



September 25, 2017

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 16-819
September 2017 Monthly Cost of Gas Report

Dear Director Howland:

Pursuant to the Commission's Order No. 25,959 in Docket DG 16-819, enclosed is Northern Utilities - New Hampshire Division's ("Northern" or the "Company") current calculation of its projected over or under collection of gas costs for the 2016 / 2017 summer season as well as for the 2016 /2017 annual period. The Company is also providing a summary of its hedging transactions and monthly inventory interest calculation, both updated through August 2017.

Northern's current calculation of costs has been updated to reflect the actual May 1, 2017 balance, actual costs and revenues for May through August 2017, and NYMEX futures prices as of September 18, 2017. 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: Alex Speidel, Staff Counsel
D Maurice Kreis, Consumer Advocate

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New Hampshire Monthly Cost of Gas Report

September 2017 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, 2017 end of year balance. This is done by determining the October 31, 2017 Summer Season balance and comparing it to the corresponding end of year balance.

As shown on Table 1, Line 27, the projected Summer Season end of period balance is an under-collection of \$1,129,013. When combined with the Winter Season's projected end of period over-collection, Line 29, of \$(1,551,257), the projected end of year balance, Line 31, is an over-collection of \$(422,244). Although the projected summer season under-collection is greater than the 4% threshold for the total projected gas costs, any adjustment / increase in rates will increase the end of year balance. Therefore, no rate change is proposed at this time.

An increase in COG rates will only occur when the projected under-collection exceeds the 4% threshold and offsets the Winter Season over-collection balance. This amount, \$1,779,287, is shown on Line 36 of Table 1.

NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
Summer 2017 Period Cost of Gas
DG 16-819
September 2017 Estimated

1	Under/(Over) collection as of 05/01/17 [1]	\$ (2,086,122)	Table 2, PG 3, APRIL, LN 114
2			
3	Forecasted firm therm sales 09/01/2017 - 10/31/2017 (Summer)		
4	Residential Heat & Non Heat	1,410,969	Table 2, PG. 2 Line 2
5	HLF Classes	881,368	Table 2, PG. 2 Line 3
6	LLF Classes	1,003,960	Table 2, PG. 2 Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$0.4055	Table 2, PG. 1 Line 7
10	HLF classes	\$0.3589	Table 2, PG. 1 Line 8
11	LLF classes	\$0.4465	Table 2, PG. 1 Line 9
12			
13	Total	\$ (1,336,739)	(Ln4*Ln 9) + (Ln5*Ln10) +(LN6*Ln 11)
14			
15	Forecasted recovered costs at current rates 09/01/2017 - 10/31/2017	\$ (1,336,739)	LN 13
16	Actual recovered costs	\$ (1,148,891)	
17	Estimated total recovered costs 05/01/2017 - 10/31/2017	\$ (2,485,630)	Ln 15 + Ln 16
18			
19	Revised projected direct gas costs 05/01/17 - 10/31/17 [2] (Summer)	\$ 5,541,682	Table 2, PG 4, LN 71
20	Revised projected indirect gas costs 05/01/17 - 10/31/17 [3] (Summer)	\$ 159,082	Table 2, PG 4, LN 104
21			
22	Total Projected Summer Gas Costs	\$ 5,700,765	LN 19 + LN 20
23			
26			
27	Projected Summer Season under/(over) collection as of 10/31/17	\$ 1,129,013	LN 1 + LN 17+LN 22
28			
29	Winter Season Variance (Over-collection)	\$ (1,551,257)	Table 2, PG 3, APRIL, LN 110 - LN 114
30			
31	Projected October 31, 2017 End of Year Balance (over-collection)	\$ (422,244)	LN 27 + LN 29
32			
34	Summer Season Under-collection Threshold (4% of Projected Summer Cost)	\$ 228,031	LN 22 * 4%
35			
36	Total Under-Collection Threshold	\$ 1,779,287	(LN 29*-1)+LN 34
37			
38	Over-collection Threshold (4% of Projected Summer Cost)	\$ (228,031)	LN 22 * 4% *-1
39			
40	Projected Summer Period Variance	\$ 1,129,013	Ln 27
41			
42	Type of Variance	Under-collection	
43			
44	Rate Adjustment Required	No	If Ln 40 < Ln 36, No, else Yes

NOTES

[1] Target balance used for determining Summer Period COG rates

[2] Reflects futures prices as of August 18, 2017

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

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

		Winter						Summer						
Sales Revenues												(Forecast)	(Forecast)	
Volumes		Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17
1	Residential Heat & Non Heat												476,265	934,704
2	Sales HLF Classes												297,501	583,867
3	Sales LLF Classes												338,881	665,079
4	Total												1,112,647	2,183,650
5	Rates													
6	Residential Heat & Non Heat CGA												\$0.4055	\$0.4055
7	Sales HLF Classes CGA												\$0.3589	\$0.3589
8	Sales LLF Classes CGA												\$0.4465	\$0.4465
9	Revenues													
10	Residential Heat & Non Heat												\$ (193,125)	\$ (379,023)
11	Sales HLF Classes												\$ (106,773)	\$ (209,550)
12	Sales LLF Classes												\$ (151,310)	\$ (296,958)
13	Total Sales		\$ (2,703,468)	\$ (4,232,010)	\$ (5,049,884)	\$ (4,110,321)	\$ (4,109,899)	\$ (3,327,640)	\$ (160,478)	\$ (395,071)	\$ (257,695)	\$ (335,647)	\$ (451,209)	\$ (885,530)
14														
15														
16														
17	Gas Costs and Credits												(Forecast)	(Forecast)
18	Volumes	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17
19	Net Demand Costs (Net of Injection Fees & Cap. Assign.)													
20	Pipeline												\$ 274,823	\$ 274,823
21	Storage												\$ 554,066	\$ 554,066
22	Peaking												\$ 22,055	\$ 22,055
23	Total Demand Costs												\$ 850,944	\$ 850,944
24														
25	Asset Management and Capacity Release													
26	NUI AMA Revenue												\$ (830,623)	\$ (830,623)
27	NUI Capacity Release												\$ (5,393)	\$ (5,393)
28	NUI AMA Rev & Cap. Release Subtotal												\$ (836,016)	\$ (836,016)
29	NH AMA Revenue												\$ (303,728)	\$ (303,728)
30	NH Capacity Release												\$ (2,343)	\$ (2,343)
31	NH Total Asset Management and Capacity Release												\$ (306,071)	\$ (306,071)
32														
33	PNGTS Refund												\$ (16,566.71)	\$ (16,566.71)
34														
35	Net Demand Costs		\$ 1,105,488	\$ 835,704	\$ 1,012,794	\$ 993,820	\$ 997,079	\$ 275,747	\$ 587,761	\$ 595,692	\$ 576,198	\$ 684,532	\$ 528,306	\$ 528,306
36														
37	NUI Commodity Costs													
38	NUI Total Pipeline Volumes												313,975	623,892
39	Pipeline Costs Modeled in Sendout™												\$ 720,034	\$ 1,679,577
40	NYMEX Price Used for Forecast												\$ 3.0280	\$ 3.0510
41	NYMEX Price Used for Update												\$ 2.8930	\$ 2.9690
42	Increase/(Decrease) NYMEX Price												\$ (0.1350)	\$ (0.0820)
43	Increase/(Decrease) in Pipeline Costs												\$ (42,387)	\$ (51,159)
44	Updated Pipeline Costs												\$ 677,647	\$ 1,628,418
45	Interruptible Volumes - NH												0	0
46	Average Supply Cost (\$/MMBtu)												\$ 2.16	\$ 2.61
47	Interruptible Cost - NH												\$ -	\$ -
48	Total Updated Pipeline Costs												\$ 677,647	\$ 1,628,418
49	New Hampshire Allocated Percentage												35.63%	35.30%
50	NH Updated Pipeline Costs												\$ 241,421	\$ 574,866
51	Hedging (Gain)/Loss Estimate													
52	NYMEX Options Contracts													
53	Hedging Expenses													
54	NYMEX Option Strike Price													
55	NYMEX Price Used for Forecast													
56	Strike Price Hit													
57	Option Hedging Gain (Credit)													
58	Tota Northern Hedging Net Cost													
59	New Hampshire Allocated Percentage													
60	NH Futures Hedging Net Cost								\$ -		\$ -		\$ -	\$ -
61														
62	NH Commodity Costs													
63	Pipeline Excl Hedging										\$ -		\$ 241,421	\$ 574,866
64	Hedging (Gain)/Loss Estimate										\$ -		\$ -	\$ -
65	Storage										\$ -		\$ -	\$ -
66	Peaking												\$ 4,859	\$ 4,967
67														
68	Total Commodity Costs		\$ 1,291,866	\$ 2,744,212	\$ 2,876,678	\$ 2,435,261	\$ 1,972,703	\$ 1,129,523	\$ 459,407	\$ 305,519	\$ 261,302	\$ 188,546	\$ 246,280	\$ 579,834

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

	Sales Revenues			
1	Volumes	Winter	Summer	Total
2	Residential Heat & Non Heat	-	1,410,969	1,410,969
3	Sales HLF Classes	-	881,368	881,368
4	Sales LLF Classes	-	1,003,960	1,003,960
5	Total	-	3,296,297	3,296,297
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	-	(572,148)	(572,148)
12	Sales HLF Classes	-	(316,323)	(316,323)
13	Sales LLF Classes	-	(448,268)	(448,268)
14	Total Sales	(23,533,223)	(2,485,630)	(26,018,853)
15				
16	Gas Costs and Credits			
17		Winter	Summer	Total
18	Net Demand Costs (Net of Injection Fees & Cap. Ass			
19	Pipeline	-	549,647	549,647
20	Storage	-	1,108,132	1,108,132
21	Peaking	-	44,109	44,109
22	Total Demand Costs	-	1,701,888	1,701,888
23				
24	Asset Management and Capacity Release			
25	NUI AMA Revenue	-	(1,661,246)	\$ (1,661,246)
26	NUI Capacity Release	-	(10,787)	\$ (10,787)
27	NUI AMA Rev & Cap. Release Subtotal	-	(1,672,033)	\$ (1,672,033)
28	NH AMA Revenue	-	(607,456)	\$ (607,456)
29	NH Capacity Release	-	(4,687)	\$ (4,687)
30	NH Total Asset Management and Capacity Release	\$ -	\$ (612,143)	\$ (612,143)
31				
32	PNGTS Refund	\$ (1,990,806)	\$ (99,400)	\$ (33,133)
33				
34	Net Demand Costs	\$ (1,990,806)	\$ 990,345	\$ 1,056,611
35				
36	NUI Commodity Costs			
37	NUI Total Pipeline Volumes			937,866
38	Pipeline Costs Modeled in Sendout™			\$ 2,399,610
39	NYMEX Price Used for Forecast			
40	NYMEX Price Used for Update			
41	Increase/(Decrease) NYMEX Price			
42	Increase/(Decrease) in Pipeline Costs			
43	Updated Pipeline Costs			
44	Interruptible Volumes - NH			
45	Average Supply Cost (\$/MMBtu)			
46	Interruptible Cost - NH			
47	Total Updated Pipeline Costs			
48	New Hampshire Allocated Percentage			
49	NH Updated Pipeline Costs			\$ 816,287
50	Hedging (Gain)/Loss Estimate			
51	NYMEX Options Contracts			
52	Hedging Expenses			
53	NYMEX Option Strike Price			
54	NYMEX Price Used for Forecast			
55	Strike Price Hit			
56	Option Hedging Gain (Credit)			\$ -
57	Total Northern Hedging Net Cost			
58	New Hampshire Allocated Percentage			
59	NH Futures Hedging Net Cost	\$ -	\$ -	\$ -
60				
61	NH Commodity Costs			
62	Pipeline Excl Hedging	\$ -	\$ 816,287	\$ 816,287
63	Hedging (Gain)/Loss Estimate	\$ -	\$ -	\$ -
64	Storage	\$ -	\$ -	\$ -
65	Peaking	\$ -	\$ 9,826	\$ 9,826
66	Total Commodity Costs	\$ 12,450,244	\$ 2,040,889	\$ 14,491,132
67				
68				

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

69	Inventory Finance Charge							\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
70															
71	Total Anticipated Direct Cost of Gas		\$ 2,397,354	\$ 3,579,916	\$ 3,889,473	\$ 3,429,081	\$ 2,969,782	\$ 1,405,270	\$ 1,047,168	\$ 901,211	\$ 837,500	\$ 873,078	\$ 774,586	\$ 1,108,139	
72															
73															
74															
75															
76	Working Capital														
77	Total Anticipated Direct Cost of Gas		\$ 2,535,615	\$ 3,718,177	\$ 4,027,734	\$ 3,567,342	\$ 3,108,043	\$ 1,543,531	\$ 1,064,461	\$ 918,505	\$ 854,794	\$ 890,371	\$ 774,586	\$ 1,108,139	
78	Working Capital Percentage		0.0887%	0.0887%	0.0887%	0.0887%	0.0887%	0.0950%	0.0950%	0.1014%	0.1014%	0.1014%	0.1014%	0.1014%	
79	Working Capital Allowance		\$ 2,249	\$ 3,298	\$ 3,573	\$ 3,164	\$ 2,757	\$ 1,466	\$ 1,011	\$ 931	\$ 867	\$ 903	\$ 785	\$ 1,124	
80	Beginning Period Working Capital Balance		\$ 1,083	\$ 3,339	\$ 6,651	\$ 10,249	\$ 13,447	\$ 16,247	\$ 17,767	\$ 18,835	\$ 19,827	\$ 20,761	\$ 21,735	\$ 22,594	
81	End of Period Working Capital Allowance		\$ 3,332	\$ 6,637	\$ 10,224	\$ 13,413	\$ 16,204	\$ 17,714	\$ 18,778	\$ 19,766	\$ 20,694	\$ 21,664	\$ 22,520	\$ 23,717	
82	Interest		\$ 6	\$ 15	\$ 25	\$ 35	\$ 43	\$ 53	\$ 57	\$ 60	\$ 68	\$ 71	\$ 74	\$ 77	
83	End of period with Interest		\$ 1,083	\$ 3,339	\$ 6,651	\$ 10,249	\$ 13,447	\$ 16,247	\$ 17,767	\$ 18,835	\$ 19,827	\$ 20,761	\$ 21,735	\$ 22,594	\$ 23,795
84	Bad Debt														
85	Projected Bad Debt	\$ -	\$ (147)	\$ (52)	\$ 5,903	\$ 4,964	\$ 4,869	\$ 18,007	\$ 31,930	\$ 24,074	\$ (1,010)	\$ (2,565)	\$ 25,000	\$ 5,000	
86	Beginning Period Bad Debt Balance		\$ 135,847	\$ 136,096	\$ 136,441	\$ 142,750	\$ 148,137	\$ 153,446	\$ 171,960	\$ 204,478	\$ 229,228	\$ 228,980	\$ 227,175	\$ 252,974	
87	End of Period Bad Debt Balance		\$ 135,700	\$ 136,044	\$ 142,344	\$ 147,714	\$ 153,007	\$ 171,453	\$ 203,890	\$ 228,551	\$ 228,218	\$ 226,416	\$ 252,175	\$ 257,974	
88	Interest		\$ 396	\$ 397	\$ 407	\$ 424	\$ 439	\$ 508	\$ 587	\$ 677	\$ 762	\$ 759	\$ 799	\$ 852	
89	End of Period Bad Debt Balance with Interest	\$ 135,847	\$ 136,096	\$ 136,441	\$ 142,750	\$ 148,137	\$ 153,446	\$ 171,960	\$ 204,478	\$ 229,228	\$ 228,980	\$ 227,175	\$ 252,974	\$ 258,825	
90	Local Production and Storage Capacity		\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
91	NH PUC Consulting Costs			\$ -	\$ -			\$ -	\$ -						
92	Miscellaneous Overhead		\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 17,293	\$ 17,293	\$ 17,293	\$ 17,293	\$ 17,293	\$ 17,293	
93	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection														
94	Beginning Balance Over/Under Collection		\$ 1,215,774	\$ 1,051,223	\$ 539,706	\$ (482,360)	\$ (1,027,539)	\$ (2,033,853)	\$ (3,827,106)	\$ (2,933,670)	\$ (2,418,587)	\$ (1,828,554)	\$ (1,279,000)	\$ (942,025)	
95	Net Costs - Revenues		\$ (167,853)	\$ (513,833)	\$ (1,022,150)	\$ (542,980)	\$ (1,001,856)	\$ (1,784,109)	\$ 903,983	\$ 523,433	\$ 597,099	\$ 554,725	\$ 340,670	\$ 239,902	
96	Ending Balance before Interest		\$ 1,047,922	\$ 537,390	\$ (482,444)	\$ (1,025,340)	\$ (2,029,395)	\$ (3,817,962)	\$ (2,923,123)	\$ (2,410,237)	\$ (1,821,487)	\$ (1,273,829)	\$ (938,330)	\$ (702,123)	
97	Average Balance		\$ 1,131,848	\$ 794,306	\$ 28,631	\$ (753,850)	\$ (1,528,467)	\$ (2,925,908)	\$ (3,375,114)	\$ (2,671,953)	\$ (2,120,037)	\$ (1,551,192)	\$ (1,108,665)	\$ (822,074)	
98	Interest Rate		3.50%	3.50%	3.50%	3.50%	3.50%	3.75%	3.75%	3.75%	4.00%	4.00%	4.00%	4.00%	
99	Interest Expense		\$ 3,301	\$ 2,317	\$ 84	\$ (2,199)	\$ (4,458)	\$ (9,143)	\$ (10,547)	\$ (8,350)	\$ (7,067)	\$ (5,171)	\$ (3,696)	\$ (2,740)	
100	Ending Balance Incl Interest Expense	\$ 1,215,774	\$ 1,051,223	\$ 539,706	\$ (482,360)	\$ (1,027,539)	\$ (2,033,853)	\$ (3,827,106)	\$ (2,933,670)	\$ (2,418,587)	\$ (1,828,554)	\$ (1,279,000)	\$ (942,025)	\$ (704,863)	
101	Total Over/Under Collection Ending Balance	\$ 1,352,705	\$ 1,190,658	\$ 682,798	\$ (329,362)	\$ (865,954)	\$ (1,864,160)	\$ (3,637,379)	\$ (2,710,357)	\$ (2,169,532)	\$ (1,578,813)	\$ (1,030,091)	\$ (666,458)	\$ (422,244)	
102															
103	Total Indirect Cost of Gas	\$ 1,352,705	\$ 144,067	\$ 144,235	\$ 148,251	\$ 144,648	\$ 141,911	\$ 149,152	\$ 40,332	\$ 34,686	\$ 10,913	\$ 11,291	\$ 40,256	\$ 21,606	
104															
105	Total Cost of Gas	\$ 1,352,705	\$ 2,541,421	\$ 3,724,151	\$ 4,037,724	\$ 3,573,729	\$ 3,111,694	\$ 1,554,422	\$ 1,087,500	\$ 935,897	\$ 848,413	\$ 884,369	\$ 814,842	\$ 1,129,745	
106															
107															
108	Total Interest	\$ -	\$ 3,704	\$ 2,728	\$ 515	\$ (1,741)	\$ (3,976)	\$ (8,583)	\$ (9,903)	\$ (7,613)	\$ (6,237)	\$ (4,341)	\$ (2,823)	\$ (1,811)	
109															
110		5310.53													
111															
112															
113															
114															
115															
116															

Winter Period
Target ending Balance* **\$ (2,086,122)**

* See Annual COG filing, Schedule 3, Page 3 of 4, APR-17, LN 109

Northern Utilities

NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances & Interest Calculation

69	Inventory Finance Charge	\$	-	\$	-	\$	-
70							
71	Total Anticipated Direct Cost of Gas	\$	17,670,876	\$	5,541,682	\$	23,212,558
72							
73							
74			Winter		Summer		Total
75	Working Capital						
76	Total Anticipated Direct Cost of Gas					\$	24,111,297
77	Working Capital Percentage						
78	Working Capital Allowance					\$	22,128
79	Beginning Period Working Capital Balance						
80	End of Period Working Capital Allowance						
81	Interest					\$	583
82	End of period with Interest						
83	Bad Debt						
84	Projected Bad Debt	\$	33,544	\$	82,429	\$	115,973
85	Beginning Period Bad Debt Balance						
86	End of Period Bad Debt Balance						
87	Interest					\$	7,006
88	End of Period Bad Debt Balance with Interest						
89	Local Production and Storage Capacity	\$	420,658	\$	-	\$	420,658
90	NH PUC Consulting Costs	\$	-	\$	-	\$	-
91	Miscellaneous Overhead	\$	408,908	\$	103,760	\$	512,668
94	Gas Cost Other than Bad Debt and Working Capital						
95	Beginning Balance Over/Under Collection					\$	(13,965,991)
96	Net Costs - Revenues					\$	(1,872,969)
97	Ending Balance before Interest					\$	(15,838,959)
98	Average Balance					\$	(14,902,475)
99	Interest Rate						
100	Interest Expense					\$	(47,669)
101	Ending Balance Incl Interest Expense						
102	Total Over/Under Collection Ending Balance						
103							
104	Total Indirect Cost of Gas	\$	2,224,969	\$	159,082	\$	2,384,051
105							
106	Total Cost of Gas	\$	18,543,140	\$	5,700,765	\$	25,596,609
107							
108	Total Interest	\$	(7,352)	\$	(32,728)	\$	(40,080)
109							
110							
111							
112							
113							
114							
115							
116							

Northern Utilities, Inc.
Price Risk Management
Profit and Loss Statement
August 2017

Account # 53325

Current

ACB	(\$24,708.38)
TE	\$94,079.00
LV	\$69,370.62

ACTIVITY - Purchase Cost and Profit and Loss	Expense	Profit and Loss
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Date	Description	State	Contracts	Option Premium	Strike Price	Option Purchase Cost
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<i>Net P&L</i>							\$0.00
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TRANSACTION COSTS	Subtotal	Total
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Transaction Cost-Enter Options	Both	0	\$7.36	\$0.00
Transaction Cost-Exit Options		0		\$0.00

<i>Total New Transaction Costs</i>					\$0.00
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OPEN CALL OPTION POSITIONS-Expense and Open Trade Equity	Total	Total
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		State	QTY	Actual Option Premium	Option Purchase Cost	Strike Price	08/31/17 Futures Price	Current Open Trade Equity
05/02/16	Nov17 Options	Both	12	0.2300	\$27,600.00	\$3.500	\$3.102	\$0.00
05/26/16	Dec17 Options	Both	20	0.2370	\$47,400.00	\$4.000	\$3.232	\$0.00
06/28/16	Jan18 Options	Both	29	0.2475	\$71,775.00	\$4.300	\$3.326	\$0.00
07/27/16	Feb18 Options	Both	30	0.2470	\$74,100.00	\$4.500	\$3.321	\$0.00
08/29/16	Mar18 Options	Both	25	0.2400	\$60,000.00	\$4.650	\$3.279	\$0.00

<i>Total Expense, Open Trade Equity</i>					\$280,875.00			\$0.00
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OPEN CALL OPTION POSITIONS- Long Option Value	Total
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		State	QTY	Current Option Premium	Current Option Value	Strike Price
05/02/16	Nov17 Options	Both	12	0.0376	\$4,512.00	\$3.500
05/26/16	Dec17 Options	Both	20	0.0337	\$6,740.00	\$4.000
06/28/16	Jan18 Options	Both	29	0.0618	\$17,922.00	\$4.300
07/27/16	Feb18 Options	Both	30	0.1091	\$32,730.00	\$4.500
08/29/16	Mar18 Options	Both	25	0.1287	\$32,175.00	\$4.650

08/31/17	<i>Total Long Option Value</i>				\$94,079.00
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MARGIN CASH BALANCE	Subtotal	Total
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08/01/17	Beginning Balance-carried forward from last month		(\$24,708.38)
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Interest Credit		\$0.00
Net Deposit to Margin Account		\$0.00
Option Premiums of new activity		\$0.00
Monthly Transaction Costs		\$0.00

<i>Total Monthly Cash Adjustment</i>		\$0.00
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08/31/17	Ending Balance (ACB)		(\$24,708.38)
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NORTHERN UTILITIES, INC.
DETERMINATION OF INVENTORY FINANCING FROM MONEY POOL
August 2017

	Total Inventory	Average bal beg + end / 2	Internally Financed	Money Pool Interest Rate	Interest to Defer	NH	ME
January 2016	\$8,349,188.69	\$9,797,354.69	\$9,797,354.69	1.70%	\$13,879.59	\$5,887.72	\$7,991.87
February	\$6,881,382.39	\$7,615,285.54	\$7,615,285.54	1.71%	\$10,851.78	\$4,603.33	\$6,248.46
March	\$6,466,038.05	\$6,673,710.22	\$6,673,710.22	1.71%	\$9,510.04	\$4,034.16	\$5,475.88
April	\$6,932,113.54	\$6,699,075.80	\$6,699,075.80	1.71%	\$9,546.18	\$4,049.49	\$5,496.69
May	\$7,347,477.88	\$7,139,795.71	\$7,139,795.71	1.72%	\$10,233.71	\$4,341.14	\$5,892.57
June	\$7,775,720.99	\$7,561,599.44	\$7,561,599.44	1.73%	\$10,901.31	\$4,624.33	\$6,276.97
July	\$8,390,100.35	\$8,082,910.67	\$8,082,910.67	1.76%	\$11,852.12	\$5,027.67	\$6,824.45
August	\$9,003,112.57	\$8,696,606.46	\$8,696,606.46	1.79%	\$12,953.71	\$5,494.96	\$7,458.74
September	\$9,643,843.60	\$9,323,478.09	\$9,323,478.09	1.81%	\$14,040.27	\$5,955.88	\$8,084.39
October	\$10,336,838.18	\$9,990,340.89	\$9,990,340.89	1.81%	\$15,044.50	\$6,381.88	\$8,662.62
November	\$10,177,266.05	\$10,257,052.11	\$10,257,052.11	1.84%	\$15,692.96	\$6,656.95	\$9,036.01
December	\$8,176,192.96	\$9,176,729.50	\$9,176,729.50	1.98%	\$15,151.98	\$6,427.47	\$8,724.51
January 2017	\$8,211,399.49	\$8,193,796.22	\$8,193,796.22	2.05%	\$13,990.62	\$5,934.82	\$8,055.80
February	\$3,991,804.55	\$6,101,602.02	\$6,101,602.02	2.05%	\$10,418.27	\$4,419.43	\$5,998.84
March	\$1,988,672.70	\$2,990,238.62	\$2,990,238.62	2.19%	\$5,445.13	\$2,309.82	\$3,135.31
April	\$3,252,033.76	\$2,620,353.23	\$2,620,353.23	2.27%	\$4,956.51	\$2,102.55	\$2,853.96
May	\$4,492,308.93	\$3,872,171.35	\$3,872,171.35	2.29%	\$7,389.39	\$3,134.58	\$4,254.81
June	\$5,803,856.23	\$5,148,082.58	\$5,148,082.58	2.44%	\$10,467.77	\$4,440.43	\$6,027.34
July	\$7,018,391.76	\$6,411,123.99	\$6,411,123.99	2.51%	\$13,409.93	\$5,688.49	\$7,721.44
August	\$8,211,399.49	\$7,614,895.62	\$7,614,895.62	2.52%	\$15,991.28	\$6,783.50	\$9,207.78

Inventory			
<u>ACCT #</u>		<u>MMBTU</u>	<u>AMOUNT</u>
	LNG		
515152	Inventory - Liquefied Natural Gas		
	NATURAL GAS	11,099	\$68,817.25
515114&115	Natural Gas Underground - SS-1 and FSS-1		
515116	Natural Gas Underground - SSNE	144,902	\$330,670.72
515113	Natural Gas Underground - MCN	2,612,926	\$7,811,911.52
516525	Washington 10 prepaid	-	
Total Inventory			<u><u>\$8,211,399.49</u></u>