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
May 2016 Estimated

Under/(Over) collection as of 5/01/16			$	(19,052)
Forecasted firm therm sales 05/01/2016 - 10/31/2016				
Residential Heat & Non Heat		3,470,624		
HLF Classes		3,477,731		
LLF Classes		2,991,879		
Current recovery rate per therm				
Residential heat & non heat		$0.3196		
HLF classes		$0.2832		
LLF classes		$0.3619		
Total	$	(3,176,866)		
Forecasted recovered costs at current rates 05/01/2016 - 10/31/2016			$	(3,176,866)
Actual recovered costs			$	-
Estimated total recovered costs 05/01/2016 - 10/31/2016			$	(3,176,866)
Revised projected direct gas costs 05/01/16 - 10/31/16 [1]			$	3,236,413
Revised projected indirect gas costs 05/01/16 - 10/31/16 [2]			$	144,291
Projected under/(over) collection as of 10/31/16			$	184,787

Actual gas costs to date	$	-		
Revised projected indirect gas costs 05/01/2016 - 10/31/2016	$	3,236,413		
Revised projected direct gas costs 05/01/2016 - 10/31/2016	$	144,291		
Estimated total adjusted gas costs 05/1/16 - 10/31/16			$	3,380,704

Under/(over) collection as percent of total gas costs	5.47%

Projected under/(over) collection as of 10/31/16	$	184,787

NOTES
[1] Revised as follows:
- Futures prices as of May 17, 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)	(Forecast)	(Forecast)	
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	Total
2	Residential Heat & Non Heat								711,597	473,945	430,469	447,488	489,892	917,233	3,470,624
3	Sales HLF Classes								713,054	474,916	431,351	448,404	490,895	919,111	3,477,731
4	Sales LLF Classes								613,438	408,568	371,089	385,760	422,315	790,708	2,991,879
5	Total								2,038,088	1,357,429	1,232,909	1,281,652	1,403,103	2,627,052	9,940,234
6	Rates														
7	Residential Heat & Non Heat CGA								$0.3196	$0.3196	$0.3196	$0.3196	$0.3196	$0.3196	
8	Sales HLF Classes CGA								$0.2832	$0.2832	$0.2832	$0.2832	$0.2832	$0.2832	
9	Sales LLF Classes CGA								$0.3619	$0.3619	$0.3619	$0.3619	$0.3619	$0.3619	
10	Revenues														
11	Residential Heat & Non Heat								$ (227,426)	$ (151,473)	$ (137,578)	$ (143,017)	$ (156,570)	$ (293,148)	$ (1,109,211)
12	Sales HLF Classes								$ (201,937)	$ (134,496)	$ (122,159)	$ (126,988)	$ (139,022)	$ (260,292)	$ (984,894)
13	Sales LLF Classes								$ (222,003)	$ (147,861)	$ (134,297)	$ (139,607)	$ (152,836)	$ (286,157)	$ (1,082,761)
14	Total Sales		$ (38,674)	$ (32)	$ 291	$ 2,260	$ 7,413	$ 180	$ (651,366)	$ (433,830)	$ (394,034)	$ (409,612)	$ (448,427)	$ (839,597)	$ (3,205,428)
15															

			Winter						Summer						
16															
17	**Gas Costs and Credits**								(Forecast)	(Forecast)	(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	$ 87,648	$ 525,885
21	Storage								$ 55,694	$ 55,694	$ 55,694	$ 55,694	$ 55,694	$ 55,694	$ 334,164
22	Peaking								$ 12,226	$ 12,226	$ 12,226	$ 12,226	$ 12,226	$ 12,226	$ 73,358
24	Total Demand Costs		$ -	$ -	$ -	$ -	$ -	$ -	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 155,568	$ 933,408
25	NUI Commodity Costs														
26	NUI Total Pipeline Volumes								521,843	331,246	299,589	302,138	347,502	673,103	2,475,421
27	Pipeline Costs Modeled in Sendout™								$ 974,512	$ 613,210	$ 568,272	$ 589,407	$ 707,191	$ 1,611,513	$ 5,064,105
28	NYMEX Price Used for Forecast								$ 1.7870	$ 1.9000	$ 1.9960	$ 2.0460	$ 2.0650	$ 2.1070	
29	NYMEX Price Used for Update								$ 1.9950	$ 2.0480	$ 2.1850	$ 2.2530	$ 2.2930	$ 2.3620	
30	Increase/(Decrease) NYMEX Price								$ 0.21	$ 0.15	$ 0.19	$ 0.21	$ 0.23	$ 0.26	
31	Increase/(Decrease) in Pipeline Costs								$ 108,543	$ 49,024	$ 56,622	$ 62,543	$ 79,230	$ 171,641	
32	Updated Pipeline Costs								$ 1,083,055	$ 662,234	$ 624,894	$ 651,950	$ 786,421	$ 1,783,155	
33	Interruptible Volumes - NH								0	0	0	0	0	0	
34	Average Supply Cost ($/MMBtu)								$ 2.08	$ 2.00	$ 2.09	$ 2.16	$ 2.26	$ 2.65	
35	Interruptible Cost - NH								$ -	$ -	$ -	$ -	$ -	$ -	
36	Total Updated Pipeline Costs								$ 1,083,055	$ 662,234	$ 624,894	$ 651,950	$ 786,421	$ 1,783,155	
37	New Hampshire Allocated Percentage								39.29%	41.14%	41.28%	42.55%	40.55%	39.30%	
38	NH Updated Pipeline Costs								$ 425,551	$ 272,463	$ 257,961	$ 277,425	$ 318,890	$ 700,781	$ 2,253,072
39	Hedging (Gain)/Loss Estimate														
40	Time Triggered NYMEX Contracts (Allocated between ME and NH)														
41	NYMEX NG Futures Contracts								0	0	0	0	0	0	
42	Average Purchase Price								$ -	$ -	$ -	$ -	$ -	$ -	
43	NYMEX Price Used for Forecast								$ 1.7870	$ 1.9000	$ 1.9960	$ 2.0460	$ 2.0650	$ 2.1070	
44	NYMEX Price Used for Update								$ 1.9950	$ 2.0480	$ 2.1850	$ 2.2530	$ 2.2930	$ 2.3620	
45	Increase/(Decrease) NYMEX Price								0.2080	0.1480	0.1890	0.2070	0.2280	0.2550	
46	NUI Futures Hedging (Gain)/Loss - Allocate								$ -	$ -	$ -	$ -	$ -	$ -	$ -
47	New Hampshire Allocated Percentage								39.29%	41.14%	41.28%	42.55%	40.55%	39.30%	
48	NH Futures Hedging (Gain)/Loss, Time Triggered								$ -	$ -	$ -	$ -	$ -	$ -	$ -
49	Price Triggered NYMEX Contracts (NH Only)														
50	NYMEX NG Futures Contracts								$ -	$ -	$ -	$ -	$ -	$ -	
51	Average Purchase Price								$ -	$ -	$ -	$ -	$ -	$ -	
52	NYMEX Price Used for Forecast								$ 1.7870	$ 1.9000	$ 1.9960	$ 2.0460	$ 2.0650	$ 2.1070	
53	NYMEX Price Used for Update								$ 1.9950	$ 2.0480	$ 2.1850	$ 2.2530	$ 2.2930	$ 2.3620	
54	Increase/(Decrease) NYMEX Price								0.2080	0.1480	0.1890	0.2070	0.2280	0.2550	
55	NUI Futures Hedging (Gain)/Loss - Allocate								$ -	$ -	$ -	$ -	$ -	$ -	$ -
56	New Hampshire Allocated Percentage								100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
57	NH Futures Hedging (Gain)/Loss, Price Triggered								$ -	$ -	$ -	$ -	$ -	$ -	$ -
58	NH Commodity Costs														
59	Pipeline Excl Hedging								$ 425,551	$ 272,463	$ 257,961	$ 277,425	$ 318,890	$ 700,781	$ 2,253,072
60	Hedging (Gain)/Loss Estimate								$ -	$ -	$ -	$ -	$ -	$ -	$ -
61	Storage								$ -	$ -	$ -	$ -	$ -	$ -	$ -
62	Peaking								$ 8,068	$ 8,190	$ 8,519	$ 8,798	$ 8,158	$ 8,199	$ 49,933
63	Total Commodity Costs		$ (3,723)	$ (120)					$ 433,619	$ 280,654	$ 266,480	$ 286,223	$ 327,048	$ 708,980	$ 2,299,161

Northern Utilities

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

64	Inventory Finance Charge														$ -
65	Asset Management and Capacity Release														
66	NUI AMA Revenue														$ -
67	PNGTS Litigation Cost														$ -
68	NUI Capacity Release														$ -
69	NUI AMA Rev & Cap. Release Subtotal														$ -
70	NH AMA Revenue														$ -
71	NH Capacity Release														$ -
72	NH Total Asset Management and Capacity Release		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
73															
74	**Total Anticipated Direct Cost of Gas**		$ (3,723)	$ (120)	$ -	$ -	$ -	$ -	$ 589,187	$ 436,222	$ 422,048	$ 441,791	$ 482,616	$ 864,549	$ 3,236,413
75			Winter						Summer						
76									(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	
77		Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	Total
78	Working Capital														
79	Total Anticipated Direct Cost of Gas		$ (3,723)	$ (120)	$ -	$ -	$ -	$ -	$ 589,187	$ 436,222	$ 422,048	$ 441,791	$ 482,616	$ 864,549	$ 3,232,569
80	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%	
81	Working Capital Allowance		$ (3)	$ (0)	$ -	$ -	$ -	$ -	$ 523	$ 387	$ 374	$ 392	$ 428	$ 767	$ 2,867
82	Beginning Period Working Capital Balance		$ (431)	$ (435)	$ (437)	$ (438)	$ (439)	$ (440)	$ (442)	$ 80	$ 468	$ 844	$ 1,239	$ 1,672	
83	End of Period Working Capital Allowance		$ (434)	$ (436)	$ (437)	$ (438)	$ (439)	$ (440)	$ 81	$ 467	$ 843	$ 1,236	$ 1,667	$ 2,439	
84	Interest		$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ 1	$ 2	$ 3	$ 4	$ 6	$ 8
85	End of period with Interest	$ (431)	$ (435)	$ (437)	$ (438)	$ (439)	$ (440)	$ (442)	$ 80	$ 468	$ 844	$ 1,239	$ 1,672	$ 2,445	
86	Bad Debt														
92	Projected Bad Debt	$ -	$ 1,434	$ 921	$ (28)	$ 628	$ 335	$ 401	$ 3,815	$ 3,815	$ 3,815	$ 3,815	$ 3,815	$ 3,815	$ 22,890
93	Beginning Period Bad Debt Balance		$ (12,773)	$ (11,371)	$ (10,480)	$ (10,537)	$ (9,936)	$ (9,627)	$ (9,254)	$ (5,461)	$ (1,656)	$ 2,160	$ 5,987	$ 9,825	
94	End of Period Bad Debt Balance		*$ (11,339)*	*$ (10,451)*	*$ (10,509)*	*$ (9,909)*	*$ (9,601)*	*$ (9,227)*	*$ (5,439)*	*$ (1,646)*	*$ 2,159*	*$ 5,975*	*$ 9,802*	*$ 13,640*	
95	Interest		$ (33)	$ (30)	$ (28)	$ (28)	$ (26)	$ (27)	$ (21)	$ (10)	$ 1	$ 12	$ 23	$ 34	$ (134)
96	End of Period Bad Debt Balance with Interest	$ (12,773)	$ (11,371)	$ (10,480)	$ (10,537)	$ (9,936)	$ (9,627)	$ (9,254)	$ (5,461)	$ (1,656)	$ 2,160	$ 5,987	$ 9,825	$ 13,674	
97	Local Production and Storage Capacity								$ -	$ -	$ -	$ -	$ -	$ -	$ -
98			$ -	$ -	$ -										$ -
99	Miscellaneous Overhead								$ 19,645	$ 19,645	$ 19,645	$ 19,645	$ 19,645	$ 19,645	$ 117,870
100															
101	Supplier Refund		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
100	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection														
101	Beginning Balance Over/Under Collection		$ 23,260	$ (19,131)	$ (19,336)	$ (19,097)	$ (16,885)	$ (9,508)	$ (9,356)	$ (51,979)	$ (30,062)	$ 17,579	$ 69,531	$ 123,646	$ 58,664
102	Net Costs - Revenues		$ (42,397)	$ (152)	$ 291	$ 2,260	$ 7,413	$ 180	$ (42,534)	$ 22,037	$ 47,659	$ 51,825	$ 53,834	$ 44,596	$ 145,011
103	Ending Balance before Interest		$ (19,137)	$ (19,284)	$ (19,045)	$ (16,836)	$ (9,472)	$ (9,328)	$ (51,890)	$ (29,942)	$ 17,598	$ 69,404	$ 123,365	$ 168,242	$ 203,675
104	Average Balance		$ 2,062	$ (19,207)	$ (19,190)	$ (17,967)	$ (13,179)	$ (9,418)	$ (30,623)	$ (40,961)	$ (6,232)	$ 43,492	$ 96,448	$ 145,944	$ 131,169
105	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%	
106	Interest Expense		$ 6	$ (52)	$ (52)	$ (49)	$ (36)	$ (27)	$ (89)	$ (119)	$ (18)	$ 127	$ 281	$ 426	$ 397
108	Ending Balance Incl Interest Expense	$ 23,260	$ (19,131)	$ (19,336)	$ (19,097)	$ (16,885)	$ (9,508)	$ (9,356)	$ (51,979)	$ (30,062)	$ 17,579	$ 69,531	$ 123,646	$ 168,668	
109	**Total Over/Under Collection Ending Balance**	$ 10,056	$ (30,938)	$ (30,253)	$ (30,072)	$ (27,260)	$ (19,575)	$ (19,052)	$ (57,359)	$ (31,250)	$ 20,584	$ 76,757	$ 135,143	$ 184,787	
110															
111	**Total Indirect Cost of Gas**	$ 10,056	$ 1,403	$ 838	$ (110)	$ 551	$ 272	$ 344	$ 23,871	$ 23,718	$ 23,819	$ 23,994	$ 24,197	$ 24,693	$ 157,645
112															
113	**Total Cost of Gas**	$ 6,333	$ (2,321)	$ 717	$ (110)	$ 551	$ 272	$ 344	$ 613,059	$ 459,939	$ 445,867	$ 465,785	$ 506,813	$ 889,241	$ 3,386,491
114															
115	**Total Interest**	$ -	$ (28)	$ (83)	$ (82)	$ (78)	$ (63)	$ (56)	$ (111)	$ (129)	$ (16)	$ 142	$ 309	$ 466	$ 271

Northern Utilities, Inc.
Price Risk Management
Profit and Loss Statement
April 2016
(Updated to reflect Option purchase on May 2nd)

Account # 53325

Current

ACB	$244,332.06
TE	$244,332.06
LV	$311,770.06

ACTIVITY - Purchase Cost and Profit and Loss							**Expense**	**Profit and Loss**
Date	Description	State	Contracts	Option Premuim	Strike Price		Option Purchase Cost	
05/02/16	Nov17 Options	Both	12	$0.230			$27,600.00	($27,600.00)
	Net P&L							($27,600.00)

TRANSACTION COSTS						**Subtotal**	**Total**
	Transaction Cost-Enter Options	Both	12	$6.21		($74.52)	
	Transaction Cost-Exit Options		0			$0.00	
	Total New Transaction Costs						($74.52)

OPEN CALL OPTION POSITIONS-Expense and Open Trade Equity					**Total**			**Total**
		State	QTY	Actual Option Premium	Option Purchase Cost	Strike Price	05/02/16 Futures Price	Current Open Trade Equity
04/28/15	Nov16 Options	Both	18	0.077	$13,860.00	$4.800	$2.664	$0.00
05/27/15	Dec16 Options	Both	31	0.085	$26,350.00	$5.250	$2.969	$0.00
06/26/15	Jan17 Options	Both	45	0.103	$46,350.00	$6.000	$3.097	$0.00
07/29/15	Feb17 Options	Both	46	0.099	$45,540.00	$6.250	$3.087	$0.00
08/27/15	Mar17 Options	Both	37	0.080	$29,600.00	$6.300	$3.043	$0.00
05/02/16	Nov17 Options	Both	12	0.230	$27,600.00	$3.500	$3.019	$0.00
	Total Expense, Open Trade Equity				**$189,300.00**			**$0.00**

OPEN CALL OPTION POSITIONS- Long Option Value					**Total**	
		State	QTY	Current Option Premium	Current Option Value	Strike Price
04/28/15	Nov16 Options	Both	18	0.0087	$1,566.00	$4.800
05/27/15	Dec16 Options	Both	31	0.0150	$4,650.00	$5.250
06/26/15	Jan17 Options	Both	45	0.0201	$9,045.00	$6.000
07/29/15	Feb17 Options	Both	46	0.0281	$12,926.00	$6.250
08/27/15	Mar17 Options	Both	37	0.0359	$13,283.00	$6.300
05/02/16	Nov17 Options	Both	12	0.2164	$25,968.00	$3.500
05/02/16	***Total Long Option Value***				**$67,438.00**	

MARGIN CASH BALANCE		**Subtotal**	**Total**
04/01/16	**Beginning Balance-carried forward from last month**		**($2,993.42)**
	Interest Credit	$0.00	
	Net Deposit to Margin Account	$275,000.00	
	Option Premiums of new activity	($27,600.00)	
	Monthly Transaction Costs	($74.52)	
	Total Monthly Cash Adjustment		$247,325.48
05/02/16	***Ending Balance (ACB)***		**$244,332.06**

NORTHERN UTILITIES, INC.

DETERMINATION OF INVENTORY FINANCING FROM MONEY POOL

April 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	$6,651.25	$7,301.44
December	$11,245,520.69	$11,244,665.13	$11,244,665.13	1.63%	$15,274.00	$7,281.12	$7,992.89
January 2016	$8,349,188.69	$9,797,354.69	$9,797,354.69	1.70%	$13,879.59	$6,616.40	$7,263.19
February	$6,881,382.39	$7,615,285.54	$7,615,285.54	1.71%	$10,851.78	$5,173.04	$5,678.74
March	$6,466,038.05	$6,673,710.22	$6,673,710.22	1.71%	$9,510.04	$4,533.43	$4,976.60
April	$6,932,113.54	$6,699,075.80	$6,699,075.80	1.71%	$9,546.18	$4,550.67	$4,995.52

Inventory ACCT #		MMBTU	AMOUNT
	LNG		
515152	Inventory - Liquified Natural Gas		
	NATURAL GAS	10,864	$95,643.64
515114&115	Natural Gas Underground - SS-1 and FSS-1		
515116	Natural Gas Underground - SSNE	46,592	$103,208.58
515113	Natural Gas Underground - MCN	2,182,246	$6,733,261.32
516525	Washington 10 prepaid	-	
Total Inventory			$6,932,113.54