	\$32.55	\$35.42	\$2.87	8.8%
20.0%	31.25	\$43.83	\$49.83	\$6.00	13.7%
30.0%	43.22	\$52.11	\$60.41	\$8.30	15.9%
40.0%	54.61	\$59.99	\$70.48	\$10.49	17.5%
50.0%	65.94	\$67.83	\$80.50	\$12.67	18.7%
60.0%	77.14	\$75.58	\$90.40	\$14.82	19.6%
70.0%	90.21	\$84.63	\$101.96	\$17.33	20.5%
80.0%	108.11	\$97.02	\$117.78	\$20.77	21.4%
90.0%	135.38	\$115.89	\$141.89	\$26.01	22.4%
100.0%	205.88	\$164.67	\$204.22	\$39.55	24.0%
Average	82.67	\$79.41	\$95.29	\$15.88	20.0%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$22.20 (1)	Customer Charge (\$/customer)		\$22.20 (3)
Distribution Charge - First 50 therms (\$/thm)		\$0.6920 (1)	Distribution Charge - All therms (\$/thm)		\$0.8841 (3)
Distribution Charge - Excess 50 therms (\$/thm)		\$0.6920 (1)			
LDAC (\$/thm)		\$0.0816 (1)	LDAC (\$/thm)		\$0.0816 (1)
COGC (\$/thm)		\$0.9719 (2)	COGC (\$/thm)		\$0.9719 (2)
45% Customer Charge Discount (\$/customer)		-\$9.99 (4)	45% Customer Charge Discount (\$/customer)		-\$9.99 (4)
45% Therm Discount - First 50 therms (\$/thm)		-\$0.7488 (4)	45% Therm Discount - All therms (\$/thm)		-\$0.8352 (4)
45% Therm Discount - Excess 50 therms (\$/thm)		-\$0.7488 (4)			

(1) Current seasonal rates

(2) Prior winter 6 month average seasonal COG

(3) Proposed Rates, Settlement Schedule 5

(4) Low income customers receive a 45% discount on the customer charge, distribution charges, and COG in the winter period only

Northern Utilities - NH Division  
Residential Low Income Heating Customer - R10  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.15	\$22.43	\$22.47	\$0.04	0.2%
20.0%	3.16	\$27.12	\$27.99	\$0.87	3.2%
30.0%	6.95	\$33.03	\$34.94	\$1.91	5.8%
40.0%	10.00	\$37.78	\$40.52	\$2.74	7.3%
50.0%	12.74	\$42.05	\$45.54	\$3.49	8.3%
60.0%	16.06	\$47.22	\$51.62	\$4.40	9.3%
70.0%	20.58	\$54.26	\$59.90	\$5.64	10.4%
80.0%	27.06	\$64.37	\$71.79	\$7.42	11.5%
90.0%	39.85	\$84.29	\$95.21	\$10.93	13.0%
100.0%	80.33	\$147.36	\$169.38	\$22.03	14.9%
Average	21.69	\$55.99	\$61.94	\$5.95	10.6%
<u>Distribution Only</u>					
10.0%	0.15	\$22.29	\$22.33	\$0.04	0.2%
20.0%	3.16	\$24.13	\$24.99	\$0.87	3.6%
30.0%	6.95	\$26.44	\$28.35	\$1.91	7.2%
40.0%	10.00	\$28.30	\$31.04	\$2.74	9.7%
50.0%	12.74	\$29.97	\$33.46	\$3.49	11.7%
60.0%	16.06	\$31.99	\$36.40	\$4.40	13.8%
70.0%	20.58	\$34.75	\$40.39	\$5.64	16.2%
80.0%	27.06	\$38.71	\$46.13	\$7.42	19.2%
90.0%	39.85	\$46.50	\$57.43	\$10.93	23.5%
100.0%	80.33	\$71.19	\$93.22	\$22.03	30.9%
Average	21.69	\$35.43	\$41.37	\$5.95	16.8%

Present Rates

Customer Charge (\$/customer)	\$22.20	(1)
Distribution Charge - First 50 therms (\$/thm)	\$0.6099	(1)
Distribution Charge - Excess 50 therms (\$/thm)	\$0.6099	(1)
LDAC (\$/thm)	\$0.0816	(1)
COGC (\$/thm)	\$0.8665	(2)

Proposed Rates

Customer Charge (\$/customer)	\$22.20	(3)
Distribution Charge - All therms (\$/thm)	\$0.8841	(3)
LDAC (\$/thm)	\$0.0816	(1)
COGC (\$/thm)	\$0.8665	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
Residential Non-Heating Customer - R6  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$22.20	\$22.20	\$0.00	0.0%
20.0%	0.50	\$23.05	\$23.38	\$0.33	1.4%
30.0%	2.23	\$26.00	\$27.48	\$1.48	5.7%
40.0%	5.44	\$31.46	\$35.06	\$3.60	11.4%
50.0%	9.21	\$37.87	\$43.96	\$6.09	16.1%
60.0%	12.95	\$44.23	\$52.79	\$8.56	19.4%
70.0%	17.13	\$51.33	\$62.66	\$11.33	22.1%
80.0%	23.24	\$61.71	\$77.08	\$15.36	24.9%
90.0%	36.13	\$83.64	\$107.53	\$23.89	28.6%
100.0%	78.37	\$155.46	\$207.27	\$51.81	33.3%
Average	18.52	\$53.70	\$65.94	\$12.24	22.8%
<u>Distribution Only</u>					
10.0%	0.00	\$22.20	\$22.20	\$0.00	0.0%
20.0%	0.50	\$22.52	\$22.86	\$0.33	1.5%
30.0%	2.23	\$23.65	\$25.12	\$1.48	6.2%
40.0%	5.44	\$25.72	\$29.32	\$3.60	14.0%
50.0%	9.21	\$28.16	\$34.25	\$6.09	21.6%
60.0%	12.95	\$30.58	\$39.14	\$8.56	28.0%
70.0%	17.13	\$33.28	\$44.61	\$11.33	34.0%
80.0%	23.24	\$37.23	\$52.60	\$15.36	41.3%
90.0%	36.13	\$45.58	\$69.46	\$23.89	52.4%
100.0%	78.37	\$72.90	\$124.71	\$51.81	71.1%
Average	18.52	\$34.18	\$46.43	\$12.24	35.8%

Present Rates

Customer Charge (\$/customer)	\$22.20	(1)
Distribution Charge - First 10 therms (\$/thm)	\$0.6470	(1)
Distribution Charge - Excess 10 therms (\$/thm)	\$0.6470	(1)
LDAC (\$/thm)	\$0.0816	(1)
COGC (\$/thm)	\$0.9719	(2)

Proposed Rates

Customer Charge (\$/customer)	\$22.20	(3)
Distribution Charge - All therms (\$/thm)	\$1.3081	(3)
LDAC (\$/thm)	\$0.0816	(1)
COGC (\$/thm)	\$0.9719	(2)

- (1) Current seasonal rates  
(2) Prior winter 6 month average seasonal COG  
(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
Residential Non-Heating Customer - R6  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$22.20	\$22.20	\$0.00	0.0%
20.0%	0.70	\$23.31	\$23.78	\$0.46	2.0%
30.0%	1.96	\$25.33	\$26.62	\$1.30	5.1%
40.0%	3.94	\$28.49	\$31.10	\$2.61	9.2%
50.0%	6.31	\$32.26	\$36.43	\$4.17	12.9%
60.0%	8.51	\$35.77	\$41.40	\$5.62	15.7%
70.0%	10.84	\$39.50	\$46.66	\$7.17	18.1%
80.0%	13.60	\$43.89	\$52.87	\$8.99	20.5%
90.0%	17.92	\$50.79	\$62.64	\$11.85	23.3%
100.0%	37.81	\$82.51	\$107.50	\$25.00	30.3%
Average	10.16	\$38.40	\$45.12	\$6.72	17.5%
<u>Distribution Only</u>					
10.0%	0.00	\$22.20	\$22.20	\$0.00	0.0%
20.0%	0.70	\$22.65	\$23.11	\$0.46	2.0%
30.0%	1.96	\$23.47	\$24.77	\$1.30	5.5%
40.0%	3.94	\$24.75	\$27.36	\$2.61	10.5%
50.0%	6.31	\$26.28	\$30.45	\$4.17	15.9%
60.0%	8.51	\$27.70	\$33.33	\$5.62	20.3%
70.0%	10.84	\$29.22	\$36.38	\$7.17	24.5%
80.0%	13.60	\$31.00	\$39.98	\$8.99	29.0%
90.0%	17.92	\$33.80	\$45.65	\$11.85	35.1%
100.0%	37.81	\$46.66	\$71.66	\$25.00	53.6%
Average	10.16	\$28.77	\$35.49	\$6.72	23.3%

Present Rates

Customer Charge (\$/customer)	\$22.20 (1)
Distribution Charge - First 10 therms (\$/thm)	\$0.6470 (1)
Distribution Charge - Excess 10 therms (\$/thm)	\$0.6470 (1)
LDAC (\$/thm)	\$0.0816 (1)
COGC (\$/thm)	\$0.8665 (2)

Proposed Rates

Customer Charge (\$/customer)	\$22.20 (3)
Distribution Charge - All therms (\$/thm)	\$1.3081 (3)
LDAC (\$/thm)	\$0.0816 (1)
COGC (\$/thm)	\$0.8665 (2)

- (1) Current seasonal rates  
(2) Projected 6 month average summer COG  
(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Low Annual, High Winter Use - G40  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	5.08	\$81.31	\$86.45	\$5.14	6.3%
20.0%	29.08	\$110.71	\$116.94	\$6.23	5.6%
30.0%	58.36	\$146.57	\$154.13	\$7.57	5.2%
40.0%	91.27	\$186.86	\$195.93	\$9.06	4.8%
50.0%	132.07	\$236.83	\$247.75	\$10.92	4.6%
60.0%	183.41	\$299.72	\$312.97	\$13.26	4.4%
70.0%	248.65	\$379.62	\$395.84	\$16.22	4.3%
80.0%	341.54	\$493.37	\$513.82	\$20.45	4.1%
90.0%	491.01	\$676.44	\$703.69	\$27.25	4.0%
100.0%	989.61	\$1,287.07	\$1,337.00	\$49.94	3.9%
Average	257.01	\$389.85	\$406.45	\$16.60	4.3%
<u>Distribution Only</u>					
10.0%	5.08	\$76.04	\$81.18	\$5.14	6.8%
20.0%	29.08	\$80.51	\$86.75	\$6.23	7.7%
30.0%	58.36	\$85.97	\$93.54	\$7.57	8.8%
40.0%	91.27	\$92.11	\$101.17	\$9.06	9.8%
50.0%	132.07	\$99.72	\$110.64	\$10.92	10.9%
60.0%	183.41	\$109.30	\$122.55	\$13.26	12.1%
70.0%	248.65	\$121.46	\$137.69	\$16.22	13.4%
80.0%	341.54	\$138.79	\$159.24	\$20.45	14.7%
90.0%	491.01	\$166.66	\$193.92	\$27.25	16.4%
100.0%	989.61	\$259.65	\$309.59	\$49.94	19.2%
Average	257.01	\$123.02	\$139.63	\$16.60	13.5%

Present Rates

Customer Charge (\$/customer)	\$75.09	(1)
Distribution Charge - First 75 therms (\$/thm)	\$0.1865	(1)
Distribution Charge - Excess 75 therms (\$/thm)	\$0.1865	(1)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.9878	(2)

Proposed Rates

Customer Charge (\$/customer)	\$80.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2320	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.9878	(2)

(1) Current seasonal rates

(2) Prior winter 6 month average seasonal COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Low Annual, High Winter Use - G40  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills		\$ Difference	% Difference
		@ Present Rates	Monthly Bills @ Proposed Rates		
<u>Delivery and Supply</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
30.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
40.0%	1.02	\$76.23	\$81.19	\$4.96	6.5%
50.0%	5.22	\$80.93	\$86.08	\$5.15	6.4%
60.0%	11.96	\$88.47	\$93.92	\$5.45	6.2%
70.0%	25.29	\$103.38	\$109.44	\$6.06	5.9%
80.0%	49.28	\$130.21	\$137.37	\$7.15	5.5%
90.0%	93.76	\$179.97	\$189.15	\$9.18	5.1%
100.0%	280.68	\$389.06	\$406.74	\$17.68	4.5%
Average	46.72	\$127.35	\$134.39	\$7.04	5.5%
<u>Distribution Only</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
30.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
40.0%	1.02	\$75.28	\$80.24	\$4.96	6.6%
50.0%	5.22	\$76.06	\$81.21	\$5.15	6.8%
60.0%	11.96	\$77.32	\$82.77	\$5.45	7.1%
70.0%	25.29	\$79.81	\$85.87	\$6.06	7.6%
80.0%	49.28	\$84.28	\$91.43	\$7.15	8.5%
90.0%	93.76	\$92.58	\$101.75	\$9.18	9.9%
100.0%	280.68	\$127.44	\$145.12	\$17.68	13.9%
Average	46.72	\$83.80	\$90.84	\$7.04	8.4%

Present Rates

Customer Charge (\$/customer)	\$75.09	(1)
Distribution Charge - First 75 therms (\$/thm)	\$0.1865	(1)
Distribution Charge - Excess 75 therms (\$/thm)	\$0.1865	(1)
LDAC (\$/thm)	\$0.0504	(2)
COGC (\$/thm)	\$0.8817	(2)

Proposed Rates

Customer Charge (\$/customer)	\$80.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2320	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8817	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Low Annual, Low Winter Use - G50  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills		\$ Difference	% Difference
		@ Present Rates	Monthly Bills @ Proposed Rates		
<u>Delivery and Supply</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	1.04	\$76.25	\$81.18	\$4.93	6.5%
30.0%	6.81	\$82.68	\$87.74	\$5.06	6.1%
40.0%	17.70	\$94.83	\$100.13	\$5.30	5.6%
50.0%	40.86	\$120.64	\$126.45	\$5.81	4.8%
60.0%	78.30	\$162.38	\$169.02	\$6.63	4.1%
70.0%	146.37	\$238.27	\$246.40	\$8.13	3.4%
80.0%	259.74	\$364.68	\$375.30	\$10.62	2.9%
90.0%	406.53	\$528.33	\$542.18	\$13.85	2.6%
100.0%	704.50	\$860.54	\$880.95	\$20.41	2.4%
Average	166.18	\$260.37	\$268.94	\$8.57	3.3%
<u>Distribution Only</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	1.04	\$75.28	\$80.22	\$4.93	6.6%
30.0%	6.81	\$76.36	\$81.42	\$5.06	6.6%
40.0%	17.70	\$78.39	\$83.69	\$5.30	6.8%
50.0%	40.86	\$82.71	\$88.52	\$5.81	7.0%
60.0%	78.30	\$89.69	\$96.33	\$6.63	7.4%
70.0%	146.37	\$102.39	\$110.52	\$8.13	7.9%
80.0%	259.74	\$123.53	\$134.16	\$10.62	8.6%
90.0%	406.53	\$150.91	\$164.76	\$13.85	9.2%
100.0%	704.50	\$206.48	\$226.89	\$20.41	9.9%
Average	166.18	\$106.08	\$114.65	\$8.57	8.1%

Present Rates

Customer Charge (\$/customer)	\$75.09	(1)
Distribution Charge - First 75 therms (\$/thm)	\$0.1865	(1)
Distribution Charge - Excess 75 therms (\$/thm)	\$0.1865	(1)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8780	(2)

Proposed Rates

Customer Charge (\$/customer)	\$80.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2085	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8780	(3)

(1) Current seasonal rates

(2) Prior winter 6 month average seasonal COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Low Annual, Low Winter Use - G50  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills		\$ Difference	% Difference
		@ Present Rates	Monthly Bills @ Proposed Rates		
<u>Delivery and Supply</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.81	\$75.96	\$80.88	\$4.93	6.5%
30.0%	5.32	\$80.79	\$85.82	\$5.03	6.2%
40.0%	12.20	\$88.16	\$93.34	\$5.18	5.9%
50.0%	26.67	\$103.67	\$109.17	\$5.50	5.3%
60.0%	55.97	\$135.06	\$141.20	\$6.14	4.5%
70.0%	110.70	\$193.72	\$201.06	\$7.35	3.8%
80.0%	196.19	\$285.32	\$294.55	\$9.23	3.2%
90.0%	306.05	\$403.05	\$414.70	\$11.64	2.9%
100.0%	521.36	\$633.78	\$650.16	\$16.38	2.6%
Average	123.53	\$207.46	\$215.09	\$7.63	3.7%
<u>Distribution Only</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.81	\$75.24	\$80.17	\$4.93	6.5%
30.0%	5.32	\$76.08	\$81.11	\$5.03	6.6%
40.0%	12.20	\$77.37	\$82.54	\$5.18	6.7%
50.0%	26.67	\$80.06	\$85.56	\$5.50	6.9%
60.0%	55.97	\$85.53	\$91.67	\$6.14	7.2%
70.0%	110.70	\$95.74	\$103.08	\$7.35	7.7%
80.0%	196.19	\$111.68	\$120.90	\$9.23	8.3%
90.0%	306.05	\$132.17	\$143.81	\$11.64	8.8%
100.0%	521.36	\$172.32	\$188.70	\$16.38	9.5%
Average	123.53	\$98.13	\$105.76	\$7.63	7.8%

Present Rates

Customer Charge (\$/customer)	\$75.09	(1)
Distribution Charge - First 75 therms (\$/thm)	\$0.1865	(1)
Distribution Charge - Excess 75 therms (\$/thm)	\$0.1865	(1)
LDAC (\$/thm)	\$0.0504	(2)
COGC (\$/thm)	\$0.8347	(2)

Proposed Rates

Customer Charge (\$/customer)	\$80.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2085	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8347	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5



Northern Utilities - NH Division  
General Service - Medium Annual, High Winter Use - G41  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	410.78	\$748.72	\$764.19	\$15.46	2.1%
20.0%	855.12	\$1,317.79	\$1,347.43	\$29.64	2.2%
30.0%	1,123.60	\$1,661.63	\$1,699.83	\$38.20	2.3%
40.0%	1,358.83	\$1,962.89	\$2,008.60	\$45.71	2.3%
50.0%	1,592.36	\$2,261.98	\$2,315.14	\$53.16	2.3%
60.0%	1,899.01	\$2,654.71	\$2,717.65	\$62.94	2.4%
70.0%	2,385.06	\$3,277.18	\$3,355.63	\$78.44	2.4%
80.0%	3,120.90	\$4,219.58	\$4,321.49	\$101.92	2.4%
90.0%	4,464.86	\$5,940.79	\$6,085.58	\$144.79	2.4%
100.0%	8,063.23	\$10,549.22	\$10,808.79	\$259.58	2.5%
Average	2,527.37	\$3,459.45	\$3,542.43	\$82.98	2.4%
<u>Distribution Only</u>					
10.0%	410.78	\$322.25	\$337.72	\$15.46	4.8%
20.0%	855.12	\$430.01	\$459.64	\$29.64	6.9%
30.0%	1,123.60	\$495.11	\$533.31	\$38.20	7.7%
40.0%	1,358.83	\$552.16	\$597.86	\$45.71	8.3%
50.0%	1,592.36	\$608.79	\$661.94	\$53.16	8.7%
60.0%	1,899.01	\$683.15	\$746.09	\$62.94	9.2%
70.0%	2,385.06	\$801.02	\$879.46	\$78.44	9.8%
80.0%	3,120.90	\$979.46	\$1,081.38	\$101.92	10.4%
90.0%	4,464.86	\$1,305.37	\$1,450.16	\$144.79	11.1%
100.0%	8,063.23	\$2,177.97	\$2,437.55	\$259.58	11.9%
Average	2,527.37	\$835.53	\$918.51	\$82.98	9.9%

Present Rates

Customer Charge (\$/customer)	\$222.64	(1)
Distribution Charge - All therms (\$/thm)	\$0.2425	(1)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.9878	(2)

Proposed Rates

Customer Charge (\$/customer)	\$225.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2744	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.9878	(3)

(1) Current seasonal rates

(2) Prior winter 6 month average seasonal COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Medium Annual, High Winter Use - G41  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills		\$ Difference	% Difference
		@ Present Rates	Monthly Bills @ Proposed Rates		
<u>Delivery and Supply</u>					
10.0%	0.00	\$222.64	\$225.00	\$2.36	1.1%
20.0%	8.12	\$231.75	\$234.80	\$3.05	1.3%
30.0%	50.08	\$278.81	\$285.42	\$6.61	2.4%
40.0%	125.85	\$363.79	\$376.84	\$13.04	3.6%
50.0%	243.55	\$495.81	\$518.84	\$23.04	4.6%
60.0%	375.58	\$643.89	\$678.14	\$34.25	5.3%
70.0%	522.98	\$809.21	\$855.97	\$46.76	5.8%
80.0%	723.73	\$1,034.37	\$1,098.18	\$63.80	6.2%
90.0%	1,101.48	\$1,458.06	\$1,553.93	\$95.88	6.6%
100.0%	2,699.06	\$3,249.91	\$3,481.42	\$231.51	7.1%
Average	585.04	\$878.82	\$930.85	\$52.03	5.9%
<u>Distribution Only</u>					
10.0%	0.00	\$222.64	\$225.00	\$2.36	1.1%
20.0%	8.12	\$224.18	\$227.23	\$3.05	1.4%
30.0%	50.08	\$232.13	\$238.74	\$6.61	2.8%
40.0%	125.85	\$246.49	\$259.53	\$13.04	5.3%
50.0%	243.55	\$268.79	\$291.83	\$23.04	8.6%
60.0%	375.58	\$293.81	\$328.06	\$34.25	11.7%
70.0%	522.98	\$321.74	\$368.50	\$46.76	14.5%
80.0%	723.73	\$359.79	\$423.59	\$63.80	17.7%
90.0%	1,101.48	\$431.37	\$527.25	\$95.88	22.2%
100.0%	2,699.06	\$734.11	\$965.62	\$231.51	31.5%
Average	585.04	\$333.51	\$385.54	\$52.03	15.6%

Present Rates

Customer Charge (\$/customer)	\$222.64	(1)
Distribution Charge - All therms (\$/thm)	\$0.1895	(1)
LDAC (\$/thm)	\$0.0504	(2)
COGC (\$/thm)	\$0.8817	(2)

Proposed Rates

Customer Charge (\$/customer)	\$225.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2744	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8817	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Medium Annual, Low Winter Use - G51  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	298.97	\$551.38	\$552.07	\$0.69	0.1%
20.0%	665.04	\$953.92	\$952.56	(\$1.36)	-0.1%
30.0%	830.71	\$1,136.09	\$1,133.80	(\$2.29)	-0.2%
40.0%	961.40	\$1,279.80	\$1,276.78	(\$3.02)	-0.2%
50.1%	1,110.81	\$1,444.09	\$1,440.23	(\$3.86)	-0.3%
60.1%	1,275.37	\$1,625.04	\$1,620.26	(\$4.78)	-0.3%
70.0%	1,540.79	\$1,909.35	\$1,910.62	\$1.27	0.1%
80.0%	1,950.17	\$2,346.69	\$2,358.48	\$11.79	0.5%
90.0%	2,919.75	\$3,382.49	\$3,419.20	\$36.71	1.1%
100.0%	5,195.70	\$5,813.89	\$5,909.09	\$95.20	1.6%
Average	1,674.87	\$2,052.59	\$2,057.31	\$4.71	0.2%
<u>Distribution Only</u>					
10.0%	298.97	\$273.82	\$274.51	\$0.69	0.3%
20.0%	665.04	\$336.50	\$335.13	(\$1.36)	-0.4%
30.0%	830.71	\$364.86	\$362.57	(\$2.29)	-0.6%
40.0%	961.40	\$387.23	\$384.21	(\$3.02)	-0.8%
50.1%	1,110.81	\$412.81	\$408.95	(\$3.86)	-0.9%
60.1%	1,275.37	\$440.98	\$436.20	(\$4.78)	-1.1%
70.0%	1,540.79	\$478.89	\$480.15	\$1.27	0.3%
80.0%	1,950.17	\$536.16	\$547.95	\$11.79	2.2%
90.0%	2,919.75	\$671.80	\$708.51	\$36.71	5.5%
100.0%	5,195.70	\$990.21	\$1,085.41	\$95.20	9.6%
Average	1,674.87	\$497.64	\$502.36	\$4.71	0.9%

Present Rates

Customer Charge (\$/customer)	\$222.64	(1)
Distribution Charge - First 1,300 therms (\$/thm)	\$0.1712	(1)
Distribution Charge - Excess 1,300 therms (\$/thm)	\$0.1399	(1)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8780	(2)

Proposed Rates

Customer Charge (\$/customer)	\$225.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.1656	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8780	(3)

(1) Current seasonal rates

(2) Prior winter 6 month average seasonal COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - Medium Annual, Low Winter Use - G51  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	112.57	\$337.32	\$343.28	\$5.95	1.8%
20.0%	415.51	\$645.96	\$661.57	\$15.61	2.4%
30.0%	530.84	\$763.46	\$782.75	\$19.29	2.5%
40.0%	615.04	\$849.25	\$871.23	\$21.98	2.6%
50.0%	707.58	\$943.52	\$968.45	\$24.93	2.6%
60.0%	801.28	\$1,038.98	\$1,066.90	\$27.92	2.7%
70.0%	921.82	\$1,161.79	\$1,193.56	\$31.77	2.7%
80.0%	1,114.68	\$1,355.41	\$1,396.19	\$40.79	3.0%
90.0%	1,569.17	\$1,807.09	\$1,873.73	\$66.65	3.7%
100.0%	3,257.80	\$3,485.24	\$3,647.97	\$162.73	4.7%
Average	1,004.63	\$1,246.04	\$1,280.56	\$34.52	2.8%
<u>Distribution Only</u>					
10.0%	112.57	\$237.69	\$243.64	\$5.95	2.5%
20.0%	415.51	\$278.19	\$293.81	\$15.61	5.6%
30.0%	530.84	\$293.61	\$312.91	\$19.29	6.6%
40.0%	615.04	\$304.87	\$326.85	\$21.98	7.2%
50.0%	707.58	\$317.24	\$342.18	\$24.93	7.9%
60.0%	801.28	\$329.77	\$357.69	\$27.92	8.5%
70.0%	921.82	\$345.89	\$377.65	\$31.77	9.2%
80.0%	1,114.68	\$368.81	\$409.59	\$40.79	11.1%
90.0%	1,569.17	\$418.21	\$484.86	\$66.65	15.9%
100.0%	3,257.80	\$601.76	\$764.49	\$162.73	27.0%
Average	1,004.63	\$356.84	\$391.37	\$34.52	9.7%

Present Rates

Customer Charge (\$/customer)	\$222.64	(1)
Distribution Charge - First 1,000 therms (\$/thm)	\$0.1337	(1)
Distribution Charge - Excess 1,000 therms (\$/thm)	\$0.1087	(1)
LDAC (\$/thm)	\$0.0504	(2)
COGC (\$/thm)	\$0.8347	(2)

Proposed Rates

Customer Charge (\$/customer)	\$225.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.1656	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8347	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - High Annual, High Winter Use - G42  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.2%	3,952.46	\$6,223.43	\$6,276.75	\$53.32	0.9%
20.0%	7,213.13	\$10,255.57	\$10,341.17	\$85.60	0.8%
30.2%	9,121.50	\$12,615.46	\$12,719.96	\$104.49	0.8%
40.0%	10,470.29	\$14,283.37	\$14,401.22	\$117.85	0.8%
50.2%	11,571.15	\$15,644.70	\$15,773.44	\$128.74	0.8%
60.0%	13,509.92	\$18,042.17	\$18,190.11	\$147.94	0.8%
70.2%	15,600.24	\$20,627.06	\$20,795.69	\$168.63	0.8%
80.0%	18,555.29	\$24,281.28	\$24,479.17	\$197.89	0.8%
90.2%	24,287.75	\$31,370.04	\$31,624.68	\$254.64	0.8%
100.0%	94,489.70	\$118,181.78	\$119,131.42	\$949.64	0.8%
Average	20,877.14	\$27,152.49	\$27,373.36	\$220.87	0.8%
<u>Distribution Only</u>					
10.2%	3,952.46	\$2,119.98	\$2,173.30	\$53.32	2.5%
20.0%	7,213.13	\$2,766.90	\$2,852.50	\$85.60	3.1%
30.2%	9,121.50	\$3,145.52	\$3,250.01	\$104.49	3.3%
40.0%	10,470.29	\$3,413.12	\$3,530.96	\$117.85	3.5%
50.2%	11,571.15	\$3,631.53	\$3,760.27	\$128.74	3.5%
60.0%	13,509.92	\$4,016.18	\$4,164.12	\$147.94	3.7%
70.2%	15,600.24	\$4,430.90	\$4,599.53	\$168.63	3.8%
80.0%	18,555.29	\$5,017.18	\$5,215.07	\$197.89	3.9%
90.2%	24,287.75	\$6,154.50	\$6,409.14	\$254.64	4.1%
100.0%	94,489.70	\$20,082.57	\$21,032.21	\$949.64	4.7%
Average	20,877.14	\$5,477.84	\$5,698.71	\$220.87	4.0%

Present Rates

Customer Charge (\$/customer)	\$1,335.81 (1)
Distribution Charge - All therms (\$/thm)	\$0.1984 (1)
LDAC (\$/thm)	\$0.0504 (1)
COGC (\$/thm)	\$0.9878 (2)

Proposed Rates

Customer Charge (\$/customer)	\$1,350.00 (3)
Distribution Charge - All therms (\$/thm)	\$0.2083 (3)
LDAC (\$/thm)	\$0.0504 (1)
COGC (\$/thm)	\$0.9878 (3)

- (1) Current seasonal rates  
(2) Prior winter 6 month average seasonal COG  
(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - High Annual, High Winter Use - G42  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.1%	145.06	\$1,488.52	\$1,515.43	\$26.91	1.8%
20.2%	557.94	\$1,923.15	\$1,986.28	\$63.12	3.3%
29.8%	1,236.71	\$2,637.70	\$2,760.35	\$122.65	4.6%
39.9%	2,019.46	\$3,461.69	\$3,652.99	\$191.30	5.5%
50.0%	2,763.59	\$4,245.04	\$4,501.60	\$256.56	6.0%
60.1%	3,577.05	\$5,101.37	\$5,429.26	\$327.90	6.4%
70.2%	4,914.67	\$6,509.48	\$6,954.68	\$445.21	6.8%
79.8%	6,697.70	\$8,386.47	\$8,988.05	\$601.58	7.2%
89.9%	9,872.70	\$11,728.80	\$12,608.83	\$880.03	7.5%
100.0%	44,000.48	\$47,655.12	\$51,528.15	\$3,873.03	8.1%
Average	7,578.54	\$9,313.74	\$9,992.56	\$678.83	7.3%
<u>Distribution Only</u>					
10.1%	145.06	\$1,353.30	\$1,380.22	\$26.91	2.0%
20.2%	557.94	\$1,403.10	\$1,466.22	\$63.12	4.5%
29.8%	1,236.71	\$1,484.96	\$1,607.61	\$122.65	8.3%
39.9%	2,019.46	\$1,579.36	\$1,770.65	\$191.30	12.1%
50.0%	2,763.59	\$1,669.10	\$1,925.66	\$256.56	15.4%
60.1%	3,577.05	\$1,767.20	\$2,095.10	\$327.90	18.6%
70.2%	4,914.67	\$1,928.52	\$2,373.72	\$445.21	23.1%
79.8%	6,697.70	\$2,143.55	\$2,745.13	\$601.58	28.1%
89.9%	9,872.70	\$2,526.46	\$3,406.48	\$880.03	34.8%
100.0%	44,000.48	\$6,642.27	\$10,515.30	\$3,873.03	58.3%
Average	7,578.54	\$2,249.78	\$2,928.61	\$678.83	30.2%

Present Rates

Customer Charge (\$/customer)	\$1,335.81	(1)
Distribution Charge - All therms (\$/thm)	\$0.1206	(1)
LDAC (\$/thm)	\$0.0504	(2)
COGC (\$/thm)	\$0.8817	(2)

Proposed Rates

Customer Charge (\$/customer)	\$1,350.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.2083	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8817	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - High Annual, Low Winter Use - G52  
Proposed Rates versus Present Rates  
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.3%	821.21	\$2,239.47	\$2,253.66	\$14.19	0.6%
20.0%	8,495.02	\$10,683.73	\$10,697.92	\$14.19	0.1%
30.3%	11,712.45	\$14,224.19	\$14,238.38	\$14.19	0.1%
40.0%	16,972.72	\$20,012.60	\$20,026.79	\$14.19	0.1%
50.3%	23,903.02	\$27,638.69	\$27,652.88	\$14.19	0.1%
60.0%	34,186.20	\$38,954.30	\$38,968.49	\$14.19	0.0%
70.3%	47,229.91	\$53,307.61	\$53,321.80	\$14.19	0.0%
80.0%	56,936.34	\$63,988.55	\$64,002.74	\$14.19	0.0%
90.3%	74,244.21	\$83,034.14	\$83,048.33	\$14.19	0.0%
100.0%	158,615.50	\$175,876.31	\$175,890.50	\$14.19	0.0%
Average	43,311.66	\$48,995.96	\$49,010.15	\$14.19	0.0%
<u>Distribution Only</u>					
10.3%	821.21	\$1,477.06	\$1,491.25	\$14.19	1.0%
20.0%	8,495.02	\$2,796.95	\$2,811.14	\$14.19	0.5%
30.3%	11,712.45	\$3,350.35	\$3,364.54	\$14.19	0.4%
40.0%	16,972.72	\$4,255.12	\$4,269.31	\$14.19	0.3%
50.3%	23,903.02	\$5,447.13	\$5,461.32	\$14.19	0.3%
60.0%	34,186.20	\$7,215.84	\$7,230.03	\$14.19	0.2%
70.3%	47,229.91	\$9,459.36	\$9,473.55	\$14.19	0.2%
80.0%	56,936.34	\$11,128.86	\$11,143.05	\$14.19	0.1%
90.3%	74,244.21	\$14,105.81	\$14,120.00	\$14.19	0.1%
100.0%	158,615.50	\$28,617.68	\$28,631.87	\$14.19	0.0%
Average	43,311.66	\$8,785.42	\$8,799.61	\$14.19	0.2%

Present Rates

Customer Charge (\$/customer)	\$1,335.81	(1)
Distribution Charge - All therms (\$/thm)	\$0.1720	(1)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8780	(2)

Proposed Rates

Customer Charge (\$/customer)	\$1,350.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.1720	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8780	(3)

- (1) Current seasonal rates  
(2) Prior winter 6 month average seasonal COG  
(3) Proposed Rates, Settlement Schedule 5

Northern Utilities - NH Division  
General Service - High Annual, Low Winter Use - G52  
Proposed Rates versus Present Rates  
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
Delivery and Supply					
10.1%	2,623.08	\$3,865.25	\$3,932.92	\$67.68	1.8%
20.1%	8,643.71	\$9,670.94	\$9,893.95	\$223.01	2.3%
30.2%	11,831.46	\$12,744.89	\$13,050.14	\$305.25	2.4%
40.2%	18,488.22	\$19,164.00	\$19,641.00	\$477.00	2.5%
50.3%	25,068.63	\$25,509.49	\$26,156.26	\$646.77	2.5%
59.8%	29,171.12	\$29,465.52	\$30,218.14	\$752.61	2.6%
69.8%	35,448.25	\$35,518.55	\$36,433.12	\$914.56	2.6%
79.9%	47,888.13	\$47,514.33	\$48,749.85	\$1,235.51	2.6%
89.9%	70,667.62	\$69,480.59	\$71,303.82	\$1,823.22	2.6%
100.0%	143,682.62	\$139,888.96	\$143,595.97	\$3,707.01	2.6%
Average	39,351.28	\$39,282.25	\$40,297.52	\$1,015.26	2.6%
Distribution Only					
10.1%	2,623.08	\$1,543.56	\$1,611.23	\$67.68	4.4%
20.1%	8,643.71	\$2,020.39	\$2,243.40	\$223.01	11.0%
30.2%	11,831.46	\$2,272.86	\$2,578.11	\$305.25	13.4%
40.2%	18,488.22	\$2,800.08	\$3,277.07	\$477.00	17.0%
50.3%	25,068.63	\$3,321.25	\$3,968.02	\$646.77	19.5%
59.8%	29,171.12	\$3,646.16	\$4,398.78	\$752.61	20.6%
69.8%	35,448.25	\$4,143.31	\$5,057.88	\$914.56	22.1%
79.9%	47,888.13	\$5,128.55	\$6,364.06	\$1,235.51	24.1%
89.9%	70,667.62	\$6,932.69	\$8,755.91	\$1,823.22	26.3%
100.0%	143,682.62	\$12,715.47	\$16,422.49	\$3,707.01	29.2%
Average	39,351.28	\$4,452.43	\$5,467.69	\$1,015.26	22.8%

Present Rates

Customer Charge (\$/customer)	\$1,335.81	(1)
Distribution Charge - All therms (\$/thm)	\$0.0792	(1)
LDAC (\$/thm)	\$0.0504	(2)
COGC (\$/thm)	\$0.8347	(2)

Proposed Rates

Customer Charge (\$/customer)	\$1,335.81	(3)
Distribution Charge - All therms (\$/thm)	\$0.1050	(3)
LDAC (\$/thm)	\$0.0504	(1)
COGC (\$/thm)	\$0.8347	(2)

(1) Current seasonal rates

(2) Projected 6 month average summer COG

(3) Proposed Rates, Settlement Schedule 5



Northern Utilities - New Hampshire Division  
Typical Residential Heating Bill (R-5)  
Bill Impacts Illustrating Changes on a Monthly Basis  
Current Rates and Proposed Rates, using 6 month average COGC

Line																
No.	Residential Heating (R-5)	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Peak	Total Off-Peak	Annual Nov-Oct
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Test Year Monthly Weather Normalized Therms per Custome	52	\$101	133	139	115	78	44	26	11	9	14	26	618	131	749
2																
3	<b><u>Current November - October Rates</u></b>															
4	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
5	Distribution	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099			
6	LDAC (\$/therm)	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816			
7	COGC (\$/therm)	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665			
8																
9	TOTAL BILL	\$112.89	\$197.96	\$254.58	\$265.56	\$223.54	\$158.05	\$91.33	\$62.06	\$39.80	\$36.84	\$43.51	\$63.40	\$1,213	\$337	\$1,550
10																
11																
12	<b><u>Proposed November - October Settlement Rates</u></b>															
13	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
14	Distribution	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841			
15	LDAC (\$/therm)	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816			
16	COGC (\$/therm) inc. increment	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665			
17																
18	TOTAL BILL	\$122.87	\$217.30	\$280.15	\$292.34	\$245.70	\$173.00	\$103.50	\$69.07	\$42.89	\$39.42	\$47.26	\$70.65	\$1,331	\$373	\$1,704
19																
20	<b><u>Proposed Bill less Current Bill</u></b>															
21	Total Bill increase/(decrease)	\$9.98	\$19.34	\$25.57	\$26.78	\$22.16	\$14.95	\$12.17	\$7.01	\$3.10	\$2.58	\$3.75	\$7.25	\$119	\$36	\$155
22	Percentage increase/(decrease)	8.8%	9.8%	10.0%	10.1%	9.9%	9.5%	13.3%	11.3%	7.8%	7.0%	8.6%	11.4%	9.8%	10.6%	10.0%

Northern Utilities - New Hampshire Division  
Typical Low Income Residential Heating Bill (R-10)  
Bill Impacts Illustrating Changes on a Monthly Basis  
Current Rates and Proposed Rates, using 6 month average COGC

Line																
No.	Low Income Residential Heating (R-10)	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Peak	Total Off-Peak	Annual Nov-Oct
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Test Year Monthly Weather Normalized Therms per Custome	50	86	121	130	116	82	47	26	10	8	13	27	585	132	717
2																
3	<b>Current November - October Rates</b>															
4	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
5	Distribution	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099			
6	LDAC (\$/therm)	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816			
7	COGC (\$/therm)	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665			
8																
9	45% Customer Charge Discount (\$/customer)	-\$9.99	-\$9.99	-\$9.99	-\$9.99	-\$9.99	-\$9.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
10	45% Therm Discount - (\$/thm)	-\$0.3114	-\$0.3114	-\$0.3114	-\$0.3114	-\$0.3114	-\$0.3114	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
11	45% Therm Discount - Cost of Gas (\$/thm)	-\$0.4374	-\$0.4374	-\$0.4374	-\$0.4374	-\$0.4374	-\$0.4374	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
12																
13	TOTAL BILL	\$61.77	\$98.15	\$133.00	\$141.95	\$127.37	\$94.17	\$95.17	\$62.72	\$38.30	\$35.24	\$42.27	\$64.59	\$656	\$338	\$995
14																
15																
16	<b>Proposed November - October Settlement Rates</b>															
17	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
18	Distribution	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841	\$0.8841			
19	LDAC (\$/therm)	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816			
20	COGC (\$/therm)	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665			
21																
22	45% Customer Charge Discount (\$/customer)	-\$9.99	-\$9.99	-\$9.99	-\$9.99	-\$9.99	-\$9.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
23	45% Therm Discount - (\$/thm)	-\$0.3978	-\$0.3978	-\$0.3978	-\$0.3978	-\$0.3978	-\$0.3978	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
24	45% Therm Discount - Cost of Gas (\$/thm)	-\$0.4374	-\$0.4374	-\$0.4374	-\$0.4374	-\$0.4374	-\$0.4374	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
25																
26	TOTAL BILL	\$67.02	\$107.26	\$145.80	\$155.71	\$139.57	\$102.86	\$108.02	\$69.85	\$41.14	\$37.53	\$45.80	\$72.05	\$718	\$374	\$1,093
27																
28	<b>Proposed Bill less Current Bill</b>															
29	Total Bill increase/(decrease)	\$5.25	\$9.11	\$12.80	\$13.75	\$12.21	\$8.69	\$12.84	\$7.13	\$2.83	\$2.29	\$3.53	\$7.46	\$62	\$36	\$98
30	Percentage increase/(decrease)	8.5%	9.3%	9.6%	9.7%	9.6%	9.2%	13.5%	11.4%	7.4%	6.5%	8.4%	11.6%	9.4%	10.7%	9.8%

Northern Utilities - New Hampshire Division  
Typical Residential Non-Heating Bill (R-6)  
Bill Impacts Illustrating Changes on a Monthly Basis  
Current Rates and Proposed Rates, using 6 month average COGC

Line																
No.	Residential Non-Heating (R-6)	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total Peak	Total Off-Peak	Annual Nov-Oct
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Test Year Monthly Weather Normalized Therms per Customer	14	21	25	26	21	16	14	11	9	8	10	11	123	63	186
2																
3	<b>Current November - October Rates</b>															
4	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
5	Distribution	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470			
6	LDAC (\$/therm)	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816			
7	COGC (\$/therm)	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665			
8																
9	TOTAL BILL	\$45.51	\$57.87	\$65.08	\$65.73	\$58.10	\$50.05	\$44.02	\$40.37	\$36.68	\$35.55	\$37.68	\$39.16	\$342	\$233	\$576
10																
11																
12	<b>Proposed November - October Settlement Rates</b>															
13	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
14	Distribution	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081	\$1.3081			
15	LDAC (\$/therm)	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816	\$0.0816			
16	COGC (\$/therm)	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.9719	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665	\$0.8665			
17																
18	TOTAL BILL	\$54.58	\$71.74	\$81.75	\$82.66	\$72.05	\$60.88	\$53.07	\$47.91	\$42.68	\$41.08	\$44.10	\$46.18	\$424	\$275	\$699
19																
20	<b>Proposed Bill less Current Bill</b>															
21	Total Bill increase/(decrease)	\$9.06	\$13.87	\$16.67	\$16.92	\$13.96	\$10.83	\$9.04	\$7.53	\$6.00	\$5.53	\$6.42	\$7.03	\$81	\$42	\$123
22	Percentage increase/(decrease)	19.9%	24.0%	25.6%	25.7%	24.0%	21.6%	20.5%	18.7%	16.4%	15.6%	17.0%	17.9%	23.8%	17.8%	21.3%

NHPUC No. 12 – Gas  
Northern Utilities, Inc.

## **NORTHERN UTILITIES, INC.**

### **SUPPLEMENT NO. 1**

**This Schedule has been deleted**

NHPUC No. 12 – Gas  
Northern Utilities, Inc.

Supplement No. 1  
Second Revised Page 1  
Superseding First Revised Page 1

## **SUPPLEMENT NO. 1**

**This Schedule has been deleted**

Issued: May XX, 2022  
Effective: August 1, 2022

Issued By: Robert B. Hevert  
Title: Senior Vice President

Authorized by NHPUC Order No. \_\_\_\_\_ in Docket No. DG 21-104, dated \_\_\_\_\_

NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

Supplement No. 1  
Sixth Revised Page 2  
Superseding Fifth Revised Page 2

**THIS SCHEDULE HAS BEEN DELETED**

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Issued by:

Title:

Robert B. Hevert

Senior Vice President

NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

Supplement No. 1  
Sixth Revised Page 3  
Superseding Fifth Revised Page 3

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Title:

Robert B. Hevert

Senior Vice President

NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

Supplement No. 1  
~~- Fifth Revised Page 4~~  
Superseding Fourth Revised Page 4

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Title:

Robert B. Hevert

Senior Vice President



NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

Supplement No. 1  
- Fifth Revised Page 5  
Superseding Fourth Revised Page 5

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Issued by:

Title:

Robert B. Hevert

Senior Vice President

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Title: Senior Vice President

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## **II. GENERAL TERMS AND CONDITIONS**

### **4. Application and Contract**

Application for service may be made through the Company's website or by contacting the Company by phone. Whether or not a signed application for service is made by the Customer and accepted by the Company, the rendering of the service by the Company and its use by the Customer shall be deemed a contract between the parties and subject to all provisions of the Tariff, as in effect from time to time, applicable to the service. Application for service to a multi-unit dwelling which is supplied through a single meter, must be made by the building owner who will be the customer of record.

The application or the depositing of any sum of money by the applicant shall not require the Company to render service until the expiration of such time as may be reasonably required by the Company to determine if the applicant has complied with the provisions of these Terms and Conditions and as may reasonably be required by the Company to install the required service facilities.

The Company shall not be required to serve any applicant if the distance of the premises to be served from an existing suitable distribution main, or the difficulty of access thereto, is such that the estimated income (revenue excluding gas costs) from the service applied for is insufficient to yield a reasonable return to the Company unless such application is accompanied by a cash payment or an undertaking satisfactory to the Company guaranteeing a stipulated revenue for a definite period of time or both.

Where service under the Rate Schedules is to be used for temporary purposes only, the Customer may be required to pay the cost of installation and removal of equipment required to render service in addition to payments for gas consumed. Said costs of installation and removal may be required to be paid in advance of any construction by the Company. If, in the Company's sole judgment, any such installation presents unusual difficulties as to metering the service supplied, the Company may estimate consumption for purposes of applying the Rate Schedule, and the Company will notify the Customer prior to turn-on of the estimated amount to be billed.

### **5. Assignment of Rate Schedule**

Rates are available for various classes of Customers. The conditions under which they are applicable are set forth in the Rate Schedules in this Tariff.

Upon application for service or upon request, the applicant or Customer shall be assigned the applicable rate schedule according to its estimated requirements. The Company shall not be held responsible for inaccurate estimates of Customer's requirements and will not refund the difference in charge(s) under different rate schedules.

## **II. GENERAL TERMS AND CONDITIONS**

omission or circumstances occasioned by or in consequence of any acts of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, unforeseeable or unusual weather conditions, washouts, arrests and restraint of rulers and peoples, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, line freeze-ups, temporary failure of gas supply, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause except willful default or neglect, whether of the kind herein enumerated, or otherwise, and whether caused or occasioned by or happening on account of the act or omission of Company or Customer or any other person or concern not a party thereto, not reasonably within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome. A failure to settle or prevent any strike or other controversy with employees or with anyone purporting or seeking to represent employees shall not be considered to be a matter within the control of the party claiming suspension.

### **12. Meter Reading, Billing and Payment**

The Company's filed rates for service are predicated on the sale and/or Delivery of natural gas, as far as practicable, for a thirty (30) day period. Bills for service will be rendered at regular intervals. The Company may, however, at its option, read some or all meters in alternate months, and render a bi-monthly or monthly bill. If a monthly bill is rendered in the intervening months it shall be based upon an estimated consumption of gas, which bill will be due and payable when rendered. When a meter reading is obtained and an actual quantity of gas is determined, that quantity previously billed the Customer on an estimated basis will be deducted from the total quantity used during the period and a bill rendered for the remaining quantity.

In the event a meter reading cannot be obtained at the regularly scheduled time, a reading will be estimated until access can be obtained. Bills rendered for service on an estimated basis shall have the same force and effect as those based upon actual meter readings.

Bills are due and payable upon presentation. A late payment charge shall be assessed at a rate of one percent per month or fraction thereof on balances unpaid within thirty days after the billing date. When bills are paid by remittance through the mail, the postmark on the envelope will be considered as the date of payment.

When a residential customer is unable to pay the total arrearage due, but such customer

#### **IV. COST OF GAS CHARGE**

NHPUC. The table below lists approved costs and amounts:

<b><u>VARIABLE</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>CURRENTLY APPROVED AMOUNTS</u></b>
MISC	Miscellaneous Overhead Costs	\$611,875
PS	Production and Storage Capacity Costs	\$214,538
WCA%	Working Capital Allowance Percentage	9.3 supply related net lag days / 365 days x WCCCR

**Where:** WCCCR=Working Capital Carrying Charge Rate

#### 6.2 **COGC Formulas**

The COGC Formulas shall be computed on an annual basis for the Company's three (3) groups of customer classes as shown in the table below. The computations will use forecasts of seasonal gas costs, carrying charges, sendout volumes, credits and sales volumes. Forecasts may be based on either historical data or Company projections, but must be weather-normalized. Any projections must be documented in full with each filing.

GROUP	CUSTOMER CLASSES
Residential	R-5, R-6 and R-10
Commercial and Industrial: Low Winter	G-50, G-51 and G-52
Commercial and Industrial: High Winter	G-40, G-41 and G-42

COGC will be calculated on a seasonal basis. The Winter Season COGC will be effective November 1<sup>st</sup> and Summer Season COGC will be effective on May 1<sup>st</sup>.

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## **V. LOCAL DELIVERY ADJUSTMENT CHARGE**

### **10. Property Tax Adjustment Mechanism (“PTAM”)**

#### **10.1 Purpose**

The purpose of this provision is to establish a procedure that allows Northern Utilities to recover the increase in local property tax expense associated with HB 700 and RSA 72:8-d and -e.

#### **10.2 Applicability**

The PTAM Rate shall be applied to all Firm Sales and Delivery Service customers with the exception of special contract customers who are exempt from the LDAC. The PTAM Rate shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided in this clause.

#### **10.3 Property Tax Adjustment Mechanism Costs (“PTAM”) Allowable for LDAC**

The amount of Property Tax Expense costs is the increase in local property tax expense related to HB 700 beginning in 2020 above the amount of local property tax expense recovery in base rates of \$4,152,854 established in DG 21-104. The prior year deferral shall be charged to the PTAM in January of the subsequent year.

#### **10.4 Effective Date of Property Tax Adjustment Mechanism Rate**

Forty five (45) days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the PTAM Rate applicable to all consumption of tariff customers eligible to receive delivery service for the subsequent twelve month period commencing with billings for gas consumed on and after November 1.

#### **10.5 Property Tax Adjustment Mechanism (“PTAM”) Formula:**

$$\text{PTAM Rate} = \frac{\text{PTAMC} + \text{RA}_{\text{PTAM}}}{\text{A:TP}_{\text{vol}}}$$

and:

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## **V. LOCAL DELIVERY ADJUSTMENT CHARGE**

### **11. Regulatory Assessment Adjustment Mechanism (“RAAM”)**

#### **11.1 Purpose**

The purpose of this provision is to establish a procedure that allows Northern Utilities to recover change in the Company’s annual PUC Regulatory Assessment.

#### **11.2 Applicability**

The RAAM Rate shall be applied to all Firm Sales and Delivery Service customers with the exception of special contract customers who are exempt from the LDAC. The RAAM Rate shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided in this clause.

#### **11.3 Regulatory Assessment Adjustment Mechanism Costs (“RAAM”) Allowable for LDAC**

Effective October 1, 2021, the amount of the NH PUC regulatory assessment to be charged, or credited, through this clause shall be calculated by taking the total assessment minus the amount in base rates of \$552,312 established in DG 21-104.

#### **11.4 Effective Date of Regulatory Assessment Adjustment Mechanism Rate**

Forty five (45) days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the RAAM Rate applicable to all consumption of tariff customers eligible to receive delivery service for the subsequent twelve month period commencing with billings for gas consumed on and after November 1.

#### **11.5 Regulatory Assessment Adjustment Mechanism (“RAAM”) Formula:**

$$\text{RAAM Rate} = \frac{\text{RAAMC} + \text{RA}_{\text{RAAM}}}{\text{A:TP}}$$

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Title: Senior Vice President

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## **V. LOCAL DELIVERY ADJUSTMENT CHARGE**

### **Where:**

**RAAMC** The amount of the annual NHPUC regulatory assessment which is above or below the amount of \$552,312 in base rates established in Docket 21-104.

**RA<sub>RAAM</sub>** Reconciliation Adjustment associated with regulatory assessment expense and revenues - Account 173 balance, inclusive of the associated interest, as outlined in Section 11.6

**A:TPvol** Forecast annual firm sales and firm delivery service throughput.

### 11.6 Reconciliation Adjustments

Account 173 shall contain the accumulated difference between revenues toward Regulatory Assessment Expense as calculated by multiplying the RAAM Rate times monthly firm throughput volumes and actual RAAMC, comprised of the regulatory assessment expense, allowed as defined in Section 11.3, plus carrying charges calculated on the average monthly balance using the Federal Reserve Statistical Release prime lending rate and then added to the end-of-month balance.

### 11.7 Application of RAAM Rate to Bills

The RAAM Rate (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales volumes and transportation throughput.

### 11.8 Information to be Filed with the NHPUC

Information pertaining to the Regulatory Assessment Adjustment Mechanism (RAAM) costs and revenue shall be filed with the NHPUC consistent with the filing requirements of all costs and revenue information included in the LDAC. An annual RAAM filing will be required forty-five (45) days prior to the effective date of November 1, containing the calculation of the new annual RAAM Rate to become effective November 1. The calculation will reflect the forecasted regulatory assessment expense for the pcoming period, the updated annual RAAM reconciliation balance and throughput forecast for the upcoming annual period.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE R-5 - RESIDENTIAL HEATING SERVICE**

#### **CHARACTER OF SERVICE**

Natural Gas or its equivalent having a nominal heat content of 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

Service hereunder is available under this rate at single, domestic locations for all purposes in individual private dwellings and individual apartments including condominiums and their facilities which use gas as the principal household heating fuel or at locations which are otherwise deemed ineligible for non-heating service based on availability.

#### **RATE – MONTHLY**

Customer Charge				\$22.20 per month
Summer	-	All therms	@	\$0.8841 per therm
Winter	-	All therms	@	\$0.8841 per therm

#### **MINIMUM BILL**

The minimum monthly bill for gas service will be the Customer Charge Per Month.

#### **COST OF GAS FACTOR AND LOCAL DELIVERY ADJUSTMENT CLAUSE**

The provisions of the Company's Cost of Gas Charge, Part IV, and the Local Delivery Adjustment Charge, Part V, apply to gas sold under this rate schedule.

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Title: Sr. Vice President

## **VI. RATE SCHEDULES**

### **RATE SCHEDULE R-10 - LOW INCOME RESIDENTIAL HEATING SERVICE**

(continued)

#### **RATE – MONTHLY**

Customer Charge				\$22.20 per month
Summer	-	All therms	@	\$0.8841 per therm
Winter	-	All therms	@	\$0.8841 per therm

#### **LOW INCOME DISCOUNT ADJUSTMENT**

Effective November 1, 2020, customers taking service under this rate schedule will receive a 45% discount off the customer charge as well as the distribution rate and cost of gas rate during the winter period. The discount does not apply during the summer period and does not apply to the Local Delivery Adjustment Charge.

#### **MINIMUM BILL**

The minimum monthly bill for gas service will be the Customer Charge Per Month.

#### **COST OF GAS FACTOR AND LOCAL DELIVERY ADJUSTMENT CLAUSE**

The provisions of the Company's Cost of Gas Charge, Part IV, and the Local Delivery Adjustment Charge, Part V, apply to gas sold under this rate schedule.

#### **DEFINITIONS**

**Summer** - Defined as being the Company's billing cycles May through October.

**Winter** - Defined as being the Company's billing cycles November through April.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE R-6 - RESIDENTIAL NON-HEATING SERVICE**

#### **CHARACTER OF SERVICE**

Natural Gas or its equivalent having a nominal heat content of 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company

#### **AVAILABILITY**

Service hereunder is available for any residential purpose other than for use as the principal heating fuel except that this rate is not available at locations where usage in the six winter months of November through April is greater than or equal to 80% of annual usage and usage exceeds 100 therms in any winter month.

#### **RATE - MONTHLY**

Customer Charge		\$22.20 per month		
Summer	-	All therms	@	\$1.3081 per therm
Winter	-	All therms	@	\$1.3081 per therm

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-40 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(Low Annual Use, High Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing one thousand (1,000) Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$80.00 per month
Summer	-	All therms	@	\$0.2320 per therm
Winter	-	All therms	@	\$0.2320 per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-41 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(Medium Annual Use, High Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$225.00 per month
Summer	-	All therms	@	\$0.2744 per therm
Winter	-	All therms	@	\$0.2744 per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

#### **CHARACTERISTICS OF CUSTOMER**

A Customer receiving service under this schedule must have annual usage of greater than 8,000 therms but less than or equal to 80,000 therms and peak period usage greater than or equal to 67% of annual usage, as determined by the Company's records and procedures.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-42 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(High Annual Use, High Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$1,350.00 per month
Summer	-	All therms	@	\$0.2083 per therm
Winter	-	All therms	@	\$0.2083 per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

#### **CHARACTERISTICS OF CUSTOMER**

A Customer receiving service under this schedule must have annual usage greater than 80,000 therms and peak period usage greater than or equal to 67% of annual usage, as determined by the Company's records and procedures.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-50 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(Low Annual Use, Low Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$80.00 per month
Summer	-	All therms	@	\$0.2085 per therm
Winter	-	All therms	@	\$0.2085 per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-51 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(Medium Annual Use, Low Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$225.00 per month
Summer	-	All therms	@	\$0.1656 per therm
Winter	-	All therms	@	\$0.1656 per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-52 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(High Annual Use, Low Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$1,350.00 per month
Summer	-	All therms	@	\$0.1050 per therm
Winter	-	All therms	@	\$0.1720 per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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Title: Senior Vice Presiden

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Thirteenth Revised Page 86  
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**NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION**  
**CURRENTLY EFFECTIVE RESIDENTIAL RATES**

		<b>Tariff Rates</b>	<b>Total Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
Residential Heating	<b><u>Tariff Rate R 5:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	All Usage	\$0.8841	\$0.9657	\$1.8783
	<b>LDAC</b>	<b>\$0.0816</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	<b>\$0.9126</b>		
Residential Heating Low Income	<b><u>Tariff Rate R 10:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	All Usage	\$0.8841	\$0.9657	\$1.8783
	<b>LDAC</b>	<b>\$0.0816</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	<b>\$0.9126</b>		
No Discount*	Monthly Customer Charge	\$0.00	\$0.00	\$0.00
No Discount*	All Usage	\$0.0000	\$0.0000	\$0.0000
No Discount	<b>LDAC</b>	<b>\$0.0000</b>		
No Discount*	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	<b>\$0.0000</b>		
Residential Non-Heating	<b><u>Tariff Rate R 6:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	All Usage	\$1.3081	\$1.3897	\$2.3023
	<b>LDAC</b>	<b>\$0.0816</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	<b>\$0.9126</b>		

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Robert B. Hevert

Senior Vice President

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Twelfth Revised Page 88  
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**NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION**  
**CURRENTLY EFFECTIVE RESIDENTIAL RATES**

		<b>Tariff Rates</b>	<b>Total Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
C&I Low Annual/High Winter	<b><u>Tariff Rate G 40:</u></b> Monthly Customer Charge All Usage <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$80.00 \$0.2320 <b>\$0.0504</b>  <b>\$0.9395</b>	<b>\$80.00</b> <b>\$0.2824</b>  	<b>\$80.00</b> <b>\$1.2219</b> 
C&I Low Annual/Low Winter	<b><u>Tariff Rate G 50:</u></b> Monthly Customer Charge All Usage <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$80.00 \$0.2085 <b>\$0.0504</b>  <b>\$0.8690</b>	<b>\$80.00</b> <b>\$0.2589</b>  	<b>\$80.00</b> <b>\$1.1279</b> 
C&I Medium Annual/High Winter	<b><u>Tariff Rate G 41:</u></b> Monthly Customer Charge All Usage <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$225.00 \$0.2744 <b>\$0.0504</b>  <b>\$0.9395</b>	<b>\$225.00</b> <b>\$0.3248</b>  	<b>\$225.00</b> <b>\$1.2643</b> 
C&I Medium Annual/Low Winter	<b><u>Tariff Rate G 51:</u></b> Monthly Customer Charge All Usage <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$225.00 \$0.1656 <b>\$0.0504</b>  <b>\$0.8690</b>	<b>\$225.00</b> <b>\$0.2160</b>  	<b>\$225.00</b> <b>\$1.0850</b> 
C&I High Annual/High Winter	<b><u>Tariff Rate G 42:</u></b> Monthly Customer Charge All Usage <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$1,350.00 \$0.2083 <b>\$0.0504</b>  <b>\$0.9395</b>	<b>\$1,350.00</b> <b>\$0.2587</b>  	<b>\$1,350.00</b> <b>\$1.1982</b> 
C&I High Annual/Low Winter	<b><u>Tariff Rate G 52:</u></b> Monthly Customer Charge All Usage <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$1,350.00 \$0.1050 <b>\$0.0504</b>  <b>\$0.8690</b>	<b>\$1,350.00</b> <b>\$0.1554</b>  	<b>\$1,350.00</b> <b>\$1.0244</b> 

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Title:

**Robert B. Hevert**

**Senior Vice President**

## **VII. DELIVERY SERVICE TERMS AND CONDITIONS (continued)**

Supplier and the volume nominated by the Supplier to the Transporting Pipeline, the lower volume will be deemed confirmed. The Company will allocate such discrepancy based on a predetermined allocation method set forth in the Supplier Service Agreement. If no predetermined allocation method has been established prior to the event of such discrepancy, the Company will allocate the discrepancy on a pro rata basis.

- 9.3.7 Nominations may be rejected, at the sole reasonable discretion of the Company, if they do not satisfy the conditions for Delivery Service in effect from time to time.

### **9.4 Determination of Receipts**

- 9.4.1 The quantity of Gas deemed received by the Company for the Supplier's Aggregation Pool at the Designated Receipt Point(s) will equal the volume so scheduled by the Transporting Pipeline(s).
- 9.4.2 The Company Gas Allowance will be assessed against receipts pursuant to Part VII, Section 8 of this tariff.

### **9.5 Metering and Determination of Deliveries**

- 9.5.1 The Company shall furnish and install, at the Customer's expense, telemetering equipment and any related equipment for the purpose of measuring Gas Usage at each Customer's Delivery Point. Telemetering equipment shall remain the property of the Company at all times. The Company shall require each Customer to install and maintain, at the Customer's expense, reliable telephone lines and electrical connections that meet the Company's operating requirements. The Company may require the Customer to furnish a dedicated telephone line. If the Customer fails to maintain such telephone lines and electrical connections for fourteen (14) consecutive days after notification by the Company, the Company may discontinue service to the Customer. If the customer requests or if an existing phone line is not providing adequate service, the Company may provide communication via cell modem technology for a monthly charge as listed in Appendix A.
- 9.5.2 Should a Customer or a Supplier request that additional telemetering equipment or a communication device be attached to the existing telemetering equipment in addition to that provided pursuant to Part VII,

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## **VII. DELIVERY SERVICE TERMS AND CONDITIONS**

### **APPENDIX A**

#### **Schedule of Administrative Fees and Charges**

**I. Supplier Balancing Charge:**      **\$0.71 per MMBtu** of Daily Imbalance Volumes

- Updated effective every November 1 to reflect the Company's latest balancing resources and associated capacity costs.
- Daily Imbalance Volumes represent the difference between ATV and ATV adjusted for actual EDDs.

**II. Peaking Service Demand Charge:**      **\$ 64.53 per MMBtu** per MDPQ per month for November 2020 through April 2021. Provided on Page 6 of Schedule 21-FXW.

- Updated effective every November 1 to reflect the Company's Peaking resources and associated costs.

**III. Company Allowance Calculation:**      **1.30% -** Provided in Schedule 18-FXW

**IV. Supplier Services and Associated Fees:**

<b><u>SERVICE</u></b>	<b><u>PRICING</u></b>
Pool Administration (required) <b>Non-Daily Metered Pools only</b>	• \$0.10/month/customer billed @ marketer level
Standard Passthrough Billing (required)	• \$0.60/customer/month billed @ marketer level
Standard Complete Billing (optional – Passthrough Billing fee not required if this service is elected)	• \$1.50/customer/month billed @ marketer level
Customer Administration (required)	• \$10/customer/switch billed @ marketer level

**V. Meter Read Charge:**      \$78.00 when customer phone line is not reporting daily data

**VI. Meter Read via Cellular Service:**      \$20.00 per month

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Senior Vice President

## **IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

### **1.0 PURPOSE**

The purpose of the Revenue Decoupling Adjustment Clause (“RDAC”) is to establish procedures that allow the Company to adjust, on a semi-annual basis, rates for distribution service that reconcile Actual Base Revenues per Customer with Authorized Base Revenues per Customer.

### **2.0 EFFECTIVE DATE**

The Revenue Decoupling Adjustment Factor (“RDAF”) shall be effective on the first day of the Adjustment Period, as defined in Section 4.0.

### **3.0 APPLICABILITY**

The RDAF shall apply to the Company’s Residential Service (Rates R-5, R-6, R-10) and Commercial/ Industrial Service (Rates G-40, G-50, G-41, G-42, G-51, G-52) customers.

### **4.0 DEFINITIONS**

The following definitions shall apply throughout the Tariff:

1. Actual Base Revenues is the revenue billed for a Customer Class through the Company’s customer charge and distribution charges plus the change in unbilled revenues. This excludes revenues billed through the RDAF. If a special contract customer as included as part of the Company’s most recent base rate case moves to service under one of the Company’s firm Rate Schedules, their associated billed revenue shall be excluded from Actual Base Revenue.
2. Actual Number of Customers is the number of customers for the applicable customer class. Actual Number of Customers shall be based on the monthly equivalent bills for a customer class. If a special contract customer as presented as part of the Company’s most recent base rate case moves to service under one of the Company’s firm Rate Schedules, they shall be excluded from the Actual Number of Customers.
3. Actual Base Revenues per Customer is Actual Base Revenues divided by the Actual Number of Customers for a Customer Class.
4. Adjustment Period is the six-month Peak or Off-Peak period for which the RDAF will be applied for each applicable customer class. The first Adjustment Period shall be the six-month period beginning November 1, 2023. Each subsequent Adjustment Period shall be the six month period beginning May 1 and November 1 of each year.

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## IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE

5. Authorized Base Revenues is the base revenues for a Customer Class as authorized by the Commission in the Company's most recent base rate case or other proceedings that result in an adjustment to base rates, or as adjusted by Commission order. This includes revenues authorized to be recovered through the Company's customer charge and distribution charges. This also includes any step revenue increases authorized by the Commission, but excludes revenues authorized to be recovered from the RDAF.
6. Authorized Base Revenues per Customer is the Authorized Base Revenues divided by the Authorized Number of Customers for a customer class.
7. Authorized Number of Customers is the number of customers in the test year for the applicable Customer Class as used in the rate design in the Company's most recent base rate case or as adjusted by Commission order.
8. Customer Class is the group of customers for purposes of calculating the monthly variance amounts by comparing actual base revenues per customer and authorized base revenues per customer, and defined as follows: Residential Heating (Rates R-5 and R-10), Residential Non-Heating (Rate R-6), Low Annual Use, High Peak Use Commercial & Industrial (Rate G-40), Low Annual Use, Low Peak Use C&I (Rate G-50), Medium Annual Use, High Peak Use C&I (Rate G-41), Medium Annual Use, Low Peak Use C&I (Rate G-51), High Annual Use, High Peak Use C&I (Rate G-42), and High Annual Use, Low Peak Use C&I (Rate G-52).
9. Measurement Period is the six-month Peak or Off-Peak period in which the Company will measure variances between actual base revenues per customer and authorized base revenues per customer for each customer class. The first Measurement Period shall begin August 1, 2022. Each subsequent Measurement Period shall be the six month periods beginning November 1 and May 1 of each year.
10. Off-Peak Period is the continuous period from May 1st through October 31st.
11. Peak Period is the continuous period from November 1st through April 30th.
12. Rate Class Group is the combination of Customer Classes into four groups (1) Residential Heating (R-5 and R-10); (2) Residential Non-Heating (R-6); (3) C&I High Load Factor (G-50, G-51, G-52); (4) C&I Low Load Factor (G-40, G-41, G-42).
13. Revenue Decoupling Adjustment ("RDA") is the cumulative monthly revenue variances, carrying costs and reconciliation amount for each Measurement Period and each Rate Class Group. The RDA forms the basis for RDAF.

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## **IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

### **5.0 CALCULATION OF REVENUE DECOUPLING ADJUSTMENT FACTOR**

#### **i. Description of RDAF Calculation**

For each month within the applicable Measurement Period, the Company shall calculate the variance between Actual Revenue per Customer and Authorized Revenue per Customer, for each Customer Class as defined in Section 4.0. The revenue per customer variance will be multiplied by the Actual Number of Customers per class, to determine the monthly Customer Class revenue variance. For each month within the applicable Measurement Period, the revenue variance for each Customer Class will be combined by Rate Class Group, and recorded in a deferral account with carrying costs accrued monthly at the prime interest rate as reported by the Wall Street Journal on the first business day of the month preceding the first month of the quarter. Following the end of each six-month Measurement Period, the monthly variances in the applicable Measurement Period shall be totaled by Rate Class Group and combined with carrying costs and any prior period deferral to form the basis for the RDA by group.

The Company will file for implementation of the RDAF 45 days before November 1. The filing will provide the proposed RDAF for the Peak period, for effect November 1, and subsequent Off-Peak period, for effect May 1. The RDA for the Peak period will reflect actual data for the entire six month period while the RDA for the Off-Peak period will reflect actual data for the first three months of the period and estimated data for the remaining three months. The first Off-Peak RDAF will become effective May 1, 2024, thus it will include the initial RDA for August 1, 2022 through October 31, 2022 and the RDA for May 1, 2023 through October 31, 2023. The filing shall include the RDA by Rate Class Group, including prior period reconciliation and calculation of the RDAF. The RDAF shall be calculated as a dollar per therm charge or credit based on the RDA for each group divided by the projected therm sales for each group over the prospective six-month Adjustment Period. The RDAF shall be charged or credited to customer bills during the applicable Adjustment Period.

#### **ii. RDAF Calculation**

##### **1. Monthly Revenue Variance (MRV)**

$$MRV_i^{CC} = (ARPC_i^{CC} - AURPC_i^{CC}) \times ACUST_i^{CC}$$

Where:

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## IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE

$ACUST_i^{CC}$ : Actual number of customers for month i for applicable Customer Class.

$ARPC_i^{CC}$ : Actual Base Revenue Per Customer for month i for applicable Customer Class, derived as:

$$ARPC_i^{CC} = \frac{\text{Actual Month i Revenue for Customer Class}}{\text{Actual Month i Bills for Customer Class}}$$

$AURPC_i^{CC}$ : Authorized Base Revenue Per Customer for month i for applicable Customer Class, derived as:

$$AURPC_i^{CC} = \frac{\text{Authorized Month i Revenue for Customer Class}}{\text{Authorized Month i Bills for Customer Class}}$$

CC: The eight Customer Classes as defined in Section 4.0.

i: The six months of each Measurement Period

### 2. Revenue Decoupling Adjustment (RDA)

$$RDA^{RCG} = \left[ \sum_{i=1}^6 MRV_i^{RCG} + \text{CarryingCosts}_i^{RCG} \right] + REC_p^{RCG}$$

Where:

RCG: The Rate Class Groups as defined in Section 4.0.

$\text{CarryingCosts}_i^{RCG}$ : Carrying Costs on the deferral account balance calculated at Prime rate for month i for applicable Rate Class Group.

$REC_p^{RCG}$ : RDAC Reconciliation Balance from prior period p as defined in Section 7.0.

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Issued by: Robert B. Hevert  
Title: Sr. Vice President

NHPUC No. 12 – Gas  
Northern Utilities, Inc.

First Revised Page 167  
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## IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE

### 3. RDA subject to Adjustment Cap

IF:  $|RDA^{RCG}| > RDC^{RCG}$

THEN:  $RDA^{RCG} = RDC^{RCG}$

AND:  $REC_C^{RCG} = RDA^{RCG} - RDC^{RCG}$

Where:

$|RDA^{RCG}|$ : Absolute Value of RDA for each Rate Class Group.

$RDC^{RCG}$ : The Revenue Decoupling Cap that equals four and one-quarter (4.25) percent of approved distribution revenues for each Rate Class Group over the relevant Measurement Period(s).

$REC_C^{RCG}$ : RDAC Reconciliation Balance for current period as defined in Section 7.0.

### iii. **RDAF Calculation**

$$RDAF^{RCG} = -1 \times \frac{RDA^{RCG}}{FS^{RCG}}$$

Where:

$FS^{RCG}$ : The forecasted therm Sales for the Adjustment Period for the applicable Rate Class Group

## **6.0 Application of the RDAF to Customer Bills**

The RDAF (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent and will be applied to the monthly billed sales for each customer during the applicable Adjustment Period.

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## **IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

### **7.0 RDAC Reconciliation**

The deferred balance shall contain the accumulated difference between the authorized RDA for the Adjustment Period determined in accordance with Section 5.0, and actual revenues received by the Company through application of the RDAF to customer bills in the Adjustment Period. Carrying costs shall be calculated on the average monthly balance of the deferred balance using the prime interest rate.

### **8.0 Revenue Decoupling Adjustment Cap**

The RDA for each Adjustment Period, determined in accordance with Section 5.0, may not exceed four and one-quarter percent (4.25%) of approved distribution revenues as established in the Company's most recent base rate case, including any adjustment due to a step. The cap shall be determined separately for each Rate Class Group over the relevant Measurement Period and shall apply to over- and under-recoveries. To the extent that the application of the RDA cap results in a RDA for a Rate Class Group that is less than that calculated in accordance with Section 5.0, the difference shall be deferred and included in the RDAC Reconciliation for recovery in the subsequent Adjustment Period. Carrying costs shall be calculated on the average monthly balance using the prime interest rate.

### **9.0 Information to be Filed with the Commission**

Information pertaining to the RDAC will be filed annually with the Commission 45 days before November 1 consistent with the filing requirements of all costs and revenue information included in the Tariff. Such information shall include:

1. Calculation of monthly revenue variances for each Customer Class.
2. Determination of Revenue Decoupling Adjustment for the upcoming Adjustment Period for each Rate Class Group.
3. Calculation of the Revenue Decoupling Adjustment Factors for each Rate Class Group, to be utilized in the upcoming applicable Adjustment Period. If distribution rates change during a Measurement Period, the monthly revenue per customer for the remaining months of the Measurement Period will be revised and filed with the Commission.

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NHPUC No. 12 – Gas  
Northern Utilities, Inc.

## NORTHERN UTILITIES, INC.

**~~SUPPLEMENT NO. 1~~** This Schedule has been deleted

Issued: ~~October 8, 2021~~ May XX,  
2022  
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Issued By: Robert B. Hevert

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NHPUC No. 12 – Gas  
Northern Utilities, Inc.

Supplement No. 1  
~~First~~ Second Revised Page 1  
Superseding ~~Original~~ First Revised Page 1

## **SUPPLEMENT NO. 1**

### **TEMPORARY RATES**

~~A temporary rate delivery charge of \$0.0683 per therm shall be billed by the Company to all customers taking service under Rate Schedules (R-5, R-6 and R-10) of this tariff.~~

~~A temporary rate delivery charge of \$0.0225 per therm shall be billed by the Company to all customers taking service under Rate Schedules (G-40, G-41, G-42, G-50, G-51 and G-52) of this tariff.~~ This Schedule has been deleted

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NORTHERN UTILITIES, INC.

Supplement No. 1  
~~Fifth~~<sup>Sixth</sup> Revised Page 2  
Superseding ~~Fourth~~<sup>Fifth</sup> Revised Page 2

**THIS SCHEDULE HAS BEEN DELETED**

**NORTHERN UTILITIES – NEW HAMPSHIRE DIVISION  
SUMMER SEASON RESIDENTIAL RATES**

<b>Summer Season May 2022 – October 2022</b>		<b>Tariff Rates</b>	<b>Total – Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
<b>Residential Heating</b>	<b><u>Tariff Rate R 5:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	—All usage	\$0.6782	\$0.7598	\$1.3959
	<b>LDAC</b>	<b>\$0.0816</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.6361</b>		
<b>Residential Heating Low Income</b>	<b><u>Tariff Rate R 10:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	—All usage	\$0.6782	\$0.7598	\$1.3959
	<b>LDAC</b>	<b>\$0.0816</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.6361</b>		
<b>-Discount*</b>	Monthly Customer Charge	\$0.00	\$0.00	\$0.00
<b>-Discount*</b>	—All usage	\$0.0000	\$0.0000	\$0.0000
<b>-Discount*</b>	<b>LDAC</b>	<b>\$0.0000</b>		
<b>-Discount*</b>	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	<b>\$0.0000</b>		
<b>Residential Non-Heating</b>	<b><u>Tariff Rate R 6:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	—All usage	\$0.7153	\$0.7969	\$1.4330
	<b>LDAC</b>	<b>\$0.0816</b>		
<b>-</b>	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.6361</b>		

\*: Discount applicable to winter months November through April only.

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Title:

Robert B. Hevert

Senior Vice President



NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

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**THIS SCHEDULE HAS BEEN DELETED**

**~~NORTHERN UTILITIES – NEW HAMPSHIRE DIVISION~~**  
**~~SUMMER SEASON C&I RATES~~**

<b>Summer Season May 2022 – October 2022</b>		<b>Tariff Rates</b>	<b>Total— Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
<b>C&amp;I Low Annual/High Winter</b>	<b><u>Tariff Rate G 40:</u></b>			
	Monthly Customer Charge	\$75.09	<b>\$75.09</b>	<b>\$75.09</b>
	—All usage	\$0.2090	<b>\$0.2594</b>	<b>\$0.9224</b>
	<b>LDAC</b>	<b>\$0.0504</b>		
	<b>Gas Cost Adjustment:</b>			
	—Cost of Gas	<b>\$0.6630</b>		
<b>C&amp;I Low Annual/Low Winter</b>	<b><u>Tariff Rate G 50:</u></b>			
	Monthly Customer Charge	\$75.09	<b>\$75.09</b>	<b>\$75.09</b>
	—All usage	\$0.2090	<b>\$0.2594</b>	<b>\$0.8519</b>
	<b>LDAC</b>	<b>\$0.0504</b>		
	<b>Gas Cost Adjustment:</b>			
	—Cost of Gas	<b>\$0.5925</b>		
<b>C&amp;I Medium Annual/High Winter</b>	<b><u>Tariff Rate G 41:</u></b>			
	Monthly Customer Charge	\$222.64	<b>\$222.64</b>	<b>\$222.64</b>
	—All usage	\$0.2120	<b>\$0.2624</b>	<b>\$0.9254</b>
	<b>LDAC</b>	<b>\$0.0504</b>		
	<b>Gas Cost Adjustment:</b>			
	—Cost of Gas	<b>\$0.6630</b>		
<b>C&amp;I Medium Annual/Low Winter</b>	<b><u>Tariff Rate G 51:</u></b>			
	Monthly Customer Charge	\$222.64	<b>\$222.64</b>	<b>\$222.64</b>
	—First 1,000 therms	\$0.1562	<b>\$0.2066</b>	<b>\$0.7991</b>
	—All usage over 1,000 therms	\$0.1312	<b>\$0.1816</b>	<b>\$0.7741</b>
	<b>LDAC</b>	<b>\$0.0504</b>		
	<b>Gas Cost Adjustment:</b>			
	—Cost of Gas	<b>\$0.5925</b>		
<b>C&amp;I High Annual/High Winter</b>	<b><u>Tariff Rate G 42:</u></b>			
	Monthly Customer Charge	\$1,335.81	<b>\$1,335.81</b>	<b>\$1,335.81</b>
	—All usage	\$0.1413	<b>\$0.1917</b>	<b>\$0.8547</b>
	<b>LDAC</b>	<b>\$0.0504</b>		
	<b>Gas Cost Adjustment:</b>			
	—Cost of Gas	<b>\$0.6630</b>		
<b>C&amp;I High Annual/Low Winter</b>	<b><u>Tariff Rate G 52:</u></b>			
	Monthly Customer Charge	\$1,335.81	<b>\$1,335.81</b>	<b>\$1,335.81</b>
	—All usage	\$0.1017	<b>\$0.1521</b>	<b>\$0.7446</b>
	<b>LDAC</b>	<b>\$0.0504</b>		
	<b>Gas Cost Adjustment:</b>			
	—Cost of Gas	<b>\$0.5925</b>		

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**THIS SCHEDULE HAS BEEN DELETED**

**~~NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION  
WINTER SEASON RESIDENTIAL RATES~~**

<b><del>Winter Season November 2021 - April 2022</del></b>		<b><del>Tariff Rates</del></b>	<b><del>Total Delivery Rates (Includes LDAC)</del></b>	<b><del>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</del></b>
<del>Residential Heating</del>	<del><b><u>Tariff Rate R-5:</u></b></del>			
	<del>Monthly Customer Charge</del>	<del>\$22.20</del>	<del>\$22.20</del>	<del>\$22.20</del>
	<del>—All Usage</del>	<del>\$0.7603</del>	<del>\$0.8261</del>	<del>\$1.7723</del>
	<del><b>LDAC</b></del>	<del>\$0.0658</del>		
	<del><b><u>Gas Cost Adjustment:</u></b></del>	<del>\$0.9462</del>		
	<del>—Cost of Gas</del>			
<del>Residential Heating Low Income</del>	<del><b><u>Tariff Rate R-10:</u></b></del>			
	<del>Monthly Customer Charge</del>	<del>\$22.20</del>	<del>\$22.20</del>	<del>\$22.20</del>
	<del>—All Usage</del>	<del>\$0.7603</del>	<del>\$0.8261</del>	<del>\$1.7723</del>
	<del><b>LDAC</b></del>	<del>\$0.0658</del>		
	<del><b><u>Gas Cost Adjustment:</u></b></del>	<del>\$0.9462</del>		
	<del>—Cost of Gas</del>			
<del>45% Low Income Discount</del>	<del>Monthly Customer Charge</del>	<del>(\$9.99)</del>	<del>(\$9.99)</del>	<del>(\$9.99)</del>
	<del>—All Usage</del>	<del>(\$0.3421)</del>	<del>(\$0.3421)</del>	<del>(\$0.7679)</del>
	<del><b>LDAC</b></del>	<del>\$0.0000</del>		
	<del><b><u>Gas Cost Adjustment:</u></b></del>			
	<del>—Cost of Gas</del>	<del>(\$0.4258)</del>		
<del>Residential Non-Heating</del>	<del><b><u>Tariff Rate R-6:</u></b></del>			
	<del>Monthly Customer Charge</del>	<del>\$22.20</del>	<del>\$22.20</del>	<del>\$22.20</del>
	<del>—All Usage</del>	<del>\$0.7153</del>	<del>\$0.7811</del>	<del>\$1.7273</del>
	<del><b>LDAC</b></del>	<del>\$0.0658</del>		
	<del><b><u>Gas Cost Adjustment:</u></b></del>	<del>\$0.9462</del>		
	<del>—Cost of Gas</del>			

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 NORTHERN UTILITIES, INC.

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**THIS SCHEDULE HAS BEEN DELETED**

**~~NORTHERN UTILITIES – NEW HAMPSHIRE DIVISION~~**  
**~~WINTER SEASON C&I RATES~~**

<b>Winter Season November 2021 – April 2022</b>		<b>Tariff Rates</b>	<b>Total – Delivery Rates (Includes LDAC)</b>	<b><u>Total Billed Rates</u> Tariff Rates, LDAC Plus Cost of Gas</b>
<b><del>C&amp;I Low Annual/High Winter</del></b>	<b><u>Tariff Rate G 40:</u></b>			
	Monthly Customer Charge	\$75.09	\$75.09	\$75.09
	—First 75 therms	\$0.2090	\$0.2538	\$1.3244
	—All usage over 75 therms	\$0.2090	\$0.2538	\$1.3244
	LDAC	\$0.0448		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	\$1.0706		
<b><del>C&amp;I Low Annual/Low Winter</del></b>	<b><u>Tariff Rate G 50:</u></b>			
	Monthly Customer Charge	\$75.09	\$75.09	\$75.09
	—First 75 therms	\$0.2090	\$0.2585	\$1.2193
	—All usage over 75 therms	\$0.2090	\$0.2585	\$1.2193
	LDAC	\$0.0495		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	\$0.9608		
<b><del>C&amp;I Medium Annual/High Winter</del></b>	<b><u>Tariff Rate G 41:</u></b>			
	Monthly Customer Charge	\$222.64	\$222.64	\$222.64
	—All usage	\$0.2650	\$0.3098	\$1.3804
	LDAC	\$0.0448		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	\$1.0706		
<b><del>C&amp;I Medium Annual/Low Winter</del></b>	<b><u>Tariff Rate G 51:</u></b>			
	Monthly Customer Charge	\$222.64	\$222.64	\$222.64
	—First 1,300 therms	\$0.1937	\$0.2385	\$1.1993
	—All usage over 1,300 therms	\$0.1624	\$0.2072	\$1.1680
	LDAC	\$0.0448		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	\$0.9608		
<b><del>C&amp;I High Annual/High Winter</del></b>	<b><u>Tariff Rate G 42:</u></b>			
	Monthly Customer Charge	\$1,335.81	\$1,335.81	\$1,335.81
	—All usage	\$0.2209	\$0.2657	\$1.3363
	LDAC	\$0.0448		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	\$1.0706		
<b><del>C&amp;I High Annual/Low Winter</del></b>	<b><u>Tariff Rate G 52:</u></b>			
	Monthly Customer Charge	\$1,335.81	\$1,335.81	\$1,335.81
	—All usage	\$0.1945	\$0.2393	\$1.2001
	LDAC	\$0.0448		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	\$0.9608		

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## **II. GENERAL TERMS AND CONDITIONS**

### **4. Application and Contract**

Application for service may be made ~~at any business office of the Company~~ through the Company's website or by contacting the Company by phone. Whether or not a signed application for service is made by the Customer and accepted by the Company, the rendering of the service by the Company and its use by the Customer shall be deemed a contract between the parties and subject to all provisions of the Tariff, as in effect from time to time, applicable to the service. Application for service to a multi-unit dwelling which is supplied through a single meter, must be made by the building owner who will be the customer of record.

The application or the depositing of any sum of money by the applicant shall not require the Company to render service until the expiration of such time as may be reasonably required by the Company to determine if the applicant has complied with the provisions of these Terms and Conditions and as may reasonably be required by the Company to install the required service facilities.

The Company shall not be required to serve any applicant if the distance of the premises to be served from an existing suitable distribution main, or the difficulty of access thereto, is such that the estimated income (revenue excluding gas costs) from the service applied for is insufficient to yield a reasonable return to the Company unless such application is accompanied by a cash payment or an undertaking satisfactory to the Company guaranteeing a stipulated revenue for a definite period of time or both.

Where service under the Rate Schedules is to be used for temporary purposes only, the Customer may be required to pay the cost of installation and removal of equipment required to render service in addition to payments for gas consumed. Said costs of installation and removal may be required to be paid in advance of any construction by the Company. If, in the Company's sole judgment, any such installation presents unusual difficulties as to metering the service supplied, the Company may estimate consumption for purposes of applying the Rate Schedule, and the Company will notify the Customer prior to turn-on of the estimated amount to be billed.

### **5. Assignment of Rate Schedule**

Rates are available for various classes of Customers. The conditions under which they are applicable are set forth in the Rate Schedules in this Tariff.

Upon application for service or upon request, the applicant or Customer shall be assigned the applicable rate schedule according to its estimated requirements. The Company shall not be held responsible for inaccurate estimates of Customer's requirements and will not refund the difference in charge(s) under different rate schedules.

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## II. GENERAL TERMS AND CONDITIONS

omission or circumstances occasioned by or in consequence of any acts of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, unforeseeable or unusual weather conditions, washouts, arrests and restraint of rulers and peoples, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, line freeze-ups, temporary failure of gas supply, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause except willful default or neglect, whether of the kind herein enumerated, or otherwise, and whether caused or occasioned by or happening on account of the act or omission of Company or Customer or any other person or concern not a party thereto, not reasonably within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome. A failure to settle or prevent any strike or other controversy with employees or with anyone purporting or seeking to represent employees shall not be considered to be a matter within the control of the party claiming suspension.

### 12. Meter Reading, Billing and Payment

The Company's filed rates for service are predicated on the sale and/or Delivery of natural gas, as far as practicable, for a thirty (30) day period. Bills for service will be rendered at regular intervals. The Company may, however, at its option, read some or all meters in alternate months, and render a bi-monthly or monthly bill. If a monthly bill is rendered in the intervening months it shall be based upon an estimated consumption of gas, which bill will be due and payable when rendered. When a meter reading is obtained and an actual quantity of gas is determined, that quantity previously billed the Customer on an estimated basis will be deducted from the total quantity used during the period and a bill rendered for the remaining quantity.

In the event a meter reading cannot be obtained at the regularly scheduled time, ~~whether monthly or in alternate months, postcards (postage pre-paid) may be used by the Company to obtain the reading. If the Customer marks the card accurately and returns it in the time described thereon, the pertinent bill will be based on the card reading;~~ [DC1] otherwise, it a reading will be estimated until access can be obtained. Bills rendered for service on an estimated basis shall have the same force and effect as those based upon actual meter readings.

Bills are due and payable upon presentation. A late payment charge shall be assessed at a rate of one percent per month or fraction thereof on balances unpaid within thirty days after the billing date. When bills are paid by remittance through the mail, the postmark on the envelope will be considered as the date of payment.

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NHPUC No. 12– Gas  
Northern Utilities, Inc.  
Revised Page 22

~~First~~ Second Revised Page 22  
~~Superseding~~ Issued in Lieu of Original First

#### IV. COST OF GAS CHARGE

NHPUC. The table below lists approved costs and amounts:

<u>VARIABLE</u>	<u>DESCRIPTION</u>	<u>CURRENTLY APPROVED AMOUNTS</u>
MISC	Miscellaneous Overhead Costs	<del>\$580,455</del> <u>\$611,875</u>
PS	Production and Storage Capacity Costs	<del>\$476,106</del> <u>\$214,538</u>
WCA%	Working Capital Allowance Percentage	<del>10.029.3</del> supply related net lag days / 365 days x WCCCR

**Where:** WCCCR=Working Capital Carrying Charge Rate

#### 6.2 COGC Formulas

The COGC Formulas shall be computed on an annual basis for the Company's three (3) groups of customer classes as shown in the table below. The computations will use forecasts of seasonal gas costs, carrying charges, sendout volumes, credits and sales volumes. Forecasts may be based on either historical data or Company projections, but must be weather-normalized. Any projections must be documented in full with each filing.

GROUP	CUSTOMER CLASSES
Residential	R-5, R-6 and R-10
Commercial and Industrial: Low Winter	G-50, G-51 and G-52
Commercial and Industrial: High Winter	G-40, G-41 and G-42

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Senior Vice President

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## **V. LOCAL DELIVERY ADJUSTMENT CHARGE**

### **10. Property Tax Adjustment Mechanism (“PTAM”)**

#### **10.1 Purpose**

The purpose of this provision is to establish a procedure that allows Northern Utilities to recover the increase in local property tax expense associated with HB 700 and RSA 72:8-d and -e.

#### **10.2 Applicability**

The PTAM Rate shall be applied to all Firm Sales and Delivery Service customers with the exception of special contract customers who are exempt from the LDAC. The PTAM Rate shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided in this clause.

#### **10.3 Property Tax Adjustment Mechanism Costs (“PTAM”) Allowable for LDAC**

The amount of Property Tax Expense costs is the increase in local property tax expense related to HB 700 beginning in 2020 above the amount of local property tax expense recovery in base rates of ~~\$4,152,8543,492,961~~ established in DG ~~2117-104070~~ and two subsequent Step increases. The prior year deferral shall be charged to the PTAM in January of the subsequent year.

#### **10.4 Effective Date of Property Tax Adjustment Mechanism Rate**

Forty five (45) days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the PTAM Rate applicable to all consumption of tariff customers eligible to receive delivery service for the subsequent twelve month period commencing with billings for gas consumed on and after November 1.

#### **10.5 Property Tax Adjustment Mechanism (“PTAM”) Formula:**

$$\text{PTAM Rate} = \frac{\text{PTAMC} + \text{RA}_{\text{PTAM}}}{\text{A:TP}_{\text{vol}}}$$

and:

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Title: Senior Vice President

Authorized by NHPUC Order No. ~~26,581~~ in Docket No. DG 21-~~104123~~, dated ~~February 15, 2022~~.



## **V. LOCAL DELIVERY ADJUSTMENT CHARGE**

### **11. Regulatory Assessment Adjustment Mechanism (“RAAM”)**

#### **11.1 Purpose**

The purpose of this provision is to establish a procedure that allows Northern Utilities to recover change in the Company’s annual PUC Regulatory Assessment.

#### **11.2 Applicability**

The RAAM Rate shall be applied to all Firm Sales and Delivery Service customers with the exception of special contract customers who are exempt from the LDAC. The RAAM Rate shall be determined annually by the Company as defined below, subject to review and approval by the NHPUC as provided in this clause.

#### **11.3 Regulatory Assessment Adjustment Mechanism Costs (“RAAM”) Allowable for LDAC**

Effective ~~October~~~~August~~ 1, 20~~21~~~~17~~, the amount of the NH PUC regulatory assessment to be charged, or credited, through this clause shall be calculated by taking the total assessment minus the amount in base rates of \$~~552,312~~~~368,964~~ established in DG ~~2117-104~~~~070~~.

#### **11.4 Effective Date of Regulatory Assessment Adjustment Mechanism Rate**

Forty five (45) days prior to November 1 of each year, the Company will file with the NHPUC for its consideration and approval, the Company's request for a change in the RAAM Rate applicable to all consumption of tariff customers eligible to receive delivery service for the subsequent twelve month period commencing with billings for gas consumed on and after November 1.

#### **11.5 Regulatory Assessment Adjustment Mechanism (“RAAM”) Formula:**

$$\text{RAAM Rate} = \frac{\text{RAAMC} + \text{RA}_{\text{RAAM}}}{\text{A:TP}}$$

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## **V. LOCAL DELIVERY ADJUSTMENT CHARGE**

### **Where:**

**RAAMC** The amount of the annual NHPUC regulatory assessment which is above or below the amount of \$~~552,312~~~~368,964~~ in base rates established in Docket ~~2117-104~~~~070~~.

**RA<sub>RAAM</sub>** Reconciliation Adjustment associated with regulatory assessment expense and revenues - Account 173 balance, inclusive of the associated interest, as outlined in Section 11.6

**A:TPvol** Forecast annual firm sales and firm delivery service throughput.

### 11.6 Reconciliation Adjustments

Account 173 shall contain the accumulated difference between revenues toward Regulatory Assessment Expense as calculated by multiplying the RAAM Rate times monthly firm throughput volumes and actual RAAMC, comprised of the regulatory assessment expense, allowed as defined in Section 11.3, plus carrying charges calculated on the average monthly balance using the Federal Reserve Statistical Release prime lending rate and then added to the end-of-month balance.

### 11.7 Application of RAAM Rate to Bills

The RAAM Rate (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent per therm and will be applied to the monthly firm sales volumes and transportation throughput.

### 11.8 Information to be Filed with the NHPUC

Information pertaining to the Regulatory Assessment Adjustment Mechanism (RAAM) costs and revenue shall be filed with the NHPUC consistent with the filing requirements of all costs and revenue information included in the LDAC. An annual RAAM filing will be required forty-five (45) days prior to the effective date of November 1, containing the calculation of the new annual RAAM Rate to become effective November 1. The calculation will reflect the forecasted regulatory assessment expense for the pcoming period, the updated annual RAAM reconciliation balance and throughput forecast for the upcoming annual period.

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Title: Senior Vice President

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE R-5 - RESIDENTIAL HEATING SERVICE**

#### **CHARACTER OF SERVICE**

Natural Gas or its equivalent having a nominal heat content of 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

Service hereunder is available under this rate at single, domestic locations for all purposes in individual private dwellings and individual apartments including condominiums and their facilities which use gas as the principal household heating fuel or at locations which are otherwise deemed ineligible for non-heating service based on availability.

#### **RATE – MONTHLY**

Customer Charge		\$22.20 per month			
Summer	-	<del>First 50</del> All therms	@	\$0. <del>6099</del> <u>8841</u> per therm	
		<del>Excess 50 therms</del>	<del>@</del>	<del>\$0.6099 per therm</del>	
Winter	-	<del>First 50</del> All therms	@	\$0. <del>6920</del> <u>8841</u> per therm	
	-	<del>Excess 50 therms</del>	<del>@</del>	<del>\$0.6920 per therm</del>	

#### **MINIMUM BILL**

The minimum monthly bill for gas service will be the Customer Charge Per Month.

#### **COST OF GAS FACTOR AND LOCAL DELIVERY ADJUSTMENT CLAUSE**

The provisions of the Company's Cost of Gas Charge, Part IV, and the Local Delivery Adjustment Charge, Part V, apply to gas sold under this rate schedule.

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Issued By: ~~Christine Vaughan~~ Robert B. Hevert

Title: Sr. Vice President

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE R-10 - LOW INCOME RESIDENTIAL HEATING SERVICE**

(continued)

#### **RATE – MONTHLY**

Customer Charge				\$22.20 per month
Summer	-	<del>First 50</del> All	@	\$0. <del>6099</del> 8841 per therm
		therms	<del>@</del>	<del>\$0.6099 per therm</del>
		<del>Excess 50</del>		
		<del>therms</del>		
Winter	-	<del>First 50</del> All	@	\$0. <del>6920</del> 8841 per therm
	-	<del>Excess 50</del> therms	<del>@</del>	<del>\$0.6920 per therm</del>

#### **LOW INCOME DISCOUNT ADJUSTMENT**

Effective November 1, 2020, customers taking service under this rate schedule will receive a 45% discount off the customer charge as well as the distribution rate and cost of gas rate during the winter period. The discount does not apply during the summer period and does not apply to the Local Delivery Adjustment Charge.

#### **MINIMUM BILL**

The minimum monthly bill for gas service will be the Customer Charge Per Month.

#### **COST OF GAS FACTOR AND LOCAL DELIVERY ADJUSTMENT CLAUSE**

The provisions of the Company's Cost of Gas Charge, Part IV, and the Local Delivery Adjustment Charge, Part V, apply to gas sold under this rate schedule.

#### **DEFINITIONS**

**Summer** - Defined as being the Company's billing cycles May through October.

**Winter** - Defined as being the Company's billing cycles November through April.

Issued: ~~September 10, 2020~~May XX, 2022

Issued By: Robert B. Hevert

Effective: ~~November 1, 2020~~August 1, 2022

Title: Sr.

Vice President

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## VI. RATE SCHEDULES

### RATE SCHEDULE R-6 - RESIDENTIAL NON-HEATING SERVICE

#### CHARACTER OF SERVICE

Natural Gas or its equivalent having a nominal heat content of 1,000 Btu per cubic foot.

#### APPLICABILITY

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company

#### AVAILABILITY

Service hereunder is available for any residential purpose other than for use as the principal heating fuel except that this rate is not available at locations where usage in the six winter months of November through April is greater than or equal to 80% of annual usage and usage exceeds 100 therms in any winter month.

#### RATE - MONTHLY

Customer Charge		\$22.20 per month	
Summer	-	<del>First 10</del> <u>All</u> therms	@ <del>\$0.6470</del> <u>1.3081</u> per therm
	-	<del>Excess 10 therms</del>	@ <del>\$0.6470 per therm</del>
Winter	-	<del>First 10</del> <u>All</u> therms	@ <del>\$0.6470</del> <u>1.3081</u> per therm
	-	<del>Excess 10 therms</del>	@ <del>\$0.6470 per therm</del>

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Vice President

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NHPUC No 12 - Gas  
Northern Utilities, Inc.  
Revised Page 73

~~Fourth~~ Fifth Revised Page 73  
~~Superseding~~ Issued in Lieu of ~~Third~~ Fourth

## VI. RATE SCHEDULES

### RATE SCHEDULE G-40 - COMMERCIAL AND INDUSTRIAL SERVICE (Low Annual Use, High Winter Use)

#### CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing one thousand (1,000) Btu per cubic foot.

#### APPLICABILITY

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### RATE - MONTHLY

Customer Charge		\$ <del>75.09</del> <u>80.00</u> per month	
Summer	-	<del>First 75</del> <u>All</u> therms	@ \$0. <del>1865</del> <u>2320</u> per therm
	-	<del>Excess 75 therms</del>	@ <del>\$0.1865 per therm</del>
Winter	-	<del>First 75</del> <u>All</u> therms	@ \$0. <del>1865</del> <u>2320</u> per therm
	-	<del>Excess 75 therms</del>	@ <del>\$0.1865 per therm</del>

#### RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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Title: Sr.

Vice President

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-41 - COMMERCIAL AND INDUSTRIAL SERVICE** **(Medium Annual Use, High Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$ <del>222.64</del> <u>225.00</u> per month
Summer	-	All therms	@	\$0. <del>1895</del> <u>2744</u> per therm
Winter	-	All therms	@	\$0. <del>2425</del> <u>2744</u> per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

#### **CHARACTERISTICS OF CUSTOMER**

A Customer receiving service under this schedule must have annual usage of greater than 8,000 therms but less than or equal to 80,000 therms and peak period usage greater than or equal to 67% of annual usage, as determined by the Company's records and procedures.

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Issued By: ~~Christine Vaughan~~ Robert B Hevert  
Sr. Vice President

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-42 - COMMERCIAL AND INDUSTRIAL SERVICE**

**(High Annual Use, High Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$ <del>1,335.81</del> <u>1,350.00</u> per month
Summer	-	All therms	@	\$0. <del>1206</del> <u>2083</u> per therm
Winter	-	All therms	@	\$0. <del>1984</del> <u>2083</u> per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

#### **CHARACTERISTICS OF CUSTOMER**

A Customer receiving service under this schedule must have annual usage greater than 80,000 therms and peak period usage greater than or equal to 67% of annual usage, as determined by the Company's records and procedures.

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Vice President

Issued By: ~~Christine Vaughan~~Robert B Hevert  
Title: Sr.

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## VI. RATE SCHEDULES

### RATE SCHEDULE G-50 - COMMERCIAL AND INDUSTRIAL SERVICE

(Low Annual Use, Low Winter Use)

#### CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### APPLICABILITY

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### RATE - MONTHLY

Customer Charge		\$ <del>75.09</del> <u>80.00</u> per month	
Summer	-	<del>First 75</del> <u>All</u> therms @ \$0. <del>1865</del> <u>2085</u> per	
		<del>Excess 75 therms @</del> therm	
			<del>\$0.1865 per therm</del>
Winter	-	<del>First 75</del> <u>All</u> therms @ \$0. <del>1865</del> <u>2085</u> per	
		<del>Excess 75 therms @</del> therm	
			<del>\$0.1865 per therm</del>

#### RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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Title: Sr.

Vice President

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## VI. RATE SCHEDULES

### RATE SCHEDULE G-51 - COMMERCIAL AND INDUSTRIAL SERVICE (Medium Annual Use, Low Winter Use)

#### CHARACTER OF SERVICE

The standard gas unit is defined as 100 cubic feet of gas containing 1,000Btu per cubic foot.

#### APPLICABILITY

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### AVAILABILITY

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### RATE - MONTHLY

Customer Charge				\$ <del>222.64</del> <u>225.00</u> per month
Summer	-	<del>First 1,000</del> <u>All</u> therms	@	\$0. <del>1337</del> <u>1656</u> per therm
		<del>Excess 1,000 therms</del>	<del>@</del>	<del>\$0.1087 per therm</del>
Winter	-	<del>First 1,300</del> <u>All</u> therms	@	\$0. <del>1712</del> <u>1656</u> per therm
		<del>Excess 1,300 therms</del>	<del>@</del>	<del>\$0.1399 per therm</del>

#### RATE ADJUSTMENT

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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Vice President

Issued By: ~~Christine Vaughan~~ Robert B Hevert  
Title: Sr.

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## **VI. RATE SCHEDULES**

### **RATE SCHEDULE G-52 - COMMERCIAL AND INDUSTRIAL SERVICE** **(High Annual Use, Low Winter Use)**

#### **CHARACTER OF SERVICE**

The standard gas unit is defined as 100 cubic feet of gas containing 1,000 Btu per cubic foot.

#### **APPLICABILITY**

The towns of Atkinson, Brentwood, Dover, Durham, East Kingston, East Rochester, Epping, Exeter, Gonic, Greenland, Hampton, Hampton Falls, Kensington, Kingston, Madbury, Newington, North Hampton, Plaistow, Portsmouth, Rochester, Salem, Seabrook, Somersworth, Stratham and limited areas of Rollinsford and the contiguous territory served by the Company.

#### **AVAILABILITY**

This schedule is available at single locations throughout the territory served by the Company to Commercial and Industrial customers having certain characteristics, as defined below, for all purposes when gas is for their exclusive use and not for resale.

#### **RATE - MONTHLY**

Customer Charge				\$ <del>1,335.81</del> <u>1,350.00</u> per month
Summer	-	All therms	@	\$0. <del>0792</del> <u>1050</u> per therm
Winter	-	All therms	@	\$0. <del>1720</del> <u>1720</u> per therm

#### **RATE ADJUSTMENT**

The above rate is subject to adjustment according to the provisions of the Cost of Gas Charge, Part IV, if applicable, and the Local Delivery Adjustment Charge, Part V.

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Effective: ~~May 1, 2019~~August 1, 2022  
President

Issued By: ~~Christine Vaughan~~Robert B Hevert

Title: Sr. Vice

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NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

~~Tenth~~ Eleventh Revised Page 85  
~~Superseded~~ Issued in Lieu of Ninth Tenth Page 85

**THIS PAGE HAS BEEN DELETED**  
**NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION**  
**WINTER SEASON RESIDENTIAL RATES**

<b>Winter Season November 2020 – April 2021</b>		<b>Tariff Rates</b>	<b>Total— Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
<b>Residential Heating</b> <b>32323.2</b>	<b><u>Tariff Rate R-5:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	— First 50 therms	\$0.6920	\$0.8019	\$1.5334
	— All usage over 50 therms	\$0.6920	\$0.8019	\$1.5334
	<b>LDAC</b>	<b>\$0.1099</b>		
<b><u>Gas Cost Adjustment:</u></b>				
— Cost of Gas		<b>\$0.7315</b>		
<b>Residential Heating</b> <b>Low Income</b>	<b><u>Tariff Rate R-10:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	— First 50 therms	\$0.6920	\$0.8019	\$1.5334
	— All usage over 50 therms	\$0.6920	\$0.8019	\$1.5334
	<b>LDAC</b>	<b>\$0.1099</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	— Cost of Gas	<b>\$0.7315</b>		
	<b>45% Low Income Discount</b>	Monthly Customer Charge (\$9.99)	(\$9.99)	(\$9.99)
	<b>45% Low Income Discount</b>	— First 50 therms (\$0.3114)	(\$0.3114)	(\$0.6406)
	<b>45% Low Income Discount</b>	— All usage over 50 therms (\$0.3114)	(\$0.3114)	(\$0.6406)
<b>No Discount</b>		<b>LDAC</b>		
		\$0.0000		
<b>45% Low Income Discount</b>		<b><u>Gas Cost Adjustment:</u></b>		
		— Cost of Gas (\$0.3292)		
<b>Residential Non-Heating</b> <b>-</b>	<b><u>Tariff Rate R-6:</u></b>			
	Monthly Customer Charge	\$22.20	\$22.20	\$22.20
	— First 10 therms	\$0.6470	\$0.7569	\$1.4884
	— All usage over 10 therms	\$0.6470	\$0.7569	\$1.4884
	<b>LDAC</b>	<b>\$0.1099</b>		
<b><u>Gas Cost Adjustment:</u></b>				
— Cost of Gas		<b>\$0.7315</b>		

Issued: November 4, 2020 May XX, 2022

Effective: With Service Rendered On and After November 1, 2020 August 1, 2022

Authorized by NHPUC Order No. 26,420 in Docket No. DG-20-154 21-104, dated October 30, 2020

Issued by: **Robert B. Hevert**  
Title: **Senior Vice President**

NHPUC No. 12 - Gas  
 NORTHERN UTILITIES, INC.

Twelfth Thirteenth Revised Page 86  
 Superseding Issued in Lieu of Eleventh Twelfth Revised Page 86

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION  
 SUMMER SEASON CURRENTLY EFFECTIVE RESIDENTIAL RATES

Summer Season May 2021 – October 2021		Tariff Rates	Total Delivery Rates (Includes LDAC)	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas
Residential Heating	<b>Tariff Rate R 5:</b> Monthly Customer Charge —First 50 therms All usage —All usage over 50 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$22.20 \$0.6099 \$0.8841 \$0.6099 \$0.1099 \$0.0816 \$0.5398 \$0.9126	\$22.20 \$0.7198 \$0.9657 \$0.7198	\$22.20 \$1.2596 \$1.8783 \$1.2596
Residential Heating Low Income	<b>Tariff Rate R 10:</b> Monthly Customer Charge —First 50 therms All usage —All usage over 50 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$22.20 \$0.6099 \$0.8841 \$0.6099 \$0.1099 \$0.0816 \$0.5398 \$0.9126	\$22.20 \$0.7198 \$0.9657 \$0.7198	\$22.20 \$1.2596 \$1.8783 \$1.2596
No Discount*	Monthly Customer Charge	\$0.00	\$0.00	\$0.00
No Discount*	—First 50 therms All usage	\$0.0000	\$0.0000	\$0.0000
No Discount*	—All usage over 50 therms	\$0.0000	\$0.0000	\$0.0000
No Discount	LDAC	\$0.0000		
No Discount*	Gas Cost Adjustment:			
No Discount*	Cost of Gas	\$0.0000		
Residential Non-Heating	<b>Tariff Rate R 6:</b> Monthly Customer Charge —First 10 therms All Usage —All usage over 10 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$22.20 \$0.6470 \$1.3081 \$0.6470 \$0.1099 \$0.0816 \$0.5398 \$0.9126	\$22.20 \$0.7569 \$1.3897 \$0.7569	\$22.20 \$1.2967 \$2.3023 \$1.2967

\* Discount applicable to winter months April through November only

Issued: ~~September 23, 2021~~ May XX, 2022

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 Title: Senior Vice President

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NHPUC No. 12 - Gas  
NORTHERN UTILITIES, INC.

**Ninth** ~~Tenth~~ Revised Page 87  
**Superseded** ~~Issued in Lieu of Eighth~~ **Ninth** Revised Page 87

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**~~NORTHERN UTILITIES—NEW HAMPSHIRE DIVISION~~**

**~~WINTER SEASON C&I RATES~~**

<b>Winter Season November 2020 – April 2021</b>		<b>Tariff Rates</b>	<b>Total— Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
<b>C&amp;I Low Annual/High Winter 32323.2</b>	<b><u>Tariff Rate G 40:</u></b>			
	Monthly Customer Charge	\$75.09	<b>\$75.09</b>	<b>\$75.09</b>
	—First 75 therms	\$0.1865	<b>\$0.2337</b>	<b>\$0.9774</b>
	—All usage over 75 therms	\$0.1865	<b>\$0.2337</b>	<b>\$0.9774</b>
	<b>LDAC</b>	<b>\$0.0472</b>		
<b>C&amp;I Low Annual/Low Winter 32323.1</b>	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.7437</b>		
	<b><u>Tariff Rate G 50:</u></b>			
	Monthly Customer Charge	\$75.09	<b>\$75.09</b>	<b>\$75.09</b>
	—First 75 therms	\$0.1865	<b>\$0.2337</b>	<b>\$0.8802</b>
<b>C&amp;I Medium Annual/High Winter 32323.4</b>	—All usage	\$0.1865	<b>\$0.2337</b>	<b>\$0.8802</b>
	<b>LDAC</b>	<b>\$0.0472</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.6465</b>		
	<b><u>Tariff Rate G 41:</u></b>			
<b>C&amp;I Medium Annual/Low Winter 32323.3</b>	Monthly Customer Charge	\$222.64	<b>\$222.64</b>	<b>\$222.64</b>
	—All usage	\$0.2425	<b>\$0.2897</b>	<b>\$1.0334</b>
	<b>LDAC</b>	<b>\$0.0472</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.7437</b>		
<b>C&amp;I High Annual/High Winter 32323.6</b>	<b><u>Tariff Rate G 51:</u></b>			
	Monthly Customer Charge	\$222.64	<b>\$222.64</b>	<b>\$222.64</b>
	—First 1,300 therms	\$0.1712	<b>\$0.2184</b>	<b>\$0.8649</b>
	—All usage over 1,300 therms	\$0.1399	<b>\$0.1871</b>	<b>\$0.8336</b>
	<b>LDAC</b>	<b>\$0.0472</b>		
<b>C&amp;I High Annual/Low Winter 32323.5</b>	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.6465</b>		
	<b><u>Tariff Rate G 42:</u></b>			
	Monthly Customer Charge	\$1,335.81	<b>\$1,335.81</b>	<b>\$1,335.81</b>
	—All usage	\$0.1984	<b>\$0.2456</b>	<b>\$0.9893</b>
<b>C&amp;I High Annual/Low Winter 32323.5</b>	<b>LDAC</b>	<b>\$0.0472</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.7437</b>		
	<b><u>Tariff Rate G 52:</u></b>			
	Monthly Customer Charge	\$1,335.81	<b>\$1,335.81</b>	<b>\$1,335.81</b>
<b>C&amp;I High Annual/Low Winter 32323.5</b>	—All usage	\$0.1720	<b>\$0.2192</b>	<b>\$0.8657</b>
	<b>LDAC</b>	<b>\$0.0472</b>		
	<b><u>Gas Cost Adjustment:</u></b>			
	—Cost of Gas	<b>\$0.6465</b>		
	<b><u>Tariff Rate G 52:</u></b>			

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Title: **Senior Vice President**

NHPUC No. 12 - Gas  
 NORTHERN UTILITIES, INC.

Eleventh Twelfth Revised Page 88  
 Superseding Issued in Lieu of Tenth Eleventh Revised Page 88

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION  
 SUMMER SEASON CURRENTLY EFFECTIVE C&I RATES

<b>Summer Season</b> <b>May 2021 – October 2021</b>		<b>Tariff Rates</b>	<b>Total Delivery Rates</b> <b>(Includes LDAC)</b>	<b>Total Billed Rates</b> <b>Tariff Rates, LDAC</b> <b>Plus Cost of Gas</b>
C&I Low Annual/High Winter	<b><u>Tariff Rate G 40:</u></b>			
	Monthly Customer Charge	\$75.09 \$80.00	\$75.09 \$80.00	\$75.09 \$80.00
	<del>—First 75 therms</del> <u>All Usage</u>	<del>\$0.1865</del> <u>\$0.2320</u>	<del>\$0.2337</del> <u>\$0.2824</u>	<del>\$0.8056</del> <u>\$1.2219</u>
	<del>—All usage over 75 therms</del>	<del>\$0.1865</del>	<del>\$0.2337</del>	<del>\$0.8056</del>
	<b>LDAC</b>	\$0.0472 <u>\$0.0504</u>		
C&I Low Annual/Low Winter	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	\$0.5719 <u>\$0.9395</u>		
	<b><u>Tariff Rate G 50:</u></b>			
	Monthly Customer Charge	\$75.09 \$80.00	\$75.09 \$80.00	\$75.09 \$80.00
	<del>—First 75 therms</del> <u>All Usage</u>	<del>\$0.1865</del> <u>\$0.2085</u>	<del>\$0.2337</del> <u>\$0.2589</u>	<del>\$0.7266</del> <u>\$1.1279</u>
C&I Medium Annual/High Winter	<del>—All usage over 75 therms</del>	<del>\$0.1865</del>	<del>\$0.2337</del>	<del>\$0.7226</del>
	<b>LDAC</b>	\$0.0472 <u>\$0.0504</u>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	\$0.4929 <u>\$0.8690</u>		
	<b><u>Tariff Rate G 41:</u></b>			
C&I Medium Annual/Low Winter	Monthly Customer Charge	\$222.64 \$225.00	\$222.64 \$225.00	\$222.64 \$225.00
	All usage	\$0.1895 <u>\$0.2744</u>	<del>\$0.2367</del> <u>\$0.3248</u>	<del>\$0.8086</del> <u>\$1.2643</u>
	<b>LDAC</b>	\$0.0472 <u>\$0.0504</u>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	\$0.5719 <u>\$0.9395</u>		
C&I High Annual/High Winter	<b><u>Tariff Rate G 51:</u></b>			
	Monthly Customer Charge	\$222.64 \$225.00	\$222.64 \$225.00	\$222.64 \$225.00
	<del>—First 1,000 therms</del> <u>All usage</u>	<del>\$0.1337</del> <u>\$0.1656</u>	<del>\$0.1809</del> <u>\$0.2160</u>	<del>\$0.6738</del> <u>\$1.0850</u>
	<del>—All usage over 1,300 therms</del>	<del>\$0.1087</del>	<del>\$0.1559</del>	<del>\$0.6488</del>
	<b>LDAC</b>	\$0.0472 <u>\$0.0504</u>		
C&I High Annual/Low Winter	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	\$0.4929 <u>\$0.8690</u>		
	<b><u>Tariff Rate G 42:</u></b>			
	Monthly Customer Charge	\$1,335.84 \$1,350.00	\$1,335.84 \$1,350.00	\$1,335.84 \$1,350.00
	All usage	\$0.1206 <u>\$0.2083</u>	<del>\$0.1678</del> <u>\$0.2587</u>	<del>\$0.7397</del> <u>\$1.1982</u>
C&I High Annual/Low Winter	<b>LDAC</b>	\$0.0472 <u>\$0.0504</u>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	\$0.5719 <u>\$0.9395</u>		
	<b><u>Tariff Rate G 52:</u></b>			
	Monthly Customer Charge	\$1,335.84 \$1,350.00	\$1,335.84 \$1,350.00	\$1,335.84 \$1,350.00
C&I High Annual/Low Winter	All usage	\$0.0792 <u>\$0.1050</u>	<del>\$0.1264</del> <u>\$0.1554</u>	<del>\$0.6193</del> <u>\$1.0244</u>
	<b>LDAC</b>	\$0.0472 <u>\$0.0504</u>		
	<b><u>Gas Cost Adjustment:</u></b>			
	Cost of Gas	\$0.4929 <u>\$0.8690</u>		
	<b><u>Tariff Rate G 52:</u></b>			

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## **VII. DELIVERY SERVICE TERMS AND CONDITIONS (continued)**

Company on a basis consistent with that utilized for its own operations.

9.3.6 Nominations will be conditionally accepted by the Company pending confirmation by the Transporting Pipeline. The Company will attempt to confirm the nominated volume with the Transporting Pipeline. In the event of a discrepancy between the volume nominated to the Company by the Supplier and the volume nominated by the Supplier to the Transporting Pipeline, the lower volume will be deemed confirmed. The Company will allocate such discrepancy based on a predetermined allocation method set forth in the Supplier Service Agreement. If no predetermined allocation method has been established prior to the event of such discrepancy, the Company will allocate the discrepancy on a pro rata basis.

9.3.7 Nominations may be rejected, at the sole reasonable discretion of the Company, if they do not satisfy the conditions for Delivery Service in effect from time to time.

### **9.4 Determination of Receipts**

9.4.1 The quantity of Gas deemed received by the Company for the Supplier's Aggregation Pool at the Designated Receipt Point(s) will equal the volume so scheduled by the Transporting Pipeline(s).

9.4.2 The Company Gas Allowance will be assessed against receipts pursuant to Part VII, Section 8 of this tariff.

### **9.5 Metering and Determination of Deliveries**

9.5.1 The Company shall furnish and install, at the Customer's expense, telemetering equipment and any related equipment for the purpose of measuring Gas Usage at each Customer's Delivery Point. Telemetering equipment shall remain the property of the Company at all times. The Company shall require each Customer to install and maintain, at the Customer's expense, reliable telephone lines and electrical connections that meet the Company's operating requirements. The Company may require the Customer to furnish a dedicated telephone line. If the Customer fails to maintain such telephone lines and electrical connections for fourteen (14) consecutive days after notification by the Company, the Company may discontinue service to the Customer. If the customer requests or if an existing phone line is not providing adequate service, the Company may provide communication via cell modem technology for a monthly charge as listed in Appendix A.

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NHPUC No. 12 – Gas  
Northern Utilities, Inc.

~~Fourth-Fifth~~ Revised Page 141  
Superseding ~~Third-Fourth~~ Revised Page  
141

## **VII. DELIVERY SERVICE TERMS AND CONDITIONS**

### **APPENDIX A**

#### **Schedule of Administrative Fees and Charges**

**I. Supplier Balancing Charge:**      **\$0.71 per MMBtu** of Daily Imbalance Volumes

- Updated effective every November 1 to reflect the Company's latest balancing resources and associated capacity costs.
- Daily Imbalance Volumes represent the difference between ATV and ATV adjusted for actual EDDs.

**II. Peaking Service Demand Charge:**      **\$ 64.53 per MMBtu** per MDPQ per month for November 2020 through April 2021. Provided on Page 6 of Schedule 21-FXW.

- Updated effective every November 1 to reflect the Company's Peaking resources and associated costs.

**III. Company Allowance Calculation:**      **1.30%** - Provided in Schedule 18-FXW

**IV. Supplier Services and Associated Fees:**

<b><u>SERVICE</u></b>	<b><u>PRICING</u></b>
Pool Administration (required) <b>Non-Daily Metered Pools only</b>	<ul style="list-style-type: none"><li>• \$0.10/month/customer billed @ marketer level</li></ul>
Standard Passthrough Billing (required)	<ul style="list-style-type: none"><li>• \$0.60/customer/month billed @ marketer level</li></ul>
Standard Complete Billing (optional – Passthrough Billing fee not required if this service is elected)	<ul style="list-style-type: none"><li>• \$1.50/customer/month billed @ marketer level</li></ul>
Customer Administration (required)	<ul style="list-style-type: none"><li>• \$10/customer/switch billed @ marketer level</li></ul>

**V. Meter Read Charge:**      \$78.00 when customer phone line is not reporting daily data

**VI. Meter Read via Cellular Service:**      **\$20.00 per month**

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\_\_\_\_\_  
Senior Vice President

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## **IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

### **1.0 PURPOSE**

The purpose of the Revenue Decoupling Adjustment Clause (“RDAC”) is to establish procedures that allow the Company to adjust, on a semi-annual basis, rates for distribution service that reconcile Actual Base Revenues per Customer with Authorized Base Revenues per Customer.

### **2.0 EFFECTIVE DATE**

The Revenue Decoupling Adjustment Factor (“RDAF”) shall be effective on the first day of the Adjustment Period, as defined in Section 4.0.

### **3.0 APPLICABILITY**

The RDAF shall apply to the Company’s Residential Service (Rates R-5, R-6, R-10) and Commercial/ Industrial Service (Rates G-40, G-50, G-41, G-42, G-51, G-52) customers.

### **4.0 DEFINITIONS**

The following definitions shall apply throughout the Tariff:

1. Actual Base Revenues is the revenue billed for a Customer Class through the Company’s customer charge and distribution charges plus the change in unbilled revenues. This excludes revenues billed through the RDAF. If a special contract customer as included as part of the Company’s most recent base rate case moves to service under one of the Company’s firm Rate Schedules, their associated billed revenue shall be excluded from Actual Base Revenue.
2. Actual Number of Customers is the number of customers for the applicable customer class. Actual Number of Customers shall be based on the monthly equivalent bills for a customer class. If a special contract customer as presented as part of the Company’s most recent base rate case moves to service under one of the Company’s firm Rate Schedules, they shall be excluded from the Actual Number of Customers.
3. Actual Base Revenues per Customer is Actual Base Revenues divided by the Actual Number of Customers for a Customer Class.
4. Adjustment Period is the six-month Peak or Off-Peak period for which the RDAF will be applied for each applicable customer class. The first Adjustment Period shall be the six-month period beginning November 1, 2023. Each subsequent Adjustment Period shall be the six month period beginning May 1 and November 1 of each year.

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Title: Sr. Vice President

**IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

5. Authorized Base Revenues is the base revenues for a Customer Class as authorized by the Commission in the Company's most recent base rate case or other proceedings that result in an adjustment to base rates, or as adjusted by Commission order. This includes revenues authorized to be recovered through the Company's customer charge and distribution charges. This also includes any step revenue increases authorized by the Commission, but excludes revenues authorized to be recovered from the RDAF.
6. Authorized Base Revenues per Customer is the Authorized Base Revenues divided by the Authorized Number of Customers for a customer class.
7. Authorized Number of Customers is the number of customers in the test year for the applicable Customer Class as used in the rate design in the Company's most recent base rate case or as adjusted by Commission order.
8. Customer Class is the group of customers for purposes of calculating the monthly variance amounts by comparing actual base revenues per customer and authorized base revenues per customer, and defined as follows: Residential Heating (Rates R-5 and R-10), Residential Non-Heating (Rate R-6), Low Annual Use, High Peak Use Commercial & Industrial (Rate G-40), Low Annual Use, Low Peak Use C&I (Rate G-50), Medium Annual Use, High Peak Use C&I (Rate G-41), Medium Annual Use, Low Peak Use C&I (Rate G-51), High Annual Use, High Peak Use C&I (Rate G-42), and High Annual Use, Low Peak Use C&I (Rate G-52).
9. Measurement Period is the six-month Peak or Off-Peak period in which the Company will measure variances between actual base revenues per customer and authorized base revenues per customer for each customer class. The first Measurement Period shall begin August 1, 2022. Each subsequent Measurement Period shall be the six month periods beginning November 1 and May 1 of each year.
10. Off-Peak Period is the continuous period from May 1st through October 31st.
11. Peak Period is the continuous period from November 1st through April 30th.
12. Rate Class Group is the combination of Customer Classes into four groups (1) Residential Heating (R-5 and R-10); (2) Residential Non-Heating (R-6); (3) C&I High Load Factor (G-50, G-51, G-52); (4) C&I Low Load Factor (G-40, G-41, G-42).
13. Revenue Decoupling Adjustment ("RDA") is the cumulative monthly revenue variances, carrying costs and reconciliation amount for each Measurement Period and each Rate Class Group. The RDA forms the basis for RDAF.

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Title: Sr. Vice President

**IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

**5.0 CALCULATION OF REVENUE DECOUPLING ADJUSTMENT FACTOR**

**i. Description of RDAF Calculation**

For each month within the applicable Measurement Period, the Company shall calculate the variance between Actual Revenue per Customer and Authorized Revenue per Customer, for each Customer Class as defined in Section 4.0. The revenue per customer variance will be multiplied by the Actual Number of Customers per class, to determine the monthly Customer Class revenue variance. For each month within the applicable Measurement Period, the revenue variance for each Customer Class will be combined by Rate Class Group, and recorded in a deferral account with carrying costs accrued monthly at the prime interest rate as reported by the Wall Street Journal on the first business day of the month preceding the first month of the quarter. Following the end of each six-month Measurement Period, the monthly variances in the applicable Measurement Period shall be totaled by Rate Class Group and combined with carrying costs and any prior period deferral to form the basis for the RDA by group.

The Company will file for implementation of the RDAF 45 days before November 1. The filing will provide the proposed RDAF for the Peak period, for effect November 1, and subsequent Off-Peak period, for effect May 1. The RDA for the Peak period will reflect actual data for the entire six month period while the RDA for the Off-Peak period will reflect actual data for the first three months of the period and estimated data for the remaining three months. The first Off-Peak RDAF will become effective May 1, 2024, thus it will include the initial RDA for August 1, 2022 through October 31, 2022 and the RDA for May 1, 2023 through October 31, 2023. The filing shall include the RDA by Rate Class Group, including prior period reconciliation and calculation of the RDAF. The RDAF shall be calculated as a dollar per therm charge or credit based on the RDA for each group divided by the projected therm sales for each group over the prospective six-month Adjustment Period. The RDAF shall be charged or credited to customer bills during the applicable Adjustment Period.

**ii. RDAF Calculation**

**1. Monthly Revenue Variance (MRV)**

$$MRV_i^{CC} = (ARPC_i^{CC} - AURPC_i^{CC}) \times ACUST_i^{CC}$$

Where:

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**IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

$ACUST_i^{CC}$ : Actual number of customers for month  $i$  for applicable Customer Class.

$ARPC_i^{CC}$ : Actual Base Revenue Per Customer for month  $i$  for applicable Customer Class, derived as:

$$\underline{ARPC_i^{CC} = \frac{\text{Actual Month } i \text{ Revenue for Customer Class}}{\text{Actual Month } i \text{ Bills for Customer Class}}}$$

$AURPC_i^{CC}$ : Authorized Base Revenue Per Customer for month  $i$  for applicable Customer Class, derived as:

$$\underline{AURPC_i^{CC} = \frac{\text{Authorized Month } i \text{ Revenue for Customer Class}}{\text{Authorized Month } i \text{ Bills for Customer Class}}}$$

$CC$ : The eight Customer Classes as defined in Section 4.0.

$i$ : The six months of each Measurement Period

2. Revenue Decoupling Adjustment (RDA)

$$RDA^{RCG} = \left[ \sum_{i=1}^6 MRV_i^{RCG} + \text{CarryingCosts}_i^{RCG} \right] + REC_p^{RCG}$$

Where:

$RCG$ : The Rate Class Groups as defined in Section 4.0.

$\text{CarryingCosts}_i^{RCG}$ : Carrying Costs on the deferral account balance calculated at Prime rate for month  $i$  for applicable Rate Class Group.

$REC_p^{RCG}$ : RDAC Reconciliation Balance from prior period  $p$  as defined in Section 7.0.

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Northern Utilities, Inc.

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**IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

3. RDA subject to Adjustment Cap

$$\text{IF: } |RDA^{RCG}| > RDC^{RCG}$$

$$\text{THEN: } RDA^{RCG} = RDC^{RCG}$$

$$\text{AND: } REC_C^{RCG} = RDA^{RCG} - RDC^{RCG}$$

Where:

$|RDA^{RCG}|$ : Absolute Value of RDA for each Rate Class Group.

$RDC^{RCG}$ : The Revenue Decoupling Cap that equals four and one-quarter (4.25) percent of approved distribution revenues for each Rate Class Group over the relevant Measurement Period(s).

$REC_C^{RCG}$ : RDAC Reconciliation Balance for current period as defined in Section 7.0.

iii. **RDAF Calculation**

$$RDAF^{RCG} = -1 \times \frac{RDA^{RCG}}{FS^{RCG}}$$

Where:

$FS^{RCG}$ : The forecasted therm Sales for the Adjustment Period for the applicable Rate Class Group

**6.0 Application of the RDAF to Customer Bills**

The RDAF (\$ per therm) shall be calculated to the nearest one one-hundredth of a cent and will be applied to the monthly billed sales for each customer during the applicable Adjustment Period.

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## **IX. REVENUE DECOUPLING ADJUSTMENT CLAUSE**

### **7.0 RDAC Reconciliation**

The deferred balance shall contain the accumulated difference between the authorized RDA for the Adjustment Period determined in accordance with Section 5.0, and actual revenues received by the Company through application of the RDAF to customer bills in the Adjustment Period. Carrying costs shall be calculated on the average monthly balance of the deferred balance using the prime interest rate.

### **8.0 Revenue Decoupling Adjustment Cap**

The RDA for each Adjustment Period, determined in accordance with Section 5.0, may not exceed four and one-quarter percent (4.25%) of approved distribution revenues as established in the Company's most recent base rate case, including any adjustment due to a step. The cap shall be determined separately for each Rate Class Group over the relevant Measurement Period and shall apply to over- and under-recoveries. To the extent that the application of the RDA cap results in a RDA for a Rate Class Group that is less than that calculated in accordance with Section 5.0, the difference shall be deferred and included in the RDAC Reconciliation for recovery in the subsequent Adjustment Period. Carrying costs shall be calculated on the average monthly balance using the prime interest rate.

### **9.0 Information to be Filed with the Commission**

Information pertaining to the RDAC will be filed annually with the Commission 45 days before November 1 consistent with the filing requirements of all costs and revenue information included in the Tariff. Such information shall include:

1. Calculation of monthly revenue variances for each Customer Class.
2. Determination of Revenue Decoupling Adjustment for the upcoming Adjustment Period for each Rate Class Group.
3. Calculation of the Revenue Decoupling Adjustment Factors for each Rate Class Group, to be utilized in the upcoming applicable Adjustment Period. If distribution rates change during a Measurement Period, the monthly revenue per customer for the remaining months of the Measurement Period will be revised and filed with the Commission.

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NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DEPRECIATION  
ACCRUAL RATES AND GENERAL PLANT RESERVE AMORTIZATION

DG 21-104  
Settlement Attachment 9  
Page 1 of 2

(1)		(2)
LINE NO.	DESCRIPTION	SETTLED DEPRECIATION RATES <sup>(1)</sup>
1	Amortizable Plant:	
2	303 Misc Intangible Plant	N/A
3	Total Amortizable Plant	N/A
4	Mfg. Gas Produc. Plant:	
5	304.2 Land & Rights - Mfg Gas Prod. Pl	N/A
6	305 Struct. And Improvements	N/A
7	320 Other Equipment	N/A
8	321 LNG Equipment	N/A
9	Total Mfg Gas Prod. Plant	N/A
10	Distribution Plant:	
11	374.4 Land Rgts, Other Distr Sy	N/A
12	374.5 Land Rgts, Rights Of Way	N/A
13	375.2 Structures - City Gate Meas & Reg	2.00%
14	375.7 Structures - Other Dist Sys	2.00%
15	376.2 Mains - Coated/Wrapped	2.91%
16	376.3 Mains - Bare Steel	N/A
17	376.4 Mains - Plastic	2.91%
18	376.5 Mains - Joint Seals	N/A
19	376.6 Mains - Cathodic Protection	5.33%
20	376.8 Mains - Cast Iron	N/A
21	378.2 Mea & Reg Station Eq, Regulating	3.99%
22	379 Mea & Reg Ta-G	3.99%
23	380 Services	4.22%
24	381 Meters	3.83%
25	382 Meter Installations	3.66%
26	383 House Regulators	3.33%
27	386 Water Heaters/Conversion Burners	6.84%
28	Total Distribution Plant	3.44%
29	General Plant:	
30	389.1 Land	N/A
31	391.10 Off Furn & Eq.- Unspecified	6.67%
32	393 Stores Equipment	N/A
33	394.10 Tools, Garage & Service Equipment	3.68%
34	396 Power Operated Equipment	N/A
35	397 Communication Equipment	5.36%
36	397.25 Metscan Communication Equip	N/A
37	397.35 ERT Automatic Reading Dev	3.18%
38	Total General Plant	4.08%
39	Total Plant in Service	3.46%
40	<u>Reserve Adjustment For Amortization<sup>2</sup></u>	
41	391.10 Off Furn & Eq.- Unspecified	(\$3,627)
42	394.10 Tools, Garage & Service Equipment	(26,530)
43	397 Communication Equipment	(79,858)
44	397.35 ERT Automatic Reading Dev	(35,782)
45	Total Reserve Adjustment for Amortization	(\$145,798)
46	<u>Leak Prone Pipe<sup>2</sup></u>	
47	376.3 Mains - Bare Steel	\$464,724
48	376.8 Mains - Cast Iron	243,173
49	Total Leak Prone Pipe Amortization	\$707,897

Notes

(1) Refer to Energy 4-36 Attachment 1

(2) Refer to testimony and schedules of Mr. Allis



**NORTHERN UTILITIES  
AMORTIZATION OF THEORETICAL  
DEPRECIATION RESERVE IMBALANCE**

**DG 21-104  
Settlement Attachment 9  
Page 2 of 2**

<b>LINE NO.</b>	<b>(1)</b>		<b>(2)</b>	
	<b>DESCRIPTION</b>		<b>TOTAL</b>	
<b>1</b>	<b>Depreciation Reserve Imbalance <sup>(1)</sup></b>		<b>\$</b>	<b>15,740,832</b>
<b>2</b>	<b>Recovery Period</b>			<b>10 years</b>
<b>3</b>	<b>Annual Recovery</b>		<b>\$</b>	<b>1,574,083</b>

**Notes**

**(1) Refer to DOE Response to Tech Session 1-2**

Northern Utilities, Inc.  
Docket No. DG 21-104  
Department of Energy Data Requests – Set 4

Date Request Received: 12/6/21  
Request No. Energy 4-36

Date of Response: 12/20/21  
Witness: Ned W. Allis

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**REQUEST:**

Depreciation. Reference Schedule RevReq-3-16, Bates 158.

- a. Please provide a schedule comparing Whole Life and Remaining Life methodologies.
- b. Please provide a revised Schedule RevReq 3-16 using Whole Life.
- c. Please provide the resultant theoretical reserve imbalance assuming Whole Life.

**RESPONSE:**

- a. Please see Energy 4-36 Attachment 1 (in Excel format) to this response for a schedule showing the whole life depreciation rates using the depreciation parameters recommended in the depreciation study as well as a comparison of the resulting depreciation rates and accruals using the remaining life and whole life techniques.
- b. Please see Energy 4-36 Attachment 2 (in Excel format) to this response for a revised Schedule RevReq 3-16 using the whole life technique. The revised Schedule RevReq 3-16 does not reflect the amortization of the theoretical reserve imbalance that would be necessary if the whole life technique is used.
- c. Please see Energy 4-36 Attachment 1 to this response for a schedule showing the theoretical reserve imbalance for each account. The Company's proposal is to use the remaining life technique, which effectively recovers the theoretical reserve imbalance over the remaining life for each account, except for general plant amortization accounts. For general plant amortization accounts the Company's proposal is to address the reserves for these accounts over 5 years.

NORTHERN UTILITIES, INC.  
NEW HAMPSHIRE DIVISION

SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND  
CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2020  
BASED ON THE WHOLE LIFE TECHNIQUE

DEPRECIABLE GROUP		SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2020	CALCULATED ANNUAL ACCRUAL		CALCULATED ACCRUED DEPRECIATION
(1)		(2)	(3)	(4)	AMOUNT	RATE	(7)
GAS PLANT							
DISTRIBUTION PLANT							
375.00	STRUCTURES AND IMPROVEMENTS	55-R2.5	(10)	3,260,871.26	65,283	2.00	1,291,250
	MAINS						
376.20	COATED AND WRAPPED	55-R2.5	(60)	29,746,227.02	866,210	2.91	11,688,236
376.40	PLASTIC	55-R2.5	(60)	120,342,184.10	3,504,364	2.91	34,937,879
376.60	CATHODIC PROTECTION	30-S5	(60)	1,082,739.45	57,688	5.33	612,441
	TOTAL MAINS			151,171,150.57	4,428,262	2.93	47,238,556
378.20	MEASURING AND REGULATING STATION EQUIPMENT	30-R2	(20)	7,328,248.14	292,753	3.99	1,543,304
380.00	SERVICES	45-R2.5	(90)	82,837,046.71	3,494,067	4.22	32,473,287
381.00	METERS	30-R2	(15)	4,624,610.24	177,099	3.83	1,856,724
382.00	METER INSTALLATIONS	30-R3	(10)	26,001,685.36	952,442	3.66	8,709,961
383.00	HOUSE REGULATORS	30-R3	0	733,549.58	24,427	3.33	211,178
386.00	OTHER PROPERTY ON CUSTOMERS' PREMISES	12-R2	0	1,978,895.03	135,356	6.84	1,150,464
	TOTAL DISTRIBUTION PLANT			277,936,056.89	9,569,689	3.44	94,474,724
GENERAL PLANT							
391.10	OFFICE FURNITURE AND EQUIPMENT	15-SQ	0	508,134.77	33,893	6.67	279,943
394.10	TOOLS, SHOP AND GARAGE EQUIPMENT						
	FULLY ACCRUED			115,969.89	0	-	115,969
	AMORTIZED	25-SQ	0	1,314,451.52	52,578	4.00	537,121
	TOTAL TOOLS, SHOP AND GARAGE EQUIPMENT			1,430,421.41	52,578	3.68	653,090
397.00	COMMUNICATION EQUIPMENT						
	FULLY ACCRUED			368,887.11	0	-	368,888
	AMORTIZED	15-SQ	0	1,504,593.10	100,356	6.67	802,422
	TOTAL COMMUNICATION EQUIPMENT			1,873,480.21	100,356	5.36	1,171,310
397.35	COMMUNICATION EQUIPMENT - ERTs						
	FULLY ACCRUED			1,814,148.86	0	-	1,814,149
	AMORTIZED	15-SQ	0	1,655,997.32	110,455	6.67	773,241
	TOTAL COMMUNICATION EQUIPMENT - ERTs			3,470,146.18	110,455	3.18	2,587,390
	TOTAL GENERAL PLANT			7,282,182.57	297,282	4.08	4,691,733

NORTHERN UTILITIES, INC.  
NEW HAMPSHIRE DIVISION

SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND  
CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2020  
BASED ON THE WHOLE LIFE TECHNIQUE

DEPRECIABLE GROUP		SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2020	CALCULATED ANNUAL ACCRUAL		CALCULATED ACCRUED DEPRECIATION
(1)		(2)	(3)	(4)	AMOUNT	RATE	(7)
LEAK PRONE PIPE					(5)	(6)	
376.30	MAINS - BARE STEEL			190,836.93	464,724	*	
376.50	MAINS - JOINT SEALS			542,145.01	0	*	
376.80	MAINS - CAST IRON			28,455.49	243,173	*	
TOTAL LEAK PRONE PIPE				761,437.43	707,897		
TOTAL UNRECOVERED RESERVE TO BE AMORTIZED					(145,798)		
TOTAL DEPRECIABLE PLANT				285,979,676.89	10,429,070	3.65	99,166,457
NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED							
303.02	INTANGIBLE SOFTWARE - 10 YEARS			2,064,603.93			
303.30	INTANGIBLE PLANT - MISCELLANEOUS SOFTWARE			5,176,113.26			
304.20	LAND RIGHTS			6,816.33			
374.40	LAND RIGHTS			89,111.32			
374.50	RIGHTS OF WAY			17,910.67			
389.10	LAND			232,946.85			
393.00	STORES EQUIPMENT			31,519.95			
396.00	POWER OPERATED EQUIPMENT			75,266.49			
397.25	COMMUNICATION EQUIPMENT - METSCAN			112,656.43			
TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED				7,806,945.23			
TOTAL GAS PLANT				293,786,622.12			

\* FIVE-YEAR AMORTIZATION OF UNRECOVERED LEAK PRONE PIPE COSTS.

\*\* FIVE-YEAR AMORTIZATION OF UNRECOVERED RESERVE RELATED TO IMPLEMENTATION OF AMORTIZATION ACCOUNTING.

NORTHERN UTILITIES, INC.  
NEW HAMPSHIRE DIVISION

COMPARISON OF WHOLE LIFE AND REMAINING LIFE DEPRECIATION RATES AND ACCRUALS AS OF DECEMBER 31, 2020

DEPRECIABLE GROUP		ORIGINAL COST AS OF DECEMBER 31, 2020	REMAINING LIFE (PROPOSED)				WHOLE LIFE				ACCRUAL DIFFERENCE (11)=(9)-(5)	
			SURVIVOR CURVE	NET SALVAGE PERCENT	CALCULATED ANNUAL ACCRUAL		SURVIVOR CURVE	NET SALVAGE PERCENT	CALCULATED ANNUAL ACCRUAL			
					AMOUNT	RATE			AMOUNT	RATE		
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
DISTRIBUTION PLANT												
375.00	STRUCTURES AND IMPROVEMENTS	3,260,871.26	55-R2.5	(10)	89,338	2.74	55-R2.5	(10)	65,283	2.00	(24,055)	
MAINS												
376.20	COATED AND WRAPPED	29,746,227.02	55-R2.5	(60)	1,123,107	3.78	55-R2.5	(60)	866,210	2.91	(256,897)	
376.40	PLASTIC	120,342,184.10	55-R2.5	(60)	3,460,577	2.88	55-R2.5	(60)	3,504,364	2.91	43,787	
376.60	CATHODIC PROTECTION	1,082,739.45	30-S5	(60)	50,271	4.64	30-S5	(60)	57,688	5.33	7,417	
TOTAL MAINS		151,171,150.57			4,633,955	3.07			4,428,262	3.75	(205,693)	
378.20	MEASURING AND REGULATING STATION EQUIPMENT	7,328,248.14	30-R2	(20)	356,985	4.87	30-R2	(20)	292,753	3.99	(64,232)	
380.00	SERVICES	82,837,046.71	45-R2.5	(90)	3,654,478	4.41	45-R2.5	(90)	3,494,067	4.22	(160,411)	
381.00	METERS	4,624,610.24	30-R2	(15)	247,087	5.34	30-R2	(15)	177,099	3.83	(69,988)	
382.00	METER INSTALLATIONS	26,001,685.36	30-R3	(10)	1,098,766	4.23	30-R3	(10)	952,442	3.66	(146,324)	
383.00	HOUSE REGULATORS	733,549.58	30-R3	0	24,378	3.32	30-R3	0	24,427	3.33	49	
386.00	OTHER PROPERTY ON CUSTOMERS' PREMISES	1,978,895.03	12-R2	0	224,826	11.36	12-R2	0	135,356	6.84	(89,470)	
TOTAL DISTRIBUTION PLANT		277,936,056.89			10,329,813	3.72			9,569,689	3.44	(760,124)	
GENERAL PLANT												
391.10	OFFICE FURNITURE AND EQUIPMENT	508,134.77	15-SQ	0	33,877	6.67	15-SQ	0	33,893	6.67	16	
394.10	TOOLS, SHOP AND GARAGE EQUIPMENT											
	FULLY ACCRUED	115,969.89			0	-			0	-	0	
	AMORTIZED	1,314,451.52	25-SQ	0	52,539	4.00	25-SQ	0	52,578	4.00	39	
TOTAL TOOLS, SHOP AND GARAGE EQUIPMENT		1,430,421.41			52,539	3.67			52,578	3.68	39	
397.00	COMMUNICATION EQUIPMENT											
	FULLY ACCRUED	368,887.11			0	-			0	-	0	
	AMORTIZED	1,504,593.10	15-SQ	0	100,381	6.67	15-SQ	0	100,356	6.67	(25)	
TOTAL COMMUNICATION EQUIPMENT		1,873,480.21			100,381	5.36			100,356	5.36	(25)	
397.35	COMMUNICATION EQUIPMENT - ERTs											
	FULLY ACCRUED	1,814,148.86			0	-			0	-	0	
	AMORTIZED	1,655,997.32	15-SQ	0	110,435	6.67	15-SQ	0	110,455	6.67	20	
TOTAL COMMUNICATION EQUIPMENT - ERTs		3,470,146.18			110,435	3.18			110,455	3.18	20	
TOTAL GENERAL PLANT		7,282,182.57			297,232	4.08			297,282	4.08	50	
LEAK PRONE PIPE												
376.30	MAINS - BARE STEEL	190,836.93			464,724	*			464,724	*	0	
376.50	MAINS - JOINT SEALS	542,145.01			0	*			0	*	0	
376.80	MAINS - CAST IRON	28,455.49			243,173	*			243,173	*	0	
TOTAL LEAK PRONE PIPE		761,437.43			707,897				707,897		0	
RESERVE ADJUSTMENT FOR AMORTIZATION					(147,312)		(145,798)					1,515
TOTAL DEPRECIABLE PLANT		285,979,676.89			11,187,630	3.91			10,429,070	3.65	(758,559)	

\* FIVE-YEAR AMORTIZATION OF UNRECOVERED LEAK PRONE PIPE COSTS.  
\*\* FIVE-YEAR AMORTIZATION OF UNRECOVERED RESERVE RELATED TO IMPLEMENTATION OF AMORTIZATION ACCOUNTING.

NORTHERN UTILITIES, INC.  
NEW HAMPSHIRE DIVISION

COMPARISON OF THE CALCULATED ACCRUED DEPRECIATION AND BOOK DEPRECIATION RESERVE  
AS OF DECEMBER 31, 2020

DEPRECIABLE GROUP (1)		CALCULATED ACCRUED DEPRECIATION (2)	BOOK DEPRECIATION RESERVE (3)	RESERVE IMBALANCE (4)=(3)-(2)
<b>GAS PLANT</b>				
<b>DISTRIBUTION PLANT</b>				
375.00	STRUCTURES AND IMPROVEMENTS	1,291,250	0	(1,291,250)
MAINS				
376.20	COATED AND WRAPPED	11,688,236	4,224,164	(7,464,072)
376.40	PLASTIC	34,937,879	36,382,883	1,445,004
376.60	CATHODIC PROTECTION	612,441	682,660	70,219
TOTAL MAINS		47,238,556	41,289,708	(5,948,848)
378.20	MEASURING AND REGULATING STATION EQUIPMENT	1,543,304	666,376	(876,928)
380.00	SERVICES	32,473,287	28,479,497	(3,993,790)
381.00	METERS	1,856,724	1,226,613	(630,111)
382.00	METER INSTALLATIONS	8,709,961	6,859,297	(1,850,664)
383.00	HOUSE REGULATORS	211,178	212,401	1,223
386.00	OTHER PROPERTY ON CUSTOMERS' PREMISES	1,150,464	0	(1,150,464)
TOTAL DISTRIBUTION PLANT		94,474,724	78,733,892	(15,740,832)
<b>LEAK PRONE PIPE</b>				
376.30	MAINS - BARE STEEL		(2,132,784)	*(2,132,784)
376.50	MAINS - JOINT SEALS		542,145	*(542,145)
376.80	MAINS - CAST IRON		(1,187,409)	*(1,187,409)
TOTAL LEAK PRONE PIPE		0	(2,778,047)	(2,778,047)
TOTAL DEPRECIABLE PLANT		94,474,724	75,955,845	(18,518,879)
<b>AMORTIZED PLANT</b>				
391.10	OFFICE FURNITURE AND EQUIPMENT	279,943	298,078	**18,135
394.10	TOOLS, SHOP AND GARAGE EQUIPMENT	653,090	785,741	**132,651
397.00	COMMUNICATION EQUIPMENT	1,171,310	1,570,602	**399,292
397.35	COMMUNICATION EQUIPMENT - ERTs	2,587,390	2,766,299	**178,909
TOTAL AMORTIZED PLANT		4,691,733	5,420,721	728,988

\* FIVE-YEAR AMORTIZATION OF UNRECOVERED LEAK PRONE PIPE COSTS.

\*\* FIVE-YEAR AMORTIZATION OF UNRECOVERED RESERVE RELATED TO IMPLEMENTATION OF AMORTIZATION ACCOUNTING.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE  
DEPRECIATION ANNUALIZATION USING WHOLE LIFE METHODOLOGY  
12 MONTHS ENDED DECEMBER 31, 2020

Docket No. DG 21-104  
Energy 4-36 Attachment 2  
Page 1 of 1

LINE NO.	(1) DESCRIPTION	(2) PLANT BALANCE 12/31/2020	(3) WHOLE LIFE DEPRECIATION RATES <sup>(1)</sup>	(4) PROFORMED DEPRECIATION EXPENSE
1	Amortizable Plant:			
2	303 Misc Intangible Plant	\$ 12,826,347	N/A	N/A
3	Total Amortizable Plant	12,826,347	N/A	-
4	Mfg. Gas Produc. Plant:			
5	304.2 Land & Rights - Mfg Gas Prod. PI	6,816	N/A	N/A
6	305 Struct. And Improvements	-	N/A	N/A
7	320 Other Equipment	-	N/A	N/A
8	321 LNG Equipment	-	N/A	N/A
9	Total Mfg Gas Prod. Plant	6,816	N/A	-
10	Distribution Plant:			
11	374.4 Land Rgts, Other Distr Sy	89,111	N/A	N/A
12	374.5 Land Rgts, Rights Of Way	17,911	N/A	N/A
13	375.2 Structures - City Gate Meas & Reg	43,350	2.00%	867
14	375.7 Structures - Other Dist Sys	3,217,521	2.00%	64,350
15	376.2 Mains - Coated/Wrapped	29,746,227	2.91%	865,615
16	376.3 Mains - Bare Steel	190,837	N/A	N/A
17	376.4 Mains - Plastic	120,342,184	2.91%	3,501,958
18	376.5 Mains - Joint Seals	542,145	N/A	N/A
19	376.6 Mains - Cathodic Protection	1,082,739	5.33%	57,710
20	376.8 Mains - Cast Iron	28,455	N/A	N/A
21	378.2 Mea & Reg Station Eq, Regulating	7,288,982	3.99%	290,830
22	379 Mea & Reg Ta-G	39,266	3.99%	1,567
23	380 Services	82,837,047	4.22%	3,495,723
24	381 Meters	4,624,610	3.83%	177,123
25	382 Meter Installations	26,001,685	3.66%	951,662
26	383 House Regulators	733,550	3.33%	24,427
27	386 Water Heaters/Conversion Burners	1,978,895	6.84%	135,356
28	Total Distribution Plant	278,804,516	3.44%	9,567,188
29	General Plant:			
30	389.1 Land	232,947	N/A	N/A
31	391.10 Off Furn & Eq.- Unspecified	508,135	6.67%	33,893
32	393 Stores Equipment	31,520	N/A	N/A
33	394.10 Tools, Garage & Service Equipment	1,430,421	3.68%	52,640
34	396 Power Operated Equipment	75,266	N/A	N/A
35	397 Communication Equipment	1,873,480	5.36%	100,419
36	397.25 Metscan Communication Equip	112,656	N/A	N/A
37	397.35 ERT Automatic Reading Dev	3,470,146	3.18%	110,351
38	Total General Plant	7,734,572	4.08%	297,303
39	Total Plant in Service	\$ 299,372,252	3.46%	\$ 9,864,491
40	<u>Reserve Adjustment For Amortization <sup>(1)</sup></u>			
41	391.10 Off Furn & Eq.- Unspecified			(3,627)
42	394.10 Tools, Garage & Service Equipment			(26,530)
43	397 Communication Equipment			(79,858)
44	397.35 ERT Automatic Reading Dev			(35,782)
45	Total Reserve Adjustment for Amortization			(145,798)
46	<u>Leak Prone Pipe <sup>(1)</sup></u>			
47	376.3 Mains - Bare Steel			464,724
48	376.8 Mains - Cast Iron			243,173
49	Total Leak Prone Pipe Amortization			707,897
50	Total Pro Forma Depreciation Expense (Line 39 + Line 45 + Line 49)			10,426,590
51	Annualized Test Year Expense <sup>(2)</sup>			\$ 9,345,585
52	Increase in Depreciation Expense			\$ 1,081,005

Notes

(1) Refer to Energy 4-36 Attachment 1

(2) Refer to Schedule RevReq-3-16, Page 1 of 2, Line 39

Northern Utilities, Inc.  
Docket No. DG 21-104  
Department of Energy Data Requests – Tech Session Set 1

Date Request Received: 1/27/22  
Request No. Energy TS 1-12

Date of Response: 2/10/22  
Witness: N. Allis / C. Goulding / D. Nawazelski

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**REQUEST:**

Depreciation. Follow up to Energy 4-36.

- a. Please confirm that under Whole Life, the pro forma depreciation expense would be \$10,426,590. If the amount is different, please provide the correct amount and where it is located in the response to Energy 4-36
- b. Please confirm that under Whole Life, the Reserve Imbalance that needs to be amortized is \$(18,518,879). If the amount is different, please provide the correct amount and where it is located in the response to Energy 4-36.

**RESPONSE:**

- a. Confirmed that the annualized depreciation expense shown in Energy 4-36 Attachment 2 is \$10,426,590 using the whole life technique. This amount does include the reserve adjustment for general plant amortization accounts but does not include any amortization of the theoretical reserve imbalance.
- b. Confirmed that the theoretical reserve imbalance calculated using the estimates from the depreciation study is negative \$18,518,579. This amount does not include general plant amortization accounts, for which Mr. Allis would recommend a five-year amortization if either the remaining life or whole life technique were used. The negative \$18,518,579 amount is the reserve imbalance to be amortized using the whole life technique, resulting in a positive amortization amount.



Northern Utilities, Inc.  
Docket No.DG 21-104  
Request for Change in Rates  
Date Request Set "Tech Session NU to DOE"

Received: May 3, 2022

Date of Response: May 17, 2022

Request Number: NU-DOE TS-1-2:

Witness: Stephen R. Eckberg

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**Request:** Please refer to Mr. Eckberg's proposed whole life depreciation rates and amortization of reserve imbalance are in Table 1 on page 12 of his direct testimony.

- (a) Is the recovery for Leak Prone Pipe Bare Steel (Account 376.3) and Cast Iron (Account 376.8) included in both the leak-prone pipe amortization and in the amortization of the theoretical reserve imbalance?
- (b) If the response yes, does Mr. Eckberg believe the costs of the leak-prone pipe assets should be amortized twice?
- (c) If the response to part (b) is no, does Mr. Eckberg agree that if the Leak-Prone Pipe costs are excluded from the theoretical reserve imbalance, then the total amount to amortize would be \$15,740,832?

**Response:**

- (a) Yes. The recovery for Leak Prone Pipe in Accounts 376.30, 376.50, and 376.80 is included in both the leak-prone pipe amortization and in the amortization of the theoretical reserve imbalance shown in Table 1 on Bates p. 12 of my testimony.
- (b) No. Mr. Eckberg does not believe these costs should be amortized twice. Doing so would "over-collect" from ratepayers. The recovery for these amounts was inadvertently included twice due, in part, to the Company's response to a data request from DOE which is included as Attachment SRE-5 to my testimony. In part (b) of that response, the Company confirmed that (\$18,518,579) was the correct theoretical reserve imbalance to amortize. However, it is clear from information included on Bates 23 of my testimony in the right most column labelled "Reserve Imbalance" that the unamortized amount of (\$2,778,047) related to the leak prone pipe accounts is included. Further, in the details on Bates 20 and 21 of my testimony it can be seen in column (5) that amortization amounts are included for these leak prone pipe accounts. Thus, the recovery related to these leak prone pipes was inadvertently included twice in my Table 1 on page 12 of my testimony.
- (c) Yes. Mr. Eckberg agrees that excluding the leak prone pipe amortization amount from the theoretical depreciation reserve imbalance would result in a balance of (\$15,740,832) rather than the current amount (\$18,518,570) shown as the theoretical reserve imbalance in my Table 1, which I have recommended be amortized over 10 years. Therefore, my Table 1 should be updated to reflect that change and also a corresponding change to the amortization of that adjusted amount over my recommended 10 year period from \$1,851,858 to \$1,574,083.