

Northern New Hampshire Monthly Cost of Gas Report

Summer Period

August 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, the projected Summer Period ending balance is an under-collection of \$447,787 (Line 12) and exceeds the 4% threshold for a rate change (Line 22). This projected under-collection is due to higher NYMEX prices combined with lower than projected earnings in July 2020. In addition, the Winter Season ending balance is also an under-collection (Line 14). Therefore, Summer Season COG rates will increase by \$0.1472 per therm for all rate classes in order to reduce both the Summer Period and end-of-year balances.

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 2019.

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, estimated demand charges for the 2020 Summer Period 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, 2020 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
August 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 08/01/20 - 10/31/20	\$ (626,803)	Table 2, Page 1, LN 31 (August thru October)
5	Actual recovered costs 05/01/20 - 07/31/2020	\$ (717,475)	
6	Estimated total recovered costs 05/01/20 - 10/31/20	\$ (1,344,277)	LN 4 + LN 5
7			
8	Revised projected direct gas costs [1]	\$ 5,151,768	Table 2, PG. 2, Line 71
9	Revised projected indirect gas costs [2]	\$ 194,020	Table 2, PG. 4, Line 104
10	Revised total projected gas costs 05/01/2020 - 10/31/2020	\$ 5,345,788	LN 19 + LN 20
11			
12	Projected October 31, 2020 Summer Season Balance	\$ 447,787	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	\$ 514,968	Table 2, Page 3, LN 102
17			
18			
19			
20	Projected Summer Season Imbalance Type	Under-collection	
21			
22	Projected Summer Balance Projection	8.38%	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)	\$ 213,832	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	Yes	IF (ABS) LN 12 > (ABS) LN 26 Yes, ELSE No

NOTES

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

[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

		Winter						Summer						
Sales Revenues		Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	(Forecast) Aug-20	(Forecast) Sep-20	(Forecast) Oct-20
1	Commodity Volumes													
2	Residential Heat & Non Heat											425,522	451,490	959,307
3	Sales HLF Classes											331,039	351,241	746,303
4	Sales LLF Classes											310,258	329,192	699,453
5	Total											1,066,818	1,131,924	2,405,063
6	Commodity Rates													
7	Residential Heat & Non Heat CGA											\$ 0.0533	\$ 0.0533	\$ 0.0533
8	Sales HLF Classes CGA											\$ 0.0533	\$ 0.0533	\$ 0.0533
9	Sales LLF Classes CGA											\$ 0.0533	\$ 0.0533	\$ 0.0533
10	Commodity Revenue													
11	Residential Heat & Non Heat CGA											\$ (22,680)	\$ (24,064)	\$ (51,131)
12	Sales HLF Classes CGA											\$ (17,644)	\$ (18,721)	\$ (39,778)
13	Sales LLF Classes CGA											\$ (16,537)	\$ (17,546)	\$ (37,281)
14	Demand Sales													
15	Residential Heat & Non Heat CGA											365,949	388,282	825,004
16	Sales HLF Classes CGA											284,693	302,068	641,820
17	Sales LLF Classes CGA											266,822	283,105	601,530
18	Total											917,464	973,455	2,068,354
19	Demand Rates													
20	Residential Heat & Non Heat CGA											\$ 0.0963	\$ 0.0963	\$ 0.0963
21	Sales HLF Classes CGA											\$ 0.0638	\$ 0.0638	\$ 0.0638
22	Sales LLF Classes CGA											\$ 0.1311	\$ 0.1311	\$ 0.1311
23	Demand Revenue													
24	Residential Heat & Non Heat CGA											\$ (35,241)	\$ (37,392)	\$ (79,448)
25	Sales HLF Classes CGA											\$ (18,163)	\$ (19,272)	\$ (40,948)
26	Sales LLF Classes CGA											\$ (34,980)	\$ (37,115)	\$ (78,861)
27	Total Revenue													
28	Residential Heat & Non Heat CGA											\$ (57,921)	\$ (61,456)	\$ (130,579)
29	Sales HLF Classes CGA											\$ (35,808)	\$ (37,993)	\$ (80,726)
30	Sales LLF Classes CGA											\$ (51,517)	\$ (54,661)	\$ (116,141)
31	Total		\$ (2,598,366)	\$ (4,010,385)	\$ (3,837,605)	\$ (3,183,677)	\$ (2,980,249)	\$ (1,834,580)	\$ (494,283)	\$ (122,174)	\$ (101,018)	\$ (145,246)	\$ (154,110)	\$ (327,446)
32														
33														
34	Gas Costs and Credits											(Forecast) Aug-20	(Forecast) Sep-20	(Forecast) Oct-20
35	Demand Costs (net of Capacity Assignment)													
36	Pipeline											\$ 147,686	\$ 147,686	\$ 147,686
37	Storage											\$ 601,905	\$ 601,905	\$ 601,905
38	On-system Peaking											\$ 27,823	\$ 27,823	\$ 27,823
39	Off-System Peaking											\$ 324,734	\$ 324,734	\$ 324,734
40	Total Demand Costs											\$ 1,102,148	\$ 1,102,148	\$ 1,102,148
41														
42	Asset Management and Capacity Release													
43	NUI AMA Revenue											\$ (1,205,050)	\$ (1,205,050)	\$ (1,205,050)
44	NUI Capacity Release											\$ -	\$ -	\$ -
45	NUI AMA Rev & Cap. Release Subtotal											\$ (504,819)	\$ (504,819)	\$ (504,819)
46	NH AMA Revenue											\$ (504,819)	\$ (504,819)	\$ (504,819)
47	NH Capacity Release											\$ -	\$ -	\$ -
48	NH Total Asset Management and Capacity Release											\$ (504,819)	\$ (504,819)	\$ (504,819)
49														
50	Re-entry Rate & Conversion Rate Revenue								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
51														
52	Net Demand Costs		\$ 759,005	\$ 797,653	\$ 798,937	\$ 694,815	\$ 717,240	\$ 864,692	\$ 597,329	\$ 597,329	\$ 597,329	\$ 597,329	\$ 597,329	\$ 597,329
53														
54	NUI Commodity Costs													
55	NUI Total Pipeline Volumes											307,247	308,564	656,863
56	Pipeline Costs Modeled in Sendout™											\$ 669,901	\$ 672,296	\$ 1,424,889
57	NYMEX Price Used for Forecast											\$ 2,3360	\$ 2,3450	\$ 2,3290
58	NYMEX Price Used for Update											\$ 1,4950	\$ 1,8540	\$ 2,3520
59	Increase/(Decrease) NYMEX Price											\$ (0.84)	\$ (0.49)	\$ 0.02
60	Increase/(Decrease) in Pipeline Costs											\$ (258,394)	\$ (151,505)	\$ 7,638
61	Updated Pipeline Costs											\$ 411,506	\$ 520,791	\$ 1,522,761
62	New Hampshire Allocated Percentage											34.45%	34.85%	37.04%
63	NH Updated Pipeline Costs											\$ 141,747	\$ 181,498	\$ 563,986
64	NH Commodity Costs													
65	Pipeline											\$ 141,747	\$ 181,498	\$ 563,986
66	Storage											\$ -	\$ -	\$ -
67	Peaking											\$ 2,555	\$ 2,584	\$ 2,734
68	Total Commodity Costs		\$ 1,405,691	\$ 3,504,183	\$ 2,906,284	\$ 2,164,464	\$ 1,406,032	\$ 735,318	\$ 227,197	\$ 312,063	\$ 30,995	\$ 184,082	\$ 246,738	\$ 566,719
69	Inventory Finance Charge								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
70														
71	Total Anticipated Direct Cost of Gas		\$ 2,164,696	\$ 4,301,837	\$ 3,705,222	\$ 2,859,279	\$ 2,123,271	\$ 1,600,010	\$ 824,526	\$ 909,392	\$ 628,323	\$ 781,411	\$ 844,067	\$ 1,164,048

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection A

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		4,603,805		
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		1,579,234		
16	Sales HLF Classes CGA		1,228,581		
17	Sales LLF Classes CGA		1,151,457		
18	Total		3,959,273		
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)	\$ (1,344,277)		\$ (19,789,139)
32					
33	Gas Costs and Credits				Total
34	Demand Costs (net of Capacity Assignment)				
35	Pipeline	\$ -	\$ 443,057		\$ 443,057
36	Storage	\$ -	\$ 1,805,714		\$ 1,805,714
37	On-system Peaking	\$ -	\$ 83,470		\$ 83,470
38	Off-System Peaking	\$ -	\$ 974,202		\$ 974,202
39	Total Demand Costs	\$ -	\$ 3,306,444		\$ 3,306,444
40	Asset Management and Capacity Release				
41	NUI AMA Revenue				\$ (3,615,150)
42	NUI Capacity Release				\$ -
43	NUI AMA Rev & Cap. Release Subtotal				\$ -
44	NH AMA Revenue				\$ (1,514,457)
45	NH Capacity Release				\$ -
46	NH Total Asset Management and Capacity Release		\$ -	\$ -	\$ (1,514,457)
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				\$ 1,131,512
62	NH Commodity Costs				
63	Pipeline				\$ 1,131,512
64	Storage				\$ -
65	Peaking				\$ 10,330
66	Total Commodity Costs	\$ 12,121,972	\$ 1,567,794		\$ 13,689,767
67	Inventory Finance Charge				\$ -
68					
69	Total Anticipated Direct Cost of Gas	\$ 16,754,314	\$ 5,151,768		\$ 21,906,082
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	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	\$ 928,210	\$ 647,142	\$ 800,229	\$ 862,886	\$ 1,182,867	
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	\$ 1,210	\$ 844	\$ 1,043	\$ 1,125	\$ 1,542	
Beginning Period Working Capital Balance		\$ (47,165)	\$ (44,018)	\$ (37,771)	\$ (32,874)	\$ (29,063)	\$ (26,198)	\$ (24,006)	\$ (22,999)	\$ (21,877)	\$ (21,118)	\$ (20,157)	\$ (19,109)	
End of Period Working Capital Allowance		\$ (43,819)	\$ (37,593)	\$ (32,735)	\$ (28,941)	\$ (26,089)	\$ (23,907)	\$ (22,906)	\$ (21,789)	\$ (21,034)	\$ (20,075)	\$ (19,031)	\$ (17,566)	
Interest		\$ (199)	\$ (179)	\$ (140)	\$ (122)	\$ (109)	\$ (99)	\$ (93)	\$ (89)	\$ (85)	\$ (82)	\$ (78)	\$ (73)	
End of period with Interest	\$ (47,165)	\$ (44,018)	\$ (37,771)	\$ (32,874)	\$ (29,063)	\$ (26,198)	\$ (24,006)	\$ (22,999)	\$ (21,877)	\$ (21,118)	\$ (20,157)	\$ (19,109)	\$ (17,639)	
Bad Debt														
Projected Bad Debt	\$ -	\$ 14,220	\$ 7,458	\$ 24,377	\$ 1,585	\$ 1,221	\$ 3,544	\$ 6,444	\$ 11,487	\$ 12,480	\$ 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	\$ 118,586	\$ 152,797	\$ 178,709	
End of Period Bad Debt Balance		\$ 47,151	\$ 54,784	\$ 79,385	\$ 81,236	\$ 82,776	\$ 86,645	\$ 93,425	\$ 105,269	\$ 118,143	\$ 152,261	\$ 178,054	\$ 203,966	
Interest		\$ 175	\$ 223	\$ 266	\$ 318	\$ 325	\$ 336	\$ 357	\$ 394	\$ 443	\$ 536	\$ 655	\$ 757	
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	\$ 118,586	\$ 152,797	\$ 178,709	\$ 204,723	
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)	\$ (2,418,905)	\$ (1,881,275)	\$ (1,232,442)	\$ (527,142)	
Net Costs - Revenues		\$ (276,395)	\$ 448,726	\$ 24,891	\$ (167,122)	\$ (699,703)	\$ (77,295)	\$ 349,062	\$ 806,037	\$ 546,124	\$ 654,983	\$ 708,775	\$ 855,420	
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)	\$ (2,407,778)	\$ (1,872,781)	\$ (1,226,292)	\$ (523,667)	\$ 328,278	
Average Balance		\$ (2,869,260)	\$ (2,795,647)	\$ (2,571,069)	\$ (2,652,362)	\$ (3,096,273)	\$ (3,497,028)	\$ (3,374,987)	\$ (2,810,797)	\$ (2,145,843)	\$ (1,553,783)	\$ (878,054)	\$ (99,432)	
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)	\$ (11,126)	\$ (8,494)	\$ (6,150)	\$ (3,476)	\$ (394)	
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)	\$ (2,418,905)	\$ (1,881,275)	\$ (1,232,442)	\$ (527,142)	\$ 327,884	
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)	\$ (2,335,119)	\$ (1,783,808)	\$ (1,099,801)	\$ (367,542)	\$ 514,968	
Total Indirect Cost of Gas	\$ (2,745,296)	\$ 162,264	\$ 158,973	\$ 176,638	\$ 152,491	\$ 149,430	\$ 149,505	\$ 13,267	\$ 20,695	\$ 24,006	\$ 47,842	\$ 42,302	\$ 45,909	
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	\$ 930,087	\$ 652,329	\$ 829,252	\$ 886,369	\$ 1,209,957	
Total Interest	\$ -	\$ (12,577)	\$ (12,186)	\$ (10,051)	\$ (10,303)	\$ (12,040)	\$ (13,606)	\$ (13,095)	\$ (10,821)	\$ (8,136)	\$ (5,696)	\$ (2,898)	\$ 291	

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				\$ 22,962,643
Working Capital Percentage				
Working Capital Allowance	\$ 24,007	\$ 6,865	\$ (47,165)	\$ (16,293)
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	\$ (848)	\$ (498)		\$ (1,346)
End of period with Interest				
Bad Debt				
Projected Bad Debt	\$ 52,406	\$ 114,600	\$ 32,931	\$ 199,937
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	\$ 1,644	\$ 3,142		\$ 4,786
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				\$ (29,931,287)
Net Costs - Revenues				\$ 3,173,504
Ending Balance before Interest				\$ (26,757,783)
Average Balance				\$ (28,344,535)
Interest Rate				
Interest Expense				\$ (114,557)
Ending Balance Incl Interest Expense			\$ (2,731,062)	
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	\$ 949,302	\$ 194,020	\$ (2,745,296)	\$ (1,601,975)
Total Cost of Gas	\$ 17,703,616	\$ 5,345,788	\$ (2,745,296)	\$ 20,304,108
Total Interest	\$ (70,762)	\$ (40,355)		\$ (111,117)

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