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September 1, 2017

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

Re: Northern Utilities, Inc. – New Hampshire Division, Docket DG 16-819,
2016-17 Annual of Gas (COG) Adjustment Reconciliation

Dear Director Howland:

Enclosed are an original, six confidential copies and one redacted copy of Northern Utilities, Inc. -- New Hampshire Division's ("Northern" or "the Company") 2016-17 Annual Cost of Gas Adjustment Reconciliation (Form III).

The objective of this reconciliation is to present the details of Northern's Annual 2016-17 over-collection. The results from the Reconciliation will be incorporated into Northern's 2017 / 2018 Annual COG filing.

Form III, Schedules 1 through 5, contains an accounting of costs, revenue recoveries and volumes for the period August 2016 through July 2017 plus estimated costs and revenues for August 2017 through October 2017.

The schedules illustrate the Company's over-collection of (\$358,002) as follows:

Schedule 1 provides the 2016-2017 beginning and ending balances;

Schedule 2 shows monthly deferred and COG allowable gas costs and revenues, including interest;

Schedule 3 presents monthly accrued and billed COG revenue collections;

Schedule 4 summarizes Northern's monthly total purchase gas costs, by supplier, as well as by volume and per unit cost; and

Schedule 5 contains sales and transportation volumes, including metered sendout at gate stations and metered volumes for Residential and Commercial & Industrial customer classes.

Attachment A presents the reconciliation of the working capital allowance and recoveries. The under-collection of \$3,516 will be reflected on Revised Page 42 of Northern's Tariff No. 11 as an increase to the costs used to calculate the COG rate.

Attachment B shows the reconciliation of the bad debt allowance and collections. The over-collection of (\$3,874) will also be reflected on Revised Page 42 of Northern's Tariff No. 11 as a decrease to the costs used in calculating the COG rate.

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NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
SCHEDULE 1: SUMMARY OF ANNUAL BALANCE
August 2016 - October 2017

	AMOUNT	
Annual Beginning Balance	\$ 341,990	FORM III SCHEDULE 2
Less: Reported Collections	\$ (27,065,144)	FORM III SCHEDULE 3
Add: Cost of Firm Gas Allowable	\$ 26,396,473	FORM III SCHEDULE 4
Add: Interest	\$ (31,320)	FORM III SCHEDULE 2
Annual Ending Balance	\$ (358,002)	

Allocation of Reconciliation Balance to 2016 / 2017 Winter Season and 2017 Summer Season

Winter Season Sales	3,486,598	SCHEDULE 10B
Summer Season Sales	786,957	SCHEDULE 10B

Winter Season Sales Percentage	81.59%
Summer Season Sales Percentage	18.41%

Reconciliation Allocated to Winter Season \$ (292,077)

Reconciliation Allocated to Summer Season \$ (65,924)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
SCHEDULE 2: ADJUSTMENTS TO REPORTED SUMMER, WINTER AND ANNUAL ACCOUNTS
August 2016 - October 2017
Acct 191.10

	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>May-17</u>	<u>Jun-17</u>	<u>Jul-17</u>	-----Estimated-----			<u>Aug-17</u>	<u>Sep-17</u>	<u>Oct-17</u>	<u>Total</u>
Initial Account Beginning Balance	\$ 344,014																		
Adjustment*	\$ (2,025)																		
Adjusted Beginning Balance	\$ 341,990	\$ 248,552	\$ 887,588	\$ 1,215,774	\$ 1,081,767	\$ 649,191	\$ (286,177)	\$ (755,911)	\$ (1,679,738)	\$ (3,408,640)	\$ (2,510,677)	\$ (1,989,057)	\$ (1,394,115)	\$ (993,529)	\$ (625,859)				
Plus: Cost of Firm Gas (Schedule 4)	\$ 224,310	\$ 961,087	\$ 954,473	\$ 2,535,615	\$ 3,743,916	\$ 4,053,472	\$ 3,593,080	\$ 3,133,782	\$ 1,569,270	\$ 1,064,461	\$ 918,505	\$ 854,794	\$ 813,009	\$ 821,573	\$ 1,155,127	\$ 26,396,473			
Less: Reported Collections (Schedule 3)	\$ (318,608)	\$ (323,705)	\$ (629,350)	\$ (2,672,968)	\$ (4,179,012)	\$ (4,989,369)	\$ (4,061,296)	\$ (4,054,062)	\$ (3,290,234)	\$ (157,263)	\$ (389,865)	\$ (254,222)	\$ (408,450)	\$ (451,209)	\$ (885,530)	\$ (27,065,144)			
Annual Account Ending Balance	\$ 247,692	\$ 885,934	\$ 1,212,711	\$ 1,078,421	\$ 646,670	\$ (286,706)	\$ (754,393)	\$ (1,676,191)	\$ (3,400,702)	\$ (2,501,442)	\$ (1,982,037)	\$ (1,388,486)	\$ (989,556)	\$ (623,165)	\$ (356,262)				
Month's Average Balance	\$ 294,841	\$ 567,243	\$ 1,050,150	\$ 1,147,098	\$ 864,218	\$ 181,242	\$ (520,285)	\$ (1,216,051)	\$ (2,540,220)	\$ (2,955,041)	\$ (2,246,357)	\$ (1,688,771)	\$ (1,191,836)	\$ (808,347)	\$ (491,061)				
Interest Rate (Prime Rate)	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.75%	3.75%	3.75%	4.00%	4.00%	4.00%	4.25%				
Interest Applied	\$ 860	\$ 1,654	\$ 3,063	\$ 3,346	\$ 2,521	\$ 529	\$ (1,517)	\$ (3,547)	\$ (7,938)	\$ (9,235)	\$ (7,020)	\$ (5,629)	\$ (3,973)	\$ (2,694)	\$ (1,739)	\$ (31,320)			
Annual Account Ending Balance w/int	\$ 248,552	\$ 887,588	\$ 1,215,774	\$ 1,081,767	\$ 649,191	\$ (286,177)	\$ (755,911)	\$ (1,679,738)	\$ (3,408,640)	\$ (2,510,677)	\$ (1,989,057)	\$ (1,394,115)	\$ (993,529)	\$ (625,859)	\$ (358,002)				

* Reflects net ATV credit for May through July 2016. These ATV costs / credits were not available nor included in 2015- 2016 reconciliation.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
SCHEDULE 3: REVENUE BACKUP TO REPORTED COLLECTIONS
August 2016 - October 2017

	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>May-17</u>	<u>Jun-17</u>	<u>Jul-17</u>	----- <u>Aug-17</u>	Estimated <u>Sep-17</u>	----- <u>Oct-17</u>	<u>Total</u>
Accrued Revenue	\$ (21,520)	\$ (1,823)	\$ 107,706	\$ 1,116,048	\$ 619,265	\$ 312,157	\$ (503,358)	\$ 38,892	\$ 83,040	\$ (1,398,745)	\$ (191,911)	\$ (126,541)				
Billed Revenue	\$ 340,127	\$ 325,528	\$ 521,644	\$ 1,556,920	\$ 3,559,748	\$ 4,677,211	\$ 4,564,654	\$ 4,015,170	\$ 3,207,195	\$ 1,556,008	\$ 581,776	\$ 380,763				
Calendarized Revenue	<u>\$ 318,608</u>	<u>\$ 323,705</u>	<u>\$ 629,350</u>	<u>\$ 2,672,968</u>	<u>\$ 4,179,012</u>	<u>\$ 4,989,369</u>	<u>\$ 4,061,296</u>	<u>\$ 4,054,062</u>	<u>\$ 3,290,234</u>	<u>\$ 157,263</u>	<u>\$ 389,865</u>	<u>\$ 254,222</u>	<u>\$ 408,450</u>	<u>\$ 451,209</u>	<u>\$ 885,530</u>	<u>\$ 27,065,144</u>

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
SCHEDULE 4: PURCHASED GAS COSTS
August 2016- October 2017

-----Estimated-----

Commodity Costs	Aug-16	Sep-16	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	Total
CONSOLIDATED EDISON	\$ -	\$ -	\$ 16,790	\$ 13,273	\$ 48,762	\$ 132,707	\$ 201,891	\$ 129,419	\$ 93,788	\$ 32,321	\$ 10,395	\$ -				\$ 679,345
DTE ENERGY TRADING	\$ 156,897	\$ 143,524	\$ 108,020	\$ 187,766	\$ 41,976	\$ 1,059	\$ 369,743	\$ 63,802	\$ 42,021	\$ 409,594	\$ -	\$ 183,709				\$ 1,708,110
EMERA ENERGY SERVICES INC.	\$ -	\$ -	\$ -	\$ 256,523	\$ 259,501	\$ 609,885	\$ 633,812	\$ 490,104	\$ 364,370	\$ 17,964	\$ -	\$ -				\$ 2,632,160
FREEPOINT	\$ -	\$ -	\$ -	\$ -	\$ 44,642	\$ 57,057	\$ 63,798	\$ 52,328	\$ 50,367	\$ 8,483	\$ -	\$ -				\$ 276,675
REPSOL	\$ 62,637	\$ 60,168	\$ 61,396	\$ 65,982	\$ 790,729	\$ 1,260,896	\$ 1,124,840	\$ 1,041,435	\$ 952,360	\$ 281,303	\$ 168,027	\$ 30,023				\$ 5,899,795
SEQUENT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73,778	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ 73,778
SHELL ENERGY NORTH AMERICA (US) LP	\$ -	\$ -	\$ -	\$ 4,269	\$ 119,082	\$ 190,552	\$ 214,185	\$ 159,227	\$ 129,418	\$ 56,163	\$ 62,626	\$ 51,893				\$ 987,414
SOUTHWESTERN	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,988	\$ -	\$ -	\$ 1,253	\$ -	\$ 143,027	\$ -				\$ 169,268
TENASKA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 160,179	\$ -	\$ -				\$ 160,179
TWIN EAGLE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 114,733	\$ 47,208	\$ 30,152				\$ 192,092
Subtotal - Commodity	\$ 219,533	\$ 203,692	\$ 186,206	\$ 527,813	\$ 1,304,692	\$ 2,350,922	\$ 2,608,269	\$ 1,936,315	\$ 1,633,576	\$ 1,080,739	\$ 431,283	\$ 295,776				\$ 12,778,816
DTE						\$ 704	\$ 816	\$ 605	\$ 696	\$ -	\$ -	\$ -				
Granite	\$ 55	\$ 58	\$ 122	\$ 174	\$ 635	\$ 554	\$ 525	\$ 496	\$ 260	\$ 87.35	\$ 79.67	\$ 85.69				\$ 3,132
Maritimes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,959	\$ -	\$ 2,206	\$ -	\$ -	\$ -				\$ 5,165
Portland	\$ 11	\$ 12	\$ 11	\$ 11	\$ 26,136	\$ 96,852	\$ 65,109	\$ 28,442	\$ 14,924	\$ 1813.32	\$ 11.9	\$ 13.29				\$ 233,346
Tennessee	\$ 5,592	\$ 5,797	\$ 5,605	\$ 8,494	\$ 8,760	\$ 14,008	\$ 10,291	\$ 9,142	\$ 10,224	\$ 10009.15	\$ 9496.71	\$ 7846.53				\$ 105,263
Subtotal - Commodity Transportation	\$ 5,657	\$ 5,867	\$ 5,738	\$ 8,679	\$ 35,531	\$ 112,118	\$ 79,701	\$ 38,685	\$ 28,309	\$ 11,910	\$ 9,588	\$ 7,946				\$ 349,728
Commodity Cost Estimates	\$ 203,692	\$ 186,206	\$ 527,813	\$ 1,352,402	\$ 2,458,615	\$ 2,664,340	\$ 1,993,630	\$ 1,661,719	\$ 1,092,521	\$ 440,796	\$ 303,634	\$ 266,180				\$ 13,151,548
Commodity Cost Reversals	\$ (219,128)	\$ (203,692)	\$ (186,206)	\$ (527,813)	\$ (1,352,402)	\$ (2,458,763)	\$ (2,664,340)	\$ (1,993,630)	\$ (1,661,719)	\$ (1,092,521)	\$ (440,796)	\$ (303,634)				\$ (13,104,644)
Subtotal - Estimates	\$ (15,436)	\$ (17,486)	\$ 341,607	\$ 824,589	\$ 1,106,213	\$ 205,577	\$ (670,710)	\$ (331,911)	\$ (569,198)	\$ (651,725)	\$ (137,162)	\$ (37,454)				\$ 26,992,837
Subtotal - Supply	\$ 209,755	\$ 192,072	\$ 533,550	\$ 1,361,081	\$ 2,446,436	\$ 2,668,617	\$ 2,017,260	\$ 1,643,089	\$ 1,092,686	\$ 440,924	\$ 303,709	\$ 266,268				\$ 13,175,448
Withdrawal - Underground Storage	\$ (119)	\$ 133	\$ (161)	\$ 50,276	\$ 827,049	\$ 974,236	\$ 727,840	\$ 801,418	\$ (470)	\$ 2	\$ (104)	\$ 105				\$ 3,380,202
ATV Reconciliation Charges	\$ (6,078)	\$ 1,492	\$ 11,959	\$ 9,659	\$ (20,765)	\$ (30,590)	\$ (16,063)	\$ 7,142	\$ 10,327	\$ -	\$ -	\$ -				\$ (32,917)
Off System Sales	\$ (17,986)	\$ (15,459)	\$ -	\$ (42,260)	\$ (49,311)	\$ (161,583)	\$ (519,433)	\$ (55,669)	\$ (220,867)	\$ (59,363)	\$ -	\$ -				\$ (1,141,931)
Net OBA Adjustment	\$ (3,542)	\$ (4,923)	\$ (2,250)	\$ (236)	\$ 1,151	\$ 226	\$ (7,278)	\$ (1,574)	\$ (2,801)	\$ (5,914)	\$ (4,739)	\$ (495)				\$ (32,375)
Company Managed	\$ -	\$ -	\$ -	\$ -	\$ (73,312)	\$ (380,398)	\$ (374,436)	\$ (298,233)	\$ (283,551)	\$ -	\$ -	\$ -				\$ (1,409,930)
LNG Boiloff	\$ 8,449	\$ 4,306	\$ 5,699	\$ 5,791	\$ 34,097	\$ 6,171	\$ 6,839	\$ 15,688	\$ 7,380	\$ 6,369	\$ 6,530	\$ 5,997				\$ 113,317
Transportation Charges	\$ (1,780)	\$ -	\$ (778)	\$ (3,715)	\$ (1,945)	\$ 151,766	\$ 60,528	\$ 12,793	\$ 80,297	\$ 17,949						\$ 315,116
Hedging Costs	\$ 24,617	\$ 19,869	\$ (92)	\$ (89)	\$ (96)	\$ (99)	\$ (99)	\$ (105)	\$ (63)	\$ (58)	\$ (63)	\$ (56)				\$ 43,666
Inventory Finance Charges	\$ 137	\$ 161	\$ 201	\$ 228	\$ 265	\$ 221	\$ 134	\$ 100	\$ 100	\$ 135	\$ 186	\$ 207				\$ 2,074
Subtotal - Other Commodity	\$ 3,698	\$ 5,579	\$ 14,578	\$ 19,653	\$ 717,133	\$ 559,950	\$ (121,967)	\$ 481,559	\$ (409,647)	\$ (40,880)	\$ 1,810	\$ 5,758				\$ 1,237,224
Sales for Resale Estimates	\$ (15,447)	\$ 5,616	\$ (33,755)	\$ (122,623)	\$ (541,981)	\$ (893,869)	\$ (353,902)	\$ (505,847)	\$ (59,363)	\$ -	\$ -	\$ (10,723)				\$ (2,531,894)
Sales for Resale Reversals	\$ 12,383	\$ 15,447	\$ (5,616)	\$ 33,755	\$ 122,623	\$ 541,981	\$ 893,869	\$ 353,902	\$ 505,847	\$ 59,363	\$ -	\$ -				\$ 2,533,554
Subtotal - Estimates	\$ (3,064)	\$ 21,063	\$ (39,371)	\$ (88,868)	\$ (419,358)	\$ (351,888)	\$ 539,967	\$ (151,945)	\$ 446,484	\$ 59,363	\$ -	\$ (10,723)				\$ 1,660
Total Annual Commodity Costs	\$ 210,388	\$ 218,714	\$ 508,757	\$ 1,291,866	\$ 2,744,212	\$ 2,876,678	\$ 2,435,261	\$ 1,972,703	\$ 1,129,523	\$ 459,407	\$ 305,519	\$ 261,302	\$ 237,716	\$ 246,280	\$ 579,834	\$ 15,478,162

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
SCHEDULE 4: PURCHASED GAS COSTS
August 2016- October 2017

Demand Costs	Aug-16	Sep-16	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	Total
-----Estimated-----																
Pipeline Reservation																
Alberta Northeast	\$ 6,343	\$ 6,288	\$ 5,934	\$ 6,754	\$ 4,142	\$ 4,268	\$ 4,252	\$ 3,443	\$ 3,889	\$ 4,661	\$ 4,819	\$ 4,041				\$ 58,834
Algonquin	\$ 14,409	\$ 14,409	\$ 14,409	\$ 14,066	\$ 14,852	\$ 14,854	\$ 14,843	\$ 14,840	\$ 14,847	\$ 14,838	\$ 14,854	\$ 14,854				\$ 176,078
DTE Energy	\$ 385,141	\$ 378,482	\$ 372,584	\$ 368,541	\$ 378,478	\$ 389,452	\$ 396,752	\$ 388,421	\$ 384,442	\$ 385,191	\$ 390,871	\$ 415,137				\$ 4,633,493
Emera	\$ 38,741	\$ 38,908	\$ 38,567	\$ 38,153	\$ 38,784	\$ 39,101	\$ 40,946	\$ 41,199	\$ 40,343	\$ 40,187	\$ 39,694	\$ 40,622				\$ 475,245
Granite State	\$ 154,483	\$ 154,483	\$ 154,483	\$ 215,460	\$ 215,460	\$ 215,460	\$ 215,460	\$ 215,460	\$ 215,460	\$ 159,253	\$ 159,253	\$ 159,253				\$ 2,233,970
Iroquois	\$ 18,383	\$ 18,383	\$ 17,257	\$ 17,257	\$ 17,790	\$ 17,790	\$ 17,790	\$ 17,790	\$ 17,790	\$ 17,790	\$ 17,790	\$ 17,790				\$ 213,597
Portland	\$ 12,125	\$ 12,125	\$ 12,125	\$ 12,125	\$ 724,954	\$ 724,954	\$ 724,954	\$ 724,954	\$ 724,954	\$ 12,499	\$ 12,499	\$ 12,499				\$ 3,710,768
Tennessee	\$ 156,055	\$ 156,055	\$ 156,055	\$ 156,055	\$ 160,887	\$ 160,887	\$ 160,887	\$ 160,887	\$ 160,887	\$ 160,887	\$ 160,887	\$ 160,887				\$ 1,911,318
Texas Eastern	\$ 2,288	\$ 2,301	\$ 2,301	\$ 2,301	\$ 2,372	\$ 2,381	\$ 2,381	\$ 2,386	\$ 2,386	\$ 2,373	\$ -	\$ 2,373				\$ 25,846
Vector	\$ 71,105	\$ 71,088	\$ 71,089	\$ 71,076	\$ 107,362	\$ 107,377	\$ 107,381	\$ 107,358	\$ 107,366	\$ 57,108	\$ 57,102	\$ 57,102				\$ 992,513
Total Pipeline Reservation	\$ 859,074	\$ 852,522	\$ 844,803	\$ 901,788	\$ 1,665,083	\$ 1,676,525	\$ 1,685,646	\$ 1,676,738	\$ 1,672,366	\$ 854,788	\$ 857,770	\$ 884,559				\$ 14,431,661
Product Demand																
DTE	\$ -	\$ -	\$ -	\$ -	\$ 74,341	\$ 74,341	\$ 74,341	\$ 74,341	\$ 74,341	\$ -	\$ -	\$ -				\$ 371,705
Emera	\$ -	\$ -	\$ -	\$ -	\$ 61,222	\$ 61,222	\$ 61,222	\$ 61,222	\$ 61,222	\$ -	\$ -	\$ -				\$ 306,110
Engi	\$ -	\$ -	\$ -	\$ -	\$ 42,637	\$ 42,637	\$ 42,637	\$ 42,637	\$ 42,637	\$ -	\$ -	\$ -				\$ 213,184
Repsol	\$ -	\$ -	\$ -	\$ -	\$ 111,512	\$ 115,229	\$ 115,229	\$ 104,077	\$ 115,229	\$ -	\$ -	\$ -				\$ 561,275
Shell	\$ -	\$ -	\$ -	\$ -	\$ 6,035	\$ 6,035	\$ 6,035	\$ 6,035	\$ 6,035	\$ -	\$ -	\$ -				\$ 30,174
Off-sytem Peaking Allocation Adjustment	\$ -	\$ -	\$ -	\$ -	\$ 25,739	\$ 25,739	\$ 25,739	\$ 25,739	\$ 25,739	\$ -	\$ -	\$ -				\$ 128,693
Total Product Demand	\$ -	\$ -	\$ -	\$ -	\$ 321,485	\$ 325,202	\$ 325,202	\$ 314,050	\$ 325,202	\$ -	\$ -	\$ -				\$ 1,611,140
Storage Pipeline Transportation and Demand Reservation																
Tennessee	\$ 4,944	\$ 4,944	\$ 4,944	\$ 4,944	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097	\$ 5,097				\$ 60,548
Texas Eastern				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -
Wash 10	\$ 102,162	\$ 102,162	\$ 102,162	\$ 102,162	\$ 105,316	\$ 105,316	\$ 105,316	\$ 105,316	\$ 105,316	\$ 105,316	\$ 105,316	\$ 105,316				\$ 1,251,177
Company Managed	\$ (97,772)	\$ (98,210)	\$ (97,650)	\$ -	\$ -	\$ (231,249)	\$ (226,263)	\$ (228,673)	\$ (228,388)	\$ (208,689)	\$ (121,584)	\$ (174,889)				\$ (1,713,367)
Total Storage and Demand Reservation	\$ 9,334	\$ 8,895	\$ 9,455	\$ 107,105	\$ 110,413	\$ (120,836)	\$ (115,850)	\$ (118,261)	\$ (117,976)	\$ (98,276)	\$ (11,171)	\$ (64,476)				\$ (401,642)
Demand Cost Estimates																
Demand Cost Estimates	\$ 487,303	\$ 804,958	\$ 802,177	\$ 1,987,994	\$ 1,862,256	\$ 1,873,023	\$ 1,861,505	\$ 1,873,023	\$ 826,893	\$ 810,847	\$ 798,225	\$ 798,347				\$ 14,786,551
Demand Cost Reversals	\$ (919,095)	\$ (487,303)	\$ (804,958)	\$ (802,177)	\$ (1,987,994)	\$ (1,862,256)	\$ (1,873,023)	\$ (1,861,505)	\$ (1,873,023)	\$ (826,893)	\$ (810,847)	\$ (798,225)				\$ (14,907,299)
Subtotal	\$ (431,792)	\$ 317,655	\$ (2,781)	\$ 1,185,817	\$ (125,738)	\$ 10,767	\$ (11,518)	\$ 11,518	\$ (1,046,130)	\$ (16,046)	\$ (12,622)	\$ 122				\$ (120,748)
PNGTS Refund																
PNGTS Refund	\$ (21,365)	\$ (21,365)	\$ (21,365)	\$ (443,547)	\$ (445,505)	\$ (441,624)	\$ (443,653)	\$ (443,653)	\$ (331,801)	\$ (16,567)	\$ (16,567)	\$ (16,567)				\$ (2,663,579)
Capacity Release	\$ (427,955)	\$ (427,633)	\$ (437,233)	\$ (501,551)	\$ (645,680)	\$ (418,297)	\$ (417,229)	\$ (417,626)	\$ (417,862)	\$ (223,139)	\$ (220,713)	\$ (222,212)				\$ (4,777,129)
Other A&G Allowance	\$ 19,645	\$ 19,645	\$ 19,645	\$ -	\$ -	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 17,293	\$ 17,293	\$ 17,293				\$ 383,420
Local Production and Storage Allowance				\$ 68,151	\$ 68,151	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ -	\$ -	\$ -				\$ 416,741
NH PUC Consulting Expense	\$ 6,813	\$ 1,665	\$ -	\$ 70,110	\$ 70,110											\$ 148,697
Total Indirect Demand Costs	\$ (422,863)	\$ (427,688)	\$ (438,953)	\$ (806,836)	\$ (952,924)	\$ (721,659)	\$ (722,622)	\$ (723,019)	\$ (611,402)	\$ (222,413)	\$ (219,986)	\$ (221,485)				\$ (6,491,850)
Demand Cost Estimates - Capacity Release																
Demand Cost Estimates - Capacity Release	\$ (511,481)	\$ (520,493)	\$ (487,301)	\$ (631,426)	\$ (650,040)	\$ (643,245)	\$ (646,284)	\$ (646,233)	\$ (428,547)	\$ (341,546)	\$ (342,551)	\$ (347,779)				\$ (6,196,926)
Demand Cost Reversals - Capacity Release	\$ 511,650	\$ 511,481	\$ 520,493	\$ 487,301	\$ 631,426	\$ 650,040	\$ 643,245	\$ 646,284	\$ 428,547	\$ 341,546	\$ 342,551	\$ 347,779				\$ 6,360,797
Subtotal	\$ 169	\$ (9,012)	\$ 33,192	\$ (144,125)	\$ (18,614)	\$ 6,795	\$ (3,039)	\$ 51	\$ 217,686	\$ 87,001	\$ (1,005)	\$ (5,228)				\$ 163,871
Annual Demand Costs	\$ 13,922	\$ 742,372	\$ 445,716	\$ 1,243,749	\$ 999,704	\$ 1,176,794	\$ 1,157,820	\$ 1,161,078	\$ 439,747	\$ 605,054	\$ 612,985	\$ 593,491	\$ 575,293	\$ 575,293	\$ 575,293	\$ 10,918,311
Total Gas Costs																
Total Gas Costs	\$ 224,310	\$ 961,087	\$ 954,473	\$ 2,535,615	\$ 3,743,916	\$ 4,053,472	\$ 3,593,080	\$ 3,133,782	\$ 1,569,270	\$ 1,064,461	\$ 918,505	\$ 854,794	\$ 813,009	\$ 821,573	\$ 1,155,127	\$ 26,396,473

REDACTED

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
COST OF GAS ADJUSTMENT - FORM III, Schedule 4 - UNITS
August 2016 - October 2017

Indicates Confidential Data

Commodity Volumes:	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>May-17</u>	<u>Jun-17</u>	<u>Jul-17</u>	-----Estimated-----			Total	
													<u>Aug-17</u>	<u>Sep-17</u>	<u>Oct-17</u>		
CONSOLIDATED EDISON																	
DTE ENERGY TRADING																	
EMERA ENERGY SERVICES INC.																	
FREEPOINT																	
REPSOL																	
SEQUENT																	
SHELL ENERGY NORTH AMERICA (US) LP																	
SOUTHWESTERN																	
TENASKA																	
TWIN EAGLE																	
Subtotal - Commodity Supply																	
Granite																	
Portland																	
Tennessee																	
Subtotal - Commodity Transportation																	
Commodity Volume Estimates																	
Commodity Volume Reversals																	
Subtotal - Estimates																	
Subtotal - Supply																	
Withdrawal - Underground Storage																	
ATV Reconciliation																	
Off System Sales																	
Net OBA Adjustment																	
Company Managed																	
LNG Boiloff																	
Transportation Charges																	
Hedging Costs																	
Inventory Finance Charges																	
Subtotal - Other Commodity																	
Sales for Resale Estimates																	
Sales for Resale Reversals																	
Subtotal - Estimates																	
Total Commodity Volumes													101,175	112,635	241,758		

REDACTED

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2016-17 ANNUAL COG RECONCILIATION
COST OF GAS ADJUSTMENT - FORM III, Schedule 4 - IN COST PER UNIT
August 2016 - October 2017

Indicates Confidential Data

	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>May-17</u>	<u>Jun-17</u>	<u>Jul-17</u>	-----Estimated----- <u>8/1/2017*</u>	<u>9/1/2017*</u>	<u>10/1/2017**</u>	<u>Total</u>
Commodity Costs per Unit:																
CONSOLIDATED EDISON																
DTE ENERGY TRADING																
EMERA ENERGY SERVICES INC.																
FREEPOINT																
REPSOL																
SEQUENT																
SHELL ENERGY NORTH AMERICA (US) LP																
SOUTHWESTERN																
TENASKA																
TWIN EAGLE																
Subtotal - Commodity Supply													\$ 2.97	\$ 2.96	\$ 2.94	
Granite																
Portland																
Tennessee																
Subtotal - Commodity Transportation													n/a	n/a	n/a	
Commodity Volume Estimates																
Commodity Volume Reversals																
Subtotal - Estimates													n/a	n/a	n/a	
Subtotal - Supply																
Withdrawal - Underground Storage																
ATV Reconciliation Charges																
Off System Sales																
Net OBA Adjustment																
Company Managed																
LNG Boiloff																
Transportation Charges																
Hedging Costs																
Inventory Finance Charge																
Subtotal - Other Commodity													n/a	n/a	n/a	
Off System Sales Estimates																
Off System Sales Reversals																
Subtotal - Estimates																
Total Commodity Costs per unit													n/a	n/a	n/a	

*: NYMEX Closing Price

**:: NYMEX Futures Price for September 30, 2017

New Hampshire	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Total
Throughput IN													
BTU Factor	1.023	1.027	1.028	1.026	1.03	1.031	1.039	1.031	1.028	1.028	1.028	1.026	
GST Meter Throughput (MCF)	340,004	330,938	511,511	689,646	1,003,576	1,006,349	878,257	1,032,339	580,020	484,663	353,785	327,372	7,538,460
Salem Meter (MCF)	11,741	13,322	23,798	38,075	66,578	66,104	55,548	64,400	28,809	20,591	13,549	12,465	414,980
GST Meter Throughput (DTH)	347,824	339,873	525,833	707,577	1,033,683	1,037,546	912,509	1,064,342	596,261	498,234	363,691	335,884	7,763,256
Salem Meter (DTH)	12,011	13,682	24,464	39,065	68,575	68,153	57,714	66,396	29,616	21,168	13,928	12,789	427,562
LNG/Propane													-
Total Throughput	359,835	353,555	550,298	746,642	1,102,259	1,105,699	970,223	1,130,738	625,876	519,401	377,619	348,673	8,190,818
Throughput OUT													
Residential Gas													
Charged	34,887	33,672	56,824	123,275	231,638	300,796	283,790	264,284	217,989	110,912	68,878	40,221	1,767,166
Uncharged Current	16,649	20,368	36,681	113,814	161,369	187,320	141,689	131,616	160,071	73,266	33,874	21,311	1,098,027
Uncharged Prior	(23,950)	(16,649)	(20,368)	(36,681)	(113,814)	(161,369)	(187,320)	(141,689)	(131,616)	(160,071)	(73,266)	(33,874)	(1,100,667)
Total Residential Gas	27,585	37,391	73,138	200,407	279,193	326,748	238,159	254,211	246,444	24,107	29,486	27,657	1,764,526
Interruptible				-	-	-	-	-	-	-	-	-	-
Commercial/Industrial Gas													
Charged	52,370	50,200	74,673	142,453	253,190	329,848	314,559	298,877	234,111	119,798	76,343	55,451	2,001,873
Uncharged Current	24,992	30,366	48,203	118,406	170,699	197,380	123,709	141,195	142,072	79,136	37,546	29,885	1,143,587
Uncharged Prior	(33,362)	(24,992)	(30,366)	(48,203)	(118,406)	(170,699)	(197,380)	(123,709)	(141,195)	(142,072)	(79,136)	(37,546)	(1,147,065)
Total C/I Gas	44,000	55,574	92,511	212,656	305,483	356,528	240,888	316,363	234,988	56,862	34,753	47,790	1,998,396
Transportation													
Charged	274,851	278,608	319,418	366,684	429,192	465,424	432,867	468,656	382,427	337,827	240,259	291,833	4,288,046
Uncharged Current	84,822	109,660	140,020	199,071	212,735	294,883	237,529	238,343	298,465	223,161	118,160	157,150	2,313,998
Uncharged Prior	(117,357)	(84,822)	(109,660)	(140,020)	(199,071)	(212,735)	(294,883)	(237,529)	(238,343)	(298,465)	(223,161)	(118,160)	(2,274,206)
Total Transportation	242,316	303,446	349,778	425,735	442,856	547,573	375,513	469,470	442,549	262,523	135,258	330,823	4,327,838
Company Use	77	85	76	109	180	212	210	205	158	72	54	58	1,496
Total Throughput OUT	313,978	396,496	515,502	838,907	1,027,712	1,231,060	854,770	1,040,250	924,139	343,564	199,551	406,328	8,092,256
Total Throughput IN	359,835	353,555	550,298	746,642	1,102,259	1,105,699	970,223	1,130,738	625,876	519,401	377,619	348,673	8,190,818
Difference IN/OUT	45,858	(42,941)	34,795	(92,265)	74,546	(125,361)	115,454	90,488	(298,262)	175,837	178,068	(57,656)	98,562
%													1.20%

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
DEFERRED WORKING CAPITAL ALLOWANCE ON PURCHASED GAS COSTS
August 2016 - October 2017

ANNUAL BALANCE SEASON - Acct 182.21

	<u>BEGINNING</u> <u>BALANCE</u>	<u>WORKING CAP</u> <u>ALLOWANCE (2)</u>	<u>WORKING CAP</u> <u>PERCENTAGE</u>	<u>WORKING CAP</u> <u>COLLECTIONS</u>	<u>WORKING CAP</u> <u>DEFERRED</u>	<u>ENDING</u> <u>BALANCE</u>	<u>AVE MONTHLY</u> <u>BALANCE</u>	<u>INTEREST</u> <u>RATE</u>	<u>INTEREST</u>	<u>ENDING BAL</u> <u>W/ INTEREST</u>
	A	B	C	D	E = B + D	F = A + E	G = (A + F) / 2	H	I = G * (H / 12)	K = F + I + J
August 2016	\$ (266)									
Adjustment	\$ (2)									
August 2016	\$ (268)	199	0.0887%	(127)	72	(196)	(232)	3.50%	(1)	(197)
September	\$ (197)	852	0.0887%	(128)	724	528	165	3.50%	0	528
October	\$ 528	847	0.0887%	(294)	553	1,081	805	3.50%	2	1,083
November	\$ 1,083	2,249	0.0887%	(2,044)	206	1,289	1,186	3.50%	3	1,292
December	\$ 1,292	3,321	0.0887%	(3,452)	(131)	1,161	1,227	3.50%	4	1,165
January 2017	\$ 1,165	3,596	0.0887%	(3,947)	(352)	813	989	3.50%	3	816
February	\$ 816	3,187	0.0887%	(3,197)	(10)	806	811	3.50%	2	808
March	\$ 808	2,780	0.0887%	(3,641)	(862)	(53)	377	3.50%	1	(52)
April	\$ (52)	1,490	0.0950%	(2,435)	(945)	(997)	(525)	3.75%	(2)	(999)
May	\$ (999)	1,011	0.0950%	(96)	915	(84)	(541)	3.75%	(2)	(86)
June	\$ (86)	873	0.0950%	(285)	588	502	208	3.75%	1	503
July	\$ 503	867	0.1014%	(181)	686	1,189	846	4.00%	3	1,191
Estimated August	\$ 1,191	824	0.1014%	(150)	674	1,866	1,529	4.00%	5	1,871
Estimated September	\$ 1,871	833	0.1014%	(150)	683	2,554	2,213	4.00%	7	2,561
Estimated October	\$ 2,561	1,244	0.1077%	(300)	944	3,505	3,033	4.25%	11	3,516
Winter Season Sales Percentage			81.59%							
Summer Season Sales Percentage			18.41%							
Reconciliation Allocated to Winter Season		\$	2,868.74							
Reconciliation Allocated to Summer Season		\$	647.50							

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
BAD DEBT EXPENSE - CALCULATION OF COLLECTION ALLOWANCE
August 2016 - October 2017

ANNUAL BALANCE- Acct 182.22

	<u>BEGINNING BALANCE</u>	<u>ACUTAL BAD DEBT</u>	<u>BAD DEBT COLLECTIONS</u>	<u>DEFERRED BALANCE</u>	<u>ENDING BALANCE</u>	<u>AVE MO BALANCE</u>	<u>INTEREST RATE</u>	<u>INTEREST</u>	<u>END BAL W/ INTEREST</u>
	A	B	C	D = B + C	E = A + D	F = (A + E) / 2	G	H = (F * G) / 12	J = E + H + I
August 2016	\$89,877	31,540	(818)	30,722	120,599	105,238	3.50%	307	120,906
September	\$120,906	13,680	(836)	12,844	133,750	127,328	3.50%	371	134,121
October	\$134,121	2,910	(1,578)	1,332	135,454	134,788	3.50%	393	135,847
November	\$135,847	(147)	(28,456)	(28,602)	107,244	121,546	3.50%	355	107,599
December	\$107,599	(52)	(49,546)	(49,598)	58,001	82,800	3.50%	241	58,243
January 2017	\$58,243	5,903	(56,568)	(50,665)	7,578	32,910	3.50%	96	7,674
February	\$7,674	4,964	(45,827)	(40,864)	(33,190)	(12,758)	3.50%	(37)	(33,227)
March	(\$33,227)	4,869	(52,196)	(47,327)	(80,554)	(56,891)	3.50%	(166)	(80,720)
April	(\$80,720)	18,007	(34,971)	(16,964)	(97,684)	(89,202)	3.75%	(279)	(97,963)
May	(\$97,963)	31,930	(3,119)	28,811	(69,152)	(83,557)	3.75%	(261)	(69,413)
June	(\$69,413)	24,074	(4,921)	19,152	(50,261)	(59,837)	3.75%	(187)	(50,448)
July	(\$50,448)	(1,010)	(3,291)	(4,302)	(54,749)	(52,598)	4.00%	(175)	(54,925)
Estimated August	(\$54,925)	25,000	(850)	24,150	(30,775)	(42,850)	4.00%	(143)	(30,917)
Estimated September	(\$30,917)	25,000	(875)	24,125	(6,792)	(18,855)	4.00%	(63)	(6,855)
Estimated October	(\$6,855)	5,000	(2,000)	3,000	(3,855)	(5,355)	4.25%	(19)	(3,874)

Winter Season Sales Percentage 81.59%
Summer Season Sales Percentage 18.41%

Reconciliation Allocated to Winter Season \$ (3,160.78)
Reconciliation Allocated to Summer Season \$ (713.42)

Northern Utilities, Inc. - New Hampshire Division
Environmental Response Costs
May 2016 - October 2017

		Beginning Balance	Firm Sales and Transportation (therms)	ERC Rate Recoveries /Passback	Current ERC Recoveries/ Passbacks	Ending Balance
May 2016	(act)	\$ (60,937)	4,459,867	\$ (0.0022)	\$ (9,831)	\$ (51,106)
June 2016	(act)	\$ (51,106)	2,951,987	\$ (0.0022)	\$ (6,489)	\$ (44,617)
July 2016	(act)	\$ (44,617)	2,424,523	\$ (0.0022)	\$ (5,426)	\$ (39,191)
August 2016	(act)	\$ (39,191)	2,650,001	\$ (0.0022)	\$ (5,831)	\$ (33,360)
September 2016	(act)	\$ (33,360)	2,651,579	\$ (0.0022)	\$ (5,829)	\$ (27,531)
October 2016	(act)	\$ (27,531)	3,484,051	\$ (0.0022)	\$ (7,663)	\$ (19,869)
November 2016	(act)	\$ 405,593 ⁽¹⁾	5,380,275	\$ 0.0034 ⁽²⁾	\$ 17,002	\$ 388,592
December 2016	(act)	\$ 388,592	8,165,647	\$ 0.0056	\$ 45,724	\$ 342,868
January 2017	(act)	\$ 342,868	9,990,097	\$ 0.0056	\$ 55,948	\$ 286,919
February 2017	(act)	\$ 286,919	9,376,948	\$ 0.0056	\$ 52,510	\$ 234,409
March 2017	(act)	\$ 234,409	9,265,700	\$ 0.0056	\$ 51,886	\$ 182,523
April 2017	(act)	\$ 182,523	7,292,392	\$ 0.0056	\$ 40,839	\$ 141,684
May 2017	(act)	\$ 141,684	4,579,550	\$ 0.0056	\$ 25,645	\$ 116,039
June 2017	(act)	\$ 116,039	3,069,446	\$ 0.0056	\$ 17,192	\$ 98,847
July 2017	(act)	\$ 98,847	2,715,359	\$ 0.0056	\$ 15,226	\$ 83,621
August 2017	(est)	\$ 83,621	2,519,913	\$ 0.0056	\$ 14,112	\$ 69,510
September 2017	(est)	\$ 69,510	2,831,668	\$ 0.0056	\$ 15,857	\$ 53,653
October 2017	(est)	\$ 53,653	3,949,342	\$ 0.0056	\$ 22,116	\$ 31,536

(1) November Beginning Balance includes \$132,297 amortization from all prior years at 1/7 of annual costs.
(See Section 4.7 of Tariff.)

(2) November Current ERC Recoveries/Passbacks reflect an Average ERC Rate based on actual Firm Sales and Transportation (therms) at (\$0.0022) and actual Firm Sales and Transportation (therms) at \$0.0056.

**NORTHERN UTILITIES
NEW HAMPSHIRE DIVISION
RLIARA Reconciliation
May 2016 - October 2017**

		<u>Beginning Balance</u>	<u>Program Costs</u>	<u>Regulatory Assessments</u>	<u>RLIARA Recoveries</u>	<u>Ending Balance</u>	<u>Average Monthly Balance</u>	<u>Interest Rate</u>	<u>Interest</u>	<u>Ending Balance w/Interest</u>
		A	B	C	D	E = A+B+C-D	F = (A+E)/2	G	H = F*(G/12)	I = E+H
May 2016	Actual	\$ (76,204)	\$ 37,109	\$ 27,503	\$ 44,161	\$ (55,753)	\$ (65,979)	3.50%	\$ (192)	\$ (55,945)
June 2016	Actual	\$ (55,945)	\$ 18,950	\$ 27,503	\$ 29,192	\$ (38,685)	\$ (47,315)	3.50%	\$ (138)	\$ (38,823)
July 2016	Actual	\$ (38,823)	\$ 16,915	\$ 27,503	\$ 23,974	\$ (18,379)	\$ (28,601)	3.50%	\$ (83)	\$ (18,462)
August 2016	Actual	\$ (18,462)	\$ 16,774	\$ (17,576) (1)	\$ 26,198	\$ (45,462)	\$ (31,962)	3.50%	\$ (248)	\$ (45,710)
September 2016	Actual	\$ (45,710)	\$ 16,918	\$ 4,963 (1)	\$ 26,212	\$ (50,041)	\$ (47,875)	3.50%	\$ (140)	\$ (50,181)
October 2016	Actual	\$ (50,181)	\$ 18,664	\$ 22,743	\$ 34,467	\$ (43,241)	\$ (46,711)	3.50%	\$ (136)	\$ (43,377)
November 2016	Actual	\$ (43,377)	\$ 20,111	\$ 22,743	\$ 52,159	\$ (52,682)	\$ (48,029)	3.50%	\$ (140)	\$ (52,822)
December 2016	Actual	\$ (52,822)	\$ 28,715	\$ 22,743	\$ 78,396	\$ (79,760)	\$ (66,291)	3.50%	\$ (193)	\$ (79,953)
January 2017	Actual	\$ (79,953)	\$ 39,868	\$ 22,743	\$ 95,907	\$ (113,249)	\$ (96,602)	3.50%	\$ (282)	\$ (113,531)
February 2017	Actual	\$ (113,531)	\$ 38,859	\$ 22,743	\$ 90,028	\$ (141,957)	\$ (127,744)	3.50%	\$ (373)	\$ (142,330)
March 2017	Actual	\$ (142,330)	\$ 40,959	\$ 22,743	\$ 88,967	\$ (167,595)	\$ (154,962)	3.50%	\$ (452)	\$ (168,047)
April 2017	Actual	\$ (168,047)	\$ 40,252	\$ 22,743	\$ 70,014	\$ (175,066)	\$ (171,556)	3.75%	\$ (536)	\$ (175,602)
May 2017	Actual	\$ (175,602)	\$ 26,562	\$ 22,743	\$ 43,965	\$ (170,262)	\$ (172,932)	3.75%	\$ (540)	\$ (170,802)
June 2017	Actual	\$ (170,802)	\$ 15,174	\$ 22,743	\$ 29,498	\$ (162,383)	\$ (166,592)	3.75%	\$ (521)	\$ (162,904)
July 2017	Actual	\$ (162,904)	\$ 12,207	\$ 22,743	\$ 26,135	\$ (154,089)	\$ (158,496)	4.00%	\$ (528)	\$ (154,617)
August 2017	Est.	\$ (154,617)	\$ 16,774	\$ 22,743	\$ 24,191	\$ (139,291)	\$ (146,954)	4.00%	\$ (158)	\$ (139,449)
September 2017	Est.	\$ (139,449)	\$ 16,918	\$ 22,743	\$ 27,184	\$ (126,972)	\$ (133,210)	4.00%	\$ (113)	\$ (127,085)
October 2017	Est.	\$ (127,085)	\$ 18,664	\$ 22,743	\$ 37,914	\$ (123,592)	\$ (125,338)	4.00%	\$ (62)	\$ (123,655)

(1) Accounting true ups to Regulatory Assessment.

[illegible]

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
SALES VARIANCE ANALYSIS
August 2016 - July 2017

	<u>NORMAL MMBtu</u>			<u>METERS</u>		
	2016-17 Forecast	2016-17 Actual	Difference	2016-17 Forecast	2016-17 Actual	Difference
Res Heat	1,790,013	1,823,252	33,239	271,472	287,039	15,567
Res General	25,910	23,713	(2,198)	23,452	16,305	(7,147)
Total Res	1,815,923	1,846,964	31,041	294,923	303,344	8,421
G-40	803,290	899,062	95,772	61,044	54,715	(6,329)
G-50	144,893	145,796	903	9,134	8,922	(212)
G-41	726,785	640,253	(86,532)	6,682	4,841	(1,841)
G-51	221,302	216,599	(4,704)	1,581	1,872	291
G-42	166,028	138,476	(27,552)	188	140	(48)
G-52	140,742	41,585	(99,157)	83	55	(28)
Total C & I	2,203,040	2,081,770	(121,269)	78,712	70,545	(8,167)
Total Company	4,018,963	3,928,735	(90,228)	373,636	373,889	253

	<u>NORMAL AVERAGE USE</u>			<u>Change in Sales Due to</u>		<u>Total Chg</u>	<u>%</u>
	2016-17 Forecast	2016-17 Actual	Difference	<u>Change In:</u>	<u>Meter Count Load Pattern</u>		
Res Heat	6.59	6.35	(0.24)	102,648	(69,409)	33,239	1.86%
Res General	1.10	1.45	0.35	(7,896)	5,699	(2,198)	-8.48%
Total Res	7.70	7.81	0.11	94,752	(63,710)	31,041	1.71%
G-40	13.16	16.43	3.27	(83,283)	179,055	95,772	11.92%
G-50	15.86	16.34	0.48	(3,363)	4,266	903	0.62%
G-41	108.77	132.26	23.49	(200,252)	113,719	(86,532)	-11.91%
G-51	139.94	115.70	(24.24)	40,669	(45,373)	(4,704)	-2.13%
G-42	883.13	989.11	105.99	(42,390)	14,838	(27,552)	-16.59%
G-52	1,695.69	756.10	(939.59)	(47,479)	(51,678)	(99,157)	-70.45%
Total C & I	27.99	29.51	1.52	(336,098)	214,828	(121,269)	-5.50%
Total Company	10.76	10.51	(0.25)	(241,346)	151,118	(90,228)	-2.25%

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
August 2016 - October 2017
SUPPLIER REFUNDS
Period Ending October 31, 2017
ANNUAL DEMAND - Acct 242.90.10

	BEGINNING BALANCE	REFUND COLLECTIONS ⁽¹⁾	ENDING BALANCE	AVE MONTHLY BALANCE	INTEREST RATE ⁽²⁾	INTEREST	ENDING BAL W/ INTEREST
	A	B	C = A + B	D = (A + C) / 2	E	F = D * (E / 12)	G = C + F
August 2016	\$ (4,379,877)	\$ 21,365	(4,358,512)	(4,369,195)	1.76%	(6,412)	(4,364,924)
September	\$ (4,364,924)	\$ 21,363	(4,343,561)	(4,354,242)	1.78%	(6,448)	(4,350,009)
October	\$ (4,350,009)	\$ 21,365	(4,328,644)	(4,339,326)	1.78%	(6,437)	(4,335,081)
November	\$ (4,335,081)	\$ 443,547	(3,891,534)	(4,113,307)	1.81%	(6,187)	(3,897,721)
December	\$ (3,897,721)	\$ 445,505	(3,452,216)	(3,674,968)	1.95%	(5,972)	(3,458,188)
January 2017	\$ (3,458,188)	\$ 441,624	(3,016,564)	(3,237,376)	2.02%	(5,452)	(3,022,016)
February	\$ (3,022,016)	\$ 443,653	(2,578,363)	(2,800,190)	2.03%	(4,728)	(2,583,091)
March	\$ (2,583,091)	\$ 443,653	(2,139,437)	(2,361,264)	2.16%	(4,246)	(2,143,684)
April	\$ (2,143,684)	\$ 331,801	(1,811,883)	(1,977,783)	2.24%	(3,690)	(1,815,573)
May	\$ (1,815,573)	\$ 16,567	(1,799,006)	(1,807,289)	2.26%	(3,398)	(1,802,403)
June	\$ (1,802,403)	\$ 16,567	(1,785,836)	(1,794,120)	2.40%	(3,590)	(1,789,426)
July	\$ (1,789,426)	\$ 16,567	(1,772,859)	(1,781,143)	2.48%	(3,677)	(1,776,536)
Estimated August	\$ (1,776,536)	\$ 16,567	(1,759,969)	(1,768,252)	2.48%	(3,650)	(1,763,619)
Estimated September	\$ (1,763,619)	\$ 16,567	(1,747,052)	(1,755,335)	2.48%	(3,623)	(1,750,675)
Estimated October	\$ (1,750,675)	\$ 16,567	(1,734,108)	(1,742,392)	2.48%	(3,597)	(1,737,705)
Totals		2,663,577				(60,236)	

(1) Refund Collections reflect transfer of PNGTS Refund dollars to the Demand and Commodity Account in accordance with Order No. 26,836 in Docket No. DG 15-393.

(2) Interest charge on Supplier Refund resulting from PNGTS rate case is calculated at the Company's short term borrowing rate effective April 1, 2015 per Order No. 26,825 in Docket No. DG 15-393.

ANNUAL COMMODITY - Acct 242.90.01

	BEGINNING BALANCE	REFUND COLLECTIONS	ENDING BALANCE	AVE MONTHLY BALANCE	INTEREST RATE	INTEREST	ENDING BAL W/ INTEREST
	A	B	C = A + B	D = (A + C) / 2	E	F = D * (E / 12)	G = C + F
August 2016	\$ -	-	0	0	3.25%	0	0
September	\$ -	0	0	0	3.25%	0	0
October	\$ -	0	0	0	3.25%	0	0
November	\$ -	0	0	0	3.25%	0	0
December	\$ -	0	0	0	3.25%	0	0
January 2017	\$ -	0	0	0	3.25%	0	0
February	\$ -	0	0	0	3.25%	0	0
March	\$ -	0	0	0	3.25%	0	0
April	\$ -	0	0	0	3.25%	0	0
May	\$ -	0	0	0	3.25%	0	0
June	\$ -	0	0	0	3.25%	0	0
July	\$ -	0	0	0	3.25%	0	0
Estimated August							
Estimated September		0				0	