Northern Utilities, Inc. New Hampshire Division 2017 / 2018 Annual Cost of Gas Filing Winter and Summer Periods

Tariff Sheets

Supplement No. 2 Original Page No. 1 Rate Summary (Winter Season)

Supplement No. 2 Original Page No. 2 Rate Summary (Summer Season)

Supplement No. 2 Original Page No. 3 Rate Summary (Winter Season)

Supplement No. 2 Original Page No. 4 Rate Summary (Summer Season)

Supplement No. 2 Original Page No. 5 Rate Summary (Winter Season)

Supplement No. 2
Original Page No. 6
Rate Summary (Summer Season)

Sixth Revised Page No. 42
Calculation of proposed Cost of Gas Adjustment
Winter Season

First Revised Page No. 42.1 Calculation of proposed Cost of Gas Adjustment Summer Season

Nineteenth Revised Page No. 43
Calculation of proposed Cost of Gas Adjustment
Winter Season

Northern Utilities, Inc. New Hampshire Division 2017 / 2018 Annual Cost of Gas Filing Winter and Summer Periods

> First Revised Page No. 43.1 Calculation of proposed Cost of Gas Adjustment Summer Season

> > Fifth Revised Page No. 59 LDAC Rates

Fourth Revised Page No. 153 Appendix A

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Alternate Fourth Revised Page No. 171
Appendix D

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19 20 21	First Revised First Revised	
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25 26 27 28	First Revised First Revised First Revised First Revised First Revised	
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33 34 35 36	First Revised First Revised First Revised First Revised First Revised	
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<u>Pages</u>	Revision	Proposed
37	First Revised	
38	First Revised	
39	First Revised	
40	First Revised	
41	First Revised	
42	Fifth Revised	Sixth Revised
42.1	Original	First Revised
43	Eighteenth Revised	Nineteenth Revised
43.1	Original	First Revised
44	First Revised	THOUTOUISCU
45	First Revised	
46	First Revised	
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56	First Revised	
57	First Revised	
58	First Revised	
58A		
58B	Original	
	Original	
58C	Original	Civilla Davida ad
59	Fifth Revised	Sixth Revised
60	Original	
61	Original	
62	Original	
63	Original	
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69	Original	
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72	Original	
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75	Original	
76	Original	
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<u>Pages</u>	Revision	<u>Proposed</u>
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89	Original	
90	Original	
91	Original	
92	Original	
93	Original	
94	Original	
95	Original	
96	Eighteenth Revised	
96.1	Original	
97	Eighteenth Revised	
97.1	Original	
98	Fourth Revised	
98.1	Original	
99	Original	
100	Original	
101	Original	
102	Original	
103	Original	
104	Original	
105	Original	
106	Original	
107	Original	
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<u>Pages</u>	Revision	Proposed
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151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166	Original Original Third Revised Original	Fourth Revised
167 168 169 170	Original Third Revised Original Original	Fourth Revised
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NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON RESIDENTIAL RATES

	Winter Season		Total	Total Bille	d Rates
	November 2017 - April 2018	Tariff	Delivery Rates	Tariff Rate	s, LDAC
		Rates	(Includes LDAC)	Plus Cost	of Gas
Residential Heating	Tariff Rate R 5:				
	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 50 therms	\$0.6468	\$0.7028	\$1.4131	
	All usage over 50 therms	\$0.5332	\$0.5892	\$1.2995	
	LDAC	\$0.0560			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7103			
Residential Heating	Tariff Rate R 10:				
Low Income	Monthly Customer Charge	\$8.54	\$8.54		\$8.54
	First 50 therms	\$0.2725	\$0.3285	\$1.0388	•
	All usage over 50 therms	\$0.2270	\$0.2830	\$0.9933	
	LDAC	\$0.0560			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7103			
Residential Non-Heating	Tariff Rate R 6:				
_	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 10 therms	\$0.4443	\$0.5003	\$1.2106	
	All usage over 10 therms	\$0.4443	\$0.5003	\$1.2106	
	LDAC	\$0.0560			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7103			
Barthard Name (1997)	Toviff Data D 44	T			[
Residential Non-Heating	Tariff Rate R 11:	¢45.50	¢45 50		¢45 50
Low Income	Monthly Customer Charge First 10 therms	\$15.52	\$15.52 \$0.3985	\$1.1088	\$15.52
		\$0.3425	*	•	
	All usage over 10 therms	\$0.3425	\$0.3985	\$1.1088	
		\$0.0560			
	Gas Cost Adjustment:	\$0.7103			
	Cost of Gas	фU./ 1U3			

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Issued by:

Title:

Senior Vice President

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION SUMMER SEASON RESIDENTIAL RATES

	Summer Season		Total	Total Bille	d Rates
	May 2018 - October 2018	Tariff	Delivery Rates	Tariff Rate	s, LDAC
		Rates	(Includes LDAC)	Plus Cost	of Gas
Residential Heating	Tariff Rate R 5:				
	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 50 therms	\$0.5678	\$0.6238	\$1.0213	
	All usage over 50 therms	\$0.5678	\$0.6238	\$1.0213	
	LDAC	\$0.0560			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.3975			
Residential Heating	Tariff Rate R 10:				
Low Income	Monthly Customer Charge	\$8.54	\$8.54		\$8.54
	First 50 therms	\$0.2408	\$0.2968	\$0.6943	,
	All usage over 50 therms	\$0.2408	\$0.2968	\$0.6943	
	LDAC	\$0.0560	•		
	Gas Cost Adjustment:				
	Cost of Gas	\$0.3975			
Residential Non-Heating	Tariff Rate R 6:				
, and the second	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 10 therms	\$0.4443	\$0.5003	\$0.8978	
	All usage over 10 therms	\$0.4443	\$0.5003	\$0.8978	
	LDAC	\$0.0560			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.3975			
Davidantial Nan Haatina	Tariff Rate R 11:				
Residential Non-Heating	<u> </u>	\$15.52	\$15.52		\$15.52
Low Income	Monthly Customer Charge First 10 therms	\$0.3425	\$15.52 \$0.3985	\$0.7960	φ13.3Z
		\$0.3425	\$0.3985	\$0.7960 \$0.7960	
	All usage over 10 therms LDAC	\$0.3425 \$0.0560	ಫ 0.3903	⊅ 0.7 9 00	
	Gas Cost Adjustment:	φυ.υ300			
	Cost of Gas	\$0.3975			
	COSE OF Gas	φυ.υ <i>σι</i> υ			

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NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON C&I RATES

	Winter Season		Total	Total Billed Rates
	November 2017 - April 2018	Tariff	Delivery Rates	Tariff Rates, LDAC
	·	Rates	(Includes LDAC)	Plus Cost of Gas
C&I Low Annual/High Winter	Tariff Rate G 40:			
	Monthly Customer Charge	\$67.45	\$67.45	\$67.45
	First 75 therms	\$0.1844	\$0.2137	\$0.9373
	All usage over 75 therms	\$0.1844	\$0.2137	\$0.9373
	LDAC	\$0.0293		
	Gas Cost Adjustment:			
	Cost of Gas	\$0.7236		
C&I Low Annual/Low Winter	Tariff Rate G 50:	I		
C&I LOW AIIIIuai/LOW WIIILEI	Monthly Customer Charge	\$67.45	\$67.45	\$67.45
	First 75 therms	\$07.45	\$0.2137	\$0.8361
		\$0.1844	\$0.2137 \$0.2137	\$0.8361 \$0.8361
	All usage over 75 therms		\$0.213 <i>1</i>	\$0.030 I
	LDAC	\$0.0293		
	Gas Cost Adjustment:			
	Cost of Gas	\$0.6224		
C&I Medium Annual/High Winter	Tariff Rate G 41:			
_	Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	All usage	\$0.2327	\$0.2620	\$0.9856
	LDAC	\$0.0293	ψ0.2020	ψ0.0000
		\$0.0200		
	Gas Cost Adjustment:	\$0.7236		
	Cost of Gas	Φ 0.7230		
C&I Medium Annual/Low Winter	Tariff Rate G 51:			
	Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	First 1,300 therms	\$0.1749	\$0.2042	\$0.8266
	All usage over 1,300 therms	\$0.1467	\$0.1760	\$0.7984
	LDAC	\$0.0293	• • • • • • • • • • • • • • • • • • • •	,
	Gas Cost Adjustment:	\$0.0200		
	Cost of Gas	\$0.6224		
		ψ0.022+		
C&I High Annual/High Winter	Tariff Rate G 42:	•••••	A.	
	Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage	\$0.1993	\$0.2286	\$0.9522
	LDAC	\$0.0293		
	Gas Cost Adjustment:			
	Cost of Gas	\$0.7236		
C&I High Annual/Low Winter	Tariff Rate G 52:			
Carring Training LOW WITH	Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage	\$0.1770	\$0.2063	\$0.8287
	LDAC	\$0.0293	40.2000	43.020 .
	Gas Cost Adjustment:	φυ.υ293		
		60.0004		
	Cost of Gas	\$0.6224		

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NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION SUMMER SEASON C&I RATES

	Summer Season May 2018 - October 2018	Tariff Rates	Total Delivery Rates (Includes LDAC)	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas
C&I Low Annual/High Winter	Tariff Rate G 40:	DO7.45	607.45	#67.45
	Monthly Customer Charge	\$67.45	\$67.45	\$67.45
	First 75 therms	\$0.1844	\$0.2137	\$0.6391
	All usage over 75 therms	\$0.1844	\$0.2137	\$0.6391
	LDAC	\$0.0293		
	Gas Cost Adjustment:	\$0.40E4		
	Cost of Gas	\$0.4254		
C&I Low Annual/Low Winter	Tariff Rate G 50:			
	Monthly Customer Charge	\$67.45	\$67.45	\$67.45
	First 75 therms	\$0.1844	\$0.2137	\$0.5680
	All usage over 75 therms	\$0.1844	\$0.2137	\$0.5680
	LDAC	\$0.0293		
	Gas Cost Adjustment:			
	Cost of Gas	\$0.3543		
C&I Medium Annual/High Winter	Tariff Rate G 41:			
oaeara,aa,g triitee	Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	All usage	\$0.1851	\$0.2144	\$0.6398
	LDAC	\$0.0293	•	,
	Gas Cost Adjustment:			
	Cost of Gas	\$0.4254		
C&I Medium Annual/Low Winter	Tariff Rate G 51:			
ear wedam Amady Low Winter	Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	First 1,000 therms	\$0.1412	\$0.1705	\$0.5248
	All usage over 1,000 therms	\$0.1187	\$0.1480	\$0.5023
	LDAC	\$0.0293	ψ0.1400	ψ0.3023
	Gas Cost Adjustment:	\$0.0293		
	•	\$0.3543		
	Cost of Gas	\$0.3343		
C&I High Annual/High Winter	Tariff Rate G 42:			
	Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage	\$0.1295	\$0.1588	\$0.5842
	LDAC	\$0.0293		
	Gas Cost Adjustment:			
	Cost of Gas	\$0.4254		
C&I High Annual/Low Winter	Tariff Rate G 52:			
Con High Annual/Low Winter	Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage	\$0.0936	\$0.1229	\$0.4772
	LDAC	\$0.0293	40.1220	WALLE TO THE STATE OF THE STATE
	Gas Cost Adjustment:	ψυ.υ293		
	Cost of Gas	\$0.3543		
		T 70.00.0		l

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Title: Senior Vice President

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON C&I RATES

	Winter Season		Total
	November 2017 - April 2018	Tariff Rates	Delivery Rates (Includes LDAC)
C&I Low Annual/High Winter	Tariff RateT 40: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1844 \$0.1844	\$67.45 \$0.2137 \$0.2137
	LDAC	\$0.0293	
C&I Low Annual/Low Winter	Tariff Rate T 50: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1844 \$0.1844	\$67.45 \$0.2137 \$0.2137
	LDAC	\$0.0293	
C&I Medium Annual/High Winter	Tariff Rate T 41: Monthly Customer Charge	\$196.73	\$196.73
	All usage	\$0.2327	\$0.2620
	LDAC	\$0.0293	
C&I Medium Annual/Low Winter	Tariff Rate T 51: Monthly Customer Charge First 1,300 therms All usage over 1,300 therms	\$196.73 \$0.1749 \$0.1467	\$196.73 \$0.2042 \$0.1760
	LDAC	\$0.0293	
C&I High Annual/High Winter	Tariff Rate T 42: Monthly Customer Charge	\$1,124.19	\$1,124.19
	All usage	\$0.1993	\$0.2286
	LDAC	\$0.0293	
C&I High Annual/Low Winter	<u>Tariff Rate T 52:</u> Monthly Customer Charge	\$1,124.19	\$1,124.19
	All usage	\$0.1770	\$0.2063
	LDAC	\$0.0293	
C&I Interruptible Transportation	Tariff Rate IT: Monthly Customer Charge First 20,000 therms All usage over 20,000 therms	\$170.21 \$0.1299 \$0.1108	\$170.21 \$0.1299 \$0.1108

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NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION SUMMER SEASON C&I RATES

	Summer Season May 2018 - October 2018	Tariff Rates	Total Delivery Rates (Includes LDAC)
C&I Low Annual/High Winter	Tariff RateT 40: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1844 \$0.1844	\$67.45 \$0.2137 \$0.2137
	LDAC	\$0.0293	
C&I Low Annual/Low Winter	Tariff Rate T 50: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1844 \$0.1844	\$67.45 \$0.2137 \$0.2137
	LDAC	\$0.0293	
C&I Medium Annual/High Winter	Tariff Rate T 41: Monthly Customer Charge	\$196.73	\$196.73
	All usage	\$0.1851	\$0.2144
	LDAC	\$0.0293	
C&I Medium Annual/Low Winter	Tariff Rate T 51: Monthly Customer Charge First 1,000 therms All usage over 1,000 therms	\$196.73 \$0.1412 \$0.1154	\$196.73 \$0.1705 \$0.1447
	LDAC	\$0.0293	
C&I High Annual/High Winter	Tariff Rate T 42: Monthly Customer Charge	\$1,124.19	\$1,124.19
	All usage	\$0.1295	\$0.1588
	LDAC	\$0.0293	
C&I High Annual/Low Winter	Tariff Rate T 52: Monthly Customer Charge	\$1,124.19	\$1,124.19
	All usage	\$0.0936	\$0.1229
	LDAC	\$0.0293	
C&I Interruptible Transportation	Tariff Rate IT: Monthly Customer Charge First 20,000 therms All usage over 20,000 therms	\$170.21 \$0.0407 \$0.0347	\$170.21 \$0.0407 \$0.0347

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Title:

Senior Vice President

Anticipated Cost of Gas

New Hampshire Division Period Covered: November 1, 2017 - April 30, 2018

reliou Coveleu. Nove	eiliber 1, 2017 - April 30,	2016
(Col 1)	(Col 2)	(Col 3)
ANTICIPATED DIRECT COST OF GAS		
Purchased Gas:	₾0.700.050	
Demand Costs:	\$2,736,659 \$8,821,653	
Supply Costs:	φο,ο21,003	
Storage & Peaking Gas:	* ***********************************	
Demand, Capacity:	\$8,330,279	
Commodity Costs:	\$5,967,050	
Hedging (Gain)/Cost	\$112,028	
Interruptible Included Above	\$0	
Inventory Finance Charge	\$3,454	
Capacity Release, & Asset Management	(\$1,894,561)	
Off-system Peaking Demand Cost Adjustment	\$ (44,199)	
Total Anticipated Direct Cost of Gas		<u>\$24,032,363</u>
ANTICIPATED INDIRECT COST OF GAS		
Adjustments:		
Prior Period Under/(Over) Collection	(\$292,077)	
Interest	(\$25,703)	
Refunds Interruptible Margins	\$0 \$0	
Total Adjustments		(\$317,780)
Working Capital:		(+,)
Total Anticipated Direct Cost of Gas	\$24,032,363	
Working Capital Percentage	0.1077%	
Working Capital Allowance	\$ 25,884	
Plus: Working Capital Reconciliation (Acct 182.11)	\$2,771	
Total Working Capital Allowance		\$28,656
Bad Debt:		
Bad Debt Allowance	\$184,403	
Plus: Bad Debt Reconciliation (Acct 182.16)	(\$3,161)	
Total Bad Debt Allowance		\$181,243
Local Production and Storage Capacity		\$420,658
Miscellaneous Overhead-81.59% Allocated to WinterSeason	n	\$418,262
Total Anticipated Indirect Cost of Gas		\$731,039
Total Cost of Gas		\$24,763,402
Issued: September 18, 2017	Issued By:	W24Clas
Effective Date: November 1, 2017	,	Senior Vice President
Authorized by NHPUC Order No in Docket No. DG 17	, dated,	

Anticipated Cost of Gas

New Hampshire Division Period Covered: May 1, 2018 - October 31, 2018

	ay 1, 2016 - October 31, 20	
(Col 1)	(Col 2)	(Col 3)
ANTICIPATED DIRECT COST OF GAS		
Purchased Gas:	#500.700	
Demand Costs:	\$592,766 \$3,440,046	
Supply Costs:	\$2,119,016	
Storage & Peaking Gas:	4 070 400	
Demand, Capacity:	\$370,493	
Commodity Costs:	\$29,837	
Hedging (Gain)/Cost	\$0	
Interruptible Included Above	\$0	
Inventory Finance Charge	\$0	
Capacity Release, & Asset Management	\$0	
Total Anticipated Direct Cost of Gas		<u>\$3,112,112</u>
ANTICIPATED INDIRECT COST OF GAS		
Adjustments:		
Prior Period Under/(Over) Collection	(\$65,925)	
Interest	(\$27,527)	
Refunds Interruptible Margins	\$0 \$0	
Total Adjustments	Φυ	(\$93,452)
Working Capital:		(+00,100)
Total Anticipated Direct Cost of Gas	\$3,112,112	
Working Capital Percentage	0.1077%	
Working Capital Allowance	\$3,352	
Plus: Working Capital Reconciliation (Acct 182.11)	\$626	
Total Working Capital Allowance		\$3,977
Bad Debt:		
Bad Debt Allowance	\$11,146	
Plus: Bad Debt Reconciliation (Acct 182.16)	(\$713)	
Total Bad Debt Allowance		\$10,433
Local Production and Storage Constitu		\$ 0
Local Production and Storage Capacity Miscellaneous Overhead-18.41% Allocated to the Summer	Season	\$0 \$94,406
Total Anticipated Indirect Cost of Gas		\$15,364
Total Cost of Gas		\$3,127,475
Total Cost of Gas		φ3,127,473
Issued: September 18, 2017	logued Pre	WZ4COO-
Effective Date: May 1, 2018	issueu by:	Senior Vice President

CALCULATION OF FIRM SALES COST OF GAS RATE

Period Covered: November 1, 2017 - April 30, 2018

(Col 1)	(Col 2)	(Col 3)	
Total Anticipated Direct Cost of Gas	\$24,032,363		
Projected Prorated Sales (11/01/17 - 04/30/18) Direct Cost of Gas Rate	34,865,979	\$0.6903	nor thorn
Direct Cost of Gas Rate		\$0.6893	per therm
Demand Cost of Gas Rate	\$9,128,178	\$0.2618	per therm
Commodity Cost of Gas Rate	\$ <u>14,904,185</u>	\$ <u>0.4275</u>	per therm
Total Direct Cost of Gas Rate	\$37,966,081	\$0.6893	per therm
Total Anticipated Indirect Cost of Gas	\$731,226		
Projected Prorated Sales (11/01/17 - 04/30/18) Indirect Cost of Gas	34,865,979	#0.0040	
indirect Cost of Gas		\$0.0210	per therm
TOTAL PERIOD AVERAGE COST OF GAS		\$0.7103	per therm
		40 100	poo
RESIDENTIAL COST OF GAS RATE -11/01/17	COGwr	\$0.7103	per therm
			po
	Maximum (COG+25%)	\$0.8879	
COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/17	COGwl	\$0.6224	per therm
	Maximum (COG+25%)	\$0.7780	
C&I HLF DEMAND COSTS ALLOCATED PER SMBA	\$349,557		
PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF	\$57,241		
C&I HLF TOTAL ADJUSTED DEMAND COSTS	\$406,798		
C&I HLF PROJECTED PRORATED SALES (11/01/17 - 04/30/18)	2,448,624		
DEMAND COST OF GAS RATE	\$0.1661		
C&I HLF COMMODITY COSTS ALLOCATED PER SMBA	\$1,066,497		
PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I HLF	(\$584)		
C&I HLF TOTAL ADJUSTED COMMODITY COSTS	\$1,065,913		
C&I HLF PROJECTED PRORATED SALES (11/01/17 - 04/30/18) COMMODITY COST OF GAS RATE	2,448,624 \$0.4353		
COMMODITY COOT OF CACHAILE	\$0.1000		
INDIRECT COST OF GAS	\$0.0210		
TOTAL C&I HLF COST OF GAS RATE	\$0.6224		
	•		
COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/17	COGwh	\$0.7236	per therm
	Maximum (COG+25%)	\$0.9045	
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$3,841,918		
PLUS RESIDENTIAL DEMAND REALLOCATION TO C&I LLF	\$629,123		
C&I LLF TOTAL ADJUSTED DEMAND COSTS	\$4,471,041		
C&I LLF PROJECTED PRORATED SALES (11/01/17 - 04/30/18)	16,182,767		
DEMAND COST OF GAS RATE	\$0.2763		
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$6,902,243		
PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I LLF	(\$3,782)		
C&I LLF TOTAL ADJUSTED COMMODITY COSTS	\$6,898,461		
C&I LLF PROJECTED PRORATED SALES (11/01/17 - 04/30/18)	16,182,767		
COMMODITY COST OF GAS RATE	\$0.4263		

Issued: September 18, 2017 Effective Date: November 1, 2017
Authorized by NHPUC Order No. _____, in Docket No. DG 17-___, dated ___

INDIRECT COST OF GAS

TOTAL C&I LLF COST OF GAS RATE

Issued By:

\$0.0210

\$0.7236

(Col 1)

(Col 3)

CALCULATION OF FIRM SALES COST OF GAS RATE

Period Covered: May 1, 2018 - October 31, 2018

(Col 2)

Total Anticipated Direct Cost of Gas Projected Prorated Sales (05/01/18 - 10/31/18)	\$3,112,112 7,869,571		
Direct Cost of Gas Rate		\$0.3955	per therm
Demand Cost of Gas Rate	\$963,258	\$0.1224	per therm
Commodity Cost of Gas Rate	\$ <u>2,148,854</u>	\$ <u>0.2731</u>	per therm
Total Direct Cost of Gas Rate	\$3,112,112	\$0.3955	per therm
Total Anticipated Indirect Cost of Gas	\$15,364		
Projected Prorated Sales (05/01/18 - 10/31/18)	7,869,571	# 0.0000	
Indirect Cost of Gas		\$0.0020	per therm
TOTAL PERIOD AVERAGE COST OF GAS		\$0.3975	per therm
RESIDENTIAL COST OF GAS RATE -05/01/18	COGwr	\$0.3975	per therm
	Maximum (COG+25%)	\$0.4969	por unorum
	,	·	
COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/18	COGwl	\$0.3543	per therm
COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/18	COGwl Maximum (COG+25%)	\$0.3543 \$0.4429	per therm
COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/18 C&I HLF DEMAND COSTS ALLOCATED PER SMBA		-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF	Maximum (COG+25%) \$125,955 \$13,376	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS	\$125,955 \$13,376 \$139,331	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF	Maximum (COG+25%) \$125,955 \$13,376	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) DEMAND COST OF GAS RATE	\$125,955 \$13,376 \$139,331 1,757,926 \$0.0793	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) DEMAND COST OF GAS RATE C&I HLF COMMODITY COSTS ALLOCATED PER SMBA	\$125,955 \$13,376 \$139,331 1,757,926 \$0.0793	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) DEMAND COST OF GAS RATE	\$125,955 \$13,376 \$139,331 1,757,926 \$0.0793	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) DEMAND COST OF GAS RATE C&I HLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED COMMODITY COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18)	\$125,955 \$13,376 \$139,331 1,757,926 \$0.0793 \$480,017 (\$55) \$479,961 1,757,926	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) DEMAND COST OF GAS RATE C&I HLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED COMMODITY COSTS	\$125,955 \$13,376 \$13,376 \$139,331 1,757,926 \$0.0793 \$480,017 (\$55) \$479,961	-	per therm
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) DEMAND COST OF GAS RATE C&I HLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED COMMODITY COSTS C&I HLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18)	\$125,955 \$13,376 \$139,331 1,757,926 \$0.0793 \$480,017 (\$55) \$479,961 1,757,926	-	per therm

COM/IND HIGH WINTER USE COST OF GAS RATE - 05/01/18	COGwh	\$0.4254 per therm
	Maximum (COG+25%)	\$0.5318
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$368,794	
PLUS RESIDENTIAL DEMAND REALLOCATION TO C&I LLF C&I LLF TOTAL ADJUSTED DEMAND COSTS	\$39,165 \$407,959	
C&I LLF TOTAL ADJUSTED DEMAND COSTS C&I LLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18)	\$407,959 2.713.210	
DEMAND COST OF GAS RATE	\$0.1504	
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$740,865	
PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I LLF	(\$85)	
C&I LLF TOTAL ADJUSTED COMMODITY COSTS	\$740,780	
C&I LLF PROJECTED PRORATED SALES (05/01/18 - 10/31/18) COMMODITY COST OF GAS RATE	2,713,210 \$0,2730	
CONTINUENT TOOST OF GAS RATE	\$0.2730	
INDIRECT COST OF GAS	\$0.0020	
TOTAL C&I LLF COST OF GAS RATE	\$0.4254	
		1. 2000 -
ssued: September 18, 2017	Issued By:	Nac H Cale
Effective Date: May 1, 2018		Senior Vice President
Authorized by NHPUC Order No, in Docket No. DG 17, dated	.	

Local Delivery Adjustment Clause

Rate Schedule	RLIARA	EEC	LRR	ERC	ITM	RCE	RPC	LDAC
Residential Heating	\$0.0039	\$0.0433	\$0.0028	\$0.0060	\$0.0000	\$0.0000	\$0.0000	\$0.0560
Residential Non-Heating	\$0.0039	\$0.0433	\$0.0028	\$0.0060	\$0.0000	\$0.0000	\$0.0000	\$0.0560
Small C&I	\$0.0039	\$0.0184	\$0.0010	\$0.0060	\$0.0000	\$0.0000	\$0.0000	\$0.0293
Medium C&I	\$0.0039	\$0.0184	\$0.0010	\$0.0060	\$0.0000	\$0.0000	\$0.0000	\$0.0293
Large C&I	\$0.0039	\$0.0184	\$0.0010	\$0.0060	\$0.0000	\$0.0000	\$0.0000	\$0.0293
No Previous Sales Service								

Issued: September 18, 2017

Effective: With Service Rendered On and After November 1, 2017

Authorized by NHPUC Order No. ___ in Docket No. ____, dated ____

Issued by:

Title:

Senior Vice President

APPENDIX A

Schedule of Administrative Fees and Charges

I. Supplier Balancing Charge: \$0.75 per MMBtu of Daily Imbalance Volumes

- Updated effective every November 1 to reflect the Company's latest balancing resources and associated capacity costs.
- Daily Imbalance Volumes represent the difference between ATV and ATV adjusted for actual EDDs.

<u>II. Peaking Service Demand Charge:</u>
November 2017 through April 2018.

\$ 35.51 per MMBtu per MDPQ per month for

• Updated effective every November 1 to reflect the Company's Peaking resources and associated costs.

III. Company Allowance Calculation: 1.26% - Provided in Attachment 3 to Schedule 10

IV. Supplier Services and Associated Fees:

<u>SERVICE</u>	<u>PRICING</u>
Pool Administration (required)	• \$0.10/month/customer billed @ marketer level
Non-Daily Metered Pools only	
Standard Passthrough Billing (required)	• \$0.60/customer/month billed @ marketer level
Standard Complete Billing (optional – Passthrough Billing fee not required if this service is elected)	• \$1.50/customer/month billed @ marketer level
Customer Administration (required)	\$10/customer/switch billed @ marketer level

Issued:	September 18, 2017	Is	ssued	by:	MCHColes
Effective:	November 1, 2017				Senior Vice President
Authorized l	ov NHPUC Order No.	in Docket No. DG 17	_	. dated	

APPENDIX C

Capacity Allocators

Capacity Allocators shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Capacity Allocators shall be applicable for capacity assignments during the period of November 1, 2017 through October 31, 2018.

Commercial and Industrial

	<u>High Winter Use</u>	Low Winter Use
Pipeline:	15.54%	60.13%
Storage:	31.09%	14.67%
Peaking:	53.37%	25.20%

Issued:	September 18, 2017		Issued by:	WLH Colas
Effective:	November 1, 2017			Senior Vice President
Authorized	by NHPUC Order No	in Docket No. DG17-	dated	

APPENDIX D

Firm Sales Service Re-Entry Fee Bill Adjustment (continued)

The Re-Entry Fee shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Firm Sales Service Re-Entry Fee Unit Charge shall be applicable for the period of November 1, 2017 through October 31, 2018.

Effective Dates:	November 1, 2017 – October 31, 2018
Annual Average Unit Cost:	\$ 257.69
25% - Annual Charge for Re-Entry Fee:	\$ 64.42
Monthly Unit Charge for Re-Entry Fee:	\$ 5.37

Issued:	September 18, 2017	Issued by:	W24coles
Effective:	November 1, 2017		Senior Vice President
Authorized	by NHPUC Order No	in Docket No. DG 17, dated	•

VII. DELIVERY SERVICE TERMS AND CONDITIONS (continued)

Appendix D

Re-entry Surcharge and Conversion Surcharge (continued)

D. Information to be Filed with the Commission:

As part of the annual Cost of Gas filing, the Company shall file with the Commission a report showing the number of customers assessed the Re-entry Surcharge and the Conversion Surcharge and the amount of revenue received for each charge through the prior April 30. Pursuant to the Company's Cost of Gas Clause, the Company will apply such revenues as credits to the Company's New Hampshire Division Cost of Gas.

The following Re-entry Surcharge and Conversion Surcharge shall be applicable for the periods of November 1, 2017 through April 30, 2018 and May 1, 2018 through October 2018.

Effective Dates:	November 1, 2017 – April 30, 2018	May 1, 2018 – October 30, 2018
Re-entry Surcharge:	\$0.0082 per therm	\$0.0085 per therm
Conversion Surcharge, Low Load Factor (G-40, G-41, G-42):	\$0.0510 per therm	\$0.0085 per therm
Conversion Surcharge, High Load Factor (G-50, G-51, G-52):	\$0.1522 per therm	\$0.0085 per therm

Issued: September 18, 2017 Effective: November 1, 2017 Issued by:

Title:

Senior Vice President

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON RESIDENTIAL RATES

	Winter Season November 2016 <u>7</u> - April 201 <u>78</u>	Total Tariff Delivery Rate Rates (Includes LDA		ry Rates	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas	
Residential Heating	Tariff Rate R 5: Monthly Customer Charge First 50 therms All usage over 50 therms LDAC Gas Cost Adjustment: Cost of Gas	\$21.36 \$0.6239 \$0.6468 \$0.5103 \$0.5332 \$0.0489 \$0.0560 \$0.8286 \$0.7103	\$0.6728 \$0.5592	\$21.36 <u>\$0.7028</u> <u>\$0.5892</u>	\$ 1.5014 \$ 1.3878	\$21.36 <u>\$1.4131</u> <u>\$1.2995</u>
Residential Heating Low income	Tariff Rate R 10: Monthly Customer Charge First 50 therms All usage over 50 therms LDAC Gas Cost Adjustment: Cost of Gas	\$8.54 \$0.2496 \$0.2725 \$0.2041 \$0.2270 \$0.0489 \$0.0560 \$0.8286 \$0.7103	\$0.2985 \$0.2530	\$8.54 <u>\$0.3285</u> <u>\$0.2830</u>	\$ 1.1271 \$ 1.0816	\$8.54 \$1.0388 \$0.9933
Residential Non-Heating	Tariff Rate R 6: Monthly Customer Charge First 10 therms All usage over 10 therms LDAC Gas Cost Adjustment: Cost of Gas	\$21.36 \$0.4214	\$0.4703 \$0.4703	\$21.36 <u>\$0.5003</u> <u>\$0.5003</u>	\$ 1.2989 \$ 1.2989	\$21.36 <u>\$1.2106</u> <u>\$1.2106</u>
Residential Non-Heating Low income	Tariff Rate R 11: Monthly Customer Charge First 10 therms All usage over 10 therms LDAC Gas Cost Adjustment: Cost of Gas	\$15.52 \$0.3196 \$0.3425 \$0.3196 \$0.3425 \$0.0489 \$0.0560 \$0.8286 \$0.7103	\$0.3685 \$0.3685	\$15.52 \$0.3985 \$0.3985	\$1.1971 \$1.1971	\$15.52 <u>\$1.1088</u> <u>\$1.1088</u>

Issued: September <u>16</u>, <u>2016</u> <u>18</u>, <u>2017</u> Effective Date: November 1, <u>2016</u> <u>2017</u>

Authorized by NHPUC Order No. in Docket No. DG 17-, dated

Issued by:

Sonior Vice President

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION SUMMER-SEASON RESIDENTIAL RATES

	Summer Season		To	otal	Total B	illed Rates
	May 20178 - October 20178	Tariff	Delive	ry Rates	Tariff Rates, LDAC	
		Rates	(Include	s LDAC)	Plus Co	ost of Gas
Residential Heating	Tariff Rate R 5:		,	•		
	Monthly Customer Charge	\$21.36		\$21.36		\$21.36
	First 50 therms	\$0.5449 \$0.5678	\$ 0.5938	\$0.6238	\$ 0.9993	\$1.0213
	All usage over 50 therms	\$0.5449 \$0.5678	\$ 0.5938	\$0.6238	\$ 0.9993	\$1.0213
	LDAC	\$0.0489 <u>\$0.0560</u>				
	Gas Cost Adjustment:					
	Cost of Gas	\$0.4055 \$0.3975				
Residential Heating	Tariff Rate R 10:					
Low income	Monthly Customer Charge	\$8.54		\$8.54		\$8.54
	First 50 therms	\$0.2179 \$0.2408	\$ 0.2668	<u>\$0.2968</u>	\$0.6723	\$0.6943
	All usage over 50 therms	\$ 0.2179 \$0.2408	\$ 0.2668	\$0.2968	\$ 0.6723	\$0.6943
	LDAC	\$0.0489 \$0.0560				
	Gas Cost Adjustment:					
	Cost of Gas	\$0.4055 <u>\$0.3975</u>				
	Tariff Data D.O.					
Residential Non-Heating	Tariff Rate R 6:	MO4 00		604.00		¢04.00
	Monthly Customer Charge	\$21.36	40.4700	\$21.36	40.0==0	\$21.36
	First 10 therms	\$0.4214 \$0.4443	\$ 0.4703	<u>\$0.5003</u>	\$0.8758	<u>\$0.8978</u>
	All usage over 10 therms	\$0.4214 \$0.4443	\$0.4703	<u>\$0.5003</u>	\$0.8758	<u>\$0.8978</u>
	LDAC	\$0.0489 <u>\$0.0560</u>				
	Gas Cost Adjustment:					
	Cost of Gas	\$0.4055 \$0.3975				
Residential Non-Heating	Tariff Rate R 11:		1			
Low income	Monthly Customer Charge	\$15.52		\$15.52		\$15.52
Low income	First 10 therms	\$0.3196 \$0.3425	\$0.3685	\$0.3985	\$ 0.7740	\$0.7960
		\$0.3196 \$0.3425	\$0.3685	\$0.3985	\$0.7740 \$ 0.7740	\$0.7960 \$0.7960
	All usage over 10 therms	*****	\$U.3063	<u> </u>	\$U.114U	<u>φυ. / 9ου</u>
		\$0.0489 \$0.0560				
	Gas Cost Adjustment:					
	Cost of Gas	\$0.4055 \$0.3975				

Issued:- September 46, 2016 18, 2017

Effective Date: May 1, 2017 2018
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Issued by:

Title: Senior Vice President

W24cles

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON RESIDENTIAL RATES

	Winter Season November 201 <mark>67</mark> - April 201 <u>78</u>	Tariff Rates	Total Delivery Rates (Includes LDAC)	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas
C&I Low Annual/High Winter	Tariff Rate G 40: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas	\$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.0293 \$0.8424 \$0.7236		\$67.45 \$1.0335 \$1.0335 \$0.9373
C&I Low Annual/Low Winter	Tariff Rate G 50:			1
C&I LOW Annual/Low Winter	Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas	\$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.0293 \$0.7529 \$0.6224		\$67.45 \$0.9440 \$0.8361 \$0.9440 \$0.8361
C&I Medium Annual/High Winter	Tariff Rate G 41:			1
car wedum Amaay ngn winter	Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	All usage LDAC Gas Cost Adjustment:	\$0.2098 \$0.232 \$0.0296 \$0.0293	7 \$0.239 4 <u>\$0.2620</u>	\$1.0818 \$0.9856
	Cost of Gas	\$0.8424 \$0.7236		
C&I Medium Annual/Low Winter	Tariff Rate G 51: Monthly Customer Charge First 1,0001,300 therms All usage over 1,0001,300 therms LDAC Gas Cost Adjustment:	\$196.73 \$0.1520 \$0.1238 \$0.1238 \$0.0296 \$0.0293		\$196.73 \$0.9345 \$0.8266 \$0.9063 \$0.7984
	Cost of Gas	\$0.7529 \$0.6224		
C&I High Annual/High Winter	Tariff Rate G 42: Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage LDAC Gas Cost Adjustment:	\$0.1764 \$0.1993 \$0.0296 \$0.0293	<u>\$0.2060</u> <u>\$0.2286</u>	\$1.0484 \$0.9522
	Cost of Gas	\$0.8424 <u>\$0.7236</u>		
C&I High Annual/Low Winter	Tariff Rate G 52: Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage LDAC	\$0.1541 \$0.1770 \$0.0296 \$0.0293	<u>\$0.1837</u> <u>\$0.2063</u>	\$ 0.9366 \$0.8287
	Gas Cost Adjustment: Cost of Gas	\$0.7529 <u>\$0.6224</u>		

Issued: September 16, 2016 18, 2017

Effective Date: November 1, 2016 2017

Authorized by NHPUC Order No. in Docket No. DG 17-, dated

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION SUMMER-SEASON RESIDENTIAL RATES

Summer Season November 20167 - April 20178	Tariff Rates	Total Delivery Rates (Includes LDAC)	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas
Tariff Rate G 40: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment:	\$67.45 \$0.1615 \$0.1844 \$0.0296 \$0.0293	\$67.45 \$0.1911 \$0.2137 \$0.1911 \$0.2137	\$67.45 \$0.6376 \$0.6391 \$0.6391
Cost of Gas	\$0.4465 <u>\$0.4254</u>		
Tariff Rate G 50: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas	\$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.0293 \$0.3589 \$0.3589	\$67.45 \$0.1911 \$0.2137 \$0.1911 \$0.2137	\$67.45 \$0.5500 \$0.5680 \$0.5500 \$0.5680
Tariff Rate G 41:	4		
Monthly Customer Charge	\$196.73	\$196.73	\$196.73
All usage LDAC Gas Cost Adjustment	\$0.1622 \$0.1851 \$0.0296 \$0.0293	\$ 0.1918 \$ <u>0.2144</u>	\$0.6383 <u>\$0.6398</u>
Cost of Gas	\$0.4465 \$0.4254		
Tariff Rate G 51: Monthly Customer Charge First 1,0001,300 therms All usage over 1,0001,300 therms LDAC Gas Cost Adjustment: Cost of Gas	\$196.73 \$0.1183 \$0.0958 \$0.0296 \$0.0293 \$0.3589 \$0.3543	\$196.73 \$0.1479 \$0.1705 \$0.1254 \$0.1480	\$196.73 \$0.5068 \$0.5248 \$0.4843 \$0.5023
Tariff Rate G 42:			
Monthly Customer Charge All usage LDAC Gas Cost Adjustment:	\$1,124.19 \$0.1066 \$0.0296 \$0.0293	\$1,124.19 \$0.1362 \$0.1588	\$1,124.19 \$0.5827 \$0.5842
	\$0.4465 <u>\$0.4254</u>		<u> </u>
Tariff Rate G 52: Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
All usage LDAC Gas Cost Adjustment:	\$0.0707 \$0.0936 \$0.0296 \$0.0293	\$ 0.1003 \$ <u>0.1229</u>	\$0.4592 \$0.4772
	Tariff Rate G 40: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas Tariff Rate G 50: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas Tariff Rate G 41: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas Tariff Rate G 51: Monthly Customer Charge First 1,0001,300 therms All usage over 1,0001,300 therms LDAC Gas Cost Adjustment: Cost of Gas Tariff Rate G 42: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas Tariff Rate G 52: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas Tariff Rate G 52: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas	Tariff Rate G 40: Monthly Customer Charge \$67.45 \$0.1844 \$0.1615 \$0.1844 \$0.0296 \$0.0293 \$0.0293 \$0.0293 \$0.1844 \$0.4615 \$0.1844 \$0.0296 \$0.0293	Tariff Rate G 40:

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NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON RESIDENTIAL RATES

November 2	Winter Season 016 - May 2017 November 2017 - May 2018		riff ites	Delive	otal ery Rates les LDAC)
C&I Low Annual/High Winter	Tariff Rate T 40: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1615 \$0.1615	\$0.1844 \$0.1844	\$0.1911 \$0.1911	\$67.45 <u>\$0.2137</u> <u>\$0.2137</u>
	LDAC	\$0.0296	<u>\$0.0293</u>		
C&I Low Annual/Low Winter	Tariff Rate T 50: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1615 \$0.1615	\$0.1844 \$0.1844	\$0.1911 \$0.1911	\$67.45 \$0.2137 \$0.2137
	LDAC	\$0.0296	<u>\$0.0293</u>		
C&I Medium Annual/High Winter	Tariff Rate T 41: Monthly Customer Charge	\$196.73			\$196.73
	All usage	\$0.2098	\$0.2327	\$0.239 4	<u>\$0.2620</u>
	LDAC	\$0.0296	<u>\$0.0293</u>		
C&I Medium Annual/Low Winter	Tariff Rate T 51: Monthly Customer Charge First 1,300 therms All usage over 1,300 therms	\$196.73 \$0.1520 \$0.1238	\$0.1749 \$0.1467	\$0.1816 \$0.1534	\$196.73 <u>\$0.2042</u> <u>\$0.1760</u>
	LDAC	\$0.0296	<u>\$0.0293</u>		
C&I High Annual/High Winter	Tariff Rate T 42: Monthly Customer Charge All usage	\$1,124.19 \$0.1764	\$0.1993	\$ 0.2060	\$1,124.19 \$0.2286
		***		Ψ0.2000	<u>\$0.2200</u>
	LDAC	\$0.0296	<u>\$0.0293</u>		
C&I High Annual/Low Winter	Tariff Rate G 52: Monthly Customer Charge	\$1,124.19			\$1,124.19
	All usage	\$0.1541	<u>\$0.1770</u>	\$0.1837	<u>\$0.2063</u>
	LDAC	\$0.0296	<u>\$0.0293</u>		
C&I Interruptible Transportation	Tariff Rate IT: Monthly Customer Charge First 20,000 therms All usage over 20,000 therms	\$170.21 \$0.1299 \$0.1108			\$170.21 \$0.1299 \$0.1108

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NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION SUMMER-SEASON RESIDENTIAL RATES

Summer Season May 201 <mark>7</mark> 8 - October 201 <u>78</u>		I I	riff tes	Total Delivery Rates (Includes LDAC)		
C&I Low Annual/High Winter	Tariff Rate T 40: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1615 \$0.1615	\$0.1844 \$0.1844	\$0.1911 \$0.1911	\$67.45 <u>\$0.2137</u> <u>\$0.2137</u>	
	LDAC	\$0.0296	<u>\$0.0293</u>			
C&I Low Annual/Low Winter	Tariff Rate T 50: Monthly Customer Charge First 75 therms All usage over 75 therms	\$67.45 \$0.1615 \$0.1615	\$0.1844 \$0.1844	\$0.1911 \$0.1911	\$67.45 \$0.2137 \$0.2137	
	LDAC	\$ 0.0296	<u>\$0.0293</u>			
C&I Medium Annual/High Winter	Tariff Rate T 41: Monthly Customer Charge	\$196.73			\$196.73	
	All usage	\$0.1622	<u>\$0.1851</u>	\$0.1918	<u>\$0.2144</u>	
	LDAC	\$0.0296	<u>\$0.0293</u>			
C&I Medium Annual/Low Winter	Tariff Rate T 51: Monthly Customer Charge First 1,000 therms All usage over 1,000 therms	\$196.73 \$0.1183 \$0.0925	\$0.1412 \$0.1154	\$0.1479 \$0.1221	\$196.73 \$0.1705 \$0.1447	
	LDAC	\$0.0296	<u>\$0.0293</u>			
C&I High Annual/High Winter	Tariff Rate T 42: Monthly Customer Charge All usage	\$1,124.19 \$0,1066	\$0.1295	\$ 0.1362	\$1,124.19 <u>\$0.1588</u>	
	•	, , , , , , , , , , , , , , , , , , , ,		\$0.1302	<u>\$0.1300</u>	
20.11.1.1	LDAC	\$0.0296	<u>\$0.0293</u>			
C&I High Annual/Low Winter	Tariff Rate G 52: Monthly Customer Charge	\$1,124.19			\$1,124.19	
	All usage	\$0.0707	<u>\$0.0936</u>	\$0.1003	<u>\$0.1229</u>	
	LDAC	\$0.0296	<u>\$0.0293</u>			
C&I Interruptible Transportation	Tariff Rate IT: Monthly Customer Charge First 20,000 therms All usage over 20,000 therms	\$170.21 \$0.0407 \$0.0347		\$0.0407 \$0.0347	\$170.21	

Issued:- September 16, 2016 18, 2017

Effective Date: May 1, 2016-2018

Issued by:

Title:

Senior Vice President

Authorized by NHPUC Order No. in Docket No. DG 17-, dated

Anticipated Cost of Gas

New Hampshire Division Period Covered: November 1, 20167 - 0 Cotober 31, 20178 - 0

(Col 1)	, ,	_	(Col 2)		(Col 3)
ANTICIPATED DIRECT COST OF GAS			, ,		, ,
Purchased Gas:					
Demand Costs:	\$ 2,760,644	\$	2,736,659		
Supply Costs:	\$ 9,964,565	\$	8,821,653		
Storage & Peaking Gas:	Ф 0.040.000	Φ.	0.000.070		
Demand, Capacity: Commodity Costs:	\$ 9,240,209 \$ 3,496,207	\$ \$	8,330,279 5,967,050		
•	, ,,,,,,	•			
Hedging (Gain)/Loss	\$ 64,809	\$	112,028		
nterruptible Included Above	\$	\$	-		
nventory Finance Charge	\$ 2,038	\$	3,454		
Capacity Release	\$ (3, 672,857)	\$	(1,894,561)		
Off-system Peaking Demand Cost Adjustment		\$	(44,199)		
Total Anticipated Direct Cost of Gas				\$ 21,855,615	\$ 24,032,363
ANTICIPATED INDIRECT COST OF GAS					
djustments:					
Prior Period Under/(Over) Collection NH PUC Consultant Costs	\$ 850,112 \$ 20.828	\$	(292,077)		
Interest	\$ 20,828 \$ (901)	\$	(25,703)		
Refunds	\$ (301)	\$	(20,700)		
Interruptible Margins	\$	\$	_		
Total Adjustments				\$ 870,039	\$ (317,780)
Vorking Capital:					
Total Anticipated Direct Cost of Gas	* //-	\$	24,032,363		
Working Capital Percentage	<u>0.887%</u>		<u>0.1077</u> %		
Working Capital Allowance	\$ 19,386	\$	25,884		
Plus: Working Capital Reconciliation (Acct 182.11)	<u>\$ 651</u>	\$	2,771		
Total Working Capital Allowance				\$ 20,037	\$ 28,656
ad Debt:					
Bad Debt Allowance	\$ 187,199	\$	184,403		
Plus: Bad Debt Reconciliation (Acct 182.16)	\$ 82,676	\$	(3,161)		
Total Bad Debt Allowance				\$ <u>269,875</u>	\$ 181,243
ocal Production and Storage Capacity				\$ 420,658	\$ 420,658
liscellaneous Overhead- <mark>22.99</mark> 7 <u>9.76</u> % Allocated to <mark>S</mark> e	\$ 408,908	\$ 418,262			
otal Anticipated Indirect Cost of Gas				\$ 1,989,516	\$ 731,039
				\$ 23.845.132	\$ 24,763,402

Issued: September 16, 2016 September 18, 2017

Effective Date: November 1, 20167

Anticipated Cost of Gas

New Hampshire Division
Period Covered: May 1, 20178 - October 31, 20178

Period	1 Covered: May 1, 2	2017 <u>8</u> - October	31, 201 7 8		
(Col 1)	(Col 2)	(Col 2)	(Col 3)	(Col 3)	
ANTICIPATED DIRECT COST OF GAS					
Purchased Gas:					
Demand Costs:	\$437,194	\$592,766			
Supply Costs:	\$2,032,100	\$2,119,016			
Storage & Peaking Gas:					
Demand, Capacity:	\$401,228	\$370,493			
Commodity Costs:	\$29,565	\$29,837			
Hedging (Gain)/Cost	\$0	\$0			
Interruptible Included Above	\$0	\$0			
Inventory Finance Charge	\$0	\$0			
Capacity Release, & Asset Management	\$0	\$0			
Total Anticipated Direct Cost of Gas			\$2,900,087	<u>\$3,112,112</u>	
ANTICIPATED INDIRECT COST OF GAS					
Adjustments: Prior Period Under/(Over) Collection	\$215,716	(\$65,925)			
NH PUC Consultant Costs	\$2,169	(\$03, 323) \$0			
Interest	(\$17,900)	<u>(\$27,527)</u>			
Refunds	\$0	\$0			
Interruptible Margins	\$0	\$0	4400005	(400.450)	
Total Adjustments			\$199,985	<u>(\$93,452)</u>	
Working Capital:	\$2,900,087	¢2 112 112			
Total Anticipated Direct Cost of Gas Working Capital Percentage	\$2,900,087 0.0887%	\$3,112,112 \$0			
Working Capital Allowance	\$2,572	\$3,35 <u>2</u>			
Plus: Working Capital Reconciliation (Acct 182.11)		\$626			
	\$103	<u>\$020</u>	to =00	to o==	
Total Working Capital Allowance			\$2,738	<u>\$3,977</u>	
Bad Debt:					
Bad Debt Allowance	\$18,846	<u>\$11,146</u>			
Plus: Bad Debt Reconciliation (Acct 182.16)	\$20,979	<u>(\$713)</u>			
Total Bad Debt Allowance			\$39,825	<u>\$10,433</u>	
Local Production and Storage Capacity			\$0	<u>\$0</u>	
Miscellaneous Overhead-20.2418.41% Allocated to the	he Summer Seasor	1	\$103,760	<u>\$94,406</u>	
Total Anticipated Indirect Cost of Gas			\$346,308	<u>\$15,364</u>	
Total Cost of Gas			\$3,246,395	\$3,127,475	
Jacuard: Contambor 16, 2016 19, 2017				L. Du	(00)
Issued: September 16, 2016-18, 2017 Effective Date: May 1, 2017 2018			_	Senior Vice	
Effective Date: May 1, 2017 2018	DC 17	. الم	2047	Senior Vice	FIESIUEIIL
Authorized by NHPUC Order No, in Docket No.	ט. טט זיי date	eu, 2	2017		

(Col 1)

(Col 3)

CALCULATION OF FIRM SALES COST OF GAS RATE

Period Covered: November 1, 20167 - April 30, 20178

(Col 2)

(Col 1)	(Col 2)		(Col 3)	
Total Anticipated Direct Cost of Gas Projected Prorated Sales (11/01/16 04/30/17) (11/01/17 - 04/30/18)	\$21,855,615 31,549,237	\$24,032,363 34,865,979		
Direct Cost of Gas Rate Demand Cost of Gas Rate	\$8,327,997	\$9,128,178	\$0.6927 \$0.2640	\$0.6893 per therm \$0.2618 per therm
Commodity Cost of Gas Rate Total Direct Cost of Gas Rate	\$13,527,618 \$21,855,615	\$14,904,185 \$24,032,363	\$0.4287 \$0.6927	\$0.4275 per therm \$0.6893 per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/16 - 04/30/17) (11/01/17 - 04/30/18) Indirect Cost of Gas	\$1,989,516 31,549,237	\$731,226 34,865,979	\$0.0631	\$0.0210 per therm
TOTAL PERIOD AVERAGE COST OF GAS			\$0.7558	\$0.7103 per therm
Period ending over-collection as determined on 11/21/16	(\$670.040\			
Projected sales (12/01/16 - 04/30/17)	(\$672,842) 27,653,599			
Per unit change in Cost of Gas (12/01/16 - 04/30/17) **Over-collection w/o rate adjustment as contained in NUI's COG Report dated. Nove	(\$0.0243)			
Period Ending over-collection as determined on 12/16/16	\$870,133			
Projected Sales (01/01/17 ~ 04/30/17) Per unit change in Cost of Gas (01/01/17 ~ 04/30/17)	22,082,929 \$0.0394			
⁻² Over-collection w/o rate adjustment as contained in NUI's COG Report dated Dece				
Period Ending over-collection as determined on 02/22/17 Projected Sales (03/01/17 - 04/30/17)	(\$875,279)			
Per unit change in Cost of Gas (03/01/17 - 04/30/17)	8,147,233 (\$0.1074)			
⁻³ Over-collection w/o rate adjustment as contained in NU's COG Report dated. Febr	uary 22, 2017			
Period Ending over collection as determined on 03/24/17 Projected Sales (04/01/17 - 04/30/17)	\$481,366 2,913,032			
Per unit change in Cost of Gas (04/01/17 - 04/30/17)	<u>\$0.1652</u>			
Over-collection w/o rate adjustment as contained in NUI's COG Report dated Marcon Communication (In Not to Communication)	31 24, 2017			
RESIDENTIAL COST OF GAS RATE - 94/01/17_11/01/17	COGwr	\$0.8286	\$0.7103	per therm
	Maximum (COG+25%)	\$0.9448	<u>\$0.8879</u>	
RESIDENTIAL COST OF GAS RATE ~ 11/01/16			\$0.7558 (\$0.0243)	
CHANGE IN PER UNIT COST RESIDENTIAL COST OF GAS RATE 12/01/16			\$0.7315	
CHANGE IN PER UNIT COST			\$0.0394	
RESIDENTIAL COST OF GAS RATE - 01/01/17 CHANGE IN PER UNIT COST			\$0.7709 (\$0.1074)	
RESIDENTIAL COST OF GAS RATE - 03/01/17			\$0.6634	
CHANGE IN PER UNIT COST RESIDENTIAL COST OF GAS RATE ~ 04/01/17			\$0.1652 \$0.8286	
COM/IND LOW WINTER USE COST OF GAS RATE04/01/17 11/01/17	COGWI	\$0.7529	\$0.6380	per therm
	Maximum (COG+25%)	\$0.8501	<u>\$0.7975</u>	
COM/IND LOW WINTER USE COST OF GAS RATE ~ 01/01/16 CHANGE IN PER UNIT COST			\$0.6801 (\$0.0243)	
COM/IND LOW WINTER USE COST OF GAS RATE - 12/01/16			\$0.6558	
CHANGE IN PER UNIT COST COM/IND LOW WINTER USE COST OF GAS RATE 01/01/17			\$0.0394 \$0.6952	
CHANGE IN PER UNIT COST COM/IND LOW WINTER USE COST OF GAS RATE - 03/01/17			(\$0.1074) \$0.5877	
CHANGE IN PER UNIT COST COM/IND LOW WINTER USE COST OF GAS RATE ~ 04/01/17			\$0.1652 \$0.7529	
C&I HLF DEMAND COSTS ALLOCATED PER SMBA	\$382,221			
PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF C&I HLF TOTAL ADJUSTED DEMAND COSTS	\$66,032 \$448,254			
C&I HLF PROJECTED PRORATED SALES (11/1/16-04/30/17)	2,570,611			
DEMAND COST OF GAS RATE	<u>\$0.1744</u>			
C&I HLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY COSTS	\$1,139,040 (\$1,261)			
C&I HLF TOTAL ADJUSTED COMMODITY COSTS C&I HLF PROJECTED PRORATED SALES (11/1/16-04/30/17)	\$1,137,779 2,570,611			
COMMODITY COST OF GAS RATE	\$0.4426			
INDIRECT COST OF GAS	<u>\$0.0210</u>			
TOTAL C&I HLF COST OF GAS RATE	<u>\$0.6380</u>			
COM/IND HIGH WINTER USE COST OF GAS RATE - 84/91/17 11/91/17	COGwh	\$0.8424	\$0.7275	per therm
	Maximum (COG+25%)	\$0.9620	\$0.9094	·
COM/IND HIGH WINTER USE COST OF GAS RATE - 01/01/16			\$0.7696	
CHANGE IN PER UNIT COST COM/IND HIGH WINTER USE COST OF GAS RATE 12/01/16			(\$0.0243) \$0.7453	
CHANGE IN PER UNIT COST COM/IND HIGH WINTER USE COST OF GAS RATE ~ 01/01/17			\$0.0394 \$0.7847	
CHANGE IN PER UNIT COST COM/IND HIGH WINTER USE COST OF GAS RATE - 03/01/17			(\$0.1074) \$0.6772	
CHANGE IN PER UNIT COST COMIND HIGH WINTER USE COST OF GAS RATE 04/01/17			\$0.1652 \$0.8424	
	\$2.202.244		ψοιο 1 <u>2 1</u>	
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA PLUS RESIDENTIAL DEMAND REALLOCATION TO C&I LLF	\$3,393,311 \$586,225			
C&I LLF TOTAL ADJUSTED DEMAND COSTS C&I LLF PROJECTED PRORATED SALES (11/01/16-04/30/17)	\$3,979,536 14,203,338			
DEMAND COST OF GAS RATE	<u>\$0.2802</u>			
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I LLF	\$6,061,232 (\$6,710)			
C&I LLF TOTAL ADJUSTED COMMODITY COSTS	(\$6,710) \$6,054,521			
C&I LLF PROJECTED PRORATED SALES (11/01/16-04/30/17) COMMODITY COST OF GAS RATE	14,203,338 \$0.4263			
INDIRECT COST OF GAS	<u>\$0.0210</u>			
TOTAL C&I LLF COST OF GAS RATE	\$0.7275			
	<u></u>		, -	_
			WE	+c0e>

Senior Vice President

CALCULATION OF FIRM SALES COST OF GAS RATE

Period Covered: May 1, 20178 - October 31, 20178

	Period Covered: May 1, 20178 - October 3	1, 201 <i>+</i> <u>8</u>			
(Col 1)	(Col 2)	(Col 2)	(Col 3)	(Col 3)	
Total Anticipated Direct Cost of Gas	\$ 2,900,087	\$3,112,112			
Projected Prorated Sales (05/01/17 - 10/31/17) (05/01/18 - 10/31/18) Direct Cost of Gas Rate	8,005,603	7,869,571	\$0.3623	<u>\$0.3955</u>	per therm
	•				·
Demand Cost of Gas Rate Commodity Cost of Gas Rate	\$ 838,422 \$2,061,665	<u>\$963,258</u> \$2,148,854	\$0.1047 \$0.2575	\$0.1224 \$0.2731	per therm per therm
Total Direct Cost of Gas Rate	\$2,900,087	\$3,112,112	\$0.3622	\$0.3955	per therm
Total Anticipated Indirect Cost of Gas	\$34 6,308	<u>\$15,364</u>			
Projected Prorated Sales (05/01/17 - 10/31/17) (05/01/18 - 10/31/18) Indirect Cost of Gas	8,005,603	7,869,571	\$0.0433	\$0.0020	per therm
mulect cost of cas			ψο.0400	<u>\$0.0020</u>	per trierrir
TOTAL PERIOD AVERAGE COST OF GAS			\$0.4055	<u>\$0.3975</u>	per therm
RESIDENTIAL COST OF GAS RATE -05/01/178	COGwr		\$0.4055	<u>\$0.3975</u>	per therm
	Maximum (COG+25%)		\$0.5069		
	000 1		Ac	*	
COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/178	COGwl		\$0.3589	<u>\$0.3543</u>	per therm
	Maximum (COG+25%)		\$0.4486		
	•				
C&I HLF DEMAND COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL DEMAND RELOCATION TO C&I HLF	\$ 108,191 \$16,122	<u>\$125,955</u> \$13,376			
C&I HLF TOTAL ADJUSTED DEMAND COSTS	\$124,313	\$139,331			
C&I HLF PROJECTED PRORATED SALES (05/01/178 - 10/31/178) DEMAND COST OF GAS RATE	2,140,549 \$0.0581	1,757,926 \$0.0793			
	\$551,251				
C&I HLF COMMODITY COSTS ALLOCATED PER SMBA PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I HLF	\$44	<u>\$480,017</u> (<u>\$55)</u>			
C&I HLF TOTAL ADJUSTED COMMODITY COSTS C&I HLF PROJECTED PRORATED SALES (05/01/178 - 10/31/178)	\$551,295 2,140,549	<u>\$479,961</u> 1,757,926			
COMMODITY COST OF GAS RATE	\$0.2575	\$0.2730			
INDIRECT COST OF GAS	\$ 0.0433	\$0.0020			
TOTAL C&I HLF COST OF GAS RATE	\$0.3589	\$0.3543			
	·	<u></u>			
COM/IND HIGH WINTER USE COST OF GAS RATE - 05/01/178	COGwh		\$0.4465	<u>\$0.4254</u>	per therm
	Maximum (COG+25%)		\$0.5581		
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$309.243	<u>\$368,794</u>			
PLUS RESIDENTIAL DEMAND REALLOCATION TO C&I LLF	\$4 6,083	<u>\$39,165</u>			
C&I LLF TOTAL ADJUSTED DEMAND COSTS C&I LLF PROJECTED PRORATED SALES (05/01/178 - 10/31/178)	\$355,326 2,438,282	<u>\$407,959</u> 2,713,210			
DEMAND COST OF GAS RATE	\$ 0.1457	<u>\$0.1504</u>			
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$ 627,925	\$740,865			
PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I LLF	\$51 _	(\$85)			
C&I LLF TOTAL ADJUSTED COMMODITY COSTS C&I LLF PROJECTED PRORATED SALES (05/01/178 - 10/31/178)	\$627,976 	<u>\$740,780</u> 2,713,210			
COMMODITY COST OF GAS RATE	\$0.2575	\$0.2730			
INDIRECT COST OF GAS	\$ 0.0433	\$0.0020			
TOTAL C&I LLF COST OF GAS RATE	\$0.4465	<u>\$0.4254</u>			
			L	420	2.
Issued: September 16, 2016 18, 2017		Issued By:	·		
Effective Date: May 1, 2017 2018 Authorized by NHPUC Order No, in Docket No. DG 17, dated	·		Sen	ior Vice President	

Local Delivery Adjustment Clause

Rate Schedule	RLIARA	DSM EEC	LRR	ERC	ITM	RCE	RPC	LDAC
Residential Heating	\$0.0096 0.0039	\$ 0.0331 0.0433	\$ 0.0006 0.0028	\$ 0.0056 0.0060	\$0.0000	\$0.0000	\$0.0000	\$ 0.0489 0.0560
Residential Non-Heating	\$0.0096 0.0039	\$ 0.0331 0.0433	\$ 0.0006 0.0028	\$ 0.0056 0.0060	\$0.0000	\$0.0000	\$0.0000	\$ 0.0489 0.0560
Small C&I	\$0.0096 0.0039	\$ 0.0142 0.0184	\$ 0.0002 0.0010	\$ 0.0056 0.0060	\$0.0000	\$0.0000	\$0.0000	\$ 0.0296 0.0293
Medium C&I	\$0.0096 0.0039	\$ 0.0142 0.0184	\$ 0.0002 0.0010	\$ 0.0056 0.0060	\$0.0000	\$0.0000	\$0.0000	\$ 0.0296 0.0293
Large C&I	\$0.0096 0.0039	\$ 0.0142 0.0184	\$ 0.0002 0.0010	\$ 0.0056 0.0060	\$0.0000	\$0.0000	\$0.0000	\$ 0.0296 0.0293
No Previous Sales Service								

Issued: September 16, 2015 September 18, 2017
Effective: With Service Rendered On and After November 1, 2016 November 1, 2017

Authorized by NHPUC Order No. in Docket No., dated

Issued by:

Title:

Senior Vice President

APPENDIX A

Schedule of Administrative Fees and Charges

I. Supplier Balancing Charge: \$0.7775 per MMBtu of Daily Imbalance Volumes

- Updated effective every November 1 to reflect the Company's latest balancing resources and associated capacity costs.
- Daily Imbalance Volumes represent the difference between ATV and ATV adjusted for actual EDDs.

II. Peaking Service Demand Charge: \$ 20.82 35.51 per MMBtu per MDPQ per month for November 2016-2017 through April 20172018.

• Updated effective every November 1 to reflect the Company's Peaking resources and associated costs.

III. Company Allowance Calculation: 1.221.26% - Provided in Attachment 3 to Schedule 10

IV. Supplier Services and Associated Fees:

<u>SERVICE</u>	PRICING
Pool Administration (required)	• \$0.10/month/customer billed @ marketer level
Non-Daily Metered Pools only	
Standard Passthrough Billing (required)	• \$0.60/customer/month billed @ marketer level
Standard Complete Billing (optional – Passthrough Billing fee not required if this service is elected)	• \$1.50/customer/month billed @ marketer level
Customer Administration (required)	• \$10/customer/switch billed @ marketer level

Issued:	September 1 <u>8</u> 6, 201 <u>67</u>		Issued by:	No CH Cole
Effective:	November 1, 201 <u>67</u>			Senior Vice President
Authorized	by NHPUC Order No.	in Docket No. DG 16 -	, dated	

APPENDIX C

Capacity Allocators

Capacity Allocators shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Capacity Allocators shall be applicable for capacity assignments during the period of November 1, 2016-2017 through October 31, 20172018.

Commercial and Industrial

	High Winter Use	Low Winter Use
Pipeline:	28.53 <u>15.54</u> %	57.40 <u>60.13</u> %
Storage:	31.01 <u>31.09</u> %	18.48 <u>14.67</u> %
Peaking:	40.46 53.37%	24.12 25.20%

Issued: September 17, 2016 18, 2017

Effective: November 1, 2016 2017

Authorized by NHPUC Order No. _____ in Docket No. DG17-_ __, dated _____.

APPENDIX D

Firm Sales Service Re-Entry Fee Bill Adjustment (continued)

The Re-Entry Fee shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Firm Sales Service Re-Entry Fee Unit Charge shall be applicable for the period of November 1, 2016-2017 through October 31, 20172018.

Effective Dates:	November 1, 2016 - <u>2017</u> – October 31, 2017 <u>2018</u>
Annual Average Unit Cost:	\$ 240.33 <u>257.69</u>
25% - Annual Charge for Re-Entry Fee:	\$ 60.08 <u>64.42</u>
Monthly Unit Charge for Re-Entry Fee:	\$ 5.01 <u>5.37</u>

Issued:	September <u>1618</u> , <u>20162017</u>		Issued by:	MICHCOLON
Effective:	November 1, 20162017			Senior Vice President
Authorized	by NHPUC Order No	in Docket No. DG 16-17 -	dated	

APPENDIX D

Firm Sales Service Re-Entry Fee Bill Adjustment (continued)

The Re-Entry Fee shall be calculated and filed with the Commission each year with the Winter Cost of Gas filing. The following Firm Sales Service Re-Entry Fee Unit Charge shall be applicable for the period of November 1, 2017 through October 31, 2018.

Effective Dates:	November 1, 2017 October 31, 2018
Annual Average Unit Cost:	\$ 262.99
25% Annual Charge for Re Entry Fee:	\$ 65.75
Monthly Unit Charge for Re-Entry Fee:	\$ 5.48

Re-entry Surcharge and Conversion Surcharge (continued)

D. Information to be Filed with the Commission:

As part of the annual Cost of Gas filing, the Company shall file with the Commission a report showing the number of customers assessed the Re-entry Surcharge and the Conversion Surcharge and the amount of revenue received for each charge through the prior April 30. Pursuant to the Company's Cost of Gas Clause, the Company will apply such revenues as credits to the Company's New Hampshire Division Cost of Gas.

Issued:	September <u>1618</u> , <u>20162017</u>	Issued by:	hel 4 colos
Effective:	November 1, 20162017		Senior Vice President
Authorized	by NHPUC Order No	in Docket No. DG 17, dated	•

The following Re-entry Surcharge and Conversion Surcharge shall be applicable for the periods of November 1, 2017 through April 30, 2018 and May 1, 2018 through October 2018.

Effective Dates:	<u>November 1, 2017 – </u>	May 1, 2018 –
Elective Dates.	<u>April 30, 2018</u>	October 30, 2018
Re-entry Surcharge:	\$0.0082 per therm	\$0.0085 per therm
Conversion Surcharge, Low Load Factor	\$0.0510 per therm	\$0.0085 per therm
(G-40, G-41, G-42):		
Conversion Surcharge, High Load Factor	\$0.1522 per therm	\$0.0085 per therm
(G-50, G-51, G-52):		

Issued: September 1618,

20162017

November 1, 20162017 Effective:

Authorized by NHPUC Order No. _____ in Docket No. DG 17 -___, dated _

Issued by: