New Hampshire Monthly Cost of Gas Report

Summer Period

September 2021 Summary

The objective of the September Monthly Cost of Gas ("COG") Report is to determine if COG rates need to be adjusted in order to minimize the October 31, 2021 expected end-of-year COG balance. This analysis determines if the October 31, 2021 Summer Period ending balance exceeds the threshold for a COG rate change and, if exceeded, a COG rate change lowers the expected end-of-year COG balance.

For the September 2021 analysis, NYMEX prices were updated based on the closing prices on September 21, 2021 and are reflected in the projected direct gas costs shown on Line 19 of Table 1. The change in NYMEX prices also impacts the working capital component of projected indirect gas costs as shown on Line 20.

As shown on Table 1, the projected Summer Period ending balance is an under-collection of $243,022 (Line 23) and exceeds the 4% threshold for a rate change (Line 37). This projected under-collection is due to higher NYMEX prices combined with lower than projected earnings in August 2021. In addition, although the Winter Season ending balance is an over-collection (Line 25), the net year-end balance reflects an under-collection and a rate adjustment will reduce the annual year-end balance. Therefore, COG rates will increase for October 2021.

However, due to the 125% ceiling on COG rate increases, the cost adjustment is limited to $94,081 (Line 47). As a result, Summer Season COG rates will increase by $0.0428 (Line 43) per therm for all rate classes in order to reduce both the Summer Period and end-of-year balances.

Support for the estimated end of year balance is provided in Table 2.

NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
2020-2021 Summer Period Cost of Gas
DG 20-154
September 2021 Estimated

1	April 30, 2021 Target Balance		$ (5,447,209)	Table 2, PG. 3, Line 108
2				
3	Forecasted firm therm sales 08/01/21-10/31/21			
4	Residential Heat & Non Heat	1,395,731		Table 2, PG. 2, Line 2
5	HLF Classes	774,272		Table 2, PG. 2, Line 3
6	LLF Classes	1,094,058		Table 2, PG. 2, Line 4
7				
8	Current recovery rate per therm			
9	Residential heat & non heat	$0.4970		Table 2, PG. 1, Line 7
10	HLF classes	$0.4501		Table 2, PG. 1, Line 8
11	LLF classes	$0.5291		Table 2, PG. 1, Line 9
12				
13	Total	$ (1,621,044)		(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14				
15	Forecasted recovered costs at current rates 09/01/21 - 10/31/21		$ (1,621,044)	LN 13
16	Actual recovered costs 05/01/2021 - 08/31/2021		$ (2,324,948)	
17	Estimated total recovered costs 05/01/21 - 10/31/21		$ (3,945,993)	LN 15 + LN 16
18				
19	Revised projected direct gas costs [1]		$ 9,515,399	Table 2, PG. 2, Line 69
20	Revised projected indirect gas costs [2]		$ 120,824	Table 2, PG. 4, Line 101
21	Revised total projected gas costs 05/01/21 - 10/31/21		$ 9,636,224	LN 19 + LN 20
22				
23	Projected October 31, 2021 Summer Season Balance		$ 243,022	LN 1 + LN 17 + LN 21
24				
25	Projected Winter Season Variance		$ (53,446)	Table 2, Page 3, LN 111
26				
27	Projected End of Year Balance		$ 189,576	Table 2, Page 3, LN 99, October
28				
29				
30				
31	Projected Summer Season Imbalance Type		Under-collection	
32				
33	Projected End of Summer Season Variance		5.80%	LN 27 / (LN 21 + LN 10)
34				
35	Summer Season Over-collection Threshold (4% of Projected Gas Costs)		NA	(LN 21) * 4%
36				
37	Summer Season Under-collection Threshold (4% of Projected Gas Costs)		$ 167,561	(LN 21 + LN 1) * 4%
38				
39	Over-collection Rate Adjustment Required		NA	
40				
41	Under-collection Rate Adjustment Required		YES	IF (ABS) LN 23 > (ABS) LN 37 Yes, ELSE No
42				
43	Maximum Allowed Rate Increase		$0.0428	Max Low Winter Rate - Current Low Winter Rat
44				
45	Projected October Sales		$ 2,198,166	Table 2, Page 1, LN 5, October
46				
47	Allowed Cost Recovery		$ 94,081	LN 43 * LN 45

NOTES
[1] Reflects futures prices as of September 21, 2021
[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

Line			Winter						Summer					
	Sales Revenues												(Forecast)	(Forecast)
1	Volumes	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
2	Residential Heat & Non Heat												455,783	939,948
3	Sales HLF Classes												252,842	521,430
4	Sales LLF Classes												357,270	736,788
5	Total												1,065,895	2,198,166
6	Rates													
7	Residential Heat & Non Heat CGA												$0.4970	$0.4970
8	Sales HLF Classes CGA												$0.4501	$0.4501
9	Sales LLF Classes CGA												$0.5291	$0.5291
10	Revenues													
11	Residential Heat & Non Heat												$ (226,524)	$ (467,154)
12	Sales HLF Classes												$ (113,804)	$ (234,695)
13	Sales LLF Classes												$ (189,032)	$ (389,835)
14	Total Sales		$ (2,882,446)	$ (4,259,355)	$ (5,212,885)	$ (4,765,411)	$ (4,067,873)	$ (2,198,500)	$ (1,042,222)	$ (283,020)	$ (566,979)	$ (432,727)	$ (529,360)	$ (1,091,684)
15														

Line									Summer					
16														
17	**Gas Costs and Credits**												(Forecast)	(Forecast)
18		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
19	Demand Costs (net of Capacity Assignment)													
20	Pipeline												$ 457,604	$ 457,604
21	Storage												$ 630,827	$ 630,827
22	On-system Peaking												$ 16,338	$ 16,338
23	Off-System Peaking												$ 317,658	$ 317,658
24	Total Demand Costs												$ 1,422,428	$ 1,422,428
25														
26	Asset Management and Capacity Release													
27	NUI AMA Revenue												$ (712,459)	$ (712,459)
28	NUI Capacity Release												$ -	$ -
29	NUI AMA Rev & Cap. Release Subtotal													
30	NH AMA Revenue												$ (288,787)	$ (288,787)
31	NH Capacity Release													
32	NH Total Asset Management and Capacity Release			$ -									$ (288,787)	$ (288,787)
33														
34	CNG Expenses												$ 9,972	$ 9,972
35														
36	Re-entry Rate & Conversion Rate Revenue								$ -	$ -	$ -		$ -	$ -
37														
38	Net Demand Costs		$ 1,156,589	$ 1,106,649	$ 1,207,069	$ 1,252,487	$ 1,172,433	$ 1,285,264	$ 958,073	$ 1,137,933	$ 1,070,137	$ 1,098,690	$ 1,143,612	$ 1,143,612
39														
40	NUI Commodity Costs													
41	NUI Total Pipeline Volumes												320,183	619,360
42	Pipeline Costs Modeled in Sendout™												$ 832,473	$ 1,619,126
43	NYMEX Price Used for Forecast												$ 2.3290	$ 2.3540
44	NYMEX Price Used for Update												$ 4.3700	$ 4.8050
45	Increase/(Decrease) NYMEX Price												$ 2.04	$ 2.45
46	Increase/(Decrease) in Pipeline Costs												$ 653,494	$ 1,518,051
47	Updated Pipeline Costs												$ 1,485,967	$ 3,137,177
48	New Hampshire Allocated Percentage												33.54%	35.85%
49	NH Updated Pipeline Costs												$ 498,403	$ 1,124,721
50														
51	NH Peaking Volumes												604	667
52	NH Peaking Costs Modeled in Sendout												$ 3,992	$ 4,396
53	Change in NYMEX Price %												$ 2.04	$ 2.45
54	Change in Peaking Costs												$ 1,232.22	$ 1,634.41
55	NH Updated Peaking Costs												$ 5,224	$ 6,031
56														
57	NH Commodity Costs													
58	Pipeline												$ 498,403	$ 1,124,721
59	Storage												$ -	$ -
60	Peaking												$ 5,224	$ 6,031
61														
62	Off-System Gas Sales Margin													
63	New Hampshire Allocated Percentage													
64	NH Off-System Gas Sales Margin													
65														
66	Total Commodity Costs		$ 884,990	$ 1,834,122	$ 2,088,305	$ 1,483,717	$ 1,501,692	$ 807,025	$ 403,902	$ 240,145	$ 345,756	$ 339,160	$ 503,628	$ 1,130,752
67	Inventory Finance Charge								$ -	$ -	$ -	$ -	$ -	$ -
68														
69	**Total Anticipated Direct Cost of Gas**		$ 2,041,578	$ 2,940,771	$ 3,295,374	$ 2,736,205	$ 2,674,125	$ 2,092,289	$ 1,361,975	$ 1,378,077	$ 1,415,893	$ 1,437,850	$ 1,647,240	$ 2,274,364

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Anal

	Sales Revenues			Prior	
1	Volumes	Winter	Summer	Period	Total
2	Residential Heat & Non Heat				
3	Sales HLF Classes				
4	Sales LLF Classes				
5	Total	-			
6	Rates				
7	Residential Heat & Non Heat CGA				
8	Sales HLF Classes CGA				
9	Sales LLF Classes CGA				
10	Revenues				
11	Residential Heat & Non Heat		$ (693,679)		
12	Sales HLF Classes		$ (348,500)		
13	Sales LLF Classes		$ (578,866)		
14	Total Sales	$ (23,386,468)	$ (3,945,993)		$ (27,332,461)
15					
16					
17	**Gas Costs and Credits**			Prior	
18		Winter	Summer	Period	Total
19	Demand Costs (net of Capacity Assignment)				
20	Pipeline				
21	Storage				
22	On-system Peaking				
23	Off-System Peaking				
24	Total Demand Costs				
25					
26	Asset Management and Capacity Release				
27	NUI AMA Revenue				
28	NUI Capacity Release				
29	NUI AMA Rev & Cap. Release Subtotal				
30	NH AMA Revenue				
31	NH Capacity Release				
32	NH Total Asset Management and Capacity Release	$ -			
33					
34	CNG Expenses				
35					
36	Re-entry Rate & Conversion Rate Revenue		$ -		
37					
38	Net Demand Costs	$ 7,180,491	$ 6,552,057		$ 13,732,548
39					
40	NUI Commodity Costs				
41	NUI Total Pipeline Volumes				
42	Pipeline Costs Modeled in Sendout™				
43	NYMEX Price Used for Forecast				
44	NYMEX Price Used for Update				
45	Increase/(Decrease) NYMEX Price				
46	Increase/(Decrease) in Pipeline Costs				
47	Updated Pipeline Costs				
48	New Hampshire Allocated Percentage				
49	NH Updated Pipeline Costs				
50					
51	NH Peaking Volumes				
52	NH Peaking Costs Modeled in Sendout				
53	Change in NYMEX Price %				
54	Change in Peaking Costs				
55	NH Updated Peaking Costs				
56					
57	NH Commodity Costs				
58	Pipeline				
59	Storage				
60	Peaking				
61					
62	Off-System Gas Sales Margin				
63	New Hampshire Allocated Percentage				
64	NH Off-System Gas Sales Margin	$ -			$ -
65					
66	Total Commodity Costs	$ 8,599,851	$ 2,963,343		$ 11,563,193
67	Inventory Finance Charge				$ -
68					
69	**Total Anticipated Direct Cost of Gas**	$ 15,780,342	$ 9,515,399		$ 25,295,741

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

		Winter						Summer					
	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	(Forecast) Sep-21	(Forecast) Oct-21
Working Capital													
Total Anticipated Direct Cost of Gas		$ 2,199,518	$ 3,098,711	$ 3,453,314	$ 2,894,144	$ 2,832,065	$ 2,250,229	$ 1,380,128	$ 1,396,231	$ 1,434,047	$ 1,456,004	$ 1,665,394	$ 2,292,518
Working Capital Percentage		0.0892%	0.0892%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%
Working Capital Allowance		$ 1,962	$ 2,764	$ 3,080	$ 2,582	$ 2,526	$ 2,007	$ 1,231	$ 1,245	$ 1,279	$ 1,299	$ 1,486	$ 2,045
Beginning Period Working Capital Balance		$ (41,358)	$ (39,505)	$ (36,844)	$ (33,859)	$ (31,366)	$ (28,921)	$ (26,990)	$ (25,830)	$ (24,653)	$ (23,439)	$ (22,202)	$ (20,774)
End of Period Working Capital Allowance		$ (39,396)	$ (36,741)	$ (33,764)	$ (31,278)	$ (28,840)	$ (26,914)	$ (25,759)	$ (24,585)	$ (23,374)	$ (22,140)	$ (20,716)	$ (18,729)
Interest		$ (109)	$ (103)	$ (96)	$ (88)	$ (82)	$ (76)	$ (71)	$ (68)	$ (65)	$ (62)	$ (58)	$ (53)
End of period with Interest	$ (41,358)	$ (39,505)	$ (36,844)	$ (33,859)	$ (31,366)	$ (28,921)	$ (26,990)	$ (25,830)	$ (24,653)	$ (23,439)	$ (22,202)	$ (20,774)	$ (18,783)
Bad Debt													
Bad Debt Expense	$ -	$ 4,903	$ 10,407	$ 12,015	$ 2,685	$ 5,854	$ 4,358	$ 734	$ 9,403	$ 9,523	$ 28,289	$ 2,371	$ 2,371
Beginning Period Bad Debt Balance		$ (7,408)	$ (2,518)	$ 7,896	$ 19,949	$ 22,692	$ 28,615	$ 33,056	$ 33,880	$ 43,388	$ 53,041	$ 81,512	$ 84,107
End of Period Bad Debt Balance		*$ (2,505)*	*$ 7,889*	*$ 19,911*	*$ 22,634*	*$ 28,546*	*$ 32,973*	*$ 33,790*	*$ 43,283*	*$ 52,911*	*$ 81,330*	*$ 83,883*	*$ 86,479*
Interest		$ (13)	$ 7	$ 38	$ 58	$ 69	$ 83	$ 91	$ 104	$ 130	$ 182	$ 224	$ 231
End of Period Bad Debt Balance with Interest	$ (7,408)	$ (2,518)	$ 7,896	$ 19,949	$ 22,692	$ 28,615	$ 33,056	$ 33,880	$ 43,388	$ 53,041	$ 81,512	$ 84,107	$ 86,710
Local Production and Storage Capacity		$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -									
Miscellaneous Overhead		$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
Beginning Balance Over/Under Collection	$ 1,191,118	$ 1,191,118	$ 510,492	$ (650,342)	$ (2,414,057)	$ (4,294,395)	$ (5,543,507)	$ (5,506,722)	$ (5,183,272)	$ (4,082,591)	$ (3,225,406)	$ (2,209,479)	$ (1,077,891)
Net Costs - Revenues		$ (682,928)	$ (1,160,644)	$ (1,759,571)	$ (1,871,266)	$ (1,235,808)	$ 51,729	$ 337,906	$ 1,113,211	$ 867,068	$ 1,023,276	$ 1,136,034	$ 1,200,833
Ending Balance before Interest		$ 508,190	$ (650,153)	$ (2,409,913)	$ (4,285,323)	$ (5,530,203)	$ (5,491,778)	$ (5,168,815)	$ (4,070,061)	$ (3,215,523)	$ (2,202,129)	$ (1,073,445)	$ 122,942
Average Balance		$ 849,654	$ (69,831)	$ (1,530,127)	$ (3,349,690)	$ (4,912,299)	$ (5,517,643)	$ (5,337,769)	$ (4,626,666)	$ (3,649,057)	$ (2,713,768)	$ (1,641,462)	$ (477,474)
Interest Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Interest Expense		$ 2,301	$ (189)	$ (4,144)	$ (9,072)	$ (13,304)	$ (14,944)	$ (14,456)	$ (12,531)	$ (9,883)	$ (7,350)	$ (4,446)	$ (1,293)
Ending Balance Incl Interest Expense	$ 1,191,118	$ 510,492	$ (650,342)	$ (2,414,057)	$ (4,294,395)	$ (5,543,507)	$ (5,506,722)	$ (5,183,272)	$ (4,082,591)	$ (3,225,406)	$ (2,209,479)	$ (1,077,891)	$ 121,649
Total Over/Under Collection Ending Balance	$ 1,142,352	$ 468,468	$ (679,290)	$ (2,427,967)	$ (4,303,069)	$ (5,543,813)	**$ (5,500,655)**	$ (5,175,222)	$ (4,063,856)	$ (3,195,804)	$ (2,150,169)	$ (1,014,558)	$ 189,576
Total Indirect Cost of Gas		$ 166,983	$ 170,826	$ 168,833	$ 154,104	$ 153,004	$ 149,369	$ 5,681	$ 16,308	$ 19,138	$ 40,512	$ 17,731	$ 21,454
Total Cost of Gas	$ 1,142,352	$ 2,208,561	$ 3,111,597	$ 3,464,207	$ 2,890,308	$ 2,827,129	$ 2,241,658	$ 1,367,656	$ 1,394,385	$ 1,435,031	$ 1,478,362	$ 1,664,971	$ 2,295,818
Total Interest	$ -	$ 2,178	$ (285)	$ (4,202)	$ (9,103)	$ (13,316)	$ (14,936)	$ (14,437)	$ (12,494)	$ (9,817)	$ (7,230)	$ (4,280)	$ (1,116)

April 30th Target Balance	$ (5,447,209)
April 30th Ending Balance	$ (5,500,655)
Variance	$ (53,446)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Anal

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				$ 26,352,302
Working Capital Percentage				
Working Capital Allowance	$ 14,921	$ 8,585	$ (41,358)	$ (17,851)
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	$ (554)	$ (378)		$ (932)
End of period with Interest				
Bad Debt				
Bad Debt Expense	$ 40,222	$ 52,691	$ (7,408)	$ 85,505
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	$ 242	$ 962		$ 1,204
End of Period Bad Debt Balance with Interest				
Local Production and Storage Capacity	$ 476,106	$ -		$ 476,106
				$ -
Miscellaneous Overhead	$ 471,532	$ 108,923		$ 580,455
Gas Cost Other than Bad Debt and Working Capital Over/U				
Beginning Balance Over/Under Collection				
Net Costs - Revenues	$ (6,658,488)	$ 5,678,329		$ (980,159)
Ending Balance before Interest				
Average Balance				
Interest Rate				
Interest Expense	$ (39,352)	$ (49,958)		$ (89,310)
Ending Balance Incl Interest Expense				
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	$ 963,119	$ 120,824	$ 1,142,352	$ 2,226,295
Total Cost of Gas	$ 16,743,461	$ 9,636,224	$ 1,142,352	$ 27,522,037
Total Interest	$ (39,664)	$ (49,374)		$ (89,038)