



September 24, 2019

Debra Howland  
Executive Director and Secretary  
New Hampshire Public Utilities Commission  
21 S. Fruit St., Suite 10  
Concord, NH 03301-2429

Re: Northern Utilities, Inc., New Hampshire Division - Docket DG 18-143  
September 2019 Monthly Cost of Gas Report

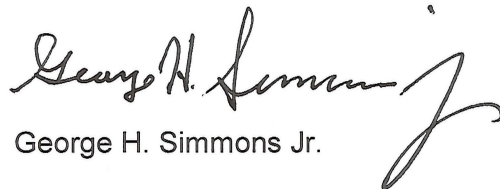
Dear Director Howland:

Pursuant to the Commission's Order No. 26,186 in Docket DG 18-143, enclosed is Northern Utilities - New Hampshire Division's ("Northern") current calculation of its projected over or under collection of gas costs for the 2018 / 2019 Summer Period.

Northern's current calculation of costs has been updated to reflect actual revenues and variable costs for May 2019 through August 2019 and NYMEX futures prices as of September 20, 2019. The updated calculations indicate that a rate change is not required at this time. Support for this decision is provided in the attached summary and tables.

If you have any questions regarding this filing, please do not hesitate to contact me or Chris Kahl at (603)773-6425.

Very truly yours,



George H. Simmons Jr.

Enclosures

cc: Lynn Fabrizio, Esq.  
D. Maurice Kreis, Consumer Advocate

George H. Simmons  
Manager Regulatory Services

6 Liberty Lane West  
Hampton, NH 03842

Phone: 603-773-6534  
Fax: 603-773-6734

simmons@unitil.com

## Northern New Hampshire Monthly Cost of Gas Report

### Summer Period

#### September 20, 2019 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, 2019 expected end-of-year COG balance. This analysis determines if the October 31, 2019 Summer Period ending balance exceeds the threshold determined in the Company’s Annual COG filing and, if exceeded, a COG rate change lowers the expected end-of-year COG balance.

As shown on Table 1, Line 24, the projected Summer Period ending balance is an under-collection of \$712,705. When combined with the Winter Season over-collection of \$1,057,523 (Line 26), the expected end-of-year COG balance is an over-collection of \$344,818 (Line 28). Although the Summer Period under-collection is greater than 4% of the total projected gas costs, an increase in current Summer Period rates prevents the Summer Period under-collection from offsetting the Winter Period over-collection and reducing the end-of-year COG balance. Therefore, a COG rate change is not required at this time.

Please note that for the 2019 Summer Period, the Company’s monthly COG model has been modified in order to more fairly account for the significant increase in Asset Management Agreement (“AMA”) revenues collected by the Company beginning May 2019 through April 2020 compared to expected AMA revenues included in the Company’s Annual COG filing made on September 17, 2018. In the Annual COG filing, AMA revenues are estimated based on the existing May through April AMAs under contract and collected evenly over the twelve-month period. However, the COG model is based on the twelve-month period November through October and all AMA revenues are allocated to the Winter Period, November through April because asset managers contract for the Company’s capacity which reflects Winter Period customers’ peak demand, not Summer Period customers’ peak demand. Therefore, significant annual changes in AMA revenues, that occur in May, are not reflected in COG rates until the following November. To adjust for this, the Company will reflect in its Summer Period Monthly COG analysis the projected demand costs included in the September 17, 2018 Annual COG filing which reflect projected AMA revenues as opposed to the actual revenues collected during the Summer Period. Further, this difference in AMA revenues will be reflected in the 2019 / 2020 Annual COG filing through the 2018 / 2019 COG Annual Reconciliation. This will allow the additional AMA revenues to be allocated fairly and properly between the Winter and Summer Period customers.

Support for the projected October 31, 2019 Summer Period ending balance and 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  
 Summer 2018-2019 Period Cost of Gas  
 DG 18-143  
 September 2019 Estimated

1	Target April 30, 2019 Target Balance	\$ (2,793,587)	Table 2, PG. 3, Line 104
2			
3	Forecasted firm therm sales 09/01/2019 - 10/31/2019		
4	Residential Heat & Non Heat	1,383,796	Table 2, PG. 2, Line 2
5	HLF Classes	741,930	Table 2, PG. 2, Line 3
6	LLF Classes	1,031,064	Table 2, PG. 2, Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$ 0.2646	Table 2, PG. 1, Line 7
10	HLF classes	\$ 0.2245	Table 2, PG. 1, Line 8
11	LLF classes	\$ 0.2934	Table 2, PG. 1, Line 9
12			
13	Total	\$ (835,230)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 09/01/2019 - 10/31/2019	\$ (835,230)	LN 13
16	Actual Recovered Costs 05/01/2019 - 08/31/2019	\$ (1,687,906)	
17	Estimated total recovered costs 05/01/19 - 10/31/19	\$ (2,523,136)	LN 15 + LN 16
18			
19	Revised projected direct gas costs 05/01/19 - 10/31/19 [1]	\$ 5,836,221	Table 2, PG. 2, Line 64, Summer
20	Revised projected indirect gas costs 05/01/19 - 10/31/19 [2]	\$ 193,207	Table 2, PG. 4, Line 96, Summer
21			
22	Total Projected Summer Period Gas Costs	\$ 6,029,428	LN 19 + LN 20
23			
24	Projected October 31, 2019 Summer Season Balance	\$ 712,705	LN 1 + Ln 17 + LN 22
25			
26	Winter Season Variance (Over-collection)	\$ (1,057,523)	Table 2, PG. 3, Line 108
27			
28	Projected End of Year Balance	\$ (344,818)	LN 24 + LN 26
29			
30	Projected October 31, 2019 Summer Season Balance	\$ 712,705	LN 24
31			
32	Projected Summer Period Imbalance Type	Under-collection	
33			
34	Summer Season Over-collection Threshold (4% of Projected Costs)	\$ (241,177)	(LN 22 * 4%)*-1
35			
36	Summer Season Under-collection Threshold (4% Plus Winter Balance)	\$ 1,298,701	((ABS) LN 26 + (ABS) LN 34)
37			
38	Over-Collection Rate Adjustment Required	No	IF (ABS)LN 30 > (ABS)LN 34, No ELSE Yes
39			
40	Under-Collection Rate Adjustment Required	No	IF (ABS)LN 30 < (ABS)LN 36, No ELSE Yes

NOTES

[1] Reflects futures prices as of September 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**

Sales Revenues		Winter						Summer						(Forecast)	(Forecast)
		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	
1	Volumes														
2	Residential Heat & Non Heat												461,965	921,830	
3	Sales HLF Classes												247,685	494,245	
4	Sales LLF Classes												344,210	686,854	
5	Total												1,053,861	2,102,929	
6	Rates														
7	Residential Heat & Non Heat CGA												\$0.2646	\$0.2646	
8	Sales HLF Classes CGA												\$0.2245	\$0.2245	
9	Sales LLF Classes CGA												\$0.2934	\$0.2934	
10	Revenues														
11	Residential Heat & Non Heat												\$ (122,236)	\$ (243,916)	
12	Sales HLF Classes												\$ (55,605)	\$ (110,958)	
13	Sales LLF Classes												\$ (100,991)	\$ (201,523)	
14	Total Sales		\$ (4,156,882)	\$ (5,933,170)	\$ (7,078,578)	\$ (6,004,899)	\$ (4,820,251)	\$ (2,428,592)	\$ (912,759)	\$ (326,968)	\$ (206,290)	\$ (241,889)	\$ (278,833)	\$ (556,397)	
15															
16															
17	Gas Costs and Credits														
18		Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	(Forecast) Sep-19	(Forecast) Oct-19	
19	Demand Costs (net of Capacity Assignment)														
20	Pipeline												\$ 172,482	\$ 172,482	
21	Storage												\$ 731,485	\$ 731,485	
22	On-system Peaking												\$ 41,033	\$ 41,033	
23	Off-System Peaking												\$ -	\$ -	
24	Total Demand Costs												\$ 945,000	\$ 945,000	
25															
26	Asset Management and Capacity Release														
27	NUI AMA Revenue												\$ (585,133)	\$ (585,133)	
28	NUI Capacity Release												\$ -	\$ -	
29	NUI AMA Rev & Cap. Release Subtotal												\$ (585,133)	\$ (585,133)	
30	NH AMA Revenue												\$ (260,507)	\$ (260,507)	
31	NH Capacity Release												\$ -	\$ -	
32	NH Total Asset Management and Capacity Release					\$ -							\$ (260,507)	\$ (260,507)	
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	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493	
37															
38	NUI Commodity Costs														
39	NUI Total Pipeline Volumes												302,280	572,717	
40	Pipeline Costs Modeled in Sendout™												\$ 706,238	\$ 1,357,630	
41	NYMEX Price Used for Forecast												\$ 2,6530	\$ 2,6690	
42	NYMEX Price Used for Update												\$ 2,2510	\$ 2,5340	
43	Increase/(Decrease) NYMEX Price												\$ (0.40)	\$ (0.14)	
44	Increase/(Decrease) in Pipeline Costs												\$ (121,517)	\$ (77,317)	
45	Updated Pipeline Costs												\$ 584,722	\$ 1,280,313	
46	New Hampshire Allocated Percentage												34.48%	36.96%	
47	NH Updated Pipeline Costs												\$ 201,614	\$ 473,239	
48															
49	Peaking Volumes												2,100	2,170	
50	Peaking Costs Modeled in Sendout												\$ 14,342	\$ 14,778	
51	Increase/(Decrease) NYMEX Price												\$ -	\$ -	
52	Increase in Peaking Costs												\$ -	\$ -	
53	Updated Peaking Costs												\$ 14,342	\$ 14,778	
54	New Hampshire Allocated Percentage												34.48%	36.96%	
55	NH Updated Peaking Costs												\$ 4,945	\$ 5,462	
56															
57	NH Commodity Costs														
58	Pipeline												\$ 201,614	\$ 473,239	
59	Storage												\$ -	\$ -	
60	Peaking												\$ 4,945	\$ 5,462	
61	Total Commodity Costs		\$ 2,159,358	\$ 4,084,471	\$ 3,865,370	\$ 2,964,860	\$ 2,082,707	\$ 1,116,989	\$ 411,499	\$ 206,315	\$ 223,098	\$ 203,087	\$ 206,560	\$ 478,702	
62	Inventory Finance Charge								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
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	\$ 1,095,993	\$ 890,808	\$ 907,591	\$ 887,581	\$ 891,053	\$ 1,163,195	

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

<b>Sales Revenues</b>				
	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)	\$ (2,523,136)		\$ (32,945,508)
15				
<b>Gas Costs and Credits</b>				
	Winter	Summer	Prior Period	Total
18 Demand Costs (net of Capacity Assignment)				
19 Pipeline				
20 Storage				
21 On-system Peaking				
22 Off-System Peaking				
23 Total Demand Costs				
24				
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	\$ 4,106,960		\$ 12,064,833
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	\$ 1,729,261		\$ 18,003,015
62 Inventory Finance Charge				
63				
64 Total Anticipated Direct Cost of Gas	\$ 24,231,627	\$ 5,836,221		\$ 30,067,848

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

	Winter							Summer					
	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	(Forecast) Sep-19	(Forecast) Oct-19
65 Working Capital													
66 Total Anticipated Direct Cost of Gas		\$ 3,857,751	\$ 5,771,295	\$ 5,618,860	\$ 4,527,307	\$ 3,718,004	\$ 1,685,569	\$ 1,114,227	\$ 909,042	\$ 907,591	\$ 887,581	\$ 891,053	\$ 1,163,195
67 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%
68 Working Capital Allowance		\$ 5,297	\$ 7,924	\$ 8,097	\$ 6,524	\$ 5,358	\$ 2,545	\$ 1,682	\$ 1,373	\$ 1,370	\$ 1,340	\$ 1,345	\$ 1,756
69 Beginning Period Working Capital Balance		\$ 9,529	\$ 14,876	\$ 22,879	\$ 31,093	\$ 37,768	\$ 43,302	\$ 46,052	\$ 47,949	\$ 49,545	\$ 51,145	\$ 52,723	\$ 54,313
70 End of Period Working Capital Allowance		\$ 14,826	\$ 22,800	\$ 30,976	\$ 37,617	\$ 43,125	\$ 45,847	\$ 47,734	\$ 49,322	\$ 50,915	\$ 52,486	\$ 54,069	\$ 56,070
71 Interest		\$ 51	\$ 78	\$ 118	\$ 150	\$ 177	\$ 204	\$ 215	\$ 223	\$ 230	\$ 237	\$ 245	\$ 253
72 End of period with interest	\$ 9,529	\$ 14,876	\$ 22,879	\$ 31,093	\$ 37,768	\$ 43,302	\$ 46,052	\$ 47,949	\$ 49,545	\$ 51,145	\$ 52,723	\$ 54,313	\$ 56,323
73 Bad Debt													
74 Projected Bad Debt	\$ -	\$ 7,281	\$ 40,557	\$ 14,378	\$ 4,248	\$ (7,102)	\$ 5,749	\$ 17,834	\$ 10,967	\$ 29,821	\$ 22,785	\$ 28,297	\$ 28,297
75 Beginning Period Bad Debt Balance		\$ (5,841)	\$ 1,430	\$ 42,078	\$ 56,672	\$ 61,177	\$ 54,327	\$ 60,338	\$ 78,489	\$ 89,841	\$ 120,142	\$ 143,530	\$ 172,550
76 End of Period Bad Debt Balance		\$ 1,439	\$ 41,987	\$ 56,456	\$ 60,919	\$ 54,075	\$ 60,076	\$ 78,172	\$ 89,456	\$ 119,662	\$ 142,927	\$ 171,827	\$ 200,847
77 Interest		\$ (9)	\$ 90	\$ 216	\$ 257	\$ 252	\$ 262	\$ 317	\$ 385	\$ 480	\$ 603	\$ 723	\$ 856
78 End of Period Bad Debt Balance with Interest	\$ (5,841)	\$ 1,430	\$ 42,078	\$ 56,672	\$ 61,177	\$ 54,327	\$ 60,338	\$ 78,489	\$ 89,841	\$ 120,142	\$ 143,530	\$ 172,550	\$ 201,702
79 Local Production and Storage Capacity		\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80 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
81 Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
82 Beginning Balance Over/Under Collection		\$ 1,310,543	\$ 1,016,249	\$ 858,271	\$ (600,885)	\$ (2,084,339)	\$ (3,198,116)	\$ (3,957,500)	\$ (3,773,710)	\$ (3,207,598)	\$ (2,501,115)	\$ (1,847,132)	\$ (1,223,699)
83 Net Costs - Revenues		\$ (299,132)	\$ (161,875)	\$ (1,459,718)	\$ (1,477,592)	\$ (1,102,247)	\$ (743,023)	\$ 201,468	\$ 582,074	\$ 719,536	\$ 663,925	\$ 630,454	\$ 625,032
84 Ending Balance before Interest		\$ 1,011,412	\$ 854,374	\$ (601,447)	\$ (2,078,478)	\$ (3,186,586)	\$ (3,941,140)	\$ (3,756,033)	\$ (3,191,636)	\$ (2,488,063)	\$ (1,837,190)	\$ (1,216,678)	\$ (598,667)
85 Average Balance		\$ 1,160,977	\$ 935,311	\$ 128,412	\$ (1,339,682)	\$ (2,635,462)	\$ (3,569,628)	\$ (3,856,767)	\$ (3,482,673)	\$ (2,847,830)	\$ (2,169,153)	\$ (1,531,905)	\$ (911,183)
86 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%
87 Interest Expense		\$ 4,837	\$ 3,897	\$ 562	\$ (5,861)	\$ (11,530)	\$ (16,361)	\$ (17,677)	\$ (15,962)	\$ (13,053)	\$ (9,942)	\$ (7,021)	\$ (4,176)
88 Ending Balance Incl Interest Expense	\$ 1,310,543	\$ 1,016,249	\$ 858,271	\$ (600,885)	\$ (2,084,339)	\$ (3,198,116)	\$ (3,957,500)	\$ (3,773,710)	\$ (3,207,598)	\$ (2,501,115)	\$ (1,847,132)	\$ (1,223,699)	\$ (602,843)
89 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)	\$ (3,647,271)	\$ (3,068,212)	\$ (2,329,828)	\$ (1,650,879)	\$ (996,836)	\$ (344,818)
90 Total Indirect Cost of Gas	\$ 1,314,231	\$ 175,316	\$ 210,407	\$ 181,230	\$ 163,178	\$ 145,015	\$ 150,260	\$ 20,605	\$ 15,219	\$ 37,083	\$ 33,257	\$ 41,822	\$ 45,220
91 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	\$ 1,116,598	\$ 906,027	\$ 944,674	\$ 920,838	\$ 932,875	\$ 1,208,415
92 Total Interest	\$ -	\$ 4,879	\$ 4,066	\$ 895	\$ (5,454)	\$ (11,101)	\$ (15,894)	\$ (17,145)	\$ (15,354)	\$ (12,342)	\$ (9,102)	\$ (6,054)	\$ (3,068)

April 30, 2019 Target Balance	\$ (2,793,587)
April 30, 2018 Actual Balance	\$ (3,851,111)
Variance	\$ (1,057,523)

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

	Winter	Summer	Prior Period	Total
65				
66				
67				
68				
69				
70				
71	\$ 35,744	\$ 8,868	\$ 9,529	\$ 54,141
72				
73				
74	\$ 779	\$ 1,403		\$ 2,182
75				
76				
77	\$ 65,111	\$ 138,000	\$ (5,841)	\$ 197,270
78				
79				
80	\$ 1,068	\$ 3,364		\$ 4,432
81				
82	\$ 476,106			\$ 476,106
83				\$ -
84	\$ 471,052	\$ 109,403		\$ 580,455
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96	\$ 1,025,405	\$ 193,207	\$ 1,314,231	\$ 2,532,842
97				
98	\$ 25,257,032	\$ 6,029,428	\$ 1,314,231	\$ 32,600,690
99				
100	\$ (22,609)	\$ (63,064)		\$ (85,673)
101				
102				
103				
104				
105				
106				
107				
108				