

Catherine A. McNamara Analyst II, Rates & Regulatory Affairs O: 603-216-3537 E: <u>Catherine.McNamara@libertyutilities.com</u>

August 24, 2018

Via ERF and US Mail

Debra A. Howland Executive Director New Hampshire Public Utilities Commission 21 S. Fruit Street, Suite 10 Concord, NH 03301-2429

RE: DG 17-135 Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities 2018 Summer Period Cost of Gas – September 2018 Monthly COG Adjustment

Dear Ms. Howland:

On behalf of Liberty Utilities (EnergyNorth Natural Gas) Corp. and in accordance with New Hampshire Public Utilities Commission Order No. 26,066 (October 31, 2017) in Docket DG 17-135, I enclose for filing the current (September) calculations of the projected over or under collection of gas costs for the 2018 Summer season ending October 31, 2018.

The calculations reflect the NYMEX closing prices as of August 17, 2018. The resulting ENNG projected under collection, excluding Keene, of \$408,190 is approximately 5.62% of the total revised anticipated gas costs for the 2018 summer season.

The calculated revised COG is an increase of \$0.0657 which is higher than the maximum allowed rate increase. Liberty elects to implement the maximum allowed ENNG COG increase (excluding Keene) of \$0.0251 per therm. for the September 1st billing cycle.

The current and revised cost of gas rates are summarized in the following table.

_	ENNG Excluding Keene Cost of Gas Rate						
	<u>Current</u>	<u>Change</u>					
	<u>Rate</u>	<u>Rate</u>					
Residential	\$0.3665	\$0.3916	\$0.0251				
Commercial/Industrial High Winter Use	\$0.3604	\$0.3855	\$0.0251				
Commercial/Industrial Low Winter Use	\$0.3873	\$0.4124	\$0.0251				

Please note this report has been filed via the Commission's Electronic Report Filing system.

Debra A. Howland DG 17-135 Page 2

Thank you for your attention to this matter. Please do not hesitate to call if you have any questions.

Sincerely,

Catherine A. McNamara

Enclosures

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities Calculation of the Projected Over or Under Collection of the 2018 Summer COG DG 17-135

September 1, 2018

Estimated Under/(Over) Collection as of 08/1/18		\$	630,125
Forecasted firm Residential therm sales 8/1/18 - 10/31/18	5,608,482		
Residential Cost of Gas Rate per therm	\$ (0.3665)		
Forecasted firm C&I High Winter Use therm sales 8/1/18 - 10/31/18	677,016		
C&I- High Winter Use Cost of Gas Rate per therm	\$ (0.3873)		
Forecasted firm C&I Low Winter therm sales 8/1/18 - 10/31/18	1,586,632		
C&I- Low Winter Use Cost of Gas Rate per therm	\$ (0.3604)		
Forecast recovered costs at current rate 08/1/18 - 10/31/18	•		(2,889,539)
Revised projected gas costs 08/1/18 - 10/31/18		\$	2,675,750
Estimated interest charged (credited) to customers 08/1/18-10/31/18			(8,145)
Projected under / (over) collection as of 10/31/18 (A)		\$	408,190
Actual Gas Costs through 08/1/18	\$ 4,607,580		
Revised projected gas costs 09/1/18 - 10/31/18	\$ 2,667,604		
Estimated total adjusted gas costs 08/1/18 - 10/31/18 (B)		\$	7,267,039
Under/ (over) collection as percent of total gas costs (A/B)			5.62%
Projected under / (over) collections as of 10/31/18 (A)		\$	408,190
Flojected dilder / (over) collections as or 10/31/18 (A)		Φ	400,190
Forecasted firm therm sales 08/01/18 - 10/31/18			6,217,018
Change in rate used to reduce forecast under/(over) collection		\$	0.0657
Current Cost of Gas Rate		\$	0.3665
Revised Cost of Gas Rate		\$	0.4322
Cap - Residential Cost of Gas Rate		\$	0.3916

ENERGYNORTH NATURAL GAS, INC.

Projected Over or Under Collection

Without Rate Adjustment	Beginning		May-18		Jun-18		Jul-18		Aug-18		Sep-18		Oct-18		
	Under/(Over)		(Actual)		(Actual)		(Actual)		(Estimate)		(Estimate)		(Estimate)		Total Peak
Total Gas Costs		\$	1,790,052	C	1,418,314	\$	1.510.747	æ	821.409	Ф	846.860	\$	1,642,177	Ф	8,029,559
Total Gas Costs		Ф	1,790,052	Ф	1,410,314	Ф	1,510,747	Ф	621,409	Ф	040,000	Ф	1,042,177	Ф	6,029,559
Adjustments and Indirect Costs															
Refunds & Adjustments		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
COG Bad Debt			-		-		-		-		-		-		-
Inventory Financing			-		-		-		(05.440)		(00,000)		(00.405)		(00.045)
Transportation Revenue Broker Revenue			-		_		-		(25,112) (260,455)		(23,668) (87,418)		(20,465) (56,671)		(69,245) (404,544)
Off System and Capacity Release			_				-		(8,400)		(14,105)		(12,378)		(34,883)
Fixed Price Option Admin.			_		_		-		(0,400)		(14,103)		(12,570)		(34,003)
Bad Debt Costs			(5,724)		(60,749)		(41,087)		(25,219)		(33,995)		(62,951)		(229,725)
Working Capital			1,132		(206)		(4,953)		(1,576)		(2,125)		(3,934)		(11,662)
Misc Overhead			· -		`- `		-		538		716		1,305		2,560
Production & Storage			405		405		405		405		405		405		2,433
Total Indirect Costs		\$	(4,186)	\$	(60,549)	\$	(45,635)	\$	(319,819)	\$	(160,188)	\$	(154,689)	\$	(745,066)
Interest			(2,719)		(135)		1,691		(2,496)		(2,301)		(3,348)	\$	(9,308)
Total Gas Costs plus Indirect Costs	\$ (1,020,256)		1,783,146		1,357,630		1,466,804		499,094		684,370		1,484,140	\$	6,254,928
Total Forecasted Sales Volumes			12,635,276		6,838,969		5,676,540		1,655,112		2,203,627		4,013,391		33,022,915
Total Forecasted Collections			893,509		986,614		1,077,077		608,089		810,025		, ,	\$	5,846,738
With Rate Adjustment															
The state stage and the stage	Beginning		May-18		Jun-18		Jul-18		Aug-18		Sep-18		Oct-18		
	Under/(Over)		(Actual)		(Actual)		(Actual)		(Estimate)		(Estimate)		(Estimate)		Total Peak
Total Gas Costs		\$	1,790,052	\$	1,418,314	\$	1,510,747	\$	821,409	\$	846,860	\$	1,642,177	\$	8,029,559
Adjustments and Indirect Costs															
Refunds & Adjustments		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
COG Bad Debt			-		-		-		-		-		-		-
Inventory Financing Transportation Revenue			-		-		-		- (25,112)		(23,668)		(20,465)		(69,245)
Broker Revenue			-		-		-		(260,455)		(87,418)		(56,671)		(404,544)
Off System and Capacity Release			-		_		_		(8,400)		(14,105)		(12,378)		(34,883)
Fixed Price Option Admin.			-		-		-		-		-		-		-
Bad Debt Costs			(5,724)		(60,749)		(41,087)		(25,219)		(33,995)		(62,951)		(229,725)
Working Capital			1,132		(206)		(4,953)		(1,576)		(2,125)		(3,934)		(11,662)
Misc Overhead			-		-		-		538		716		1,305		2,560
Production & Storage		•	405	•	405	•	405	•	405	_	405	_	405	•	2,433
Total Indirect Costs		\$	(4,186)	\$	(60,549)	\$	(45,635)	\$	(319,819)	\$	(160,188)	\$	(154,689)	\$	(745,066)
Interest			(2,719)		(135)		1,691		(2,496)		(2,301)		(3,080)	\$	(9,040)
Total Gas Costs plus Indirect Costs	\$ (1,020,256)		1,783,146		1,357,630		1,466,804		499,094		684,370		1,484,408	\$	6,255,196
Total Forecasted Sales Volumes			12,635,276		6,838,969		5,676,540		1,655,112		2,203,627		4,013,391		33,022,915
Total Forecasted Collections			893,509		986,614		1,077,077		608,089		954,803		1,735,105	\$	6,255,196

Liberty Utilities (EnergyNorth Natural Gas) Corp. Off Peak 2018 Summer Cost of Gas Filing

Filed Tariff Sheets

Proposed Fifth Revised Page 1 Check Sheet

Proposed Fifth Revised Page 3 Check Sheet (Cont'd)

Proposed Fourth Revised Page 4 Check Sheet (Cont'd)

Proposed Fifth Revised Page 84
Calculation Firm Sales Cost of Gas Rate

Proposed Fifth Revised Page 86
Calculation of Firm Sales Cost of Gas Rate

Proposed Fourth Revised Page 89
Calculation of Firm Transportation Cost of Gas Rate

EFFECTIVE:

September 01, 2018

Page	Revision
Title	Original
TOC i	Original
TOC ii	Original
TOC iii	Original
TOC iv	Original
1	Fifth Revised
2	First Revised
3	Fifth Revised
4	Fourth Revised
5	Original
6	Original
7	Original
8	Original
9	Original
10	Original
11	Original
12	Original
13	Original
14	Original
15	Original
16	Original
17	Original
18	Original
19	Original
20	Original
21	Original
22	Original
23	Original
24	Original

ISSUED: August 24 2018 ISSUED BY: /s/Susan L. Fleck

Susan L. Fleck
TITLE: President

56 First Revised 57 Original 58 First Revised 59 Original 60 First Revised 61 Original 62 First Revised 63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised 86 Fifth Revised	Page	Revision
58 First Revised 59 Original 60 First Revised 61 Original 62 First Revised 63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	56	First Revised
59 Original 60 First Revised 61 Original 62 First Revised 63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	57	Original
60 First Revised 61 Original 62 First Revised 63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	58	First Revised
61 Original 62 First Revised 63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	59	Original
62 First Revised 63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	60	First Revised
63 Original 64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	61	Original
64 First Revised 65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	62	First Revised
65 Original 66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	63	Original
66 First Revised 67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	64	First Revised
67 Original 68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	65	Original
68 First Revised 69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	66	First Revised
69 Original 70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	67	Original
70 First Revised 71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	68	First Revised
71 Original 72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	69	Original
72 First Revised 73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	70	First Revised
73 Original 74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	71	Original
74 First Revised 75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	72	First Revised
75 Original 76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	73	Original
76 First Revised 77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	74	First Revised
77 Original 78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	75	Original
78 First Revised 79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	76	First Revised
79 Original 80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	77	Original
80 First Revised 81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	78	First Revised
81 Original 82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	79	Original
82 First Revised 83 Original 84 Fifth Revised 85 Fifth Revised	80	First Revised
83 Original 84 Fifth Revised 85 Fifth Revised	81	Original
84 Fifth Revised 85 Fifth Revised	82	First Revised
85 Fifth Revised	83	·
7104 7	84	Fifth Revised
86 Fifth Revised	85	
	86	Fifth Revised

ISSUED: August 24, 2018 ISSUED BY: /s/Susan L. Fleck Susan L. Fleck President TITLE:

EFFECTIVE: September 01, 2018

<u>Page</u>	<u>Revision</u>					
87	Original					
88	Original					
89	Fourth Revised					
90	Fourth Revised					
91	Original					
92	Original					
93	Original					
94	Original					
95	Original					
96	Original					
97	Original					
98	Original					
99	Original					
100	Original					
101	Original					
102	Original					
103	Original					
104	Original					
105	Original					
106	Original					
107	Original					
108	Original					
109	Original					
110	Original					
111	Original					
112	Original					
113	Original					
114	Original					
115	Original					
116	Original					
117	Original					

ISSUED: August 24, 2018 ISSUED BY: /s/Susan L. Fleck Susan L. Fleck President TITLE:

EFFECTIVE: September 01, 2018

22 FIRM RATE SCHEDULES EXCLUDING KEENE CUSTOMERS

	Rates effective March 1, 2018 - April 30, 2018 Winter Period				Rates Effective September 1, 2018 - October 31, 2018 Summer Period						
	Delivery <u>Charge</u>	Cost of Gas Rate Page 92	LDAC <u>Charge</u>	Total <u>Rate</u>	Delivery <u>Charge</u>		Cost of Gas Rate ge 89		_DAC e 97		Total <u>Rate</u>
Residential Non Heating - R-1 Customer Charge per Month per Meter All therms	\$16.88 \$0.2231	\$0.8056	\$0.0856	\$16.88 \$1.1143	\$ 15.0 \$ 0.393		0.3916	\$	0.0945	\$	15.02 0.8799
Residential Heating - R-3 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$24.43 100 therms \$0.3863 \$0.3197	\$ 0.8056	\$ 0.0856 \$ 0.0856	\$24.43 \$ 1.2775 \$ 1.2109	\$ 15.0 all them \$ 0.563	าร	0.3916	\$	0.0945	\$	15.02 1.0492
Residential Heating - R-4 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$9.77 100 therms \$0.1545 \$0.1278	\$ 0.8056	\$ 0.0856 \$ 0.0856	\$9.77 \$ 1.0457 \$ 1.0190	\$ 6.0 all thern \$ 0.225	าร	0.3916	\$	0.0945	\$	6.00 0.7113
Commercial/Industrial - G-41 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$53.45 100 therms \$0.4383 \$0.2944	\$ 0.8041 \$ 0.8041	\$ 0.0674 \$ 0.0674		\$ 56.5 20 them \$ 0.463 \$ 0.311	ns 9 \$	0.3855 0.3855		0.0763 0.0763		56.58 0.9257 0.7734
Commercial/Industrial - G-42 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$160.36 1000 therms \$0.3986 \$0.2655	\$ 0.8041	\$ 0.0674 \$ 0.0674		\$ 169.7 400 thern \$ 0.421 \$ 0.281	ns 9 \$	0.3855 0.3855		0.0763 0.0763	-	169.75 0.8837 0.7429
Commercial/Industrial - G-43 Customer Charge per Month per Meter All therms over the first block per month at	\$688.20 \$0.2449	\$0.8041	\$0.0674	\$688.20 \$1.1164	\$ 728.4 \$ 0.118		0.3855	\$	0.0763	\$	728.47 0.5803
Commercial/Industrial - G-51 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$53.45 100 therms \$0.2642 \$0.1717	\$ 0.8200	\$ 0.0674 \$ 0.0674	\$53.45 \$ 1.1516 \$ 1.0591	\$ 56.5 100 thern \$ 0.279 \$ 0.181	ns 6 \$	0.4124 0.4124		0.0763 0.0763	-	56.58 0.7683 0.6704
Commercial/Industrial - G-52 Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$160.36 1000 therms \$0.2268 \$0.1511	\$ 0.8200 \$ 0.8200	\$ 0.0674 \$ 0.0674		\$ 169.7 1000 thern \$ 0.174 \$ 0.098	ns 0 \$	0.4124 0.4124		0.0763 0.0763		169.75 0.6627 0.5876
Commercial/Industrial - G-53 Customer Charge per Month per Meter All therms over the first block per month at	\$708.24 \$0.1585	\$0.8200	\$0.0674	\$708.24 \$1.0459	\$ 749.6 \$ 0.080	8	0.4124		0.0763	\$	749.68 0.5692
Commercial/Industrial - G-54 Customer Charge per Month per Meter All therms over the first block per month at	\$708.24 \$0.0605	\$0.8200	\$0.0674	\$708.24 \$0.9479	\$ 749.6 \$ 0.034		0.4124	\$	0.0763	\$ \$	749.68 0.5234

ISSUED: August 24, 2018 ISSUED BY: /s/Susan L. Fleck
Susan L. Fleck

EFFECTIVE: September 01, 2018 TITLE: President

24 FIRM RATE SCHEDULES EXCLUDING KEENE CUSTOMERS – MANAGED EXPANSION PROGRAM

II RATE SCHEDULES FIRM RATE SCHEDULES

Rates effective March 1, 2018 - April 30, 2018
Winter Period
Rates Effective September 1, 2018 - October 31, 2018
Summer Period

	Delivery <u>Charge</u>	Cost of Gas Rate Page 92	LDAC <u>Charge</u>	Total <u>Rate</u>	Delivery <u>Charge</u>	Cost of Gas Rate Page 89	LDAC Page 97	Total <u>Rate</u>
Residential Non Heating - R-5 Customer Charge per Month per Meter All therms	\$21.94 \$0.2900	\$0.8056	\$0.0856	\$21.94 \$1.1812	\$ 19.52 \$ 0.5119			\$ 19.52 \$ 0.9191
Residential Heating - R-6 Customer Charge per Month per Meter All theretas	\$31.76			\$31.76	\$ 19.52 \$ 0.7320		\$ 0.0945	\$ 19.52 \$ 1.1392
Size of the first block Therms in the first block per month at All therms over the first block per month at	\$0.5022 \$0.4156	\$ 0.8056 \$ 0.8056		\$ 1.3934 \$ 1.3068				
Residential Heating - R-7 Customer Charge per Month per Meter All therms Size of the first block Therms in the first block per month at All therms over the first block per month at	\$12.70 100 therms \$0.2009 \$0.1661	\$ 0.8056	\$ 0.0856 \$ 0.0856	\$12.70 \$ 1.0921 \$ 1.0573	\$ 7.81 \$ 0.2928			\$ 7.81 \$ 0.7000
Commercial/Industrial - G-44 Customer Charge per Month per Meter Size of the first block	\$69.49 100 therms	,	,	\$69.49	\$ 73.56 20 therms			\$ 73.56
Therms in the first block per month at All therms over the first block per month at	\$0.5698 \$0.3827	\$ 0.8041 \$ 0.8041	\$ 0.0674 \$ 0.0674	\$ 1.4413 \$ 1.2542	\$ 0.6031 \$ 0.4051	\$ 0.3855		\$ 0.9860 \$ 0.7880
Commercial/Industrial - G-45 Customer Charge per Month per Meter Size of the first block	\$208.47 1000 therms			\$208.47	\$ 220.68 400 therms			\$ 220.68
Therms in the first block per month at All therms over the first block per month at	\$0.5182 \$0.3452	\$ 0.8041 \$ 0.8041	\$ 0.0674 \$ 0.0674	\$ 1.3897 \$ 1.2167	\$ 0.5485 \$ 0.3654			\$ 0.9314 \$ 0.7483
Commercial/Industrial - G-46 Customer Charge per Month per Meter All therms over the first block per month at	\$894.66 \$0.3184	\$0.8041	\$0.0674	\$894.66 \$1.1899	\$ 947.01 \$ 0.1540			\$ 947.01 \$ 0.5369
Commercial/Industrial - G-55 Customer Charge per Month per Meter Size of the first block	\$69.49 100 therms			\$69.49	\$ 73.56			\$ 73.56
Therms in the first block per month at All therms over the first block per month at	\$0.3434 \$0.2232	\$ 0.8200 \$ 0.8200	\$ 0.0674 \$ 0.0674	\$ 1.2308 \$ 1.1106	\$ 0.3635 \$ 0.2363			\$ 0.7733 \$ 0.6461
Commercial/Industrial - G-56 Customer Charge per Month per Meter Size of the first block	\$208.47 1000 therms			\$208.47	\$ 220.68			\$ 220.68
Therms in the first block per month at All therms over the first block per month at	\$0.2949 \$0.1964	\$ 0.8200 \$ 0.8200	\$ 0.0674 \$ 0.0674	\$ 1.1823 \$ 1.0838	\$ 0.2262 \$ 0.1286			\$ 0.6360 \$ 0.5384
Commercial/Industrial - G-57 Customer Charge per Month per Meter All therms over the first block per month at	\$920.72 \$0.2061	\$0.8200	\$0.0674	\$920.72 \$1.0935	\$ 974.59 \$ 0.1047		\$ 0.0763	\$ 974.59 \$ 0.5145
Commercial/Industrial - G-58 Customer Charge per Month per Meter All therms over the first block per month at	\$920.72 \$0.0786	\$0.8200	\$0.0674	\$920.72 \$0.9660	\$ 974.59 \$ 0.0451		\$ 0.0763	\$ 974.59 \$ 0.4549

ISSUED: August 24, 2018 ISSUED BY: /s/Susan L. Fleck

Susan L. Fleck President

EFFECTIVE: September 01, 2018 TITLE:

27 CALCULATION OF FIRM SALES SUMMER PERIOD COST OF GAS RATE EXCLUDING KEENE CUSTOMERS

CALCULATION OF FIRM SALES COST OF GAS RATE
PERIOD COVERED: SUMMER PERIOD, MAY 1, 2018 THROUGH OCTOBER 31, 2018
(Refer to Text in Section 16 Cost of Gas Clause)

		(Col	2)	(Col 3)	
Total Anticipated Direct Cost of Gas Projected Prorated Sales (05/01/18 - 10/31/18) Direct Cost of Gas Rate			899,258 395,370	\$ 0.3042	per therm
Demand Cost of Gas Rate Commodity Cost of Gas Rate Adjustment Cost of Gas Rate Total Direct Cost of Gas Rate		2,;	898,265 \$ 801,331 \$ 800,338) \$	0.1444 (0.0413)	per therm per therm per therm per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (05/01/18 - 10/31/18) Indirect Cost of Gas TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE 05/01/18					per therm
RESIDENTIAL COST OF GAS RATE - 05/01/2018		COGsr		0.3133	/therm
Change in rate due to change in under/over recovery RESIDENTIAL COST OF GAS RATE - 06/01/2018 Change in rate due to change in under/over recovery		COGsr	,	0.0783 0.3916 (0.0789)	/therm
RESIDENTIAL COST OF GAS RATE - 07/01/2018 Change in rate due to change in under/over recovery		COGsr	,	0.3127 0.0538	/therm
RESIDENTIAL COST OF GAS RATE - 08/01/2018 Change in rate due to change in under/over recovery RESIDENTIAL COST OF GAS RATE - 09/01/2018		COGsr	,	0.0251	/therm
		Maximum (COG + 25	%) \$	\$ 0.3916	
COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/2018 Change in rate due to change in under/over recovery		COGsl		0.3299	/therm
COM/IND LOW WINTER USE COST OF GAS RATE - 06/01/2018 Change in rate due to change in under/over recovery		COGsl	*((0.0789)	
COM/IND LOW WINTER USE COST OF GAS RATE - 07/01/2018 Change in rate due to change in under/over recovery COM/IND LOW WINTER USE COST OF GAS RATE - 08/01/2018		COGsl	,	0.0538	/therm
Change in rate due to change in under/over recovery COM/IND LOW WINTER USE COST OF GAS RATE - 09/01/2018		COGsl	,	0.0251	/therm
Average Demand Cost of Gas Rate Effective 05/01/18 Times: Low Winter Use Ratio (Summer) Times: Correction Factor Adjusted Demand Cost of Gas Rate Commodity Cost of Gas Rate Adjustment Cost of Gas Rate Indirect Cost of Gas Rate Adjusted Com/Ind Low Winter Use Cost of Gas Rate	\$ 0.2010 1.0892 9.9942 \$ 0.2177 \$ 0.1444 \$ (0.0413) \$ 0.0091 \$ 0.3299	Maximum (COG + 25	%)	\$ 0.4124	
		COGsh		0.3084	/thorm
COM/IND HIGH WINTER USE COST OF GAS RATE - 05/01/2018 Change in rate due to change in under/over recovery		COGSII	9		/uleilli
COM/IND HIGH WINTER USE COST OF GAS RATE - 05/01/2018 Change in rate due to change in under/over recovery COM/IND HIGH WINTER USE COST OF GAS RATE - 06/01/2018 Change in rate due to change in under/over recovery		COGsh		0.0771	/therm
Change in rate due to change in under/over recovery COM/IND HIGH WINTER USE COST OF GAS RATE - 06/01/2018			<u> </u>	0.0771 0.3855 (0.0789) 0.3066 0.0538	/therm

Average Demand Cost of Gas Rate Effective 05/01/18 Times: High Winter Use Ratio (Summer) Times: Correction Factor	\$ 0.2010 0.9820 0.9942	Maximum (COG + 25%)	\$ 0.3855
Adjusted Demand Cost of Gas Rate	\$ 0.1962		
Commodity Cost of Gas Rate	\$ 0.1444		
Adjustment Cost of Gas Rate	\$ (0.0413)		
Indirect Cost of Gas Rate	\$ 0.0091		
Adjusted Com/Ind High Winter Use Cost of Gas Rate	\$ 0.3084		

ISSUED: August 24, 2018 ISSUED BY: /s/Susan L. Fleck

Susan L. Fleck

EFFECTIVE: September 01, 2018 TITLE: President