

New Hampshire Monthly Cost of Gas Report

Summer Period

September 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 2023 Summer Period estimated ending balance¹. An adjustment is made to COG rates if the estimated ending balance exceeds 4% of total projected gas costs.

The September 2023 analysis and summary incorporates the revised April 30, 2023 target balance of (\$4,229,669)², updates commodity costs to reflect NYMEX prices as of September 21, 2023, and replaces estimated costs and revenues for May through August 2023 with actuals.

As shown on Table 1, Line 17, projected Summer Period revenues are \$2,643,014 and the total net projected Summer Period costs³, Line 23, are \$2,544,040. The resulting ending balance, Line 25, is an over-collection of (\$98,974). This over-collection represents a variance of 1.46% 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 Summer Period runs from May 1st to October 31st.

² 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.

³ 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
September 2023 Estimated

1	April 30, 2023 Target Balance	\$ (4,229,669)	Table 3, Page 3, Line 86, April
2			
3	Forecasted firm therm sales 08/01/23-10/31/23		
4	Residential Heat & Non Heat	1,473,443	Table 2, PG. 2, Line 2
5	HLF Classes	890,829	Table 2, PG. 2, Line 3
6	LLF Classes	1,118,910	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	\$ (1,291,703)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 08/01/23 - 10/31/23	\$ (1,291,703)	LN 13
16	Actual recovered costs 05/01/23 - 07/31/203	\$ (1,351,310)	Table 2, Line 14
17	Estimated total recovered costs 05/01/23 - 10/31/23	\$ (2,643,014)	LN 15 + LN 16
18			
19	Revised projected direct gas costs [1]	\$ 6,668,810	Table 2, PG. 2, Line 66
20	Revised projected indirect gas costs [2]	\$ 104,899	Table 2, PG. 4, Line 101
21	Revised total projected gas costs 05/01/2023 - 10/31/2023	\$ 6,773,709	LN 19 + LN 20
22			
23	Total Summer Season Revenue Requirement	\$ 2,544,040	LN 1 + LN 21
24			
25	Projected October 31, 2023 Summer Season Balance	\$ (98,974)	LN 17 + LN 23
26			
27			
28			
29	Projected Summer Season Imbalance Type	Over-collection	
30			
31	Under/(over) collection as percent of total gas costs	-1.46%	LN 25 / LN 21
32			
33	Summer Season Under-collection Threshold (4% over Summer Costs)	\$ 270,948	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 LN 25 > LN 33 Yes, ELSE No

NOTES

[1] Reflects futures prices as of September 21, 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	(Actual) May-23	(Actual) Jun-23	(Actual) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Volumes													
Residential Heat & Non Heat												488,035	985,408
Sales HLF Classes												295,061	595,768
Sales LLF Classes												370,606	748,304
Total												1,153,702	2,329,480
Rates													
Residential Heat & Non Heat CGA												\$0.3708	\$0.3708
Sales HLF Classes CGA												\$0.3123	\$0.3123
Sales LLF Classes CGA												\$0.4175	\$0.4175
Revenues													
Residential Heat & Non Heat												\$ (180,963)	\$ (365,389)
Sales HLF Classes												\$ (92,148)	\$ (186,058)
Sales LLF Classes												\$ (154,728)	\$ (312,417)
Total Sales		\$ (4,291,232)	\$ (5,668,019)	\$ (7,228,720)	\$ (6,633,026)	\$ (5,100,389)	\$ (2,046,585)	\$ (506,891)	\$ (278,324)	\$ (280,036)	\$ (286,059)	\$ (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	(Actual) May-23	(Actual) Jun-23	(Actual) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
Demand Costs (net of Capacity Assignment)													
Pipeline											\$ 617,837	\$ 617,837	\$ 617,837
Storage											\$ 699,734	\$ 699,734	\$ 699,734
On-system Peaking											\$ -	\$ -	\$ -
Off-System Peaking											\$ 313,458	\$ 313,458	\$ 313,458
Total Demand Costs											\$ 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)
NUI Capacity Release											\$ -	\$ -	\$ -
NUI AMA Rev & Cap. Release Subtotal											\$ (714,232)	\$ (714,232)	\$ (714,232)
NH AMA Revenue											\$ (714,232)	\$ (714,232)	\$ (714,232)
NH Capacity Release											\$ (714,232)	\$ (714,232)	\$ (714,232)
NH Total Asset Management and Capacity Release											\$ (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	\$ 811,164	\$ 869,501	\$ 855,060	\$ 799,302	\$ 916,797	\$ 916,797
NUI Commodity Costs													
NUI Total Pipeline Volumes												382,828	657,694
Pipeline Costs Modeled in Sendout™												\$ 1,714,809	\$ 3,185,675
NYMEX Price Used for Forecast												\$ 5,345	\$ 5,411
NYMEX Price Used for Update												\$ 2,556	\$ 2,610
Increase/(Decrease) NYMEX Price												\$ (2,79)	\$ (2,80)
Percentage of Purchases tied to NYMEX												100.00%	100.00%
Increase/(Decrease) in Pipeline Costs												\$ (1,067,707)	\$ (1,842,201)
Updated Pipeline Costs												\$ 647,102	\$ 1,343,474
New Hampshire Allocated Percentage												30.29%	35.66%
NH Updated Pipeline Costs												\$ 196,001	\$ 479,150
NH Peaking Volumes												1,800	1,860
NUI Peaking Costs Modeled in Sendout												\$ 83,732	\$ 86,193
Change in NYMEX Price												\$ (2,79)	\$ (2,80)
Percentage of Purchases tied to NYMEX												100.00%	100.00%
Increase/(Decrease) in Pipeline Costs												\$ (5,020.20)	\$ (5,209.86)
Updated Peaking Costs												\$ 78,712	\$ 80,983
New Hampshire Allocated Percentage												30.29%	35.66%
NH Updated Peaking Costs												\$ 23,841	\$ 28,883
NH Commodity Costs													
Pipeline												\$ 196,001	\$ 479,150
Storage												\$ -	\$ -
Peaking		\$ -										\$ 25,362	\$ 30,741
Total Commodity Costs		\$ 2,228,171	\$ 4,974,442	\$ 6,425,245	\$ 5,710,736	\$ 2,759,617	\$ 366,881	\$ 251,074	\$ 193,445	\$ 153,120	\$ 171,296	\$ 221,363	\$ 509,890
Inventory Finance Charge								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Anticipated Direct Cost of Gas		\$ 3,428,685	\$ 5,840,096	\$ 7,441,153	\$ 6,705,494	\$ 3,765,371	\$ 1,153,081	\$ 1,062,239	\$ 1,062,946	\$ 1,008,180	\$ 970,598	\$ 1,138,159	\$ 1,426,687

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

Sales Revenues				
Volumes	Winter	Summer	Prior Period	Total
Residential Heat & Non Heat				
Sales HLF Classes				
Sales LLF Classes				
Total				
Rates				
Residential Heat & Non Heat CGA				
Sales HLF Classes CGA				
Sales LLF Classes CGA				
Revenues				
Residential Heat & Non Heat				
Sales HLF Classes				
Sales LLF Classes				
Total Sales	\$ (30,967,970)	\$ (2,643,014)		\$ (33,610,984)
Gas Costs and Credits				
				Total
Demand Costs (net of Capacity Assignment)				
Pipeline	\$ -			\$ 1,853,511
Storage	\$ -			\$ 2,099,201
On-system Peaking	\$ -			\$ -
Off-System Peaking	\$ -			\$ 940,374
Total Demand Costs	\$ -	\$ -		\$ 4,893,086
Asset Management and Capacity Release				
NUI AMA Revenue				\$ (5,233,650)
NUI Capacity Release				\$ -
NUI AMA Rev & Cap. Release Subtotal				\$ -
NH AMA Revenue				\$ (2,142,696)
NH Capacity Release				\$ -
NH Total Asset Management and Capacity Release			\$ -	\$ (2,142,696)
Re-entry Rate & Conversion Rate Revenue		\$ -		\$ -
Net Demand Costs	\$ 5,868,789	\$ 5,168,622		\$ 11,037,411
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	\$ -			
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	\$ -			
NH Commodity Costs				
Pipeline				
Storage				
Peaking				
Total Commodity Costs	\$ 22,465,091	\$ 1,500,188		\$ 23,965,279
Inventory Finance Charge	\$ -	\$ -		\$ -
Total Anticipated Direct Cost of Gas	\$ 28,333,880	\$ 6,668,810		\$ 35,002,690

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

		Winter						Summer					
		(Actual) Nov-22	(Actual) Dec-22	(Actual) Jan-23	(Actual) Feb-23	(Actual) Mar-23	(Actual) Apr-23	(Actual) May-23	(Actual) Jun-23	(Actual) Jul-23	(Forecast) Aug-23	(Forecast) Sep-23	(Forecast) Oct-23
	Oct-22												
Working Capital													
Total Anticipated Direct Cost of Gas		\$ 3,546,489	\$ 5,957,900	\$ 7,558,957	\$ 6,823,299	\$ 3,883,175	\$ 1,270,885	\$ 1,082,170	\$ 1,082,878	\$ 1,028,111	\$ 990,530	\$ 1,158,091	\$ 1,446,618
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		\$ 4,958	\$ 8,329	\$ 13,447	\$ 12,139	\$ 6,908	\$ 2,502	\$ 2,131	\$ 2,132	\$ 2,024	\$ 1,950	\$ 2,280	\$ 2,848
Beginning Period Working Capital Balance		\$ 10,794	\$ 15,813	\$ 24,234	\$ 37,862	\$ 50,257	\$ 57,478	\$ 60,360	\$ 62,887	\$ 65,432	\$ 67,914	\$ 70,338	\$ 73,109
End of Period Working Capital Allowance		\$ 15,752	\$ 24,142	\$ 37,681	\$ 50,000	\$ 57,165	\$ 59,980	\$ 62,491	\$ 65,019	\$ 67,457	\$ 69,864	\$ 72,618	\$ 75,958
Interest		\$ 61	\$ 92	\$ 181	\$ 256	\$ 313	\$ 379	\$ 397	\$ 413	\$ 457	\$ 474	\$ 491	\$ 512
End of period with Interest	\$ 10,794	\$ 15,813	\$ 24,234	\$ 37,862	\$ 50,257	\$ 57,478	\$ 60,360	\$ 62,887	\$ 65,432	\$ 67,914	\$ 70,338	\$ 73,109	\$ 76,470
Bad Debt													
Projected Bad Debt	\$ -	\$ 7,329	\$ 11,806	\$ 12,501	\$ 9,274	\$ (302)	\$ 2,629	\$ 16,762	\$ 14,043	\$ 10,010	\$ 33,785	\$ 2,847	\$ 2,847
Beginning Period Bad Debt Balance		\$ 5,033	\$ 12,402	\$ 24,292	\$ 36,971	\$ 46,487	\$ 46,456	\$ 49,393	\$ 66,528	\$ 81,047	\$ 91,648	\$ 126,180	\$ 129,903
End of Period Bad Debt Balance		\$ 12,362	\$ 24,208	\$ 36,792	\$ 46,245	\$ 46,185	\$ 49,085	\$ 66,155	\$ 80,572	\$ 91,056	\$ 125,433	\$ 129,026	\$ 132,750
Interest		\$ 40	\$ 84	\$ 178	\$ 243	\$ 270	\$ 309	\$ 373	\$ 475	\$ 592	\$ 746	\$ 877	\$ 903
End of Period Bad Debt Balance with Interest	\$ 5,033	\$ 12,402	\$ 24,292	\$ 36,971	\$ 46,487	\$ 46,456	\$ 49,393	\$ 66,528	\$ 81,047	\$ 91,648	\$ 126,180	\$ 129,903	\$ 133,653
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)	\$ (3,623,539)	\$ (3,349,602)	\$ (3,037,940)	\$ (2,864,834)	\$ (4,102,310)	\$ (4,907,009)	\$ (4,361,563)	\$ (3,582,579)	\$ (2,856,563)	\$ (2,169,310)	\$ (1,451,462)
Net Costs - Revenues		\$ (744,742)	\$ 289,881	\$ 330,238	\$ 190,272	\$ (1,217,214)	\$ (775,700)	\$ 575,279	\$ 804,554	\$ 748,075	\$ 704,470	\$ 730,252	\$ 582,754
Ending Balance before Interest		\$ (3,608,706)	\$ (3,333,658)	\$ (3,019,364)	\$ (2,847,668)	\$ (4,082,048)	\$ (4,878,010)	\$ (4,331,730)	\$ (3,557,009)	\$ (2,834,504)	\$ (2,152,093)	\$ (1,439,058)	\$ (868,708)
Average Balance		\$ (3,236,335)	\$ (3,478,599)	\$ (3,184,483)	\$ (2,942,804)	\$ (3,473,441)	\$ (4,490,160)	\$ (4,619,369)	\$ (3,959,286)	\$ (3,208,542)	\$ (2,504,328)	\$ (1,804,184)	\$ (1,160,085)
Interest Rate		5.50%	5.50%	7.00%	7.00%	7.00%	7.75%	7.75%	7.75%	8.25%	8.25%	8.25%	8.25%
Interest Expense		\$ (14,833)	\$ (15,944)	\$ (18,576)	\$ (17,166)	\$ (20,262)	\$ (28,999)	\$ (29,833)	\$ (25,570)	\$ (22,059)	\$ (17,217)	\$ (12,404)	\$ (7,976)
Ending Balance Incl Interest Expense	\$ (2,863,964)	\$ (3,623,539)	\$ (3,349,602)	\$ (3,037,940)	\$ (2,864,834)	\$ (4,102,310)	\$ (4,907,009)	\$ (4,361,563)	\$ (3,582,579)	\$ (2,856,563)	\$ (2,169,310)	\$ (1,451,462)	\$ (876,684)
Total Over/Under Collection Ending Balance	\$ (2,848,136)	\$ (3,595,324)	\$ (3,301,076)	\$ (2,963,108)	\$ (2,768,090)	\$ (3,998,376)	\$ (4,797,256)	\$ (4,232,148)	\$ (3,436,100)	\$ (2,697,001)	\$ (1,972,793)	\$ (1,248,450)	\$ (666,561)
Total Indirect Cost of Gas	\$ (2,848,136)	\$ 115,359	\$ 122,171	\$ 125,535	\$ 122,550	\$ 104,732	\$ 94,625	\$ 9,760	\$ 11,425	\$ 10,955	\$ 39,670	\$ 14,023	\$ 19,066
Total Cost of Gas	\$ (2,848,136)	\$ 3,544,044	\$ 5,962,266	\$ 7,566,688	\$ 6,828,044	\$ 3,870,103	\$ 1,247,705	\$ 1,071,999	\$ 1,074,371	\$ 1,019,135	\$ 1,010,268	\$ 1,152,182	\$ 1,445,753
Total Interest	\$ -	\$ (14,733)	\$ (15,768)	\$ (18,217)	\$ (16,667)	\$ (19,678)	\$ (28,311)	\$ (29,064)	\$ (24,682)	\$ (21,010)	\$ (15,997)	\$ (11,035)	\$ (6,560)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				\$ 35,829,103
Working Capital Percentage				
Working Capital Allowance	\$ 48,284	\$ 13,366	\$ 10,794	\$ 72,444
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	\$ 1,282	\$ 2,744		\$ 4,026
End of period with Interest				
Bad Debt				
Projected Bad Debt	\$ 43,237	\$ 80,293	\$ 5,033	\$ 128,563
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	\$ 1,123	\$ 3,966		\$ 5,090
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/U				
Beginning Balance Over/Under Collection				
Net Costs - Revenues				
Ending Balance before Interest				
Average Balance				
Interest Rate				
Interest Expense	\$ (115,780)	\$ (115,059)		\$ (230,839)
Ending Balance Incl Interest Expense			\$ (2,863,964)	
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	\$ 684,971	\$ 104,899	\$ (2,848,136)	\$ (2,058,267)
Total Cost of Gas	\$ 29,018,851	\$ 6,773,709	\$ (2,848,136)	\$ 32,944,423
Total Interest	\$ (113,375)	\$ (108,349)		\$ (221,724)

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/U				
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)