

Northern New Hampshire Monthly Cost of Gas Report

Summer Period

July 2020 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 the October 31, 2020 expected end-of-year COG balance. This analysis determines if the October 31, 2020 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.

As shown on Table 1, Line 12, the projected Summer Period ending balance is an under-collection of \$132,488. This balance is below the 4% threshold (\$202,897) for requiring a COG rate change. Therefore, a Summer Period COG rate change is not required at this time.

In June 2020, Northern updated its sales forecast to reflect the impacts from the current coronavirus pandemic. However, due to time constraints, the Company was unable to generate a new supply dispatch to include in its cost of gas model. As a result, the updated forecast is applied only to the demand rates in order to determine demand revenues. Commodity revenues are based on the initial forecast. Any revision to the initial forecast is not expected to impact the ending commodity account balance because a lower forecast would produce lower commodity revenues and an equal amount of lower commodity costs.

In addition, for the 2020 Summer Season, the Company’s monthly COG model has been modified in order to account for the significant decrease in Asset Management Agreement (“AMA”) revenues collected by the Company beginning April 2020 through March 2021. These revenues are approximately \$6.4 million lower than those projected in the Company’s Annual COG filing made on September 17, 2019 and will result in Summer Period demand costs being significantly higher than estimated.

In the Annual COG filing, AMA revenues are estimated based on the existing AMAs under contract (effective the prior April 1st) and collected evenly over the twelve-month period. However, because the COG model is based on the twelve-month period November through October, large changes in AMA revenues disproportionately impact the Summer Period resulting in large Summer Period imbalances and subsequent rate changes. Therefore, Summer 2020 estimated demand charges will not be replaced with actual demand costs but kept at estimated levels. Actual demand costs will be reconciled with estimated demand costs in the 2019 /2020 annual reconciliation thereby allocating the difference between estimated and actual AMA revenues between the Summer and Winter seasons in a more equitable manner.

Support for the projected October 31, 2019 end-of-year COG balance is provided in Table 2.

NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
2019-2020 Summer Period Cost of Gas
DG 19-154
July 2020 Estimated

1	April 30, 2020 Target Balance	\$ (3,553,724)	February Monthly COG Update, Table 3
2			
3			
4	Forecasted recovered costs at current rates 07/01/20 - 10/31/20	\$ (769,753)	Table 2, Page 1, LN 31 (July thru October)
5	Actual recovered costs 05/01/20 - 06/30/2020	\$ (616,456)	
6	Estimated total recovered costs 05/01/20 - 10/31/20	\$ (1,386,209)	LN 4 + LN 5
7			
8	Revised projected direct gas costs [1]	\$ 4,860,616	Table 2, PG. 2, Line 71
9	Revised projected indirect gas costs [2]	\$ 211,805	Table 2, PG. 4, Line 104
10	Revised total projected gas costs 05/01/2020 - 10/31/2020	\$ 5,072,421	LN 19 + LN 20
11			
12	Projected October 31, 2020 Summer Season Balance	\$ 132,488	LN 1 + LN 6 + LN 10
13			
14	Winter Season Variance	\$ 67,181	Table 2, Page 3, LN 114
15			
16	Projected End of Year Balance	\$ 191,991	Table 2, Page 3, LN 102
17			
18			
19			
20	Projected Summer Season Imbalance Type	Under-collection	
21			
22	Projected Summer Balance Projection	2.61%	LN 12 / LN 10
23			
24	Summer Season Over-collection Threshold (4% over Summer Costs)	NA	(ABS) LN 14 + (ABS) LN 26
25			
26	Summer Season Under-collection Threshold (4% over Year End Balance)	\$ 202,897	LN 10 * 4%
27			
28	Over-collection Rate Adjustment Required	NA	IF (ABS) LN 12 > (ABS) LN 24 Yes, ELSE No
29			
30	Under-collection Rate Adjustment Required	No	IF (ABS) LN 12 > (ABS) LN 26 Yes, ELSE No

NOTES

[1] Reflects futures prices as of July 20, 2020

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

|(ABS) LN 14 + (ABS) LN 24 |

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection #

Sales Revenues		Winter	Summer	Prior Period	Total
1	Commodity Volumes				
2	Residential Heat & Non Heat		2,753,447		
3	Sales HLF Classes		2,142,072		
4	Sales LLF Classes		2,007,603		
5	Total		5,653,762		
6	Commodity Rates				
7	Residential Heat & Non Heat CGA				
8	Sales HLF Classes CGA				
9	Sales LLF Classes CGA				
10	Commodity Revenue				
11	Residential Heat & Non Heat CGA				
12	Sales HLF Classes CGA				
13	Sales LLF Classes CGA				
14	Demand Sales				
15	Residential Heat & Non Heat CGA		1,939,399		
16	Sales HLF Classes CGA		1,508,775		
17	Sales LLF Classes CGA		1,414,061		
18	Total		4,862,235		
19	Demand Rates				
20	Residential Heat & Non Heat CGA				
21	Sales HLF Classes CGA				
22	Sales LLF Classes CGA				
23	Demand Revenue				
24	Residential Heat & Non Heat CGA				
25	Sales HLF Classes CGA				
26	Sales LLF Classes CGA				
27	Total Revenue				
28	Residential Heat & Non Heat CGA				
29	Sales HLF Classes CGA				
30	Sales LLF Classes CGA				
31	Total	\$ (18,444,862)	\$ (1,386,209)		\$ (19,831,071)
32					
33	Gas Costs and Credits				Total
34	Demand Costs (net of Capacity Assignment)				
35	Pipeline	\$ -	\$ 590,743		\$ 590,743
36	Storage	\$ -	\$ 2,407,619		\$ 2,407,619
37	On-system Peaking	\$ -	\$ 111,293		\$ 111,293
38	Off-System Peaking	\$ -	\$ 1,298,936		\$ 1,298,936
39	Total Demand Costs	\$ -	\$ 4,408,592		\$ 4,408,592
40	Asset Management and Capacity Release				
41	NUI AMA Revenue				\$ (4,820,200)
42	NUI Capacity Release				\$ -
43	NUI AMA Rev & Cap. Release Subtotal				\$ -
44	NH AMA Revenue				\$ (2,019,276)
45	NH Capacity Release				\$ -
46	NH Total Asset Management and Capacity Release		\$ -	\$ -	\$ (2,019,276)
47					
48	Re-entry Rate & Conversion Rate Revenue	\$ (10,000)	\$ -		\$ (10,000)
49					
50	Net Demand Costs	\$ 4,632,342	\$ 3,583,973		\$ 8,216,315
51					
52	NUI Commodity Costs				
53	NUI Total Pipeline Volumes				1,604,767
54	Pipeline Costs Modeled in Sendout™				\$ 3,470,012
55	NYMEX Price Used for Forecast				
56	NYMEX Price Used for Update				
57	Increase/(Decrease) NYMEX Price				
58	Increase/(Decrease) in Pipeline Costs				
59	Updated Pipeline Costs				
60	New Hampshire Allocated Percentage				
61	NH Updated Pipeline Costs				\$ 863,368
62	NH Commodity Costs				
63	Pipeline				\$ 863,368
64	Storage				\$ -
65	Peaking				\$ 10,330
66	Total Commodity Costs	\$ 12,121,972	\$ 1,276,643		\$ 13,398,615
67	Inventory Finance Charge				\$ -
68					
69	Total Anticipated Direct Cost of Gas	\$ 16,754,314	\$ 4,860,616		\$ 21,614,930
70					
71					

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

	Winter								Summer					
	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	(Forecast) Jul-20	(Forecast) Aug-20	(Forecast) Sep-20	(Forecast) Oct-20	
Working Capital														
Total Anticipated Direct Cost of Gas		\$ 2,321,971	\$ 4,459,112	\$ 3,862,497	\$ 3,016,554	\$ 2,280,546	\$ 1,757,285	\$ 843,345	\$ 791,894	\$ 760,449	\$ 777,431	\$ 786,621	\$ 1,013,785	
Working Capital Percentage		0.1441%	0.14%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	
Working Capital Allowance		\$ 3,346	\$ 6,426	\$ 5,037	\$ 3,934	\$ 2,974	\$ 2,291	\$ 1,100	\$ 1,033	\$ 992	\$ 1,014	\$ 1,026	\$ 1,322	
Beginning Period Working Capital Balance		\$ (47,165)	\$ (44,018)	\$ (37,771)	\$ (32,874)	\$ (29,063)	\$ (26,198)	\$ (24,006)	\$ (22,999)	\$ (22,056)	\$ (21,149)	\$ (20,217)	\$ (19,269)	
End of Period Working Capital Allowance		\$ (43,819)	\$ (37,593)	\$ (32,735)	\$ (28,941)	\$ (26,089)	\$ (23,907)	\$ (22,906)	\$ (21,967)	\$ (21,064)	\$ (20,135)	\$ (19,191)	\$ (17,947)	
Interest		\$ (199)	\$ (179)	\$ (140)	\$ (122)	\$ (109)	\$ (99)	\$ (93)	\$ (89)	\$ (85)	\$ (82)	\$ (78)	\$ (74)	
End of period with Interest	\$ (47,165)	\$ (44,018)	\$ (37,771)	\$ (32,874)	\$ (29,063)	\$ (26,198)	\$ (24,006)	\$ (22,999)	\$ (22,056)	\$ (21,149)	\$ (20,217)	\$ (19,269)	\$ (18,021)	
Bad Debt														
Projected Bad Debt	\$ -	\$ 14,220	\$ 7,458	\$ 24,377	\$ 1,585	\$ 1,221	\$ 3,544	\$ 6,444	\$ 11,487	\$ 25,257	\$ 33,676	\$ 25,257	\$ 25,257	
Beginning Period Bad Debt Balance		\$ 32,931	\$ 47,326	\$ 55,008	\$ 79,651	\$ 81,554	\$ 83,101	\$ 86,981	\$ 93,782	\$ 105,663	\$ 131,388	\$ 165,650	\$ 191,613	
End of Period Bad Debt Balance		\$ 47,151	\$ 54,784	\$ 79,385	\$ 81,236	\$ 82,776	\$ 86,645	\$ 93,425	\$ 105,269	\$ 130,920	\$ 165,064	\$ 190,907	\$ 216,870	
Interest		\$ 175	\$ 223	\$ 266	\$ 318	\$ 325	\$ 336	\$ 357	\$ 394	\$ 468	\$ 587	\$ 706	\$ 808	
End of Period Bad Debt Balance with Interest	\$ 32,931	\$ 47,326	\$ 55,008	\$ 79,651	\$ 81,554	\$ 83,101	\$ 86,981	\$ 93,782	\$ 105,663	\$ 131,388	\$ 165,650	\$ 191,613	\$ 217,678	
Local Production and Storage Capacity		\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Miscellaneous Overhead		\$ 77,924	\$ 77,924	\$ 77,924	\$ 77,924	\$ 77,924	\$ 77,924	\$ 18,818	\$ 18,818	\$ 18,818	\$ 18,818	\$ 18,818	\$ 18,818	
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection														
Beginning Balance Over/Under Collection		\$ (2,731,062)	\$ (3,020,010)	\$ (2,583,515)	\$ (2,568,801)	\$ (2,746,422)	\$ (3,458,380)	\$ (3,549,518)	\$ (3,213,815)	\$ (2,555,490)	\$ (1,946,884)	\$ (1,321,154)	\$ (692,621)	
Net Costs - Revenues		\$ (276,395)	\$ 448,726	\$ 24,891	\$ (167,122)	\$ (699,703)	\$ (77,295)	\$ 349,062	\$ 669,721	\$ 617,499	\$ 632,185	\$ 632,511	\$ 686,339	
Ending Balance before Interest		\$ (3,007,457)	\$ (2,571,284)	\$ (2,558,624)	\$ (2,735,923)	\$ (3,446,124)	\$ (3,535,675)	\$ (3,200,456)	\$ (2,544,094)	\$ (1,937,991)	\$ (1,314,699)	\$ (688,643)	\$ (6,282)	
Average Balance		\$ (2,869,260)	\$ (2,795,647)	\$ (2,571,069)	\$ (2,652,362)	\$ (3,096,273)	\$ (3,497,028)	\$ (3,374,987)	\$ (2,878,955)	\$ (2,246,741)	\$ (1,630,792)	\$ (1,004,899)	\$ (349,452)	
Interest Rate		5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	
Interest Expense		\$ (12,553)	\$ (12,231)	\$ (10,177)	\$ (10,499)	\$ (12,256)	\$ (13,842)	\$ (13,359)	\$ (11,396)	\$ (8,893)	\$ (6,455)	\$ (3,978)	\$ (1,383)	
Ending Balance Incl Interest Expense	\$ (2,731,062)	\$ (3,020,010)	\$ (2,583,515)	\$ (2,568,801)	\$ (2,746,422)	\$ (3,458,380)	\$ (3,549,518)	\$ (3,213,815)	\$ (2,555,490)	\$ (1,946,884)	\$ (1,321,154)	\$ (692,621)	\$ (7,665)	
Total Over/Under Collection Ending Balance	\$ (2,745,296)	\$ (3,016,703)	\$ (2,566,279)	\$ (2,522,024)	\$ (2,693,930)	\$ (3,401,478)	\$ (3,486,543)	\$ (3,143,032)	\$ (2,471,883)	\$ (1,836,646)	\$ (1,175,721)	\$ (520,277)	\$ 191,991	
Total Indirect Cost of Gas	\$ (2,745,296)	\$ 162,264	\$ 158,973	\$ 176,638	\$ 152,491	\$ 149,430	\$ 149,505	\$ 13,267	\$ 20,247	\$ 36,556	\$ 47,558	\$ 41,751	\$ 44,749	
Total Cost of Gas	\$ (2,745,296)	\$ 2,326,960	\$ 4,460,809	\$ 3,881,860	\$ 3,011,770	\$ 2,272,702	\$ 1,749,515	\$ 837,793	\$ 793,323	\$ 778,187	\$ 806,171	\$ 809,554	\$ 1,039,715	
Total Interest	\$ -	\$ (12,577)	\$ (12,186)	\$ (10,051)	\$ (10,303)	\$ (12,040)	\$ (13,606)	\$ (13,095)	\$ (11,091)	\$ (8,510)	\$ (5,950)	\$ (3,350)	\$ (648)	

April 30th Target Balance	\$ (3,553,724)
April 30th Projected Balance	\$ (3,486,543)
Variance	\$ 67,181

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection A

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				\$ 22,671,491
Working Capital Percentage				
Working Capital Allowance	\$ 24,007	\$ 6,485	\$ (47,165)	\$ (16,673)
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	\$ (848)	\$ (501)		\$ (1,348)
End of period with Interest				
Bad Debt				
Projected Bad Debt	\$ 52,406	\$ 127,377	\$ 32,931	\$ 212,714
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	\$ 1,644	\$ 3,320		\$ 4,964
End of Period Bad Debt Balance with Interest				
Local Production and Storage Capacity				\$ 476,106
				\$ -
Miscellaneous Overhead				\$ 580,455
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection				
Beginning Balance Over/Under Collection				\$ (30,387,673)
Net Costs - Revenues				\$ 2,840,420
Ending Balance before Interest				\$ (27,547,253)
Average Balance				\$ (28,967,463)
Interest Rate				
Interest Expense				\$ (117,023)
Ending Balance Incl Interest Expense			\$ (2,731,062)	
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	\$ 949,302	\$ 204,127	\$ (2,745,296)	\$ (1,591,867)
Total Cost of Gas	\$ 17,703,616	\$ 5,064,743	\$ (2,745,296)	\$ 20,023,063
Total Interest	\$ (70,762)	\$ (42,645)		\$ (113,407)

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