

New Hampshire Monthly Cost of Gas Report

Summer Period

April 2024 Summary

The objective of the summer period Monthly Cost of Gas (“COG”) Report is to determine if COG rates need to be adjusted in order to minimize differences between the October 31, 2024 target balance and the corresponding estimated end of summer period balance. An adjustment is made to COG rates if the difference between the target balance and estimated end of summer period balance exceeds 5% of total projected gas costs.

For April 2024 update, commodity costs have been updated to reflect NYMEX prices as of April 22, 2024, and the October 31, 2023 reconciliation balance has been updated to reflect the actual costs and revenues for the entire 2023 summer season¹.

As shown on Table 1, Line 23, the estimated summer period ending balance is an under-collection of \$1,544,400 and, Line 25, the target summer period ending balance is an under-collection of \$2,636,390. The variance between the estimated and target balances is an over-collection of (\$1,091,991) (Line 27).

This over-collection is primarily due to a large decrease in NYMEX prices. Compared those used in the annual COG filing, average summer season NYMEX prices have dropped by \$0.96 per Dth or about 29%. In addition to NYMEX prices, the over-collection is due to the updated reconciliation balance which was revised from a \$298,724 under-collection to a (\$112,212) over-collection². The revised reconciliation balance reflects lower commodity prices than those projected from August to October 2023.

The over-collection represents a variance of 21.08% of total gas costs (Line 31) and exceeds the 5% threshold for requiring a rate change. As a result, Northern will decrease its COG rates by \$0.1548 per therm effective May 1, 2024.

Support for the estimated end of summer period balance is provided in Table 2. This table has been modified to focus on the six month summer period only.

Support for the revised target end of winter period balance, an over-collection of (\$2,636,930), is provided in Table 3. This table reflects the updated October 31, 2023 reconciliation balance.

¹ The initial COG rates effective May 1, 2024 reflected a prior period balance that includes estimated costs and revenues for August through October 2023. These estimates have been replaced with actual costs and revenues as of the November 2023 Monthly Cost of Gas Report. In addition, the revised prior period balance updates the April 30, 2024 target balance.

² See Table 4, Page 2, Line 18.

Summer COG rates are designed to fully offset the target over-collection and will be adjusted if the monthly variance between the target balance and projected balance exceeds 5% of total gas costs.

The revised annual reconciliation, reflecting actual and revenues for August through October 2023, is provided in Table 4.

NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
Summer 2023-2024 Period Cost of Gas
DG 23-085
April 2024 Estimated

1	Under/(Over) collection as of 04/30/24	\$ (27,051)	Table 2, PG. 2, Line 87, April
2			
3	Forecasted firm therm sales 05/01/24 - 10/31/24		
4	Residential heat & non heat	2,706,958	Table 2, PG. 1, Line 2
5	HLF Classes	1,861,021	Table 2, PG. 1, Line 3
6	LLF Classes	2,486,344	Table 2, PG. 1, Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$0.5117	Table 2, PG. 1, Line 7
10	HLF classes	\$0.4443	Table 2, PG. 1, Line 8
11	LLF classes	\$0.5622	Table 2, PG. 1, Line 9
12			
13	Total	\$ (3,609,824)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 05/01/24 - 10/31/24	\$ (3,609,824)	LN 13
16	Actual recovered costs	\$ -	Table 2, PG. 1, Line 14
17	Estimated total recovered costs 05/01/24 - 10/31/24	\$ (3,609,824)	LN 15 + LN 16
18			
19	Revised projected direct gas costs [1]	\$ 5,116,897	Table 2, PG. 1, Line 57, Summer
20	Revised projected indirect gas costs [2]	\$ 64,378	Table 2, PG. 2, Line 89, Summer
21	Revised total projected gas costs 05/01/24 - 10/31/24	\$ 5,181,275	LN 19 + LN 20
22			
23	Projected October 31, 2024 Summer Period Balance	\$ 1,544,400	LN 1 + LN 17 + LN 21
24			
25	October 31, 2024 Target Balance [3]	\$ 2,636,390	Table 3, PG. 2, Line 87, April *-1
26			
27	Variance from Target Balance	\$ (1,091,991)	LN 23 - LN 25
28			
29	Total Projected Gas Costs	\$ 5,181,275	LN 21
30			
31	Under/(over) collection as percent of total gas costs	-21.08%	LN 27 / LN 29

NOTES

- [1] Reflects futures prices as of April 22, 2024
- [2] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity, Miscellaneous Overhead and Interest
- [3] Updated to reflect actual account balance as of October 31, 2023

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

		Summer							
Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)		
Volumes		Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer
1	Residential Heat & Non Heat		583,664	377,706	322,728	326,289	364,019	732,552	
2	Sales HLF Classes		401,266	259,671	221,874	224,323	250,261	503,626	
3	Sales LLF Classes		536,096	346,923	296,426	299,697	334,352	672,850	
4	Total		1,521,025	984,300	841,027	850,309	948,632	1,909,028	7,054,322
5	Rates								
6	Residential Heat & Non Heat CGA		\$0.5117	\$0.5117	\$0.5117	\$0.5117	\$0.5117	\$0.5117	
7	Sales HLF Classes CGA		\$0.4443	\$0.4443	\$0.4443	\$0.4443	\$0.4443	\$0.4443	
8	Sales LLF Classes CGA		\$0.5622	\$0.5622	\$0.5622	\$0.5622	\$0.5622	\$0.5622	
9	Revenues								
10	Residential Heat & Non Heat		\$ (298,661)	\$ (193,272)	\$ (165,140)	\$ (166,962)	\$ (186,269)	\$ (374,847)	
11	Sales HLF Classes		\$ (178,283)	\$ (115,372)	\$ (98,579)	\$ (99,667)	\$ (111,191)	\$ (223,761)	
12	Sales LLF Classes		\$ (301,393)	\$ (195,040)	\$ (166,651)	\$ (168,490)	\$ (187,973)	\$ (378,276)	
13	Total Sales		\$ (778,336)	\$ (503,684)	\$ (430,369)	\$ (435,119)	\$ (485,432)	\$ (976,884)	\$ (3,609,824)
14									
15									
16									
17	Gas Costs and Credits		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	
18			May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	
19	Demand Costs (net of Capacity Assignment)								
20	Pipeline		\$ 547,694	\$ 547,694	\$ 547,694	\$ 547,694	\$ 538,881	\$ 538,881	\$ 3,268,536
21	Storage		\$ 943,112	\$ 943,112	\$ 943,112	\$ 943,112	\$ 943,112	\$ 943,112	\$ 5,658,670
22	On-system Peaking		\$ 41,750	\$ 41,750	\$ 41,750	\$ 41,750	\$ 41,750	\$ 41,750	\$ 250,502
23	Off-System Peaking		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Total Demand Costs		\$ 1,532,556	\$ 1,532,556	\$ 1,532,556	\$ 1,532,556	\$ 1,523,743	\$ 1,523,743	\$ 9,177,709
25									
26	Asset Management and Capacity Release								
27	NUI AMA Revenue		\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	
28	NUI Capacity Release								
29	NUI AMA Rev & Cap. Release Subtotal								
30	NH AMA Revenue		\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	
31	NH Capacity Release								
32	NH Total Asset Management and Capacity Release		\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (5,149,279)
33									
34	Re-entry Rate & Conversion Rate Revenue		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
35									
36	Net Demand Costs		\$ 674,343	\$ 674,343	\$ 674,343	\$ 674,343	\$ 665,529	\$ 665,529	\$ 4,028,430
37									
38	NUI Commodity Costs								
39	NUI Total Pipeline Volumes		507,876	343,509	319,203	322,747	347,012	593,569	
40	Pipeline Costs Modeled in Sendout™		1,245,374	829,905	784,411	800,585	791,384	1,490,203	
41	NYMEX Price Used for Forecast		\$ 3.0510	\$ 3.1610	\$ 3.2790	\$ 3.3200	\$ 3.3020	\$ 3.3950	
42	NYMEX Price Used for Update		\$ 1.7910	\$ 2.0650	\$ 2.3780	\$ 2.4780	\$ 2.4800	\$ 2.5810	
43	Increase/(Decrease) NYMEX Price		\$ (1.26)	\$ (1.10)	\$ (0.90)	\$ (0.84)	\$ (0.82)	\$ (0.81)	
44	% of Pipeline Volumes Tied to NYMEX		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
45	Increase/(Decrease) in Pipeline Costs		\$ (639,924)	\$ (376,486)	\$ (287,602)	\$ (271,753)	\$ (285,244)	\$ (483,165)	
46	Updated Pipeline Costs		\$ 605,450	\$ 453,419	\$ 496,809	\$ 528,832	\$ 506,140	\$ 1,007,038	
47	New Hampshire Allocated Percentage		30.06%	28.71%	26.39%	26.39%	27.39%	32.29%	
48	NH Updated Pipeline Costs		\$ 181,974	\$ 130,184	\$ 131,084	\$ 139,533	\$ 138,648	\$ 325,211	
49									
50	NH Commodity Costs								
51	Pipeline		\$ 181,974	\$ 130,184	\$ 131,084	\$ 139,533	\$ 138,648	\$ 325,211	
52	Storage		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
53	Peaking		\$ 9,064	\$ 7,627	\$ 6,613	\$ 6,613	\$ 5,564	\$ 6,352	
54	Total Commodity Costs		\$ 191,038	\$ 137,812	\$ 137,696	\$ 146,146	\$ 144,212	\$ 331,563	\$ 1,088,467
55	Inventory Finance Charge		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
56									
57	Total Anticipated Direct Cost of Gas		\$ 865,381	\$ 812,154	\$ 812,039	\$ 820,488	\$ 809,742	\$ 997,092	\$ 5,116,897

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

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	Apr-24	(Forecast) May-24	(Forecast) Jun-24	(Forecast) Jul-24	(Forecast) Aug-24	(Forecast) Sep-24	(Forecast) Oct-24	Summer
Working Capital								
Total Anticipated Direct Cost of Gas		\$ 865,381	\$ 812,154	\$ 812,039	\$ 820,488	\$ 809,742	\$ 997,092	
Working Capital Percentage		0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	
Working Capital Allowance		\$ 1,869	\$ 1,754	\$ 1,754	\$ 1,772	\$ 1,749	\$ 2,154	\$ 11,052
Beginning Period Working Capital Balance		\$ (453)	\$ 1,419	\$ 3,189	\$ 4,972	\$ 6,786	\$ 8,589	
End of Period Working Capital Allowance		\$ 1,416	\$ 3,173	\$ 4,943	\$ 6,744	\$ 8,535	\$ 10,742	
Interest		\$ 3	\$ 16	\$ 29	\$ 41	\$ 54	\$ 68	\$ 213
End of period with Interest	\$ (453)	\$ 1,419	\$ 3,189	\$ 4,972	\$ 6,786	\$ 8,589	\$ 10,811	
Bad Debt								
Projected Bad Debt		\$ 3,414	\$ 3,414	\$ 3,414	\$ 3,414	\$ 3,414	\$ 3,414	\$ 20,484
Beginning Period Bad Debt Balance		\$ 85,615	\$ 89,648	\$ 93,709	\$ 97,799	\$ 101,917	\$ 106,065	
End of Period Bad Debt Balance		\$ 89,029	\$ 93,062	\$ 97,123	\$ 101,213	\$ 105,331	\$ 109,479	
Interest		\$ 619	\$ 647	\$ 676	\$ 705	\$ 734	\$ 763	\$ 4,144
End of Period Bad Debt Balance with Interest	\$ 85,615	\$ 89,648	\$ 93,709	\$ 97,799	\$ 101,917	\$ 106,065	\$ 110,243	
Local Production and Storage Capacity		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous Overhead								
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection								
Beginning Balance Over/Under Collection	\$ (112,212)	\$ (112,212)	\$ (25,654)	\$ 283,727	\$ 668,759	\$ 1,060,230	\$ 1,393,198	
Net Costs - Revenues		\$ 87,045	\$ 308,470	\$ 381,670	\$ 385,370	\$ 324,309	\$ 20,208	
Ending Balance before Interest		\$ (25,168)	\$ 282,816	\$ 665,397	\$ 1,054,128	\$ 1,384,539	\$ 1,413,406	
Average Balance		\$ (68,690)	\$ 128,581	\$ 474,562	\$ 861,443	\$ 1,222,385	\$ 1,403,302	
Interest Rate		8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	
Interest Expense		\$ (487)	\$ 911	\$ 3,361	\$ 6,102	\$ 8,659	\$ 9,940	
Ending Balance Incl Interest Expense	\$ (112,212)	\$ (25,654)	\$ 283,727	\$ 668,759	\$ 1,060,230	\$ 1,393,198	\$ 1,423,346	
Total Over/Under Collection Ending Balance	\$ (27,051)	\$ 65,413	\$ 380,625	\$ 771,529	\$ 1,168,933	\$ 1,507,852	\$ 1,544,400	
Total Indirect Cost of Gas		\$ 5,418	\$ 6,742	\$ 9,234	\$ 12,034	\$ 14,610	\$ 16,339	\$ 64,378
Total Cost of Gas		\$ 870,799	\$ 818,896	\$ 821,273	\$ 832,523	\$ 824,351	\$ 1,013,432	\$ 5,181,275
Total Interest		\$ 135	\$ 1,574	\$ 4,066	\$ 6,848	\$ 9,447	\$ 10,772	\$ 32,843

Updated End of Winter Period Balance ("Target Balance")
 (\$2,636,390)
 Line 87 - April

Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

		Winter						
Sales Revenues	Oct-23	(Forecast) Nov-23	(Forecast) Dec-23	(Forecast) Jan-24	(Forecast) Feb-24	(Forecast) Mar-24	(Forecast) Apr-24	Winter
Volumes								
Residential Heat & Non Heat		2,125,956	3,109,808	3,620,784	3,145,375	2,671,575	1,527,106	
Sales HLF Classes		325,460	476,077	554,302	481,522	408,988	233,783	
Sales LLF Classes		1,878,057	2,747,186	3,198,579	2,778,605	2,360,053	1,349,036	
Total		4,329,473	6,333,071	7,373,664	6,405,502	5,440,616	3,109,925	
Rates								
Residential Heat & Non Heat CGA		\$0.7282	\$0.7282	\$0.7282	\$0.7282	\$0.7282	\$0.7282	
Sales HLF Classes CGA		\$0.6587	\$0.6587	\$0.6587	\$0.6587	\$0.6587	\$0.6587	
Sales LLF Classes CGA		\$0.7402	\$0.7402	\$0.7402	\$0.7402	\$0.7402	\$0.7402	
Revenues								
Residential Heat & Non Heat		\$ (1,548,121)	\$ (2,264,563)	\$ (2,636,655)	\$ (2,290,462)	\$ (1,945,441)	\$ (1,112,039)	
Sales HLF Classes		\$ (214,381)	\$ (313,592)	\$ (365,118)	\$ (317,178)	\$ (269,401)	\$ (153,993)	
Sales LLF Classes		\$ (1,390,137)	\$ (2,033,467)	\$ (2,367,588)	\$ (2,056,724)	\$ (1,746,911)	\$ (998,557)	
Total Sales		\$ (3,152,639)	\$ (4,611,621)	\$ (5,369,361)	\$ (4,664,364)	\$ (3,961,753)	\$ (2,264,588)	\$ (24,024,327)
Gas Costs and Credits								
		Winter						
Gas Costs and Credits	Oct-23	(Forecast) Nov-23	(Forecast) Dec-23	(Forecast) Jan-24	(Forecast) Feb-24	(Forecast) Mar-24	(Forecast) Apr-24	Winter
Demand Costs (net of Capacity Assignment)								
Pipeline		\$ 305,595	\$ 305,595	\$ 297,310	\$ 297,310	\$ 297,310	\$ 547,694	\$ 2,050,814
Storage		\$ 944,617	\$ 944,617	\$ 944,617	\$ 944,617	\$ 944,617	\$ 944,617	\$ 5,667,701
On-system Peaking		\$ 290,051	\$ 290,051	\$ 290,051	\$ 290,051	\$ 290,051	\$ 132,428	\$ 1,582,685
Off-System Peaking		\$ 104,459	\$ 104,459	\$ 104,459	\$ 104,459	\$ 104,459	\$ -	\$ 522,295
Total Demand Costs		\$ 1,644,722	\$ 1,644,722	\$ 1,636,437	\$ 1,636,437	\$ 1,636,437	\$ 1,624,739	\$ 9,823,495
Asset Management and Capacity Release								
NUI AMA Revenue		\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (2,164,517)	\$ (12,987,100)
NUI Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NUI AMA Rev & Cap. Release Subtotal		\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (5,149,279)
NH AMA Revenue		\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (5,149,279)
NH Capacity Release		\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (5,149,279)
NH Total Asset Management and Capacity Release		\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (858,213)	\$ (5,149,279)
Re-entry Rate & Conversion Rate Revenue		\$ (4,167)	\$ (4,167)	\$ (4,167)	\$ (4,167)	\$ (4,167)	\$ (4,167)	\$ (25,000)
Net Demand Costs		\$ 782,342	\$ 782,342	\$ 774,057	\$ 774,057	\$ 774,057	\$ 762,359	\$ 4,649,215
NUI Commodity Costs								
NUI Total Pipeline Volumes		1,206,814	776,970	723,894	677,191	568,894	968,631	
Pipeline Costs Modeled in Sendout™		\$ 3,259,675	\$ 3,439,438	\$ 4,470,111	\$ 4,053,327	\$ 2,102,517	\$ 2,625,100	
NYMEX Price Used for Forecast		\$ 2,991.0	\$ 3,453.0	\$ 3,706.0	\$ 3,634.0	\$ 3,328.0	\$ 3,052.0	
NYMEX Price Used for Update		\$ 2,991.0	\$ 3,453.0	\$ 3,706.0	\$ 3,634.0	\$ 3,328.0	\$ 3,052.0	
% of Pipeline Volumes Tied to NYMEX		100.00%	82.00%	84.00%	83.00%	100.00%	100.00%	
Increase/(Decrease) NYMEX Price		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Increase/(Decrease) in Pipeline Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Updated Pipeline Costs		\$ 3,259,675	\$ 3,439,438	\$ 4,470,111	\$ 4,053,327	\$ 2,102,517	\$ 2,625,100	
New Hampshire Allocated Percentage		36.08%	37.46%	37.48%	37.09%	35.77%	32.28%	
NH Updated Pipeline Costs		\$ 1,176,142	\$ 1,288,500	\$ 1,675,371	\$ 1,503,215	\$ 752,092	\$ 847,363	
NH Commodity Costs								
Pipeline		\$ 1,176,142	\$ 1,288,500	\$ 1,675,371	\$ 1,503,215	\$ 752,092	\$ 847,363	
Storage		\$ -	\$ 822,493	\$ 952,902	\$ 893,145	\$ 802,607	\$ -	
Peaking		\$ 24,212	\$ 1,002,116	\$ 3,079,730	\$ 1,473,923	\$ 1,006,667	\$ 11,988	
Total Commodity Costs		\$ 1,200,354	\$ 3,113,110	\$ 5,708,003	\$ 3,870,283	\$ 2,561,367	\$ 859,351	\$ 17,312,467
Inventory Finance Charge		\$ 1,082	\$ 1,691	\$ 2,012	\$ 1,730	\$ 1,416	\$ 708	
Total Anticipated Direct Cost of Gas		\$ 1,983,778	\$ 3,897,143	\$ 6,484,072	\$ 4,646,070	\$ 3,336,840	\$ 1,622,418	\$ 21,970,322

Updated End of Winter Period Balance ("Target Balance")
 (\$2,636,390)
 Line 87 - April

Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

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		Winter						
	Oct-23	(Forecast) Nov-23	(Forecast) Dec-23	(Forecast) Jan-24	(Forecast) Feb-24	(Forecast) Mar-24	(Forecast) Apr-24	Winter
Working Capital								
Total Anticipated Direct Cost of Gas		\$ 1,983,778	\$ 3,897,143	\$ 6,484,072	\$ 4,646,070	\$ 3,336,840	\$ 1,622,418	
Working Capital Percentage		0.2160%	0.22%	0.22%	0.22%	0.22%	0.22%	
Working Capital Allowance		\$ 4,285	\$ 8,417	\$ 14,005	\$ 10,035	\$ 7,207	\$ 3,504	\$ 47,452
Beginning Period Working Capital Balance		\$ (368)	\$ 3,929	\$ 12,404	\$ 26,546	\$ 36,805	\$ 44,298	
End of Period Working Capital Allowance		\$ 3,917	\$ 12,347	\$ 26,409	\$ 36,581	\$ 44,012	\$ 47,802	
Interest		\$ 13	\$ 58	\$ 137	\$ 224	\$ 286	\$ 326	\$ 1,044
End of period with Interest	\$ (368)	\$ 3,929	\$ 12,404	\$ 26,546	\$ 36,805	\$ 44,298	\$ 48,128	
Bad Debt								
Projected Bad Debt	\$ -	\$ 9,162	\$ 9,162	\$ 9,162	\$ 9,162	\$ 9,162	\$ 9,162	\$ 54,970
Beginning Period Bad Debt Balance		\$ 74,485	\$ 84,207	\$ 93,997	\$ 103,857	\$ 113,787	\$ 123,787	
End of Period Bad Debt Balance		\$ 83,647	\$ 93,369	\$ 103,159	\$ 113,019	\$ 122,949	\$ 132,949	
Interest		\$ 560	\$ 629	\$ 698	\$ 768	\$ 838	\$ 909	\$ 4,403
End of Period Bad Debt Balance with Interest	\$ 74,485	\$ 84,207	\$ 93,997	\$ 103,857	\$ 113,787	\$ 123,787	\$ 133,858	
Local Production and Storage Capacity		\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	
Miscellaneous Overhead		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
		\$ 84,015	\$ 84,015	\$ 84,015	\$ 84,015	\$ 84,015	\$ 84,015	
Gas Cost Other than Bad Debt and Working Capital	Over/Under Collection							
Beginning Balance Over/Under Collection		\$ (1,387,700)	\$ (2,450,335)	\$ (3,064,504)	\$ (1,847,357)	\$ (1,758,605)	\$ (2,277,992)	
Net Costs - Revenues		\$ (1,049,090)	\$ (594,706)	\$ 1,234,482	\$ 101,477	\$ (505,141)	\$ (522,399)	
Ending Balance before Interest		\$ (2,436,790)	\$ (3,045,041)	\$ (1,830,022)	\$ (1,745,879)	\$ (2,263,746)	\$ (2,800,391)	
Average Balance		\$ (1,912,245)	\$ (2,747,688)	\$ (2,447,263)	\$ (1,796,618)	\$ (2,011,176)	\$ (2,539,191)	
Interest Rate		8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	
Interest Expense		\$ (13,545)	\$ (19,463)	\$ (17,335)	\$ (12,726)	\$ (14,246)	\$ (17,986)	
Ending Balance Incl Interest Expense	\$ (1,387,700)	\$ (2,450,335)	\$ (3,064,504)	\$ (1,847,357)	\$ (1,758,605)	\$ (2,277,992)	\$ (2,818,377)	
Total Over/Under Collection Ending Balance	\$ (1,313,582)	\$ (2,362,198)	\$ (2,958,102)	\$ (1,716,953)	\$ (1,608,013)	\$ (2,109,907)	\$ (2,636,390)	
Total Indirect Cost of Gas	\$ (1,313,582)	\$ 120,245	\$ 118,574	\$ 126,439	\$ 127,234	\$ 123,019	\$ 115,687	\$ 731,198
Total Cost of Gas	\$ (1,313,582)	\$ 2,104,023	\$ 4,015,717	\$ 6,610,511	\$ 4,773,304	\$ 3,459,859	\$ 1,738,105	\$ 22,701,519
Total Interest	\$ -	\$ (12,972)	\$ (18,776)	\$ (16,499)	\$ (11,734)	\$ (13,121)	\$ (16,750)	\$ (89,854)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2022-23 ANNUAL COG RECONCILIATION
SCHEDULE 2: ADJUSTMENTS TO REPORTED SUMMER, WINTER AND ANNUAL ACCOUNTS
August 2022 - October 2023
Acct 191

	<u>Aug-22</u>	<u>Sep-22</u>	<u>Oct-22</u>	<u>Nov-22</u>	<u>Dec-22</u>	<u>Jan-23</u>	<u>Feb-23</u>	<u>Mar-23</u>	<u>Apr-23</u>	<u>May-23</u>	<u>Jun-23</u>	<u>Jul-23</u>	<u>Aug-23</u>	<u>Sep-23</u>	<u>Oct-23</u>	<u>Total</u>
Initial Account Beginning Balance	\$ (3,623,802)															
Adjustment (1)	\$ 25,951															
Adjusted Beginning Balance	\$ (3,597,851)	\$ (2,900,813)	\$ (2,465,092)	\$ (2,863,963)	\$ (3,605,471)	\$ (3,304,602)	\$ (2,957,231)	\$ (2,750,970)	\$ (3,959,669)	\$ (4,747,564)	\$ (4,340,988)	\$ (3,703,856)	\$ (3,120,698)	\$ (2,577,220)	\$ (2,012,817)	
Plus: Cost of Firm Gas (Schedule 4)	\$ 1,483,552	\$ 1,535,697	\$ 1,640,074	\$ 3,546,489	\$ 5,957,900	\$ 7,558,957	\$ 6,823,298	\$ 3,883,175	\$ 1,270,885	\$ 938,189	\$ 938,897	\$ 884,130	\$ 846,549	\$ 879,137	\$ 1,025,962	\$ 39,212,891
Less: Reported Collections (Schedule 3)	\$ (775,702)	\$ (1,091,048)	\$ (2,026,760)	\$ (4,273,205)	\$ (5,641,232)	\$ (7,193,375)	\$ (6,600,437)	\$ (5,072,358)	\$ (2,030,754)	\$ (502,359)	\$ (275,870)	\$ (277,593)	\$ (283,551)	\$ (299,009)	\$ (500,661)	\$ (36,843,914)
Annual Account Ending Balance	\$ (2,890,000)	\$ (2,456,164)	\$ (2,851,779)	\$ (3,590,679)	\$ (3,288,803)	\$ (2,939,020)	\$ (2,734,370)	\$ (3,940,153)	\$ (4,719,538)	\$ (4,311,734)	\$ (3,677,962)	\$ (3,097,319)	\$ (2,557,701)	\$ (1,997,092)	\$ (1,487,515)	
Month's Average Balance	\$ (3,243,925)	\$ (2,678,489)	\$ (2,658,435)	\$ (3,227,321)	\$ (3,447,137)	\$ (3,121,811)	\$ (2,845,800)	\$ (3,345,562)	\$ (4,339,603)	\$ (4,529,649)	\$ (4,009,475)	\$ (3,400,588)	\$ (2,839,199)	\$ (2,287,156)	\$ (1,750,166)	
Interest Rate (Prime Rate)	4.00%	4.00%	5.50%	5.50%	5.50%	7.00%	7.00%	7.00%	7.75%	7.75%	7.75%	8.25%	8.25%	8.25%	8.50%	
Interest Applied	\$ (10,813)	\$ (8,928)	\$ (12,184)	\$ (14,792)	\$ (15,799)	\$ (18,211)	\$ (16,601)	\$ (19,516)	\$ (28,027)	\$ (29,254)	\$ (25,895)	\$ (23,379)	\$ (19,519)	\$ (15,724)	\$ (12,397)	\$ (271,039)
Annual Account Ending Balance w/int	<u>\$ (2,900,813)</u>	<u>\$ (2,465,092)</u>	<u>\$ (2,863,963)</u>	<u>\$ (3,605,471)</u>	<u>\$ (3,304,602)</u>	<u>\$ (2,957,231)</u>	<u>\$ (2,750,970)</u>	<u>\$ (3,959,669)</u>	<u>\$ (4,747,564)</u>	<u>\$ (4,340,988)</u>	<u>\$ (3,703,856)</u>	<u>\$ (3,120,698)</u>	<u>\$ (2,577,220)</u>	<u>\$ (2,012,817)</u>	<u>\$ (1,499,912)</u>	

(1) Reflects ATV charges of \$25,705 plus interest, not included in the 2021-2022 reconciliation.

Northern Utilities, Inc.
Winter and Summer Season Reconciliations

Section A

April 30, 2023 COG Balance - All Components

1	Actual Ending Balance	-\$4,797,256	Sum of Schedule 2, Atts A & B
2	Target Ending Balance	-\$4,229,669	Table 3 - Monthly COG Reports
3			
4	Total Over-collection - All Components	-\$567,587	LN 2 - LN 1
5	Less Working Capital Balance	-\$4,079	Attachment A
6	Less Bad Debt Balance	-\$45,613	Attachment B
7			
8	Demand & Commodity Over-collection	-\$517,896	LN 4 - Ln 5 - LN 6
9			
10	AMA Adjustment - Allocation to Winter	-\$863,886	LN 26
11			
12	Interest	-\$5,918	LN 20 - Section B October
13			
14	Calculated Winter Ending Balance	-\$1,387,700	LN 8 + LN 10 + LN 12
15			
16	Annual Reconciliation Balance	-\$1,499,912	Schedule 1
17			
18	Summer Reconciliation Balance	-\$112,212	LN 16 - LN 14
19			
20	Monthly AMA Revenue		
21	April 22 to March 23	-\$714,232	Annual Revenue / 12
22	April 23 to March 24	-\$858,213	Annual Revenue / 12
23			
24	Monthly Increase in AMA Revenue	-\$143,981	LN 22- LN 21
25			
26	AMA revenue Impact May to Oct	-\$863,886	LN 24 * 6

Section B

AMA Adjustment & Interest

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Total
Starting balance	\$0.00	-\$929.88	-\$1,865.76	-\$2,868.46	-\$3,878.05	-\$4,894.58	
AMA Adjustment	-\$143,981.05	-\$143,981.05	-\$143,981.05	-\$143,981.05	-\$143,981.05	-\$143,981.05	-\$863,886.32
AMA Plus Interest	\$0	-\$144,911	-\$145,847	-\$146,850	-\$147,859	-\$148,876	
Interest Rate	7.75%	7.75%	8.25%	8.25%	8.25%	8.25%	
Monthly Interest	-\$929.88	-\$935.88	-\$1,002.70	-\$1,009.59	-\$1,016.53	-\$1,023.52	-\$5,918.10
Ending Interest	-\$929.88	-\$1,865.76	-\$2,868.46	-\$3,878.05	-\$4,894.58	-\$5,918.10	

Attachment A

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
 DEFERRED WORKING CAPITAL ALLOWANCE ON PURCHASED GAS COSTS
 August 2022 - October 2023**

ANNUAL BALANCE SEASON - Acct 173

	<u>BEGINNING</u> <u>BALANCE</u>	<u>WORKING CAP</u> <u>ALLOWANCE (1)</u>	<u>WORKING CAP</u> <u>PERCENTAGE</u>	<u>WORKING CAP</u> <u>COLLECTIONS</u>	<u>WORKING CAP</u> <u>DEFERRED</u>	<u>ENDING</u> <u>BALANCE</u>	<u>AVE MONTHLY</u> <u>BALANCE</u>	<u>INTEREST</u> <u>RATE</u>	<u>INTEREST</u>	<u>ENDING BAL</u> <u>W/ INTEREST</u>
	A	B	C	D	E = B + D	F = A + E	G = (A + F) / 2	H	I = G * (H / 12)	K = F + I + J
August 2022	\$ 6,302									
Adjustment	\$ 21									
August 2022	\$ 6,324	1,507	0.1016%	(227)	1,280	7,604	6,964	4.00%	23	7,627
September	\$ 7,627	1,560	0.1016%	(228)	1,332	8,959	8,293	4.00%	28	8,987
October	\$ 8,987	2,293	0.1398%	(531)	1,762	10,749	9,868	5.50%	45	10,794
November	\$ 10,794	4,958	0.1398%	(7,327)	(2,369)	8,425	9,610	5.50%	44	8,469
December	\$ 8,469	8,329	0.1398%	(10,817)	(2,488)	5,981	7,225	5.50%	33	6,014
January 2023	\$ 6,014	13,447	0.1779%	(14,273)	(826)	5,188	5,601	7.00%	33	5,221
February	\$ 5,221	12,139	0.1779%	(13,160)	(1,022)	4,199	4,710	7.00%	27	4,226
March	\$ 4,226	6,908	0.1779%	(11,320)	(4,411)	(185)	2,021	7.00%	12	(173)
April	\$ (173)	2,502	0.1969%	(6,394)	(3,892)	(4,065)	(2,119)	7.75%	(14)	(4,079)
May	\$ (4,079)	1,847	0.1969%	(1,860)	(13)	(4,092)	(4,085)	7.75%	(26)	(4,118)
June	\$ (4,118)	1,849	0.1969%	(983)	866	(3,252)	(3,685)	7.75%	(24)	(3,276)
July	\$ (3,276)	1,853	0.2096%	(980)	873	(2,402)	(2,839)	8.25%	(20)	(2,422)
August	\$ (2,422)	1,765	0.2096%	(1,014)	751	(1,671)	(2,046)	8.25%	(14)	(1,685)
September	\$ (1,685)	1,839	0.2096%	(1,072)	768	(917)	(1,301)	8.25%	(9)	(926)
October	\$ (926)	2,222	0.2160%	(1,744)	478	(449)	(687)	8.50%	(5)	(453)

(1) Working Capital Allowance calculated by taking monthly Total Gas Costs from Schedule 4, Page 2, and multiplying by (9.30/366)* prime interest rate.

Winter Season Sales Percentage	82.38%
Summer Season Sales Percentage	17.62%
Reconciliation Allocated to Winter Season	\$ (374)
Reconciliation Allocated to Summer Season	\$ (80)

Attachment B

**NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
 BAD DEBT EXPENSE - CALCULATION OF COLLECTION ALLOWANCE
 August 2022 - October 2023**

ANNUAL BALANCE- Acct 173

	<u>BEGINNING BALANCE</u>	<u>ACUTAL BAD DEBT</u>	<u>BAD DEBT COLLECTIONS</u>	<u>DEFERRED BALANCE</u>	<u>ENDING BALANCE</u>	<u>AVE MO BALANCE</u>	<u>INTEREST RATE</u>	<u>INTEREST</u>	<u>END BAL W/ INTEREST</u>
	A	B	C	D = B + C	E = A + D	F = (A + E) / 2	G	H = (F * G) / 12	J = E + H + I
August 2022	(\$53,152)	17,008	53	17,061	(36,091)	(44,622)	4.00%	(149)	(36,240)
September	(\$36,240)	27,539	62	27,600	(8,639)	(22,440)	4.00%	(75)	(8,714)
October	(\$8,714)	13,618	138	13,756	5,042	(1,836)	5.50%	(8)	5,033
November	\$5,033	7,329	(10,700)	(3,371)	1,663	3,348	5.50%	15	1,678
December	\$1,678	11,806	(15,969)	(4,164)	(2,486)	(404)	5.50%	(2)	(2,488)
January 2023	(\$2,488)	12,501	(21,071)	(8,570)	(11,058)	(6,773)	7.00%	(40)	(11,097)
February	(\$11,097)	9,274	(19,428)	(10,154)	(21,252)	(16,175)	7.00%	(94)	(21,346)
March	(\$21,346)	(302)	(16,711)	(17,013)	(38,360)	(29,853)	7.00%	(174)	(38,534)
April	(\$38,534)	2,629	(9,437)	(6,808)	(45,342)	(41,938)	7.75%	(271)	(45,613)
May	(\$45,613)	16,762	(2,672)	14,090	(31,523)	(38,568)	7.75%	(249)	(31,772)
June	(\$31,772)	14,043	(1,471)	12,573	(19,199)	(25,485)	7.75%	(165)	(19,364)
July	(\$19,364)	10,010	(1,463)	8,546	(10,817)	(15,091)	8.25%	(104)	(10,921)
August	(\$10,921)	33,785	(1,494)	32,291	21,370	5,225	8.25%	36	21,406
September	\$21,406	51,585	(1,580)	50,006	71,412	46,409	8.25%	319	71,731
October	\$71,731	15,892	(2,563)	13,329	85,060	78,396	8.50%	555	85,615

Winter Season Allocation 87.00%
 Summer Season Allocation 13.00%

Reconciliation Allocated to Winter Season \$ 74,485
 Reconciliation Allocated to Summer Season \$ 11,130