NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
Summer 2016 Period Cost of Gas
DG 16-309
July 2016 Estimated

Under/(Over) collection as of 5/01/16			$	(19,052)
Forecasted firm therm sales 07/01/2016 - 10/31/2016				
Residential Heat & Non Heat		2,285,082		
HLF Classes		2,289,762		
LLF Classes		1,969,873		
Current recovery rate per therm				
Residential heat & non heat		$0.3904		
HLF classes		$0.3540		
LLF classes		$0.4327		
Total	$	(2,555,036)		
Forecasted recovered costs at current rates 07/01/2016 - 10/31/2016			$	(2,555,036)
Actual recovered costs 5/01/2016 - 06/30/2016			$	(904,319)
Estimated total recovered costs 05/01/2016 - 10/31/2016			$	(3,459,354)
Revised projected direct gas costs 05/01/16 - 10/31/16 [1]			$	3,364,670
Revised projected indirect gas costs 05/01/16 - 10/31/16 [2]			$	137,670
Projected under/(over) collection as of 10/31/16			$	23,933

Actual gas costs to date 5/01/2016 - 06/30/2016	$	890,073		
Revised projected indirect gas costs 07/01/2016 - 10/31/2016	$	117,353		
Revised projected direct gas costs 07/01/2016 - 10/31/2016	$	2,869,202		
Estimated total adjusted gas costs 05/01/16 - 10/31/16			$	3,876,628

Under/(over) collection as percent of total gas costs	0.62%

NOTES
[1] Revised as follows:
- Futures prices as of July 19, 2016
[2] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity, Miscellaneous Overheads and Interest

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

			Winter						Summer						
	Sales Revenues										(Forecast)	(Forecast)	(Forecast)	(Forecast)	Total
1	Volumes	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Summer
2	Residential Heat & Non Heat										430,469	447,488	489,892	917,233	2,285,082
3	Sales HLF Classes										431,351	448,404	490,895	919,111	2,289,762
4	Sales LLF Classes										371,089	385,760	422,315	790,708	1,969,873
5	Total										1,232,909	1,281,652	1,403,103	2,627,052	6,544,717
6	Rates														
7	Residential Heat & Non Heat CGA								$0.3196	$0.3430	$0.3904	$0.3904	$0.3904	$0.3904	
8	Sales HLF Classes CGA								$0.2832	$0.3066	$0.3540	$0.3540	$0.3540	$0.3540	
9	Sales LLF Classes CGA								$0.3619	$0.3853	$0.4327	$0.4327	$0.4327	$0.4327	
10	Revenues														
11	Residential Heat & Non Heat										$ (168,055)	$ (174,699)	$ (191,254)	$ (358,088)	$ (892,096)
12	Sales HLF Classes										$ (152,698)	$ (158,735)	$ (173,777)	$ (325,365)	$ (810,576)
13	Sales LLF Classes										$ (160,570)	$ (166,918)	$ (182,736)	$ (342,139)	$ (852,364)
14	Total Sales		$ (38,674)	$ (32)	$ 291	$ 2,260	$ 7,413	$ 180	$ (554,766)	$ (349,552)	$ (481,324)	$ (500,353)	$ (547,767)	$ (1,025,593)	$ (3,459,354)
15															

16			Winter						Summer						
17	**Gas Costs and Credits**										(Forecast)	(Forecast)	(Forecast)	(Forecast)	
18		Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Total
19	Net Demand Costs (Net of Injection Fees & Cap. Assign.)														
20	Pipeline									$ 87,648	$ 87,648	$ 87,648	$ 87,648	$ 87,648	$ 438,238
21	Storage									$ 55,694	$ 55,694	$ 55,694	$ 55,694	$ 55,694	$ 278,470
22	Peaking									$ 12,226	$ 12,226	$ 12,226	$ 12,226	$ 12,226	$ 61,132
23	Total Demand Costs		$ -	$ -	$ -	$ -	$ -	$ -	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 933,408
24	Asset Management and Capacity Release														
25	NUI AMA Revenue														$ -
26	PNGTS Litigation Cost														$ -
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	Total Demand Costs								$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 933,408
34	NUI Commodity Costs														
35	NUI Total Pipeline Volumes										299,589	302,138	347,502	673,103	1,622,332
36	Pipeline Costs Modeled in Sendout™										$ 568,272	$ 589,407	$ 707,191	$ 1,611,513	$ 3,476,383
37	NYMEX Price Used for Forecast										$ 1.9960	$ 2.0460	$ 2.0650	$ 2.1070	
38	NYMEX Price Used for Update										$ 2.9170	$ 2.7280	$ 2.6890	$ 2.7300	
39	Increase/(Decrease) NYMEX Price										$ 0.92	$ 0.68	$ 0.62	$ 0.62	
40	Increase/(Decrease) in Pipeline Costs										$ 275,921	$ 206,058	$ 216,841	$ 419,343	$ 1,118,164
41	Updated Pipeline Costs										$ 844,194	$ 795,465	$ 924,032	$ 2,030,857	
42	Interruptible Volumes - NH										0	0	0	0	
43	Average Supply Cost ($/MMBtu)										$ 2.82	$ 2.63	$ 2.66	$ 3.02	
44	Interruptible Cost - NH										$ -	$ -	$ -	$ -	
45	Total Updated Pipeline Costs										$ 844,194	$ 795,465	$ 924,032	$ 2,030,857	
46	New Hampshire Allocated Percentage										41.28%	42.55%	40.55%	39.30%	
47	NH Updated Pipeline Costs										$ 348,489	$ 338,496	$ 374,690	$ 798,128	$ 1,859,803
48	Hedging (Gain)/Loss Estimate														
49	NYMEX Options Contracts														
50	Number of Contracts										$ -	$ -	$ -	$ -	
51	Option Contract Price										$ -	$ -	$ -	$ -	
52	Hedging Expenses										$ -	$ -	$ -	$ -	
53	NYMEX Option Strike Price										$ -	$ -	$ -	$ -	
54	NYMEX Price Used for Forecast										$ -	$ -	$ -	$ -	
55	Strike Price Hit										NA	NA	NA	NA	
56	Option Hedging Gain (Credit)										-	-	-	-	
57	Tota Northern Hedginf Net Cost										$ -	$ -	$ -	$ -	$ -
58	New Hampshire Allocated Percentage										41.28%	42.55%	40.55%	39.30%	
59	NH Futures Hedging Net Cost										$ -	$ -	$ -	$ -	$ -

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

60	NH Commodity Costs														
61	Pipeline Excl Hedging										$ 348,489	$ 338,496	$ 374,690	$ 798,128	$ 1,859,803
62	Hedging (Gain)/Loss Estimate										$ -	$ -	$ -	$ -	$ -
63	Storage										$ -	$ -	$ -	$ -	$ -
64	Peaking										$ 8,519	$ 8,798	$ 8,158	$ 8,199	$ 33,675
65	Total Commodity Costs		$ (3,723)	$ (120)					$ 339,900	$ 197,884	$ 357,008	$ 347,294	$ 382,849	$ 806,328	$ 2,431,262
66	Inventory Finance Charge														$ -
67															
68	**Total Anticipated Direct Cost of Gas**		$ (3,723)	$ (120)	$ -	$ -	$ -	$ -	$ 495,468	$ 353,452	$ 512,576	$ 502,862	$ 538,417	$ 961,896	$ 3,364,670

69			Winter						Summer						
70											(Forecast)	(Forecast)	(Forecast)	(Forecast)	Total
71		Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Summer
72	Working Capital														
73	Total Anticipated Direct Cost of Gas		$ (3,723)	$ (120)	$ -	$ -	$ -	$ -	$ 515,113	$ 373,097	$ 532,221	$ 522,507	$ 558,062	$ 981,541	$ 3,482,540
74	Working Capital Percentage		0.0887%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	
75	Working Capital Allowance		$ (3)	$ (0)	$ -	$ -	$ -	$ -	$ 457	$ 331	$ 472	$ 463	$ 495	$ 871	$ 3,089
76	Beginning Period Working Capital Balance		$ (431)	$ (435)	$ (437)	$ (438)	$ (439)	$ (440)	$ (442)	$ 15	$ 346	$ 820	$ 1,286	$ 1,786	
77	End of Period Working Capital Allowance		$ (434)	$ (436)	$ (437)	$ (438)	$ (439)	$ (440)	$ 15	$ 346	$ 818	$ 1,283	$ 1,781	$ 2,657	
78	Interest		$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ 1	$ 2	$ 3	$ 4	$ 6	$ 16
79	End of period with Interest	$ (431)	$ (435)	$ (437)	$ (438)	$ (439)	$ (440)	$ (442)	$ 15	$ 346	$ 820	$ 1,286	$ 1,786	$ 2,663	
80	Bad Debt														
81	Projected Bad Debt	$ -	$ 1,434	$ 921	$ (28)	$ 628	$ 335	$ 401	$ 327	$ 994	$ 3,815	$ 3,815	$ 3,815	$ 3,815	$ 16,581
82	Beginning Period Bad Debt Balance		$ (12,773)	$ (11,371)	$ (10,480)	$ (10,537)	$ (9,936)	$ (9,627)	$ (9,254)	$ (8,954)	$ (7,985)	$ (4,188)	$ (379)	$ 3,440	
83	End of Period Bad Debt Balance		*$ (11,339)*	*$ (10,451)*	*$ (10,509)*	*$ (9,909)*	*$ (9,601)*	*$ (9,227)*	*$ (8,927)*	*$ (7,960)*	*$ (4,170)*	*$ (373)*	*$ 3,436*	*$ 7,255*	
84	Interest		$ (33)	$ (30)	$ (28)	$ (28)	$ (26)	$ (27)	$ (27)	$ (25)	$ (18)	$ (7)	$ 4	$ 16	$ (56)
85	End of Period Bad Debt Balance with Interest	$ (12,773)	$ (11,371)	$ (10,480)	$ (10,537)	$ (9,936)	$ (9,627)	$ (9,254)	$ (8,954)	$ (7,985)	$ (4,188)	$ (379)	$ 3,440	$ 7,271	
86	Local Production and Storage Capacity								$ -	$ -	$ -	$ -	$ -	$ -	$ -
87			$ -	$ -	$ -										$ -
88	Miscellaneous Overhead								$ 19,645	$ 19,645	$ 19,645	$ 19,645	$ 19,645	$ 19,645	$ 117,870
89															
90	Supplier Refund		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
91	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection														
92	Beginning Balance Over/Under Collection		$ 23,260	$ (19,131)	$ (19,336)	$ (19,097)	$ (16,885)	$ (9,508)	$ (9,356)	$ (49,094)	$ (25,658)	$ 25,239	$ 47,498	$ 57,947	$ 46,575
93	Net Costs - Revenues		$ (42,397)	$ (152)	$ 291	$ 2,260	$ 7,413	$ 180	$ (39,653)	$ 23,544	$ 50,898	$ 22,154	$ 10,295	$ (44,052)	$ 23,186
94	Ending Balance before Interest		$ (19,137)	$ (19,284)	$ (19,045)	$ (16,836)	$ (9,472)	$ (9,328)	$ (49,009)	$ (25,550)	$ 25,239	$ 47,393	$ 57,793	$ 13,895	$ 69,761
95	Average Balance		$ 2,062	$ (19,207)	$ (19,190)	$ (17,967)	$ (13,179)	$ (9,418)	$ (29,182)	$ (37,322)	$ (210)	$ 36,316	$ 52,646	$ 35,921	$ 58,168
96	Interest Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	
97	Interest Expense		$ 6	$ (52)	$ (52)	$ (49)	$ (36)	$ (27)	$ (85)	$ (109)	$ (1)	$ 106	$ 154	$ 105	$ 170
98	Ending Balance Incl Interest Expense	$ 23,260	$ (19,131)	$ (19,336)	$ (19,097)	$ (16,885)	$ (9,508)	$ (9,356)	$ (49,094)	$ (25,658)	$ 25,239	$ 47,498	$ 57,947	$ 14,000	
99	**Total Over/Under Collection Ending Balance**	$ 10,056	$ (30,938)	$ (30,253)	$ (30,072)	$ (27,260)	$ (19,575)	$ (19,052)	$ (58,033)	$ (33,297)	$ 21,871	$ 48,406	$ 63,173	$ 23,933	
100															
101	**Total Indirect Cost of Gas**	$ 10,056	$ 1,403	$ 838	$ (110)	$ 551	$ 272	$ 344	$ 20,317	$ 20,837	$ 23,915	$ 24,026	$ 24,118	$ 24,458	$ 137,670
102															
103	**Total Cost of Gas**	$ 6,333	$ (2,321)	$ 717	$ (110)	$ 551	$ 272	$ 344	$ 515,785	$ 374,288	$ 536,492	$ 526,888	$ 562,534	$ 986,353	$ 3,502,340
104															
105	**Total Interest**	$ -	$ (28)	$ (83)	$ (82)	$ (78)	$ (63)	$ (56)	$ (112)	$ (133)	$ (17)	$ 102	$ 162	$ 127	$ 130

Northern Utilities, Inc.
Price Risk Management
Profit and Loss Statement
June 2016

Account # 53325

Current

ACB	($50,203.58)
TE	$208,004.00
LV	$157,800.42

ACTIVITY - Purchase Cost and Profit and Loss

Date	Description	State	Contracts	Option Premuim	Strike Price	Expense Option Purchase Cost	Profit and Loss
06/28/16	Jan18 Options	Both	29	$0.2475		$71,775.00	($71,775.00)
	Net P&L						($71,775.00)

TRANSACTION COSTS

	Description	State	Contracts	Rate	Subtotal	Total
	Transaction Cost-Enter Options	Both	29	$7.36	($213.44)	
	Transaction Cost-Exit Options		0		$0.00	
	Total New Transaction Costs					($213.44)

OPEN CALL OPTION POSITIONS-Expense and Open Trade Equity

		State	QTY	Actual Option Premium	Total Option Purchase Cost	Strike Price	06/30/16 Futures Price	Total Current Open Trade Equity
04/28/15	Nov16 Options	Both	18	0.0770	$13,860.00	$4.800	$3.085	$0.00
05/27/15	Dec16 Options	Both	31	0.0850	$26,350.00	$5.250	$3.319	$0.00
06/26/15	Jan17 Options	Both	45	0.1030	$46,350.00	$6.000	$3.446	$0.00
07/29/15	Feb17 Options	Both	46	0.0990	$45,540.00	$6.250	$3.429	$0.00
08/27/15	Mar17 Options	Both	37	0.0800	$29,600.00	$6.300	$3.368	$0.00
05/02/16	Nov17 Options	Both	12	0.2300	$27,600.00	$3.500	$3.146	$0.00
05/26/16	Dec17 Options	Both	20	0.2370	$47,400.00	$4.000	$3.279	$0.00
06/28/16	Jan18 Options	Both	29	0.2475	$71,775.00	$4.300	$3.385	$0.00
	Total Expense, Open Trade Equity				**$308,475.00**			**$0.00**

OPEN CALL OPTION POSITIONS- Long Option Value

		State	QTY	Current Option Premium	Total Current Option Value	Strike Price
04/28/15	Nov16 Options	Both	18	0.0094	$1,692.00	$4.800
05/27/15	Dec16 Options	Both	31	0.0197	$6,107.00	$5.250
06/26/15	Jan17 Options	Both	45	0.0272	$12,240.00	$6.000
07/29/15	Feb17 Options	Both	46	0.0397	$18,262.00	$6.250
08/27/15	Mar17 Options	Both	37	0.0519	$19,203.00	$6.300
05/02/16	Nov17 Options	Both	12	0.2789	$33,468.00	$3.500
05/26/16	Dec17 Options	Both	20	0.2244	$44,880.00	$4.000
06/28/16	Jan18 Options	Both	29	0.2488	$72,152.00	$4.000
06/30/16	***Total Long Option Value***				**$208,004.00**	

MARGIN CASH BALANCE

		Subtotal	Total
06/01/16	**Beginning Balance-carried forward from last month**		**$196,784.86**
	Interest Credit	$0.00	
	Net Deposit to Margin Account	($175,000.00)	
	Option Premiums of new activity	($71,775.00)	
	Monthly Transaction Costs	($213.44)	
	Total Monthly Cash Adjustment		($246,988.44)
06/30/16	***Ending Balance (ACB)***		**($50,203.58)**

NORTHERN UTILITIES, INC.

DETERMINATION OF INVENTORY FINANCING FROM MONEY POOL

June 2016

	Total Inventory	Average bal beg + end / 2	Internally Financed	Money Pool Interest Rate	Interest to Defer	NH	ME
January 2015	$10,398,644.45	$12,704,155.00	$12,704,155.00	1.56%	$16,515.40	$7,872.89	$8,642.51
February	$5,906,333.53	$8,152,488.99	$8,152,488.99	1.57%	$10,666.17	$5,084.56	$5,581.61
March	$3,816,219.24	$4,861,276.38	$4,861,276.38	1.57%	$6,360.17	$3,031.89	$3,328.28
April	$4,853,845.91	$4,335,032.58	$4,335,032.58	1.58%	$5,707.79	$2,720.90	$2,986.89
May	$5,845,033.55	$5,349,439.73	$5,349,439.73	1.58%	$7,043.43	$3,357.60	$3,685.83
June	$6,981,986.40	$6,413,509.97	$6,413,509.97	1.58%	$8,444.45	$4,025.47	$4,418.98
July	$8,083,382.82	$7,532,684.61	$7,532,684.61	1.58%	$9,918.03	$4,727.93	$5,190.11
August	$9,191,271.89	$8,637,327.36	$8,637,327.36	1.58%	$11,372.48	$5,421.26	$5,951.22
September	$10,272,808.68	$9,732,040.28	$9,732,040.28	1.48%	$12,002.85	$5,721.76	$6,281.09
October	$11,382,175.37	$10,827,492.03	$10,827,492.03	1.46%	$13,173.45	$6,279.78	$6,893.67
November	$11,243,809.57	$11,312,992.47	$11,312,992.47	1.48%	$13,952.69	$5,918.73	$8,033.96
December	$11,245,520.69	$11,244,665.13	$11,244,665.13	1.63%	$15,274.00	$6,479.23	$8,794.77
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

Inventory ACCT #		MMBTU	AMOUNT
	LNG		
515152	Inventory - Liquified Natural Gas		
	NATURAL GAS	10,012	$91,262.95
515114&115	Natural Gas Underground - SS-1 and FSS-1		
515116	Natural Gas Underground - SSNE	94,526	$122,515.52
515113	Natural Gas Underground - MCN	2,588,155	$7,561,942.52
516525	Washington 10 prepaid	-	
Total Inventory			$7,775,720.99