

New Hampshire Monthly Cost of Gas Report

Summer Period

June 2019 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 October 31, 2019 expected end of year balance. This is done by determining if the October 31, 2019 Summer Season balance exceeds the threshold for a rate change and, if exceeded, the rate change would lower the expected end of year balance.

As shown on Table 1, Line 24, the projected end of Summer Period balance is an over-collection of (\$528,665). This balance is above the 4% Summer Period over-collection threshold of (\$220,351) (Line 36) for requiring a change in COG rates. In addition, the winter season variance (Line 26) is also an over-collection. Therefore, a COG rate change is required in order to reduce the end of year balance.

Support for the projected end of Summer Period and end of year balances is provided in Table 2.

NORTHERN UTILITIES, INC.
 NEW HAMPSHIRE DIVISION
 Calculation of the Projected Over or Under Collection of the
 Summer 2018-2019 Period Cost of Gas
 DG 18-143
 June 2019 Estimated

1	Target April 30, 2019 Target Balance	\$ (2,793,587)	Table 2, PG. 3, Line 104
2			
3	Forecasted firm therm sales 06/01/2019 - 10/31/2019		
4	Residential Heat & Non Heat	2,784,462	Table 2, PG. 2, Line 2
5	HLF Classes	1,492,905	Table 2, PG. 2, Line 3
6	LLF Classes	2,074,697	Table 2, PG. 2, Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$ 0.3670	Table 2, PG. 1, Line 7
10	HLF classes	\$ 0.3269	Table 2, PG. 1, Line 8
11	LLF classes	\$ 0.3958	Table 2, PG. 1, Line 9
12			
13	Total	\$ (2,331,093)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 06/01/2019 - 10/31/2019	\$ (2,331,093)	LN 13
16	Actual Recovered Costs 05/01/2019 - 05/31/2019	\$ (912,759)	
17	Estimated total recovered costs 05/01/19 - 10/31/19	\$ (3,243,853)	LN 15 + LN 16
18			
19	Revised projected direct gas costs 05/01/19 - 10/31/19[1]	\$ 5,304,657	Table 2, PG. 2, Line 64, Winter
20	Revised projected indirect gas costs 05/01/19 - 10/31/19 [2]	\$ 204,117	Table 2, PG. 4, Line 96, Winter
21			
22	Total Projected Summer Period Gas Costs	\$ 5,508,774	LN 19 + LN 20
23			
24	Projected October 31, 2019 Summer Season Balance	\$ (528,665)	LN 1 + Ln 17 + LN 22
25			
26	Winter Season Variance (Over-collection)	\$ (1,057,523)	Table 2, PG. 4, Line 108
27			
28	Projected End of Year Balance	\$ (1,586,189)	LN 24 + LN 26
29			
30	Projected October 31, 2019 Summer Season Balance	\$ (528,665)	LN 24
31			
32	Projected Summer Period Imbalance Type	Under-Collection	
33			
34	Projected Summer Period Imbalance %	-9.60%	LN 24 / LN 22
35			
36	Summer Season Over-collection Threshold (4% of Projected Costs)	\$ (220,351)	(LN 22 * 4%)*-1
37			
38	Summer Season Under-collection Threshold (4% Plus Winter Balance)	\$ 1,277,874	((ABS) LN 26 + (ABS) LN 36)
39			
40	Over-Collection Rate Adjustment Required	Yes	IF (ABS) LN 30 < (ABS) LN 36, No ELSE Yes
41			
42	Under-Collection Rate Adjustment Required	No	IF (ABS) LN 30 < (ABS) LN 38, No ELSE Yes

NOTES

[1] Reflects futures prices as of June 20, 2019

[2] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity.

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

		Winter						Summer						
Sales Revenues		Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	(Forecast) Jun-19	(Forecast) Jul-19	(Forecast) Aug-19	(Forecast) Sep-19	(Forecast) Oct-19
1	Volumes													
2	Residential Heat & Non Heat									521,912	436,849	441,905	461,965	921,830
3	Sales HLF Classes									279,826	234,219	236,930	247,685	494,245
4	Sales LLF Classes									388,876	325,496	329,262	344,210	686,854
5	Total									1,190,614	996,564	1,008,097	1,053,861	2,102,929
6	Rates													
7	Residential Heat & Non Heat CGA									\$0.3670	\$0.3670	\$0.3670	\$0.3670	\$0.3670
8	Sales HLF Classes CGA									\$0.3269	\$0.3269	\$0.3269	\$0.3269	\$0.3269
9	Sales LLF Classes CGA									\$0.3958	\$0.3958	\$0.3958	\$0.3958	\$0.3958
10	Revenues													
11	Residential Heat & Non Heat									\$ (191,542)	\$ (160,324)	\$ (162,179)	\$ (169,541)	\$ (338,312)
12	Sales HLF Classes									\$ (91,475)	\$ (76,566)	\$ (77,452)	\$ (80,968)	\$ (161,569)
13	Sales LLF Classes									\$ (153,917)	\$ (128,831)	\$ (130,322)	\$ (136,238)	\$ (271,857)
14	Total Sales		\$ (4,156,882)	\$ (5,933,170)	\$ (7,078,578)	\$ (6,004,899)	\$ (4,820,251)	\$ (2,428,592)	\$ (912,759)	\$ (436,934)	\$ (365,721)	\$ (369,953)	\$ (386,748)	\$ (771,737)
15														
16														
17	Gas Costs and Credits													
18		Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	(Forecast) Jun-19	(Forecast) Jul-19	(Forecast) Aug-19	(Forecast) Sep-19	(Forecast) Oct-19
19	Demand Costs (net of Capacity Assignment)													
20	Pipeline									\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482
21	Storage									\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485
22	On-system Peaking									\$ 41,033	\$ 41,033	\$ 41,033	\$ 41,033	\$ 41,033
23	Off-System Peaking									\$ -	\$ -	\$ -	\$ -	\$ -
24	Total Demand Costs									\$ 945,000	\$ 945,000	\$ 945,000	\$ 945,000	\$ 945,000
25	Asset Management and Capacity Release													
26	NUI AMA Revenue									\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)
27	NUI Capacity Release									\$ -	\$ -	\$ -	\$ -	\$ -
28	NUI AMA Rev & Cap. Release Subtotal									\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)
29	NH AMA Revenue									\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)
30	NH Capacity Release									\$ -	\$ -	\$ -	\$ -	\$ -
31	NH Total Asset Management and Capacity Release									\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)
32										\$ -	\$ -	\$ -	\$ -	\$ -
33										\$ -	\$ -	\$ -	\$ -	\$ -
34	Re-entry Rate & Conversion Rate Revenue									\$ -	\$ -	\$ -	\$ -	\$ -
35										\$ -	\$ -	\$ -	\$ -	\$ -
36	Net Demand Costs		\$ 1,540,534	\$ 1,528,964	\$ 1,595,630	\$ 1,404,587	\$ 1,477,437	\$ 410,720	\$ 158,484	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493
37	NUI Commodity Costs													
38	NUI Total Pipeline Volumes									334,214	288,763	290,326	302,280	572,717
39	Pipeline Costs Modeled in Sendout™									\$ 821,440	\$ 713,823	\$ 712,207	\$ 706,238	\$ 1,357,630
40	NYMEX Price Used for Forecast									\$ 2,6340	\$ 2,6670	\$ 2,6710	\$ 2,6530	\$ 2,6690
41	NYMEX Price Used for Update									\$ 2,6330	\$ 2,1850	\$ 2,1660	\$ 2,1460	\$ 2,1860
42	Increase/(Decrease) NYMEX Price									\$ (0,00)	\$ (0,48)	\$ (0,51)	\$ (0,51)	\$ (0,48)
43	Increase/(Decrease) in Pipeline Costs									\$ (334)	\$ (139,184)	\$ (146,614)	\$ (153,256)	\$ (276,622)
44	Updated Pipeline Costs									\$ 821,105	\$ 574,639	\$ 565,592	\$ 552,982	\$ 1,081,007
45	New Hampshire Allocated Percentage									36.05%	34.96%	35.18%	34.48%	36.96%
46	NH Updated Pipeline Costs									\$ 295,989	\$ 200,902	\$ 198,952	\$ 190,670	\$ 399,571
47														
48	Peaking Volumes									2,100	2,170	2,170	2,100	2,170
49	Peaking Costs Modeled in Sendout									\$ 14,540	\$ 14,949	\$ 14,918	\$ 14,342	\$ 14,778
50	Increase/(Decrease) NYMEX Price									\$ -	\$ -	\$ -	\$ -	\$ -
51	Increase in Peaking Costs									\$ -	\$ -	\$ -	\$ -	\$ -
52	Updated Peaking Costs									\$ 14,540	\$ 14,949	\$ 14,918	\$ 14,342	\$ 14,778
53	New Hampshire Allocated Percentage									36.05%	34.96%	35.18%	34.48%	36.96%
54	NH Updated Peaking Costs									\$ 5,241	\$ 5,226	\$ 5,248	\$ 4,945	\$ 5,462
55														
56	NH Commodity Costs													
57	Pipeline									\$ 295,989	\$ 200,902	\$ 198,952	\$ 190,670	\$ 399,571
58	Storage									\$ -	\$ -	\$ -	\$ -	\$ -
59	Peaking									\$ 5,241	\$ 5,226	\$ 5,248	\$ 4,945	\$ 5,462
60	Total Commodity Costs		\$ 2,159,358	\$ 4,084,471	\$ 3,865,370	\$ 2,964,860	\$ 2,082,707	\$ 1,116,989	\$ 411,499	\$ 301,230	\$ 206,128	\$ 204,200	\$ 195,616	\$ 405,033
61	Inventory Finance Charge									\$ -	\$ -	\$ -	\$ -	\$ -
62										\$ -	\$ -	\$ -	\$ -	\$ -

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

Sales Revenues					
		Winter	Summer	Prior Period	Total
1	Volumes				
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				
12	Sales HLF Classes				
13	Sales LLF Classes				
14	Total Sales	\$ (30,422,373)	\$ (3,243,853)		\$ (33,666,225)
15					
16					
17	Gas Costs and Credits				
18		Winter	Summer	Prior 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	Asset Management and Capacity Release				
26	NUI AMA Revenue				
27	NUI Capacity Release				
28	NUI AMA Rev & Cap. Release Subtotal				
29	NH AMA Revenue				
30	NH Capacity Release				
31	NH Total Asset Management and Capacity Release				
32					
33					
34	Re-entry Rate & Conversion Rate Revenue				
35					
36	Net Demand Costs	\$ 7,957,873	\$ 3,580,951		\$ 11,538,824
37					
38	NUI Commodity Costs				
39	NUI Total Pipeline Volumes				
40	Pipeline Costs Modeled in Sendout™				
41	NYMEX Price Used for Forecast				
42	NYMEX Price Used for Update				
43	Increase/(Decrease) NYMEX Price				
44	Increase/(Decrease) in Pipeline Costs				
45	Updated Pipeline Costs				
46	New Hampshire Allocated Percentage				
47	NH Updated Pipeline Costs				
48					
49	Peaking Volumes				
50	Peaking Costs Modeled in Sendout				
51	Increase/(Decrease) NYMEX Price				
52	Increase in Peaking Costs				
53	Updated Peaking Costs				
54	New Hampshire Allocated Percentage				
55	NH Updated Peaking Costs				
56					
57	NH Commodity Costs				
58	Pipeline				
59	Storage				
60	Peaking				
61	Total Commodity Costs	\$ 16,273,754	\$ 1,723,706		\$ 17,997,460
62	Inventory Finance Charge				

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

63															
64	Total Anticipated Direct Cost of Gas		\$ 3,699,891	\$ 5,613,436	\$ 5,461,000	\$ 4,369,447	\$ 3,560,144	\$ 1,527,709	\$ 569,984	\$ 985,723	\$ 890,621	\$ 888,693	\$ 880,109	\$ 1,089,526	
65			Winter						Summer						
66										(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	
67			Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
68	Working Capital														
69	Total Anticipated Direct Cost of Gas		\$ 3,857,751	\$ 5,771,295	\$ 5,618,860	\$ 4,527,307	\$ 3,718,004	\$ 1,685,569	\$ 588,217	\$ 985,723	\$ 890,621	\$ 888,693	\$ 880,109	\$ 1,089,526	
70	Working Capital Percentage		0.1373%	0.14%	0.14%	0.14%	0.14%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	
71	Working Capital Allowance		\$ 5,297	\$ 7,924	\$ 8,097	\$ 6,524	\$ 5,358	\$ 2,545	\$ 888	\$ 1,488	\$ 1,345	\$ 1,342	\$ 1,329	\$ 1,645	
72	Beginning Period Working Capital Balance		\$ 9,529	\$ 14,876	\$ 22,879	\$ 31,093	\$ 37,768	\$ 43,302	\$ 46,052	\$ 47,153	\$ 48,861	\$ 50,433	\$ 52,009	\$ 53,579	
73	End of Period Working Capital Allowance		\$ 14,826	\$ 22,800	\$ 30,976	\$ 37,617	\$ 43,125	\$ 45,847	\$ 46,940	\$ 48,641	\$ 50,206	\$ 51,775	\$ 53,338	\$ 55,225	
74	Interest		\$ 51	\$ 78	\$ 118	\$ 150	\$ 177	\$ 204	\$ 213	\$ 220	\$ 227	\$ 234	\$ 241	\$ 249	
75	End of period with Interest		\$ 9,529	\$ 14,876	\$ 22,879	\$ 31,093	\$ 37,768	\$ 43,302	\$ 46,052	\$ 47,153	\$ 48,861	\$ 50,433	\$ 52,009	\$ 53,579	
76	Bad Debt														
77	Projected Bad Debt	\$ -	\$ 7,281	\$ 40,557	\$ 14,378	\$ 4,248	\$ (7,102)	\$ 5,749	\$ 17,834	\$ 28,297	\$ 28,297	\$ 37,729	\$ 28,297	\$ 28,297	
78	Beginning Period Bad Debt Balance		\$ (5,841)	\$ 1,430	\$ 42,078	\$ 56,672	\$ 61,177	\$ 54,327	\$ 60,338	\$ 78,489	\$ 107,211	\$ 136,064	\$ 174,503	\$ 203,665	
79	End of Period Bad Debt Balance		\$ 1,439	\$ 41,987	\$ 56,456	\$ 60,919	\$ 54,075	\$ 60,076	\$ 78,172	\$ 106,786	\$ 135,508	\$ 173,793	\$ 202,800	\$ 231,962	
80	Interest		\$ (9)	\$ 90	\$ 216	\$ 257	\$ 252	\$ 262	\$ 317	\$ 425	\$ 556	\$ 710	\$ 865	\$ 998	
81	End of Period Bad Debt Balance with Interest	\$ (5,841)	\$ 1,430	\$ 42,078	\$ 56,672	\$ 61,177	\$ 54,327	\$ 60,338	\$ 78,489	\$ 107,211	\$ 136,064	\$ 174,503	\$ 203,665	\$ 232,960	
82	Local Production and Storage Capacity		\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
83			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
84	Miscellaneous Overhead		\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	
85															
86	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection														
87	Beginning Balance Over/Under Collection		\$ 1,310,543	\$ 1,016,249	\$ 858,271	\$ (600,885)	\$ (2,084,339)	\$ (3,198,116)	\$ (3,957,500)	\$ (4,300,924)	\$ (3,752,314)	\$ (3,225,134)	\$ (2,701,711)	\$ (2,201,326)	
88	Net Costs - Revenues		\$ (299,132)	\$ (161,875)	\$ (1,459,718)	\$ (1,477,592)	\$ (1,102,247)	\$ (743,023)	\$ (324,542)	\$ 567,023	\$ 543,134	\$ 536,974	\$ 511,595	\$ 336,023	
89	Ending Balance before Interest		\$ 1,011,412	\$ 854,374	\$ (601,447)	\$ (2,078,478)	\$ (3,186,586)	\$ (3,941,140)	\$ (4,282,042)	\$ (3,733,901)	\$ (3,209,180)	\$ (2,688,160)	\$ (2,190,116)	\$ (1,865,304)	
90	Average Balance		\$ 1,160,977	\$ 935,311	\$ 128,412	\$ (1,339,682)	\$ (2,635,462)	\$ (3,569,628)	\$ (4,119,771)	\$ (4,017,413)	\$ (3,480,747)	\$ (2,956,647)	\$ (2,445,914)	\$ (2,033,315)	
91	Interest Rate		5.00%	5.00%	5.25%	5.25%	5.25%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	
92	Interest Expense		\$ 4,837	\$ 3,897	\$ 562	\$ (5,861)	\$ (11,530)	\$ (16,361)	\$ (18,882)	\$ (18,413)	\$ (15,953)	\$ (13,551)	\$ (11,210)	\$ (9,319)	
93	Ending Balance Incl Interest Expense	\$ 1,310,543	\$ 1,016,249	\$ 858,271	\$ (600,885)	\$ (2,084,339)	\$ (3,198,116)	\$ (3,957,500)	\$ (4,300,924)	\$ (3,752,314)	\$ (3,225,134)	\$ (2,701,711)	\$ (2,201,326)	\$ (1,874,623)	
94	Total Over/Under Collection Ending Balance	\$ 1,314,231	\$ 1,032,556	\$ 923,228	\$ (513,120)	\$ (1,985,395)	\$ (3,100,487)	\$ (3,851,111)	\$ (4,175,282)	\$ (3,596,242)	\$ (3,038,637)	\$ (2,475,199)	\$ (1,944,082)	\$ (1,586,189)	
95															
96	Total Indirect Cost of Gas	\$ 1,314,231	\$ 175,316	\$ 210,407	\$ 181,230	\$ 163,178	\$ 145,015	\$ 150,260	\$ 18,604	\$ 30,250	\$ 32,705	\$ 44,698	\$ 37,755	\$ 40,104	
97															
98	Total Cost of Gas	\$ 1,314,231	\$ 3,875,207	\$ 5,823,842	\$ 5,642,230	\$ 4,532,625	\$ 3,705,159	\$ 1,677,969	\$ 588,587	\$ 1,015,974	\$ 923,327	\$ 933,391	\$ 917,865	\$ 1,129,630	
99															
100	Total Interest	\$ -	\$ 4,879	\$ 4,066	\$ 895	\$ (5,454)	\$ (11,101)	\$ (15,894)	\$ (18,352)	\$ (17,769)	\$ (15,170)	\$ (12,607)	\$ (10,104)	\$ (8,072)	
101															
102															
103															
104															
105															
106															
107															
108															

Variance due to changes in NYMEX	
April 30, 2019 Target Balance	\$ (2,793,587)
April 30, 2018 Projected Balance	\$ (3,851,111)
Variance	\$ (1,057,523)

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

63					
64	Total Anticipated Direct Cost of Gas	\$ 24,231,627	\$ 5,304,657		\$ 29,536,284
65					
66					
67		Winter	Summer	Prior Period	Total
68	Working Capital				
69	Total Anticipated Direct Cost of Gas				
70	Working Capital Percentage				
71	Working Capital Allowance	\$ 35,744	\$ 8,038	\$ 9,529	\$ 53,311
72	Beginning Period Working Capital Balance				
73	End of Period Working Capital Allowance				
74	Interest	\$ 779	\$ 1,385		\$ 2,163
75	End of period with Interest				
76	Bad Debt				
77	Projected Bad Debt	\$ 65,111	\$ 168,751	\$ (5,841)	\$ 228,021
78	Beginning Period Bad Debt Balance				
79	End of Period Bad Debt Balance				
80	Interest	\$ 1,068	\$ 3,871		\$ 4,940
81	End of Period Bad Debt Balance with Interest				
82	Local Production and Storage Capacity	\$ 476,106			\$ 476,106
83					\$ -
84	Miscellaneous Overhead	\$ 471,052	\$ 109,403		\$ 580,455
85					
86	Gas Cost Other than Bad Debt and Working Capital O				
87	Beginning Balance Over/Under Collection				
88	Net Costs - Revenues				
89	Ending Balance before Interest				
90	Average Balance				
91	Interest Rate				
92	Interest Expense				
93	Ending Balance Incl Interest Expense				
94	Total Over/Under Collection Ending Balance				
95					
96	Total Indirect Cost of Gas	\$ 1,025,405	\$ 204,117	\$ 1,314,231	\$ 2,543,753
97					
98	Total Cost of Gas	\$ 25,257,032	\$ 5,508,774	\$ 1,314,231	\$ 32,080,036
99					
100	Total Interest	\$ (22,609)	\$ (82,074)		\$ (104,683)
101					
102					
103					
104					
105					
106					
107					
108					