

New Hampshire Monthly Cost of Gas Report

Summer Period

May 2023 Summary

The objective of the Summer Period Monthly Cost of Gas (“COG”) analysis is to determine if COG rates need to be adjusted in order to minimize the estimated end of Summer Period balance. An adjustment is made to COG rates if the estimated end of Summer Period balance exceeds 4% of total projected gas costs.

For the May 2023 monthly COG update, commodity costs have been updated to reflect NYMEX prices as of May 18, 2023 and the April 30, 2023 Summer Period starting balance (“target balance”) has been updated to an over-collection of (\$4,229,669) due to a revision in the 2021-2022 reconciliation balance¹.

As shown on Table 1, Line 17, total net projected Summer Period costs² are \$3,198,705 and the projected Summer Period revenues, Line 23, are \$3,270,537. The resulting ending balance, Line 25, is an under-collection of \$71,832. This under-collection represents a variance of 0.96% of total gas costs (Line 31) and is below the 4% threshold for requiring a rate change. As a result, a Summer Period rate change is not required at this time.

Support for the estimated end of Summer Period balance is provided in Table 2. Support for the revised Summer Period target balance is provided in Table 3.

¹ The initial target balance and associated COG rates effective May 1, 2023 reflected a prior period balance that includes estimated costs and revenues for August through October 2022. These estimates have been replaced with actual costs and revenues as of the November 2022 Monthly Cost of Gas Report. In addition, off-system peaking demand costs have been reallocated from Summer (6 month) billing to monthly (12 month) billing (see Line 23 of Tables 2 & 3). This is consistent with the timing of when the invoices will be received. As a result, total annual demand costs are the same but demand costs incurred during the Winter months are now lower which results in the target balance being higher. This higher target balance will be offset in the summer season by the peaking demand costs that will now be incurred during the summer months.

² Net projected Summer Period costs reflect total costs incurred during the summer months (see Line 21 of Table 1) less the April 30th 2023 Target Balance (see Line 1 of Table 1).

NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
2022-2023 Summer Period Cost of Gas
DG 22-056
May 2023 Estimated

1	April 30, 2023 Target Balance	\$ (4,229,669)	Table 3, Page 3, Line 86, April
2			
3	Forecasted firm therm sales 05/01/23-10/31/23		
4	Residential Heat & Non Heat	3,648,755	Table 2, PG. 2, Line 2
5	HLF Classes	2,206,001	Table 2, PG. 2, Line 3
6	LLF Classes	2,770,809	Table 2, PG. 2, Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$0.3708	Table 2, PG. 1, Line 7
10	HLF classes	\$0.3123	Table 2, PG. 1, Line 8
11	LLF classes	\$0.4175	Table 2, PG. 1, Line 9
12			
13	Total	\$ (3,198,705)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 05/01/23 - 10/31/23	\$ (3,198,705)	LN 13
16	Actual recovered costs	\$ -	
17	Estimated total recovered costs 05/01/23 - 10/31/23	\$ (3,198,705)	LN 15 + LN 16
18			
19	Revised projected direct gas costs [1]	\$ 7,456,383	Table 2, PG. 2, Line 66
20	Revised projected indirect gas costs [2]	\$ 43,823	Table 2, PG. 4, Line 101
21	Revised total projected gas costs 05/01/2023 - 10/31/2023	\$ 7,500,206	LN 19 + LN 20
22			
23	Total Summer Season Revenue Requirement	\$ 3,270,537	LN 1 + LN 21
24			
25	Projected October 31, 2023 Summer Season Balance	\$ 71,832	LN 17 + LN 23
26			
27			
28			
29	Projected Summer Season Imbalance Type	Under-collection	
30			
31	Projected Summer Balance Projection	0.96%	LN 25 / LN 21
32			
33	Summer Season Under-collection Threshold (4% over Summer Costs)	\$ 300,008	LN 21 * 4%
34			
35	Over-collection Rate Adjustment Required	NA	IF (ABS) LN 25 > (ABS) LN 33 Yes, ELSE No
36			
37	Under-collection Rate Adjustment Required	No	IF (ABS) LN 25 > (ABS) LN 33 Yes, ELSE No

NOTES

[1] Reflects futures prices as of May 18, 2023

[2] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity, Miscellaneous Overhead and Interest

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

Sales Revenues	Oct-22	Winter						Summer					
		(Actual) Nov-22	(Actual) Dec-22	(Actual) Jan-23	(Actual) Feb-23	(Actual) Mar-23	(Actual) Apr-23	(Forecast) May-23	(Forecast) Jun-23	(Forecast) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Volumes													
Residential Heat & Non Heat								788,321	510,680	436,331	439,981	488,035	985,408
Sales HLF Classes								476,611	308,752	263,801	266,008	295,061	595,768
Sales LLF Classes								598,639	387,802	331,343	334,115	370,606	748,304
Total								1,863,572	1,207,233	1,031,474	1,040,103	1,153,702	2,329,480
Rates													
Residential Heat & Non Heat CGA								\$0.3708	\$0.3708	\$0.3708	\$0.3708	\$0.3708	\$0.3708
Sales HLF Classes CGA								\$0.3123	\$0.3123	\$0.3123	\$0.3123	\$0.3123	\$0.3123
Sales LLF Classes CGA								\$0.4175	\$0.4175	\$0.4175	\$0.4175	\$0.4175	\$0.4175
Revenues													
Residential Heat & Non Heat								\$ (292,310)	\$ (189,360)	\$ (161,791)	\$ (163,145)	\$ (180,963)	\$ (365,389)
Sales HLF Classes								\$ (148,846)	\$ (96,423)	\$ (82,385)	\$ (83,074)	\$ (92,148)	\$ (186,058)
Sales LLF Classes								\$ (249,932)	\$ (161,907)	\$ (138,336)	\$ (139,493)	\$ (154,728)	\$ (312,417)
Total Sales		\$ (4,291,232)	\$ (5,668,019)	\$ (7,228,720)	\$ (6,633,026)	\$ (5,100,389)	\$ (2,046,585)	\$ (691,087)	\$ (447,691)	\$ (382,512)	\$ (385,712)	\$ (427,839)	\$ (863,864)

Gas Costs and Credits	Oct-22	Winter						Summer					
		(Actual) Nov-22	(Actual) Dec-22	(Actual) Jan-23	(Actual) Feb-23	(Actual) Mar-23	(Actual) Apr-23	(Forecast) May-23	(Forecast) Jun-23	(Forecast) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Demand Costs (net of Capacity Assignment)													
Pipeline								\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837
Storage								\$ 699,734	\$ 699,734	\$ 699,734	\$ 699,734	\$ 699,734	\$ 699,734
On-system Peaking								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Off-System Peaking								\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458
Total Demand Costs								\$ 1,631,029	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029
Asset Management and Capacity Release													
NUI AMA Revenue								\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)
NUI Capacity Release								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NUI AMA Rev & Cap. Release Subtotal								\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)
NH AMA Revenue								\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)
NH Capacity Release								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NH Total Asset Management and Capacity Release								\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)
Re-entry Rate & Conversion Rate Revenue								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Demand Costs		\$ 1,200,514	\$ 865,653	\$ 1,015,908	\$ 994,759	\$ 1,005,754	\$ 786,200	\$ 916,797	\$ 916,797	\$ 916,797	\$ 916,797	\$ 916,797	\$ 916,797
NUI Commodity Costs													
NUI Total Pipeline Volumes								576,044	394,175	355,581	356,908	382,828	657,694
Pipeline Costs Modeled in Sendout™								\$ 2,798,684	\$ 1,860,832	\$ 1,715,991	\$ 1,710,505	\$ 1,714,809	\$ 3,185,675
NYMEX Price Used for Forecast								\$ 5.219	\$ 5.278	\$ 5.340	\$ 5.357	\$ 5.345	\$ 5.411
NYMEX Price Used for Update								\$ 2.117	\$ 2.592	\$ 2.715	\$ 2.787	\$ 2.770	\$ 2.849
Increase/(Decrease) NYMEX Price								\$ (3.10)	\$ (2.69)	\$ (2.63)	\$ (2.57)	\$ (2.58)	\$ (2.56)
Percentage of Purchases tied to NYMEX								100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Increase/(Decrease) in Pipeline Costs								\$ (1,786,888)	\$ (1,058,754)	\$ (933,400)	\$ (917,254)	\$ (985,782)	\$ (1,685,012)
Updated Pipeline Costs								\$ 1,011,795	\$ 802,078	\$ 782,591	\$ 793,251	\$ 729,027	\$ 1,500,663
New Hampshire Allocated Percentage								32.56%	30.79%	29.14%	29.27%	30.29%	35.66%
NH Updated Pipeline Costs								\$ 329,470	\$ 246,929	\$ 228,046	\$ 232,224	\$ 220,815	\$ 535,211
NH Peaking Volumes								1,860	1,800	1,860	1,860	1,800	1,860
NUI Peaking Costs Modeled in Sendout								\$ 88,926	\$ 85,409	\$ 88,256	\$ 88,256	\$ 83,732	\$ 86,193
Change in NYMEX Price								\$ (3.10)	\$ (2.69)	\$ (2.63)	\$ (2.57)	\$ (2.58)	\$ (2.56)
Percentage of Purchases tied to NYMEX								100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Increase/(Decrease) in Pipeline Costs								\$ (5,769.72)	\$ (4,834.80)	\$ (4,882.50)	\$ (4,780.20)	\$ (4,635.00)	\$ (4,765.32)
Updated Peaking Costs								\$ 83,156	\$ 80,574	\$ 83,373	\$ 83,476	\$ 79,097	\$ 81,427
New Hampshire Allocated Percentage								32.56%	30.79%	29.14%	29.27%	30.29%	35.66%
NH Updated Peaking Costs								\$ 27,078	\$ 24,806	\$ 24,295	\$ 24,437	\$ 23,958	\$ 29,041
NH Commodity Costs													
Pipeline								\$ 329,470	\$ 246,929	\$ 228,046	\$ 232,224	\$ 220,815	\$ 535,211
Storage								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Peaking		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,957	\$ 26,294	\$ 25,718	\$ 25,837	\$ 25,362	\$ 30,741
Total Commodity Costs		\$ 2,198,781	\$ 4,929,413	\$ 6,426,765	\$ 5,695,141	\$ 2,745,410	\$ 355,858	\$ 358,427	\$ 273,224	\$ 253,763	\$ 258,060	\$ 246,177	\$ 565,952
Inventory Finance Charge								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Anticipated Direct Cost of Gas		\$ 3,399,295	\$ 5,795,066	\$ 7,442,673	\$ 6,689,899	\$ 3,751,165	\$ 1,142,058	\$ 1,275,224	\$ 1,190,020	\$ 1,170,560	\$ 1,174,857	\$ 1,162,974	\$ 1,482,748

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Analysis

Sales Revenues					
Volumes		Winter	Summer	Prior Period	Total
Residential Heat & Non Heat			3,648,755		
Sales HLF Classes			2,206,001		
Sales LLF Classes			2,770,809		
Total			8,625,565		
Rates					
Residential Heat & Non Heat CGA					
Sales HLF Classes CGA					
Sales LLF Classes CGA					
Revenues					
Residential Heat & Non Heat					\$ (1,352,959)
Sales HLF Classes					\$ (688,934)
Sales LLF Classes					\$ (1,156,813)
Total Sales		\$ (30,967,970)	\$ (3,198,705)		\$ (34,166,676)
Gas Costs and Credits					Total
Demand Costs (net of Capacity Assignment)					
Pipeline	\$ -	\$ 3,707,022			\$ 3,707,022
Storage	\$ -	\$ 4,198,402			\$ 4,198,402
On-system Peaking	\$ -	\$ -			\$ -
Off-System Peaking	\$ -	\$ 1,880,748			\$ 1,880,748
Total Demand Costs	\$ -	\$ 9,786,173			\$ 9,786,173
Asset Management and Capacity Release					
NUI AMA Revenue					\$ (10,467,300)
NUI Capacity Release					\$ -
NUI AMA Rev & Cap. Release Subtotal					\$ -
NH AMA Revenue					\$ (4,285,393)
NH Capacity Release					\$ -
NH Total Asset Management and Capacity Release		\$ -	\$ -		\$ (4,285,393)
Re-entry Rate & Conversion Rate Revenue	\$ (5,000)	\$ -			\$ (5,000)
Net Demand Costs	\$ 5,868,789	\$ 5,500,780			\$ 11,369,569
NUI Commodity Costs					
NUI Total Pipeline Volumes					
Pipeline Costs Modeled in Sendout™					
NYMEX Price Used for Forecast					
NYMEX Price Used for Update					
Increase/(Decrease) NYMEX Price					
Percentage of Purchases tied to NYMEX					
Increase/(Decrease) in Pipeline Costs					
Updated Pipeline Costs					
New Hampshire Allocated Percentage					
NH Updated Pipeline Costs	\$ -	\$ 1,792,696			\$ 1,792,696
NH Peaking Volumes					
NUI Peaking Costs Modeled in Sendout					
Change in NYMEX Price					
Percentage of Purchases tied to NYMEX					
Increase/(Decrease) in Pipeline Costs					
Updated Peaking Costs					
New Hampshire Allocated Percentage					
NH Updated Peaking Costs	\$ -	\$ 153,615			\$ 153,615
NH Commodity Costs					
Pipeline					\$ 1,792,696
Storage					\$ -
Peaking					\$ 162,908
Total Commodity Costs	\$ 22,351,368	\$ 1,955,603			\$ 24,306,971
Inventory Finance Charge	\$ -	\$ -			\$ -
Total Anticipated Direct Cost of Gas	\$ 28,220,157	\$ 7,456,383			\$ 35,676,540

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

		Winter						Summer					
	Oct-22	(Actual) Nov-22	(Actual) Dec-22	(Actual) Jan-23	(Actual) Feb-23	(Actual) Mar-23	(Actual) Apr-23	(Forecast) May-23	(Forecast) Jun-23	(Forecast) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Working Capital													
Total Anticipated Direct Cost of Gas		\$ 3,517,099	\$ 5,912,871	\$ 7,560,477	\$ 6,807,704	\$ 3,868,969	\$ 1,259,862	\$ 1,295,155	\$ 1,209,952	\$ 1,190,491	\$ 1,194,788	\$ 1,182,905	\$ 1,502,680
Working Capital Percentage		0.1398%	0.14%	0.18%	0.18%	0.18%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
Working Capital Allowance		\$ 4,917	\$ 8,266	\$ 13,450	\$ 12,111	\$ 6,883	\$ 2,481	\$ 2,550	\$ 2,382	\$ 2,344	\$ 2,353	\$ 2,329	\$ 2,959
Beginning Period Working Capital Balance		\$ 10,794	\$ 15,772	\$ 24,129	\$ 37,759	\$ 50,126	\$ 57,321	\$ 60,180	\$ 63,127	\$ 65,925	\$ 68,702	\$ 71,506	\$ 74,305
End of Period Working Capital Allowance		\$ 15,711	\$ 24,038	\$ 37,579	\$ 49,870	\$ 57,009	\$ 59,802	\$ 62,730	\$ 65,509	\$ 68,269	\$ 71,055	\$ 73,835	\$ 77,263
Interest		\$ 61	\$ 91	\$ 180	\$ 256	\$ 312	\$ 378	\$ 397	\$ 415	\$ 433	\$ 451	\$ 469	\$ 489
End of period with Interest	\$ 10,794	\$ 15,772	\$ 24,129	\$ 37,759	\$ 50,126	\$ 57,321	\$ 60,180	\$ 63,127	\$ 65,925	\$ 68,702	\$ 71,506	\$ 74,305	\$ 77,753
Bad Debt													
Projected Bad Debt	\$ -	\$ 7,329	\$ 11,806	\$ 12,501	\$ 9,274	\$ (302)	\$ 2,629	\$ 2,847	\$ 2,847	\$ 2,847	\$ 2,847	\$ 2,847	\$ 2,847
Beginning Period Bad Debt Balance		\$ 5,033	\$ 12,402	\$ 24,292	\$ 36,971	\$ 46,487	\$ 46,456	\$ 49,393	\$ 52,568	\$ 55,763	\$ 58,979	\$ 62,216	\$ 65,473
End of Period Bad Debt Balance		\$ 12,362	\$ 24,208	\$ 36,792	\$ 46,245	\$ 46,185	\$ 49,085	\$ 52,240	\$ 55,414	\$ 58,610	\$ 61,825	\$ 65,062	\$ 68,320
Interest		\$ 40	\$ 84	\$ 178	\$ 243	\$ 270	\$ 309	\$ 328	\$ 349	\$ 369	\$ 390	\$ 411	\$ 432
End of Period Bad Debt Balance with Interest	\$ 5,033	\$ 12,402	\$ 24,292	\$ 36,971	\$ 46,487	\$ 46,456	\$ 49,393	\$ 52,568	\$ 55,763	\$ 58,979	\$ 62,216	\$ 65,473	\$ 68,752
Local Production and Storage Capacity		\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Overhead		\$ 82,048	\$ 82,048	\$ 82,048	\$ 82,048	\$ 82,048	\$ 82,048	\$ 19,931	\$ 19,931	\$ 19,931	\$ 19,931	\$ 19,931	\$ 19,931
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
Beginning Balance Over/Under Collection	\$ (2,863,964)	\$ (2,863,964)	\$ (3,652,996)	\$ (3,424,326)	\$ (3,111,576)	\$ (2,954,541)	\$ (4,206,787)	\$ (5,023,219)	\$ (4,449,642)	\$ (3,713,657)	\$ (2,927,053)	\$ (2,134,268)	\$ (1,390,547)
Net Costs - Revenues		\$ (774,132)	\$ 244,852	\$ 331,758	\$ 174,677	\$ (1,231,420)	\$ (786,723)	\$ 604,068	\$ 762,261	\$ 807,979	\$ 809,076	\$ 755,066	\$ 638,815
Ending Balance before Interest		\$ (3,638,096)	\$ (3,408,145)	\$ (3,092,569)	\$ (2,936,899)	\$ (4,185,960)	\$ (4,993,510)	\$ (4,419,151)	\$ (3,687,381)	\$ (2,905,678)	\$ (2,117,976)	\$ (1,379,202)	\$ (751,732)
Average Balance		\$ (3,251,030)	\$ (3,530,571)	\$ (3,258,448)	\$ (3,024,238)	\$ (3,570,251)	\$ (4,600,149)	\$ (4,721,185)	\$ (4,068,512)	\$ (3,309,668)	\$ (2,522,515)	\$ (1,756,735)	\$ (1,071,140)
Interest Rate		5.50%	5.50%	7.00%	7.00%	7.00%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
Interest Expense		\$ (14,901)	\$ (16,182)	\$ (19,008)	\$ (17,641)	\$ (20,826)	\$ (29,709)	\$ (30,491)	\$ (26,276)	\$ (21,375)	\$ (16,291)	\$ (11,346)	\$ (6,918)
Ending Balance Incl Interest Expense	\$ (2,863,964)	\$ (3,652,996)	\$ (3,424,326)	\$ (3,111,576)	\$ (2,954,541)	\$ (4,206,787)	\$ (5,023,219)	\$ (4,449,642)	\$ (3,713,657)	\$ (2,927,053)	\$ (2,134,268)	\$ (1,390,547)	\$ (758,650)
Total Over/Under Collection Ending Balance	\$ (2,848,136)	\$ (3,624,822)	\$ (3,375,905)	\$ (3,036,847)	\$ (2,857,927)	\$ (4,103,010)	\$ (4,913,646)	\$ (4,333,947)	\$ (3,591,969)	\$ (2,799,372)	\$ (2,000,546)	\$ (1,250,769)	\$ (612,145)
Total Indirect Cost of Gas	\$ (2,848,136)	\$ 115,250	\$ 121,869	\$ 125,105	\$ 122,046	\$ 104,141	\$ 93,891	\$ (4,438)	\$ (352)	\$ 4,550	\$ 9,681	\$ 14,642	\$ 19,740
Total Cost of Gas	\$ (2,848,136)	\$ 3,514,545	\$ 5,916,936	\$ 7,567,779	\$ 6,811,946	\$ 3,855,306	\$ 1,235,949	\$ 1,270,786	\$ 1,189,669	\$ 1,175,110	\$ 1,184,538	\$ 1,177,616	\$ 1,502,489
Total Interest	\$ -	\$ (14,800)	\$ (16,007)	\$ (18,649)	\$ (17,143)	\$ (20,244)	\$ (29,023)	\$ (29,766)	\$ (25,512)	\$ (20,572)	\$ (15,450)	\$ (10,465)	\$ (5,996)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Analysis

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				\$ 36,502,953
Working Capital Percentage				
Working Capital Allowance	\$ 48,108	\$ 14,917	\$ 10,794	\$ 73,819
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	\$ 1,278	\$ 2,656		\$ 3,934
End of period with Interest				
Bad Debt				
Projected Bad Debt	\$ 43,237	\$ 17,079	\$ 5,033	\$ 65,349
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	\$ 1,123	\$ 2,279		\$ 3,403
End of Period Bad Debt Balance with Interest				
Local Production and Storage Capacity	\$ 214,538	\$ -		\$ 214,538
Miscellaneous Overhead	\$ 492,287	\$ 119,588		\$ 611,875
Gas Cost Other than Bad Debt and Working Capital Over/Under				
Beginning Balance Over/Under Collection				
Net Costs - Revenues				
Ending Balance before Interest				
Average Balance				
Interest Rate				
Interest Expense	\$ (118,267)	\$ (112,696)		\$ (230,963)
Ending Balance Incl Interest Expense			\$ (2,863,964)	
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	\$ 682,304	\$ 43,823	\$ (2,848,136)	\$ (2,122,010)
Total Cost of Gas	\$ 28,902,460	\$ 7,500,206	\$ (2,848,136)	\$ 33,554,530
Total Interest	\$ (115,865)	\$ (107,761)		\$ (223,627)

Updated End of Period Balance ("Target Balance")
 (\$4,229,669)
 Line 86 - April

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

Sales Revenues	Oct-22	Winter						Summer					
		(Forecast) Nov-22	(Forecast) Dec-22	(Forecast) Jan-23	(Forecast) Feb-23	(Forecast) Mar-23	(Forecast) Apr-23	(Forecast) May-23	(Forecast) Jun-23	(Forecast) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Volumes													
Residential Heat & Non Heat		2,220,775	3,207,847	3,784,334	3,243,890	2,759,086	1,590,808	788,321	510,680	436,331	439,981	488,035	985,408
Sales HLF Classes		382,966	553,184	652,597	559,399	475,796	274,330	476,611	308,752	263,801	266,008	295,061	595,768
Sales LLF Classes		2,088,065	3,016,150	3,558,187	3,050,039	2,594,207	1,495,743	598,639	387,802	331,343	334,115	370,606	748,304
Total		4,691,806	6,777,181	7,995,118	6,853,328	5,829,089	3,360,882	1,863,572	1,207,233	1,031,474	1,040,103	1,153,702	2,329,480
Rates													
Residential Heat & Non Heat CGA		\$ 1,1289	\$ 1,1289	\$ 1,1289	\$ 1,1289	\$ 1,1289	\$ 1,1289	\$ 0.6916	\$ 0.6916	\$ 0.6916	\$ 0.6916	\$ 0.6916	\$ 0.6916
Sales HLF Classes CGA		\$ 1.0536	\$ 1.0536	\$ 1.0536	\$ 1.0536	\$ 1.0536	\$ 1.0536	\$ 0.6331	\$ 0.6331	\$ 0.6331	\$ 0.6331	\$ 0.6331	\$ 0.6331
Sales LLF Classes CGA		\$ 1.1428	\$ 1.1428	\$ 1.1428	\$ 1.1428	\$ 1.1428	\$ 1.1428	\$ 0.7383	\$ 0.7383	\$ 0.7383	\$ 0.7383	\$ 0.7383	\$ 0.7383
Revenues													
Residential Heat & Non Heat		\$ (2,507,033)	\$ (3,621,339)	\$ (4,272,134)	\$ (3,662,027)	\$ (3,114,733)	\$ (1,795,863)	\$ (545,203)	\$ (353,186)	\$ (301,766)	\$ (304,291)	\$ (337,525)	\$ (681,508)
Sales HLF Classes		\$ (403,493)	\$ (582,834)	\$ (687,576)	\$ (589,383)	\$ (501,299)	\$ (289,034)	\$ (301,743)	\$ (195,471)	\$ (167,012)	\$ (168,410)	\$ (186,803)	\$ (377,181)
Sales LLF Classes		\$ (2,386,240)	\$ (3,446,857)	\$ (4,066,296)	\$ (3,485,585)	\$ (2,964,660)	\$ (1,709,336)	\$ (441,975)	\$ (286,314)	\$ (244,630)	\$ (246,677)	\$ (273,619)	\$ (552,473)
Total Sales		\$ (5,296,767)	\$ (7,651,030)	\$ (9,026,007)	\$ (7,736,995)	\$ (6,580,691)	\$ (3,794,233)	\$ (1,288,921)	\$ (834,971)	\$ (713,409)	\$ (719,377)	\$ (797,947)	\$ (1,611,162)

Gas Costs and Credits	Oct-22	Winter						Summer					
		(Forecast) Nov-22	(Forecast) Dec-22	(Forecast) Jan-23	(Forecast) Feb-23	(Forecast) Mar-23	(Forecast) Apr-23	(Forecast) May-23	(Forecast) Jun-23	(Forecast) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Demand Costs (net of Capacity Assignment)													
Pipeline		\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837	\$ 617,837
Storage		\$ 645,439	\$ 645,439	\$ 645,439	\$ 645,439	\$ 645,439	\$ 701,106	\$ 699,734	\$ 699,734	\$ 699,734	\$ 699,734	\$ 699,734	\$ 699,734
On-system Peaking		\$ 196,790	\$ 196,790	\$ 196,790	\$ 196,790	\$ 196,790	\$ 83,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Off-System Peaking		\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458	\$ 313,458
Total Demand Costs		\$ 1,773,524	\$ 1,773,524	\$ 1,773,524	\$ 1,773,524	\$ 1,773,524	\$ 1,715,928	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029	\$ 1,631,029
Asset Management and Capacity Release													
NUI AMA Revenue		\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)
NUI Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NUI AMA Rev & Cap. Release Subtotal		\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)	\$ (1,744,550)
NH AMA Revenue		\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)
NH Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NH Total Asset Management and Capacity Release		\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)	\$ (714,232)
Re-entry Rate & Conversion Rate Revenue		\$ (1,000.00)	\$ (1,000.00)	\$ (1,000.00)	\$ (1,000.00)	\$ (1,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Demand Costs		\$ 1,058,292	\$ 1,058,292	\$ 1,058,292	\$ 1,058,292	\$ 1,058,292	\$ 1,001,696	\$ 916,797	\$ 916,797	\$ 916,797	\$ 916,797	\$ 916,797	\$ 916,797
NUI Commodity Costs													
NUI Total Pipeline Volumes		577,049	1,131,026	1,155,723	1,098,878	1,043,990	1,029,309	576,044	394,175	355,581	356,908	382,828	657,694
Pipeline Costs Modeled in Sendout™		\$ 4,653,001	\$ 10,571,190	\$ 13,045,845	\$ 12,266,039	\$ 8,070,275	\$ 5,398,884	\$ 2,798,684	\$ 1,860,832	\$ 1,715,991	\$ 1,710,505	\$ 1,714,809	\$ 3,185,675
NYMEX Price Used for Forecast		\$ 7.9010	\$ 8.0350	\$ 8.1150	\$ 7.8180	\$ 6.7050	\$ 5.3520	\$ 5.2190	\$ 5.2780	\$ 5.3400	\$ 5.3570	\$ 5.3450	\$ 5.4110
NYMEX Price Used for Update		\$ 7.9010	\$ 8.0350	\$ 8.1150	\$ 7.8180	\$ 6.7050	\$ 5.3520	\$ 5.2190	\$ 5.2780	\$ 5.3400	\$ 5.3570	\$ 5.3450	\$ 5.4110
Increase/(Decrease) NYMEX Price		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Increase/(Decrease) in Pipeline Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Updated Pipeline Costs		\$ 4,653,001	\$ 10,571,190	\$ 13,045,845	\$ 12,266,039	\$ 8,070,275	\$ 5,398,884	\$ 2,798,684	\$ 1,860,832	\$ 1,715,991	\$ 1,710,505	\$ 1,714,809	\$ 3,185,675
New Hampshire Allocated Percentage		37.57%	38.38%	38.18%	37.58%	36.63%	32.91%	32.56%	30.79%	29.14%	29.27%	30.29%	35.66%
NH Updated Pipeline Costs		\$ 1,747,920	\$ 4,057,370	\$ 4,981,153	\$ 4,610,118	\$ 2,956,075	\$ 1,776,991	\$ 911,334	\$ 572,880	\$ 500,037	\$ 500,749	\$ 519,400	\$ 1,136,170
NH Commodity Costs													
Pipeline		\$ 1,747,920	\$ 4,057,370	\$ 4,981,153	\$ 4,610,118	\$ 2,956,075	\$ 1,776,991	\$ 911,334	\$ 572,880	\$ 500,037	\$ 500,749	\$ 519,400	\$ 1,136,170
Storage		\$ 1,899,820	\$ 1,819,825	\$ 2,116,343	\$ 2,008,342	\$ 1,530,128	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Peaking		\$ 12,665	\$ 207,187	\$ 1,492,494	\$ 374,558	\$ 38,253	\$ 31,486	\$ 28,957	\$ 26,294	\$ 25,718	\$ 25,837	\$ 25,362	\$ 30,741
Total Commodity Costs		\$ 3,660,406	\$ 6,084,382	\$ 8,589,990	\$ 6,993,018	\$ 4,524,456	\$ 1,808,478	\$ 940,290	\$ 599,174	\$ 525,755	\$ 526,586	\$ 544,761	\$ 1,166,911
Inventory Finance Charge		\$ 799	\$ 1,243	\$ 1,507	\$ 1,281	\$ 1,038	\$ 514	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Anticipated Direct Cost of Gas		\$ 4,719,497	\$ 7,143,917	\$ 9,649,788	\$ 8,052,591	\$ 5,583,786	\$ 2,810,688	\$ 1,857,087	\$ 1,515,971	\$ 1,442,551	\$ 1,443,382	\$ 1,461,558	\$ 2,083,707

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

Sales Revenues				
Volumes	Winter	Summer	Prior Period	Total
Residential Heat & Non Heat				20,455,496
Sales HLF Classes				5,104,273
Sales LLF Classes				18,573,201
Total				44,132,969
Rates				
Residential Heat & Non Heat CGA				
Sales HLF Classes CGA				
Sales LLF Classes CGA				
Revenues				
Residential Heat & Non Heat				\$ (21,496,609)
Sales HLF Classes				\$ (4,450,239)
Sales LLF Classes				\$ (20,104,661)
Total Sales	\$ (40,085,722)	\$ (5,965,786)		\$ (46,051,509)
Gas Costs and Credits				
	Winter	Summer	Prior Period	Total
Demand Costs (net of Capacity Assignment)				
Pipeline	\$ 3,707,022	\$ 3,707,022		\$ 7,414,044
Storage	\$ 3,928,299	\$ 4,198,402		\$ 8,126,701
On-system Peaking	\$ 1,067,478	\$ -		\$ 1,067,478
Off-System Peaking	\$ 1,880,748	\$ 1,880,748		\$ 3,761,497
Total Demand Costs	\$ 10,583,548	\$ 9,786,173		\$ 20,369,720
Asset Management and Capacity Release				
NUI AMA Revenue	\$ (10,467,300)	\$ (10,467,300)		\$ (20,934,600)
NUI Capacity Release				\$ -
NUI AMA Rev & Cap. Release Subtotal				\$ -
NH AMA Revenue	\$ (4,285,393)	\$ (4,285,393)		\$ (8,570,786)
NH Capacity Release				\$ -
NH Total Asset Management and Capacity Release	\$ (4,285,393)	\$ (4,285,393)		\$ (8,570,786)
Re-entry Rate & Conversion Rate Revenue	\$ (5,000)	\$ (1,000.00)		\$ (6,000)
Net Demand Costs	\$ 6,293,155	\$ 5,500,780		\$ 11,793,935
NUI Commodity Costs				
NUI Total Pipeline Volumes				8,759,207
Pipeline Costs Modeled in Sendout™				\$ 66,991,729
NYMEX Price Used for Forecast				
NYMEX Price Used for Update				
Increase/(Decrease) NYMEX Price				
Increase/(Decrease) in Pipeline Costs				
Updated Pipeline Costs				
New Hampshire Allocated Percentage				
NH Updated Pipeline Costs				\$ 24,270,196
NH Commodity Costs				
Pipeline				\$ 24,270,196
Storage				\$ 9,374,458
Peaking				\$ 2,319,552
Total Commodity Costs	\$ 31,660,730	\$ 4,303,477		\$ 35,964,206
Inventory Finance Charge				\$ 6,382
Total Anticipated Direct Cost of Gas	\$ 37,960,266	\$ 9,804,257		\$ 47,764,523

Updated End of Period Balance ("Target Balance")
(\$4,229,669)
Line 86 - April

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

	Oct-22	Winter						Summer					
		(Forecast) Nov-22	(Forecast) Dec-22	(Forecast) Jan-23	(Forecast) Feb-23	(Forecast) Mar-23	(Forecast) Apr-23	(Forecast) May-23	(Forecast) Jun-23	(Forecast) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Working Capital													
Total Anticipated Direct Cost of Gas		\$ 4,719,497	\$ 7,143,917	\$ 9,649,788	\$ 8,052,591	\$ 5,583,786	\$ 2,810,688	\$ 1,857,087	\$ 1,515,971	\$ 1,442,551	\$ 1,443,382	\$ 1,461,558	\$ 2,083,707
Working Capital Percentage		0.1588%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%
Working Capital Allowance		\$ 7,495	\$ 11,345	\$ 15,325	\$ 12,788	\$ 8,868	\$ 4,464	\$ 2,949	\$ 2,408	\$ 2,291	\$ 2,292	\$ 2,321	\$ 3,309
Beginning Period Working Capital Balance		\$ 10,748	\$ 18,319	\$ 29,789	\$ 45,309	\$ 58,367	\$ 67,562	\$ 72,389	\$ 75,723	\$ 78,531	\$ 81,237	\$ 83,958	\$ 86,723
End of Period Working Capital Allowance		\$ 18,243	\$ 29,664	\$ 45,114	\$ 58,098	\$ 67,235	\$ 72,025	\$ 75,338	\$ 78,130	\$ 80,822	\$ 83,529	\$ 86,280	\$ 90,032
Interest		\$ 75	\$ 125	\$ 195	\$ 269	\$ 327	\$ 364	\$ 385	\$ 401	\$ 415	\$ 429	\$ 443	\$ 460
End of period with Interest	\$ 10,748	\$ 18,319	\$ 29,789	\$ 45,309	\$ 58,367	\$ 67,562	\$ 72,389	\$ 75,723	\$ 78,531	\$ 81,237	\$ 83,958	\$ 86,723	\$ 90,492
Bad Debt													
Projected Bad Debt	\$ -	\$ 20,261	\$ 20,261	\$ 20,261	\$ 20,261	\$ 20,261	\$ 20,261	\$ 2,847	\$ 2,847	\$ 2,847	\$ 2,847	\$ 2,847	\$ 2,847
Beginning Period Bad Debt Balance		\$ 5,033	\$ 25,373	\$ 45,818	\$ 66,370	\$ 87,029	\$ 107,796	\$ 128,671	\$ 132,195	\$ 135,738	\$ 139,298	\$ 142,878	\$ 146,476
End of Period Bad Debt Balance		\$ 25,294	\$ 45,633	\$ 66,079	\$ 86,631	\$ 107,290	\$ 128,057	\$ 131,518	\$ 135,042	\$ 138,584	\$ 142,145	\$ 145,724	\$ 149,322
Interest		\$ 79	\$ 185	\$ 291	\$ 398	\$ 506	\$ 614	\$ 678	\$ 696	\$ 714	\$ 733	\$ 752	\$ 770
End of Period Bad Debt Balance with Interest	\$ 5,033	\$ 25,373	\$ 45,818	\$ 66,370	\$ 87,029	\$ 107,796	\$ 128,671	\$ 132,195	\$ 135,738	\$ 139,298	\$ 142,878	\$ 146,476	\$ 150,093
Local Production and Storage Capacity		\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ 35,756	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Overhead		\$ 82,048	\$ 82,048	\$ 82,048	\$ 82,048	\$ 82,048	\$ 82,048	\$ 19,931	\$ 19,931	\$ 19,931	\$ 19,931	\$ 19,931	\$ 19,931
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
Beginning Balance Over/Under Collection		\$ (2,907,656)	\$ (3,383,462)	\$ (3,791,407)	\$ (3,067,637)	\$ (2,649,086)	\$ (3,544,274)	\$ (4,430,729)	\$ (3,864,176)	\$ (3,181,546)	\$ (2,447,092)	\$ (1,713,964)	\$ (1,037,568)
Net Costs - Revenues		\$ (459,466)	\$ (389,309)	\$ 741,586	\$ 433,400	\$ (879,101)	\$ (865,741)	\$ 588,098	\$ 700,931	\$ 749,074	\$ 743,936	\$ 683,542	\$ 492,477
Ending Balance before Interest		\$ (3,367,122)	\$ (3,772,771)	\$ (3,049,822)	\$ (2,634,237)	\$ (3,528,187)	\$ (4,410,014)	\$ (3,842,631)	\$ (3,163,245)	\$ (2,432,472)	\$ (1,703,156)	\$ (1,030,421)	\$ (545,091)
Average Balance		\$ (3,137,389)	\$ (3,578,117)	\$ (3,420,614)	\$ (2,850,937)	\$ (3,088,636)	\$ (3,977,144)	\$ (4,136,680)	\$ (3,513,711)	\$ (2,807,009)	\$ (2,075,124)	\$ (1,372,192)	\$ (791,329)
Interest Rate		6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
Interest Expense		\$ (16,341)	\$ (18,636)	\$ (17,816)	\$ (14,849)	\$ (16,087)	\$ (20,714)	\$ (21,545)	\$ (18,301)	\$ (14,620)	\$ (10,808)	\$ (7,147)	\$ (4,122)
Ending Balance Incl Interest Expense	\$ (2,907,656)	\$ (3,383,462)	\$ (3,791,407)	\$ (3,067,637)	\$ (2,649,086)	\$ (3,544,274)	\$ (4,430,729)	\$ (3,864,176)	\$ (3,181,546)	\$ (2,447,092)	\$ (1,713,964)	\$ (1,037,568)	\$ (549,212)
Total Over/Under Collection Ending Balance	\$ (2,891,875)	\$ (3,339,770)	\$ (3,715,800)	\$ (2,955,958)	\$ (2,503,689)	\$ (3,368,916)	\$ (4,229,669)	\$ (3,656,258)	\$ (2,967,277)	\$ (2,226,557)	\$ (1,487,127)	\$ (804,369)	\$ (308,627)
Total Indirect Cost of Gas	\$ (2,891,875)	\$ 129,374	\$ 131,084	\$ 136,061	\$ 136,672	\$ 131,679	\$ 122,792	\$ 5,244	\$ 7,981	\$ 11,578	\$ 15,424	\$ 19,147	\$ 23,196
Total Cost of Gas	\$ (2,891,875)	\$ 4,848,871	\$ 7,275,001	\$ 9,785,849	\$ 8,189,264	\$ 5,715,465	\$ 2,933,480	\$ 1,862,331	\$ 1,523,952	\$ 1,454,130	\$ 1,458,806	\$ 1,480,705	\$ 2,106,904
Total Interest	\$ -	\$ (16,186)	\$ (18,326)	\$ (17,329)	\$ (14,181)	\$ (15,254)	\$ (19,737)	\$ (20,483)	\$ (17,204)	\$ (13,490)	\$ (9,646)	\$ (5,952)	\$ (2,891)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				\$ 47,764,523
Working Capital Percentage				
Working Capital Allowance	\$ 60,285	\$ 15,570	\$ 10,748	\$ 86,604
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	\$ 1,355	\$ 2,533		\$ 3,888
End of period with Interest				
Bad Debt				
Projected Bad Debt	\$ 121,564	\$ 17,079	\$ 5,033	\$ 143,676
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	\$ 2,074	\$ 4,343		\$ 6,417
End of Period Bad Debt Balance with Interest				
Local Production and Storage Capacity	\$ 214,538	\$ -		\$ 214,538
				\$ -
Miscellaneous Overhead	\$ 492,287	\$ 119,588		\$ 611,875
Gas Cost Other than Bad Debt and Working Capital Over/L				
Beginning Balance Over/Under Collection				\$ (36,018,597)
Net Costs - Revenues				\$ 2,539,428
Ending Balance before Interest				\$ (33,479,169)
Average Balance				\$ (34,748,883)
Interest Rate				
Interest Expense	\$ (104,442)	\$ (76,542)		\$ (180,984)
Ending Balance Incl Interest Expense			\$ (2,907,656)	
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	\$ 787,662	\$ 82,571	\$ (2,891,875)	\$ (2,021,642)
Total Cost of Gas	\$ 38,747,928	\$ 9,886,828	\$ (2,891,875)	\$ 45,742,882
Total Interest	\$ (101,012)	\$ (69,666)		\$ (170,679)