

Liberty Utilities (EnergyNorth)
Temporary Rate Increase
Test Year Ended December 31, 2022

Line	Account	Test Year Ended December 31, 2022	Cost of Gas	Adjustments	Distribution Operating Income	Proposed Temporary Increase	With Proposed Temporary Increase
1	Revenue						
2	Operating Revenue	\$ 209,490,317	\$ (110,661,385)	\$ (2,275,787)	\$ 96,553,144	\$ 15,287,114	\$ 111,840,258
3	Decoupling Revenue	8,479,807	(8,479,807)	-	-	-	-
4	Indirect COG Revenue	3,893,588	-	-	3,893,588	-	3,893,588
5	Other Revenue	1,880,466	-	-	1,880,466	-	1,880,466
6	Revenue	\$ 223,744,178	\$ (119,141,193)	\$ (2,275,787)	\$ 102,327,198	\$ 15,287,114	\$ 117,614,312
7							
8	Operating Expenses						
9	Operations and Maintenance - Gas	\$ 114,454,194	\$ (112,232,037)		\$ 2,222,157		\$ 2,222,157
10	Operations and Maintenance - Distribution	13,059,212	-		13,059,212		13,059,212
11	Customer Accounting	3,925,424	782,693		4,708,117		4,708,117
12	Sales & New Business	487,256	-		487,256		487,256
13	Administrative & General	12,266,440	-		12,266,440		12,266,440
14	Depreciation and Amortization	24,926,507	-	(2,944,134)	21,982,372		21,982,372
15	Taxes other than Income Taxes	15,457,322	-		15,457,322		15,457,322
16	Income Taxes	12,188,963	-	(6,358,544)	5,830,419	4,116,056	9,946,475
17	Operating Expenses	\$ 196,765,317	\$ (111,449,344)	\$ (9,302,678)	\$ 76,013,295	\$ 4,116,056	\$ 80,129,350
18							
19	Utility Net Income	\$ 26,978,861	\$ (7,691,849)	\$ 7,026,891	\$ 26,313,903	\$ 11,171,059	\$ 37,484,962
20							
21	Rate Base		<i>Line 48</i>		\$ 527,760,229		\$ 527,760,229
22							
23	Rate of Return on Rate Base				4.99%		7.10%
24							

Line	Description	Reference	Amount
25	Adjustments		
26	Adjust Operating Revenue	RR-3-EN-01	(2,275,787)
27	Adjustment to Operating Revenue	To Line 2	<u>\$ (2,275,787)</u>
28			
29	Adjust CTA, Concord Steam, and Depr Imbalance Amortization	RR-EN-3-5 & 6	\$ (551,702)
30	Adjustment to Amortization Expense	To Line 14	<u>\$ (551,702)</u>
31			
32	EADIT Amortization	RR-EN-3-6	\$ (2,392,432)
33	Adjustment to Amortization Expense	To Line 14	<u>\$ (2,392,432)</u>
34			
35	Historical Test Year Income Taxes	Line 16	\$ 12,188,963
36	Normalized Income Tax Expense	Line 78	5,830,419
37	Adjustment to Income Tax Expense	To Line 16	<u>\$ (6,358,544)</u>
38			
39	Rate Base, 12/31/2022		
40	Utility Plant	RR-EN-5	\$ 818,583,027
41	Accumulated Depreciation	RR-EN-5	(188,019,704)
42	Materials and Supplies	RR-EN-5-1	6,463,310
43	Customer Deposits	RR-EN-5-1	(3,027,697)
44	Cash Working Capital	Line 57	2,967,250
45	Regulatory Assets	RR-EN-5	12,610,917
46	Accumulated Deferred Income Taxes	RR-EN-5	(84,710,759)
47	Excess Accumulated Deferred Income Taxes	RR-EN-5	(37,106,114)
48	Total Rate Base		<u>\$ 527,760,229</u>
49			
50	<u>Cash Working Capital</u>		
51	Operating Expenses, Taxes other than Income Taxes	Sum Line 9 thru 15	\$ 70,182,876
52	Less: Depreciation and Amortization	Line 14	(21,982,372)
53	Income Taxes, Adjusted	Line 78	5,830,419
54	Less: Deferred Income Taxes	RR-EN-2-1-WP	(11,942,273)
55			<u>\$ 42,088,649</u>
56	Cash Working Capital	25.72 days	7.05%
57			<u>\$ 2,967,250</u>
58			

Line	Description	Reference	Amount
59	Normalize Income Tax Expense		
60	Net Income before Adjustments	Line 19	\$ 26,978,861
61	Add Back: Income Tax Expense	Line 16	12,188,963
62	Adjust Cost of Gas & LDAC	Line 19	(7,691,849)
63	Adjust Operating Revenue	Line 27	(2,275,787)
64	Adjust Other Revenue	Line 5	0
65	Adjust Amortization Expense	Line 29	2,944,134
66	Pre-Tax Operating Income, Adjusted		\$ 32,144,322
67			
68	Rate Base	Line 48	\$ 527,760,229
69	Debt Portion	RR-4	45.00%
70	Debt Component		\$ 237,492,103
71	Debt Cost	RR-4	4.417%
72	Synchronized Interest expense		10,490,026
73	Pre-Tax Income	Line 66 - Line 72	\$ 21,654,296
74			
75	Income Tax Rates		21.00% <i>Federal</i>
76			7.50% <i>State</i>
77			26.93% <i>Composite</i>
78	Income Tax Expense - Normalized		5,830,419
79			
80			
81	Temporary Increase Revenue Deficiency		
82	Rate Base	Line 48	\$ 527,760,229
83	Target Rate of Return on Rate Base	Line 95	7.10%
84	Operating Income Requirement		37,484,962
85	Operating Income at Present Rates	Line 19	26,313,903
86	Operating Income Deficiency		11,171,059
87	Income Tax Allowance	From Line 77	4,116,056
88	Revenue Deficiency		15,287,114
89	Additional Income Tax Expense	Line 88- Line 86	\$ 4,116,056
90			
91			
92	<u>Target Rate of Return on Rate Base</u>		
93	Common Equity	Docket DG 20-105 (ROE)	55.00% 9.30% 5.12%
94	Short-Term Debt		0.00% 0.00% 0.00%
95	Long-Term Debt		45.00% 4.417% 1.99%
96			100.00% 7.10%
97			
98			
99	Proposed Temporary Increase	Line 2	\$ 15,287,114
100	Distribution Revenue	Line 6	102,327,198 14.94%
101	Total Revenue	Line 6	\$ 223,744,178 6.83%
102	% of Permanent Increase		54.74%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

1 Winter Season (Jan. - Apr., Nov. - Dec.)
2 Residential Non-Heating (RI)

PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
average Usage (Therms)	25	35	35	33	28	21	177
Winter:							
Cust. Chg	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$106.98
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$13.31	\$18.65	\$18.65	\$17.85	\$14.90	\$11.09	\$94.45
HB Threshold	\$ 0.5345						-
Summer:							
Cust. Chg							
Headblock							
Tailblock	\$ 0.5345						-
HB Threshold							
Total Base Rate Amount	\$31.14	\$36.48	\$36.48	\$35.68	\$32.73	\$28.92	\$201.43
COG Rate - (Winter)	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326
COG amount - Winter	\$3.30	\$4.63	\$4.63	\$4.43	\$3.70	\$2.75	\$23.43
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113
LDAC amount	\$2.77	\$3.88	\$3.88	\$3.72	\$3.10	\$2.31	\$19.67
Total Bill	\$37.22	\$44.99	\$45.00	\$43.82	\$39.52	\$33.98	\$244.53

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
13	11	9	9	11	16	69	246
\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$106.98	\$213.96
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$7.11	\$6.07	\$4.93	\$4.65	\$5.65	\$8.59	\$37.01	\$131.46
\$24.94	\$23.90	\$22.76	\$22.48	\$23.48	\$26.42	\$143.99	\$345.42
\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$0.4351
\$16.07	\$13.70	\$11.13	\$10.51	\$12.76	\$19.40	\$83.58	\$107.01
\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1132
\$1.57	\$1.34	\$1.09	\$1.03	\$1.25	\$1.90	\$8.17	\$27.84
\$42.58	\$38.94	\$34.97	\$34.02	\$37.49	\$47.72	\$235.73	\$480.26

31 Winter Season (Jan. - Apr., Nov. - Dec.)
32 Residential Non-Heating (RI)

CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
average Usage (Therms)	25	35	35	33	28	21	177
Winter:							
Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$11.49	\$16.10	\$16.10	\$15.41	\$12.86	\$9.57	\$81.53
HB Threshold	\$ 0.4614						-
Summer:							
Cust. Chg							
Headblock	\$ 0.4614						-
Tailblock							
HB Threshold							
Total Base Rate Amount	\$26.88	\$31.49	\$31.49	\$30.80	\$28.25	\$24.96	\$173.87
COG Rate - (Winter)	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326
COG amount - Winter	\$3.3031	\$4.6275	\$4.6275	\$4.4279	\$3.6956	\$2.7503	\$23.43
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113
LDAC amount	\$2.77	\$3.88	\$3.88	\$3.72	\$3.10	\$2.31	\$19.67
Total Bill	\$32.96	\$40.00	\$40.00	\$38.94	\$35.05	\$30.02	\$216.97

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
13	11	9	9	11	16	69	246
\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$184.68
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.14	\$5.24	\$4.25	\$4.02	\$4.88	\$7.42	\$31.95	\$113.48
\$21.53	\$20.63	\$19.64	\$19.41	\$20.27	\$22.81	\$124.29	\$298.16
\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$0.4351
\$16.0669	\$13.7035	\$11.1276	\$10.5112	\$12.7620	\$19.4038	\$83.58	\$107.01
\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1132
\$1.57	\$1.34	\$1.09	\$1.03	\$1.25	\$1.90	\$8.17	\$27.84
\$39.17	\$35.67	\$31.86	\$30.95	\$34.28	\$44.11	\$216.03	\$433.00

DIFFERENCE:

Total Bill	\$4.26	\$4.99	\$4.99	\$4.88	\$4.48	\$3.96	\$27.56
% Change	12.93%	12.48%	12.48%	12.53%	12.78%	13.18%	12.70%
Base Rate	\$4.26	\$4.99	\$4.99	\$4.88	\$4.48	\$3.96	\$27.56
% Change	15.85%	15.85%	15.85%	15.85%	15.85%	15.85%	15.85%
COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$3.41	\$3.27	\$3.11	\$3.08	\$3.21	\$3.62	\$19.70	\$47.26
8.71%	9.17%	9.77%	9.94%	9.37%	8.20%	9.12%	10.91%
\$3.41	\$3.27	\$3.11	\$3.08	\$3.21	\$3.62	\$19.70	\$47.26
15.85%	15.85%	15.85%	15.85%	15.85%	15.85%	15.85%	15.85%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (Energy/North Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

71 Winter Season (Jan. - Apr., Nov. - Dec.) 72 Residential Heating (R3)							
73 PROPOSED							
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
74 average Usage (Therms)	80	119	144	137	101	61	642
75							
76							
77 Winter:							
78 Cust. Chg	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$106.98
79 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
80 Tailblock	\$ 0.7143	\$56.90	\$85.20	\$102.73	\$97.80	\$72.23	\$458.62
81 HB Threshold	-						
82							
83 Summer:							
84 Cust. Chg							
85 Headblock							
86 Tailblock	\$ 0.7143						
87 HB Threshold	-						
88							
89 Total Base Rate Amount	\$74.73	\$103.03	\$120.56	\$115.63	\$90.06	\$61.60	\$565.60
90							
91 COG Rate - (Winter)	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326
92 COG amount - Winter	\$10.56	\$15.82	\$19.07	\$18.15	\$13.41	\$8.13	\$85.14
93							
94 COG Rate - (Summer)							
95 COG amount - Summer							
96							
97 LDAC	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113
98 LDAC amount	\$8.87	\$13.28	\$16.01	\$15.24	\$11.25	\$6.82	\$71.46
99							
100 Total Bill	\$94.16	\$132.12	\$155.63	\$149.02	\$114.73	\$76.55	\$722.20

Summer Season (May - Oct.)							
May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
27	17	13	12	18	36	123	765
\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$106.98	\$213.96
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$19.10	\$11.80	\$9.38	\$8.92	\$12.88	\$25.94	\$88.02	\$546.64
\$36.93	\$29.63	\$27.21	\$26.75	\$30.71	\$43.77	\$195.00	\$760.60
\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$0.3056
\$32.27	\$19.93	\$15.85	\$15.07	\$21.77	\$43.84	\$148.74	\$233.88
\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1124
\$3.16	\$1.95	\$1.55	\$1.47	\$2.13	\$4.29	\$14.54	\$86.00
\$72.36	\$51.51	\$44.61	\$43.29	\$54.61	\$91.90	\$358.28	\$1,080.48

101 Winter Season (Jan. - Apr., Nov. - Dec.) 102 Residential Heating (R3)							
103 CURRENT							
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
104 average Usage (Therms)	80	119	144	137	101	61	642
105							
106							
107 Winter:							
108 Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35
109 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
110 Tailblock	\$ 0.6167	\$49.12	\$73.56	\$88.69	\$84.43	\$62.36	\$395.96
111 HB Threshold	-						
112							
113 Summer:							
114 Cust. Chg							
115 Headblock							
116 Tailblock	\$ 0.6167						
117 HB Threshold	-						
118							
119 Total Base Rate Amount	\$64.52	\$88.95	\$104.08	\$99.83	\$77.75	\$53.18	\$488.31
120							
121 COG Rate - (Winter)	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326	\$0.1326
122 COG amount - Winter	\$10.5622	\$15.8163	\$19.0696	\$18.1545	\$13.4089	\$8.1257	\$85.14
123							
124 COG Rate - (Summer)							
125 COG amount - Summer							
126							
127 LDAC	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113
128 LDAC amount	\$8.87	\$13.28	\$16.01	\$15.24	\$11.25	\$6.82	\$71.46
129							
130 Total Bill	\$83.94	\$118.04	\$139.16	\$133.22	\$102.42	\$68.13	\$644.91

Summer Season (May - Oct.)							
May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
27	17	13	12	18	36	123	765
\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35	\$184.71
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$16.49	\$10.18	\$8.10	\$7.70	\$11.12	\$22.3986	\$75.99	\$471.95
\$31.88	\$25.58	\$23.49	\$23.09	\$26.52	\$37.79	\$168.35	\$656.66
\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$0.3056
\$32.2747	\$19.9342	\$15.8507	\$15.0685	\$21.7709	\$43.8420	\$148.74	\$233.88
\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1124
\$3.16	\$1.95	\$1.55	\$1.47	\$2.13	\$4.29	\$14.54	\$86.00
\$67.31	\$47.46	\$40.89	\$39.63	\$50.41	\$85.92	\$331.63	\$976.54

131 DIFFERENCE:							
132 Total Bill	\$10.21	\$14.08	\$16.47	\$15.80	\$12.31	\$8.42	\$77.29
133 % Change	12.17%	11.93%	11.84%	11.86%	12.02%	12.36%	11.98%
134							
135							
136 Base Rate	\$10.21	\$14.08	\$16.47	\$15.80	\$12.31	\$8.42	\$77.29
137 % Change	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
138							
139 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
140 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$5.05	\$4.05	\$3.72	\$3.66	\$4.20	\$5.98	\$26.65	\$103.94
7.50%	8.53%	9.10%	9.22%	8.33%	6.96%	8.04%	10.64%
\$5.05	\$4.05	\$3.72	\$3.66	\$4.20	\$5.98	\$26.65	\$103.94
15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (Energy/North Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

141 Winter Season (Jan. - Apr., Nov. - Dec.)
142 Low Income Residential Heating (R4)

PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
average Usage (Therms)	64	97	138	131	99	61	590
Winter:							
Cust. Chg	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$9.81	\$58.86
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$ 0.7143	\$25.18	\$38.05	\$54.05	\$51.35	\$38.97	\$231.62
HB Threshold	-						
Summer:							
Cust. Chg							
Headblock							
Tailblock	\$ 0.3929						
HB Threshold	-						
Total Base Rate Amount	\$34.99	\$47.86	\$63.86	\$61.16	\$48.78	\$33.82	\$290.48
COG Rate - (Winter)	\$0.0729	\$0.0729	\$0.0729	\$0.0729	\$0.0729	\$0.0729	\$0.0729
COG amount - Winter	\$4.6725	\$7.0599	\$10.0279	\$9.5285	\$7.2315	\$4.4550	\$42.98
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113
LDAC amount	\$7.13	\$10.78	\$15.31	\$14.55	\$11.04	\$6.80	\$65.61
Total Bill	\$46.80	\$65.70	\$89.19	\$85.24	\$67.06	\$45.08	\$399.07

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
27	17	14	13	16	30	117	706
\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$17.83	\$106.98	\$165.84
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$19.29	\$12.0616	\$9.7290	\$8.9666	\$11.7492	\$21.6946	\$83.49	\$315.11
\$37.12	\$29.89	\$27.56	\$26.80	\$29.58	\$39.52	\$190.47	\$480.95
\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$0.2606
\$32.60	\$20.38	\$16.44	\$15.15	\$19.85	\$36.66	\$141.09	\$184.07
\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1124
\$3.19	\$1.99	\$1.61	\$1.48	\$1.94	\$3.58	\$13.79	\$79.40
\$72.90	\$52.27	\$45.61	\$43.43	\$51.38	\$79.77	\$345.35	\$744.42

171 Winter Season (Jan. - Apr., Nov. - Dec.)
172 Low Income Residential Heating (R4)

CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
average Usage (Therms)	64	97	138	131	99	61	590
Winter:							
Cust. Chg	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$50.79
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$ 0.6167	\$21.74	\$32.85	\$46.66	\$44.34	\$33.65	\$199.96
HB Threshold	-						
Summer:							
Cust. Chg							
Headblock							
Tailblock	\$ 0.3392						
HB Threshold	-						
Total Base Rate Amount	\$30.21	\$41.31	\$55.13	\$52.80	\$42.11	\$29.19	\$250.76
COG Rate - (Winter)	\$0.0729	\$0.0729	\$0.0729	\$0.0729	\$0.0729	\$0.0729	\$0.0729
COG amount - Winter	\$4.6725	\$7.0599	\$10.0279	\$9.5285	\$7.2315	\$4.4550	\$42.98
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	0.1113
LDAC amount	\$7.13	\$10.78	\$15.31	\$14.55	\$11.04	\$6.80	\$65.61
Total Bill	\$42.01	\$59.15	\$80.46	\$76.88	\$60.39	\$40.45	\$359.34

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
27	17	14	13	16	30	117	706
\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35	\$143.15
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$16.6539	\$10.41	\$8.40	\$7.74	\$10.14	\$18.73	\$72.08	\$272.04
\$32.05	\$25.81	\$23.79	\$23.13	\$25.54	\$34.12	\$164.44	\$415.19
\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$1.2071	\$0.2606
\$32.5975	\$20.3829	\$16.4411	\$15.1527	\$19.8550	\$36.6619	\$141.09	\$184.07
\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1124
\$3.19	\$1.99	\$1.61	\$1.48	\$1.94	\$3.58	\$13.79	\$79.40
\$67.83	\$48.18	\$41.84	\$39.77	\$47.33	\$74.37	\$319.32	\$678.66

DIFFERENCE:

Total Bill	\$4.79	\$6.54	\$8.73	\$8.36	\$6.67	\$4.63	\$39.72
% Change	11.39%	11.06%	10.85%	10.88%	11.05%	11.44%	11.05%
Base Rate	\$4.79	\$6.54	\$8.73	\$8.36	\$6.67	\$4.63	\$39.72
% Change	15.84%	15.84%	15.84%	15.84%	15.84%	15.84%	15.84%
COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$5.07	\$4.09	\$3.77	\$3.66	\$4.04	\$5.40	\$26.03	\$65.76
7.48%	8.48%	9.00%	9.21%	8.54%	7.26%	8.15%	9.69%
\$5.07	\$4.09	\$3.77	\$3.66	\$4.04	\$5.40	\$26.03	\$65.76
15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.84%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

211 Winter Season (Jan. - Apr., Nov. - Dec.)

212 Commercial/Industrial - Low Annual Use, High Winter Use (G-41)

213 PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
214 average Usage (Therms)	266	421	523	495	351	196	2,252
217 Winter:							
218 Cust. Chg	\$70.44	\$70.44	\$70.44	\$70.44	\$70.44	\$70.44	\$422.64
219 Headblock \$ 0.5708	\$57.08	\$57.08	\$57.08	\$57.08	\$57.08	\$57.08	\$342.48
220 Tailblock \$ 0.3927	\$65.10	\$126.21	\$166.15	\$155.15	\$98.42	\$37.66	\$648.68
221 HB Threshold 100							
222							
223 Summer:							
224 Cust. Chg							
225 Headblock \$ 0.5708							
226 Tailblock \$ 0.3927							
227 HB Threshold 20							
228							
229 Total Base Rate Amount	\$192.62	\$253.73	\$293.67	\$282.67	\$225.94	\$165.18	\$1,413.80
230							
231 COG Rate - (Winter)	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327
232 COG amount - Winter	\$35.2684	\$55.9187	\$69.4152	\$65.6963	\$46.5266	\$25.9956	\$298.82
233							
234 COG Rate - (Summer)							
235 COG amount - Summer							
236							
237 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
238 LDAC amount	\$23.65	\$37.50	\$46.56	\$44.06	\$31.20	\$17.43	\$200.41
239							
240 Total Bill	\$251.54	\$347.15	\$409.64	\$392.42	\$303.67	\$208.61	\$1,913.04

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
72	36	27	25	44	104	308	2,560
\$70.44	\$70.44	\$70.44	\$70.44	\$70.44	\$70.44	\$422.64	\$845.28
\$11.42	\$11.42	\$11.42	\$11.42	\$11.42	\$11.42	\$68.50	\$410.98
\$20.55	\$6.26	\$2.55	\$1.91	\$9.46	\$33.17	\$73.91	\$722.59
\$102.40	\$88.12	\$84.41	\$83.77	\$91.31	\$115.03	\$565.04	\$1,978.84
\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$0.2621
\$87.32	\$43.41	\$32.00	\$30.02	\$53.22	\$126.15	\$372.12	\$670.94
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0898
\$6.92	\$3.44	\$2.54	\$2.38	\$4.22	\$10.00	\$29.49	\$229.91
\$196.64	\$134.97	\$118.95	\$116.17	\$148.75	\$251.17	\$966.66	\$2,879.69

241 Winter Season (Jan. - Apr., Nov. - Dec.)

242 Commercial/Industrial - Low Annual Use, High Winter Use (G-41)

243 CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
244 average Usage (Therms)	266	421	523	495	351	196	2,252
247 Winter:							
248 Cust. Chg	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$364.89
249 Headblock \$ 0.4928	\$49.28	\$49.28	\$49.28	\$49.28	\$49.28	\$49.28	\$295.68
250 Tailblock \$ 0.3390	\$56.20	\$108.95	\$143.43	\$133.93	\$84.96	\$32.51	\$559.98
251 HB Threshold 100							
252							
253 Summer:							
254 Cust. Chg							
255 Headblock \$ 0.4928							
256 Tailblock \$ 0.3390							
257 HB Threshold 20							
258							
259 Total Base Rate Amount	\$166.29	\$219.05	\$253.53	\$244.02	\$195.05	\$142.60	\$1,220.55
260							
261 COG Rate - (Winter)	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327
262 COG amount - Winter	\$35.2684	\$55.9187	\$69.4152	\$65.6963	\$46.5266	\$25.9956	\$298.82
263							
264 COG Rate - (Summer)							
265 COG amount - Summer							
266							
267 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
268 LDAC amount	\$23.65	\$37.50	\$46.56	\$44.06	\$31.20	\$17.43	\$200.41
269							
270 Total Bill	\$225.21	\$312.47	\$369.50	\$353.78	\$272.78	\$186.03	\$1,719.78

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
72	36	27	25	44	104	308	2,560
\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$60.81	\$364.89	\$729.78
\$9.86	\$9.86	\$9.86	\$9.86	\$9.86	\$9.86	\$59.14	\$354.82
\$17.74	\$5.41	\$2.20	\$1.65	\$8.16	\$28.64	\$63.80	\$623.78
\$88.41	\$76.08	\$72.88	\$72.32	\$78.83	\$99.31	\$487.82	\$1,708.37
\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$0.2621
\$87.32	\$43.41	\$32.00	\$30.02	\$53.22	\$126.15	\$372.12	\$670.94
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0898
\$6.92	\$3.44	\$2.54	\$2.38	\$4.22	\$10.00	\$29.49	\$229.91
\$182.65	\$122.93	\$107.41	\$104.72	\$136.27	\$235.45	\$889.44	\$2,609.22

271 DIFFERENCE:

273 Total Bill	\$26.33	\$34.68	\$40.15	\$38.64	\$30.88	\$22.58	\$193.26
274 % Change	11.69%	11.10%	10.87%	10.92%	11.32%	12.13%	11.24%
275							
276 Base Rate	\$26.33	\$34.68	\$40.15	\$38.64	\$30.88	\$22.58	\$193.26
277 % Change	15.83%	15.83%	15.84%	15.83%	15.83%	15.83%	15.83%
278							
279 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
280 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$13.99	\$12.04	\$11.53	\$11.45	\$12.48	\$15.72	\$77.22	\$270.48
7.66%	9.80%	10.74%	10.93%	9.16%	6.68%	8.68%	10.37%
\$13.99	\$12.04	\$11.53	\$11.45	\$12.48	\$15.72	\$77.22	\$270.48
15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

281 Winter Season (Jan. - Apr., Nov. - Dec.)

282 Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)

283 PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
284 average Usage (Therms)	2,572	3,720	4,472	4,295	3,196	1,965	20,220
287 Winter:							
288 Cust. Chg	\$211.30	\$211.30	\$211.30	\$211.30	\$211.30	\$211.30	\$1,267.80
289 Headblock \$ 0.5195	\$519.50	\$519.50	\$519.50	\$519.50	\$519.50	\$519.50	\$3,117.00
290 Tailblock \$ 0.3548	\$557.82	\$964.96	\$1,231.87	\$1,169.19	\$779.29	\$342.24	\$5,045.37
291 HB Threshold 1,000							
292							
293 Summer:							
294 Cust. Chg							
295 Headblock \$ 0.5195							
296 Tailblock \$ 0.3548							
297 HB Threshold 400							
298							
299 Total Base Rate Amount	\$1,288.62	\$1,695.76	\$1,962.67	\$1,899.99	\$1,510.09	\$1,073.04	\$9,430.17
300							
301 COG Rate - (Winter)	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327
302 COG amount - Winter	\$341.33	\$493.61	\$593.44	\$569.99	\$424.16	\$260.70	\$2,683.24
303							
304 COG Rate - (Summer)							
305 COG amount - Summer							
306							
307 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
308 LDAC amount	\$228.93	\$331.06	\$398.01	\$382.29	\$284.48	\$174.85	\$1,799.61
309							
310 Total Bill	\$1,858.88	\$2,520.43	\$2,954.11	\$2,852.28	\$2,218.73	\$1,508.59	\$13,913.02

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
819	445	332.59	333.46	570	1,228	3,728	23,949
\$211.30	\$211.30	\$211.30	\$211.30	\$211.30	\$211.30	\$1,267.80	\$2,535.60
\$207.80	\$207.80	\$172.78	\$173.23	\$207.80	\$207.80	\$1,177.21	\$4,294.21
\$148.60	\$16.05	\$0.00	\$0.00	\$60.46	\$293.78	\$518.88	\$5,564.25
\$567.70	\$435.15	\$384.08	\$384.53	\$479.56	\$712.88	\$2,963.89	\$12,394.06
\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$0.3000
\$988.65	\$537.56	\$401.57	\$402.61	\$688.70	\$1,482.69	\$4,501.79	\$7,185.03
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0900
\$78.36	\$42.61	\$31.83	\$31.91	\$54.59	\$117.52	\$356.82	\$2,156.43
\$1,634.71	\$1,015.32	\$817.48	\$819.06	\$1,222.85	\$2,313.09	\$7,822.50	\$21,735.51

311 Winter Season (Jan. - Apr., Nov. - Dec.)

312 Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)

313 CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
314 average Usage (Therms)	2,572	3,720	4,472	4,295	3,196	1,965	20,220
317 Winter:							
318 Cust. Chg	\$182.42	\$182.42	\$182.42	\$182.42	\$182.42	\$182.42	\$1,094.53
319 Headblock \$ 0.4485	\$448.50	\$448.50	\$448.50	\$448.50	\$448.50	\$448.50	\$2,691.00
320 Tailblock \$ 0.3063	\$481.57	\$833.05	\$1,063.48	\$1,009.37	\$672.76	\$295.45	\$4,355.68
321 HB Threshold 1,000							
322							
323 Summer:							
324 Cust. Chg							
325 Headblock \$ 0.4485							
326 Tailblock \$ 0.3063							
327 HB Threshold 400							
328							
329 Total Base Rate Amount	\$1,112.49	\$1,463.97	\$1,694.40	\$1,640.29	\$1,303.68	\$926.38	\$8,141.21
330							
331 COG Rate - (Winter)	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327
332 COG amount - Winter	\$341.3331	\$493.6084	\$593.4356	\$569.9944	\$424.1640	\$260.7014	\$2,683.24
333							
334 COG Rate - (Summer)							
335 COG amount - Summer							
336							
337 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
338 LDAC amount	\$228.93	\$331.06	\$398.01	\$382.29	\$284.48	\$174.85	\$1,799.61
339							
340 Total Bill	\$1,682.75	\$2,288.64	\$2,685.84	\$2,592.57	\$2,012.33	\$1,361.93	\$12,624.06

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
819	445	333	333	570	1,228	3,728	23,949
\$182.42	\$182.42	\$182.42	\$182.42	\$182.42	\$182.42	\$1,094.53	\$2,189.05
\$179.40	\$179.40	\$149.17	\$149.55	\$179.40	\$179.40	\$1,016.32	\$3,707.32
\$128.29	\$13.85	\$0.00	\$0.00	\$52.19	\$253.62	\$447.95	\$4,803.63
\$490.11	\$375.67	\$331.59	\$331.98	\$414.02	\$615.44	\$2,558.80	\$10,700.01
\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$0.3000
\$988.65	\$537.56	\$401.57	\$402.61	\$688.70	\$1,482.69	\$4,501.79	\$7,185.03
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0900
\$78.36	\$42.61	\$31.83	\$31.91	\$54.59	\$117.52	\$356.82	\$2,156.43
\$1,557.12	\$955.84	\$764.98	\$766.50	\$1,157.31	\$2,215.65	\$7,417.40	\$20,041.46

342 DIFFERENCE:

343 Total Bill	\$176.13	\$231.79	\$268.27	\$259.70	\$206.41	\$146.66	\$1,288.96
344 % Change	10.47%	10.13%	9.99%	10.02%	10.26%	10.77%	10.21%
345							
346 Base Rate	\$176.13	\$231.79	\$268.27	\$259.70	\$206.41	\$146.66	\$1,288.96
347 % Change	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
348							
349 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
350 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$77.59	\$59.47	\$52.49	\$52.55	\$65.54	\$97.44	\$405.09	\$1,694.05
4.98%	6.22%	6.86%	6.86%	5.66%	4.40%	5.46%	8.45%
\$77.59	\$59.47	\$52.49	\$52.55	\$65.54	\$97.44	\$405.09	\$1,694.05
15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

351 Winter Season (Jan. - Apr., Nov. - Dec.)

352 Commercial/Industrial - High Annual Use, High Winter Use (G-43)

353 PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
354 average Usage (Therms)	20,835	27,418	33,202	31,104	25,329	17,425	155,312
355 Winter:							
356 Cust. Chg	\$904.85	\$904.85	\$904.85	\$904.85	\$904.85	\$904.85	\$5,429.10
357 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
358 Tailblock \$ 0.3204	\$6,675.42	\$8,784.63	\$10,637.98	\$9,965.76	\$8,115.29	\$5,583.02	\$49,762.10
359 HB Threshold	-	-	-	-	-	-	-
360 Summer:							
361 Cust. Chg	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
362 Headblock \$ 0.1557	\$1,335.89	\$890.42	\$699.28	\$752.72	\$977.06	\$2,030.80	\$6,686.16
363 Tailblock	-	-	-	-	-	-	-
364 HB Threshold	-	-	-	-	-	-	-
365 Total Base Rate Amount	\$7,580.27	\$9,689.48	\$11,542.83	\$10,870.61	\$9,020.14	\$6,487.87	\$55,191.20
366 COG Rate - (Winter)	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327
367 COG amount - Winter	\$2,764.7559	\$3,638.3292	\$4,405.9290	\$4,127.5187	\$3,361.1090	\$2,312.3172	\$20,609.96
368 COG Rate - (Summer)	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074
369 COG amount - Summer	\$10,359.33	\$6,904.86	\$5,422.69	\$5,837.07	\$7,576.74	\$15,748.18	\$51,848.87
370 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
371 LDAC amount	\$1,854.28	\$2,440.18	\$2,954.99	\$2,768.27	\$2,254.25	\$1,550.84	\$13,822.81
372 Total Bill	\$12,199.30	\$15,767.99	\$18,903.75	\$17,766.40	\$14,635.50	\$10,351.02	\$89,623.97

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
8,580	5,719	4,491	4,834	6,275	13,043	42,943	198,255
\$904.85	\$904.85	\$904.85	\$904.85	\$904.85	\$904.85	\$5,429.10	\$10,858.20
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,335.89	\$890.42	\$699.28	\$752.72	\$977.06	\$2,030.80	\$6,686.16	\$56,448.26
\$2,240.74	\$1,795.27	\$1,604.13	\$1,657.57	\$1,881.91	\$2,935.65	\$12,115.26	\$67,306.46
\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$0.3655
\$10,359.33	\$6,904.86	\$5,422.69	\$5,837.07	\$7,576.74	\$15,748.18	\$51,848.87	\$72,458.83
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0905
\$821.09	\$547.29	\$429.81	\$462.65	\$600.54	\$1,248.22	\$4,109.61	\$17,932.41
\$13,421.16	\$9,247.42	\$7,456.63	\$7,957.30	\$10,059.18	\$19,932.05	\$68,073.74	\$157,697.70

381 Winter Season (Jan. - Apr., Nov. - Dec.)

382 Commercial/Industrial - High Annual Use, High Winter Use (G-43)

383 CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
384 average Usage (Therms)	20,835	27,418	33,202	31,104	25,329	17,425	155,312
385 Winter:							
386 Cust. Chg	\$781.17	\$781.17	\$781.17	\$781.17	\$781.17	\$781.17	\$4,687.02
387 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
388 Tailblock \$ 0.2766	\$5,762.86	\$7,583.74	\$9,183.72	\$8,603.40	\$7,005.90	\$4,819.80	\$42,959.42
389 HB Threshold	-	-	-	-	-	-	-
390 Summer:							
391 Cust. Chg	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
392 Headblock \$ 0.1344	\$1,153.13	\$768.60	\$603.62	\$649.75	\$843.39	\$1,752.99	\$5,771.48
393 Tailblock	-	-	-	-	-	-	-
394 HB Threshold	-	-	-	-	-	-	-
395 Total Base Rate Amount	\$6,544.03	\$8,364.91	\$9,964.89	\$9,384.57	\$7,787.07	\$5,600.97	\$47,646.43
396 COG Rate - (Winter)	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327	\$0.1327
397 COG amount - Winter	\$2,764.7559	\$3,638.3292	\$4,405.9290	\$4,127.5187	\$3,361.1090	\$2,312.3172	\$20,609.96
398 COG Rate - (Summer)	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074
399 COG amount - Summer	\$10,359.33	\$6,904.86	\$5,422.69	\$5,837.07	\$7,576.74	\$15,748.18	\$51,848.87
400 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
401 LDAC amount	\$1,854.28	\$2,440.18	\$2,954.99	\$2,768.27	\$2,254.25	\$1,550.84	\$13,822.81
402 Total Bill	\$11,163.07	\$14,443.41	\$17,325.81	\$16,280.36	\$13,402.42	\$9,464.12	\$82,079.20

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
8,580	5,719	4,491	4,834	6,275	13,043	42,943	198,255
\$781.17	\$781.17	\$781.17	\$781.17	\$781.17	\$781.17	\$4,687.02	\$9,374.03
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,153.13	\$768.60	\$603.62	\$649.75	\$843.39	\$1,752.99	\$5,771.48	\$48,730.90
\$1,934.30	\$1,549.77	\$1,384.79	\$1,430.91	\$1,624.56	\$2,534.15	\$10,458.50	\$58,104.93
\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$1.2074	\$0.3655
\$10,359.33	\$6,904.86	\$5,422.69	\$5,837.07	\$7,576.74	\$15,748.18	\$51,848.87	\$72,458.83
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0905
\$821.09	\$547.29	\$429.81	\$462.65	\$600.54	\$1,248.22	\$4,109.61	\$17,932.41
\$13,114.73	\$9,001.93	\$7,237.29	\$7,730.64	\$9,801.84	\$19,530.55	\$66,416.98	\$148,496.17

412 DIFFERENCE:

413 Total Bill	\$1,036.24	\$1,324.58	\$1,577.94	\$1,486.04	\$1,233.07	\$886.90	\$7,544.77
414 % Change	9.28%	9.17%	9.11%	9.13%	9.20%	9.37%	9.19%
415 Base Rate	\$1,036.24	\$1,324.58	\$1,577.94	\$1,486.04	\$1,233.07	\$886.90	\$7,544.77
416 % Change	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
417 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
418 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$306.43	\$245.49	\$219.34	\$226.65	\$257.34	\$401.50	\$1,656.76	\$9,201.53
2.34%	2.73%	3.03%	2.93%	2.63%	2.06%	2.49%	6.20%
\$306.43	\$245.49	\$219.34	\$226.65	\$257.34	\$401.50	\$1,656.76	\$9,201.53
15.84%	15.84%	15.84%	15.84%	15.84%	15.84%	15.84%	15.84%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (Energy/North Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

421 Winter Season (Jan. - Apr., Nov. - Dec.)

422 Commercial/Industrial - Low Annual Use, Low Winter Use (G-51)

423 PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
424 average Usage (Therms)	289	347	393	372	315	255	1,972
427 Winter:							
428 Cust. Chg	\$70.51	\$70.51	\$70.51	\$70.51	\$70.51	\$70.51	\$423.06
429 Headblock \$ 0.3440	\$34.40	\$34.40	\$34.40	\$34.40	\$34.40	\$34.40	\$206.40
430 Tailblock \$ 0.2297	\$43.47	\$56.73	\$67.37	\$62.58	\$49.30	\$35.61	\$315.06
431 HB Threshold 100							
432							
433 Summer:							
434 Cust. Chg							
435 Headblock \$ 0.3440							
436 Tailblock \$ 0.2297							
437 HB Threshold 100							
438							
439 Total Base Rate Amount	\$148.38	\$161.64	\$172.28	\$167.49	\$154.21	\$140.52	\$944.52
440							
441 COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
442 COG amount - Winter	\$38.2380	\$45.8703	\$51.9946	\$49.2367	\$41.5924	\$33.7176	\$260.65
443							
444 COG Rate - (Summer)							
445 COG amount - Summer							
446							
447 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
448 LDAC amount	\$25.74	\$30.88	\$35.00	\$33.15	\$28.00	\$22.70	\$175.48
449							
450 Total Bill	\$212.36	\$238.39	\$259.28	\$249.87	\$223.80	\$196.94	\$1,380.65

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
205	205	186	174	196	257	1,223	3,195
\$70.51	\$70.51	\$70.51	\$70.51	\$70.51	\$70.51	\$423.06	\$846.12
\$34.40	\$34.40	\$34.40	\$34.40	\$34.40	\$34.40	\$206.40	\$412.80
\$24.06	\$24.12	\$19.75	\$17.02	\$22.11	\$36.13	\$143.20	\$458.26
\$128.97	\$129.03	\$124.66	\$121.93	\$127.02	\$141.04	\$772.66	\$1,717.18
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.5437
\$247.08	\$247.43	\$224.42	\$210.12	\$236.87	\$310.50	\$1,476.41	\$1,737.06
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0916
\$19.59	\$19.62	\$17.80	\$16.66	\$18.78	\$24.62	\$117.08	\$292.56
\$395.64	\$396.08	\$366.87	\$348.71	\$382.68	\$476.16	\$2,366.14	\$3,746.79

451 Winter Season (Jan. - Apr., Nov. - Dec.)

452 Commercial/Industrial - Low Annual Use, Low Winter Use (G-51)

453 CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
454 average Usage (Therms)	289	347	393	372	315	255	1,972
457 Winter:							
458 Cust. Chg	\$60.87	\$60.87	\$60.87	\$60.87	\$60.87	\$60.87	\$365.22
459 Headblock \$ 0.2970	\$29.70	\$29.70	\$29.70	\$29.70	\$29.70	\$29.70	\$178.20
460 Tailblock \$ 0.1983	\$37.53	\$48.98	\$58.16	\$54.03	\$42.56	\$30.75	\$271.99
461 HB Threshold 100							
462							
463 Summer:							
464 Cust. Chg							
465 Headblock \$ 0.2970							
466 Tailblock \$ 0.1983							
467 HB Threshold 100							
468							
469 Total Base Rate Amount	\$128.10	\$139.55	\$148.73	\$144.60	\$133.13	\$121.32	\$815.42
470							
471 COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
472 COG amount - Winter	\$38.2380	\$45.8703	\$51.9946	\$49.2367	\$41.5924	\$33.7176	\$260.65
473							
474 COG Rate - (Summer)							
475 COG amount - Summer							
476							
477 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
478 LDAC amount	\$25.74	\$30.88	\$35.00	\$33.15	\$28.00	\$22.70	\$175.48
479							
480 Total Bill	\$192.08	\$216.30	\$235.73	\$226.98	\$202.72	\$177.73	\$1,251.54

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
205	205	186	174	196	257	1,223	3,195
\$60.87	\$60.87	\$60.87	\$60.87	\$60.87	\$60.87	\$365.22	\$730.45
\$29.70	\$29.70	\$29.70	\$29.70	\$29.70	\$29.70	\$178.20	\$356.40
\$20.77	\$20.83	\$17.05	\$14.70	\$19.09	\$31.19	\$123.62	\$395.62
\$111.34	\$111.40	\$107.62	\$105.27	\$109.66	\$121.76	\$667.05	\$1,482.46
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.5437
\$247.08	\$247.43	\$224.42	\$210.12	\$236.87	\$310.50	\$1,476.41	\$1,737.06
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0916
\$19.59	\$19.62	\$17.80	\$16.66	\$18.78	\$24.62	\$117.08	\$292.56
\$378.01	\$378.44	\$349.83	\$332.05	\$365.31	\$456.88	\$2,260.53	\$3,512.08

481 DIFFERENCE:

483 Total Bill	\$20.28	\$22.09	\$23.55	\$22.89	\$21.08	\$19.21	\$129.11
484 % Change	10.56%	10.21%	9.99%	10.09%	10.40%	10.81%	10.32%
485							
486 Base Rate	\$20.28	\$22.09	\$23.55	\$22.89	\$21.08	\$19.21	\$129.11
487 % Change	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
488							
489 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
490 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$17.63	\$17.64	\$17.04	\$16.67	\$17.36	\$19.28	\$105.61	\$234.72
4.66%	4.66%	4.87%	5.02%	4.75%	4.22%	4.67%	6.68%
\$17.63	\$17.64	\$17.04	\$16.67	\$17.36	\$19.28	\$105.61	\$234.72
15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

491 Winter Season (Jan. - Apr., Nov. - Dec.)

492 Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)

493 PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
494 average Usage (Therms)	1,916	2,288	2,709	2,529	2,176	1,766	13,384
497 Winter:							
498 Cust. Chg	\$211.12	\$211.12	\$211.12	\$211.12	\$211.12	\$211.12	\$1,266.72
499 Headblock \$ 0.2965	\$296.50	\$296.50	\$296.50	\$296.50	\$296.50	\$296.50	\$1,779.00
500 Tailblock \$ 0.2026	\$185.56	\$260.95	\$346.29	\$309.77	\$238.29	\$155.19	\$1,496.06
501 HB Threshold 1,000							
502 Summer:							
503 Cust. Chg							
504 Headblock \$ 0.2190							
505 Tailblock \$ 0.1311							
506 HB Threshold 1,000							
507 Total Base Rate Amount	\$693.18	\$768.57	\$853.91	\$817.39	\$745.91	\$662.81	\$4,541.78
508 COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
509 COG amount - Winter	\$253.2804	\$302.4718	\$358.1631	\$334.3335	\$287.6911	\$233.4658	\$1,769.41
510 COG Rate - (Summer)							
511 COG amount - Summer							
512 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
513 LDAC amount	\$170.51	\$203.63	\$241.12	\$225.08	\$193.68	\$157.17	\$1,191.20
514 Total Bill	\$1,116.97	\$1,274.67	\$1,453.20	\$1,376.81	\$1,227.29	\$1,053.45	\$7,502.39

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
1,399	1,382	1,237	1,246	1,341	1,653	8,259	21,644
\$211.12	\$211.12	\$211.12	\$211.12	\$211.12	\$211.12	\$1,266.72	\$2,533.44
\$219.00	\$219.00	\$219.00	\$219.00	\$219.00	\$219.00	\$1,314.00	\$3,093.00
\$52.36	\$50.13	\$31.06	\$32.31	\$44.70	\$85.62	\$296.18	\$1,792.24
\$482.48	\$480.25	\$461.18	\$462.43	\$474.82	\$515.74	\$2,876.90	\$7,418.68
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.5423
\$1,688.81	\$1,668.21	\$1,492.71	\$1,504.22	\$1,618.29	\$1,994.96	\$9,967.21	\$11,736.61
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0916
\$133.92	\$132.29	\$118.37	\$119.29	\$128.33	\$158.20	\$790.41	\$1,981.61
\$2,305.22	\$2,280.75	\$2,072.27	\$2,085.93	\$2,221.45	\$2,668.90	\$13,634.52	\$21,136.91

521 Winter Season (Jan. - Apr., Nov. - Dec.)

522 Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)

523 CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
524 average Usage (Therms)	1,916	2,288	2,709	2,529	2,176	1,766	13,384
527 Winter:							
528 Cust. Chg	\$182.26	\$182.26	\$182.26	\$182.26	\$182.26	\$182.26	\$1,093.58
529 Headblock \$ 0.2560	\$256.00	\$256.00	\$256.00	\$256.00	\$256.00	\$256.00	\$1,536.00
530 Tailblock \$ 0.1749	\$160.19	\$225.27	\$298.95	\$267.42	\$205.71	\$133.97	\$1,291.52
531 HB Threshold 1,000							
532 Summer:							
533 Cust. Chg							
534 Headblock \$ 0.1891							
535 Tailblock \$ 0.1132							
536 HB Threshold 1,000							
537 Total Base Rate Amount	\$598.45	\$663.53	\$737.21	\$705.68	\$643.98	\$572.24	\$3,921.10
538 COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
539 COG amount - Winter	\$253.2804	\$302.4718	\$358.1631	\$334.3335	\$287.6911	\$233.4658	\$1,769.41
540 COG Rate - (Summer)							
541 COG amount - Summer							
542 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
543 LDAC amount	\$170.51	\$203.63	\$241.12	\$225.08	\$193.68	\$157.17	\$1,191.20
544 Total Bill	\$1,022.25	\$1,169.63	\$1,336.50	\$1,265.10	\$1,125.35	\$962.88	\$6,881.70

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
1,399	1,382	1,237	1,246	1,341	1,653	8,259	21,644
\$182.26	\$182.26	\$182.26	\$182.26	\$182.26	\$182.26	\$1,093.58	\$2,187.16
\$189.10	\$189.10	\$189.10	\$189.10	\$189.10	\$189.10	\$1,134.60	\$2,670.60
\$45.21	\$43.28	\$26.82	\$27.90	\$38.60	\$73.93	\$255.74	\$1,547.26
\$416.58	\$414.64	\$398.18	\$399.26	\$409.96	\$445.29	\$2,483.92	\$6,405.02
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.5423
\$1,688.81	\$1,668.21	\$1,492.71	\$1,504.22	\$1,618.29	\$1,994.96	\$9,967.21	\$11,736.61
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0916
\$133.92	\$132.29	\$118.37	\$119.29	\$128.33	\$158.20	\$790.41	\$1,981.61
\$2,239.31	\$2,215.15	\$2,009.27	\$2,022.76	\$2,156.59	\$2,598.46	\$13,241.54	\$20,123.24

552 DIFFERENCE:

553 Total Bill	\$94.73	\$105.03	\$116.70	\$111.71	\$101.94	\$90.58	\$620.69
554 % Change	9.27%	8.98%	8.73%	8.83%	9.06%	9.41%	9.02%
555 Base Rate	\$94.73	\$105.03	\$116.70	\$111.71	\$101.94	\$90.58	\$620.69
556 % Change	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%	15.83%
557 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
558 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$65.91	\$65.60	\$63.00	\$63.17	\$64.86	\$70.45	\$392.98	\$1,013.67
2.94%	2.96%	3.14%	3.12%	3.01%	2.71%	2.97%	5.04%
\$65.91	\$65.60	\$63.00	\$63.17	\$64.86	\$70.45	\$392.98	\$1,013.67
15.82%	15.82%	15.82%	15.82%	15.82%	15.82%	15.82%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line
No

561 Winter Season (Jan. - Apr., Nov. - Dec.)

562 Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)							
563 PROPOSED							
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
564 average Usage (Therms)	26,393	30,514	34,284	31,537	28,621	23,002	174,351
565 Winter:							
566 Cust. Chg	\$933.33	\$933.33	\$933.33	\$933.33	\$933.33	\$933.33	\$5,599.98
567 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
568 Tailblock	\$5,471.30	\$6,325.48	\$7,107.05	\$6,537.65	\$5,933.24	\$4,768.23	\$36,142.95
569 HB Threshold	\$ 0.2073						
570							
571							
572 Summer:							
573 Cust. Chg							
574 Headblock							
575 Tailblock	\$ 0.1051						
576 HB Threshold							
577							
578							
579 Total Base Rate Amount	\$6,404.63	\$7,258.81	\$8,040.38	\$7,470.98	\$6,866.57	\$5,701.56	\$41,742.93
580							
581 COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
582 COG amount - Winter	\$3,489.1727	\$4,033.9057	\$4,532.3302	\$4,169.2122	\$3,783.7616	\$3,040.8102	\$23,049.19
583							
584 COG Rate - (Summer)							
585 COG amount - Summer							
586							
587 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
588 LDAC amount	\$2,348.99	\$2,715.72	\$3,051.27	\$2,806.81	\$2,547.31	\$2,047.14	\$15,517.23
589							
590 Total Bill	\$12,242.79	\$14,008.43	\$15,623.98	\$14,447.00	\$13,197.64	\$10,789.51	\$80,309.35

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
18,412	20,467	17,338	18,127	19,178	22,948	116,471	290,822
\$933.33	\$933.33	\$933.33	\$933.33	\$933.33	\$933.33	\$5,599.98	\$11,199.96
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,935.12	\$2,151.13	\$1,822.28	\$1,905.11	\$2,015.64	\$2,411.81	\$12,241.09	\$48,384.03
\$2,868.45	\$3,084.46	\$2,755.61	\$2,838.44	\$2,948.97	\$3,345.14	\$17,841.07	\$59,583.99
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.5626
\$22,219.81	\$24,700.16	\$20,924.09	\$21,875.19	\$23,144.40	\$27,693.37	\$140,557.02	\$163,606.21
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0917
\$1,762.04	\$1,958.74	\$1,659.29	\$1,734.72	\$1,835.37	\$2,196.10	\$11,146.26	\$26,663.49
\$26,850.30	\$29,743.36	\$25,338.99	\$26,448.34	\$27,928.74	\$33,234.61	\$169,544.34	\$249,853.70

591 Winter Season (Jan. - Apr., Nov. - Dec.)

592 Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)							
593 CURRENT							
	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
594 average Usage (Therms)	26,393	30,514	34,284	31,537	28,621	23,002	174,351
595 Winter:							
596 Cust. Chg	\$805.75	\$805.75	\$805.75	\$805.75	\$805.75	\$805.75	\$4,834.52
597 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
598 Tailblock	\$4,724.37	\$5,461.94	\$6,136.82	\$5,645.15	\$5,123.25	\$4,117.28	\$31,208.82
599 HB Threshold	\$ 0.1790						
600							
601							
602 Summer:							
603 Cust. Chg							
604 Headblock							
605 Tailblock	\$ 0.0907						
606 HB Threshold							
607							
608							
609 Total Base Rate Amount	\$5,530.13	\$6,267.70	\$6,942.57	\$6,450.90	\$5,929.00	\$4,923.04	\$36,043.34
610							
611 COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
612 COG amount - Winter	\$3,489.1727	\$4,033.9057	\$4,532.3302	\$4,169.2122	\$3,783.7616	\$3,040.8102	\$23,049.19
613							
614 COG Rate - (Summer)							
615 COG amount - Summer							
616							
617 LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
618 LDAC amount	\$2,348.99	\$2,715.72	\$3,051.27	\$2,806.81	\$2,547.31	\$2,047.14	\$15,517.23
619							
620 Total Bill	\$11,368.29	\$13,017.32	\$14,526.17	\$13,426.92	\$12,260.08	\$10,010.99	\$74,609.76
621 DIFFERENCE:							
622 Total Bill	\$874.50	\$991.11	\$1,097.81	\$1,020.08	\$937.56	\$778.52	\$5,699.59
623 % Change	7.69%	7.61%	7.56%	7.60%	7.65%	7.78%	7.64%
624							
625							
626 Base Rate	\$874.50	\$991.11	\$1,097.81	\$1,020.08	\$937.56	\$778.52	\$5,699.59
627 % Change	15.81%	15.81%	15.81%	15.81%	15.81%	15.81%	15.81%
628							
629 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
630 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
18,412	20,467	17,338	18,127	19,178	22,948	116,471	290,822
\$805.75	\$805.75	\$805.75	\$805.75	\$805.75	\$805.75	\$4,834.52	\$9,669.04
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,669.98	\$1,856.40	\$1,572.60	\$1,644.08	\$1,739.47	\$2,081.36	\$10,563.91	\$41,772.72
\$2,475.74	\$2,662.15	\$2,378.35	\$2,449.84	\$2,545.23	\$2,887.12	\$15,398.43	\$51,441.77
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.5626
\$22,219.81	\$24,700.16	\$20,924.09	\$21,875.19	\$23,144.40	\$27,693.37	\$140,557.02	\$163,606.21
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0917
\$1,762.04	\$1,958.74	\$1,659.29	\$1,734.72	\$1,835.37	\$2,196.10	\$11,146.26	\$26,663.49
\$26,457.59	\$29,321.05	\$24,961.74	\$26,059.74	\$27,525.00	\$32,776.59	\$167,101.71	\$241,711.47
\$392.71	\$422.31	\$377.25	\$388.60	\$403.74	\$458.02	\$2,442.64	\$8,142.23
1.48%	1.44%	1.51%	1.49%	1.47%	1.40%	1.46%	3.37%
\$392.71	\$422.31	\$377.25	\$388.60	\$403.74	\$458.02	\$2,442.64	\$8,142.23
15.86%	15.86%	15.86%	15.86%	15.86%	15.86%	15.86%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

Line No

631 **Winter Season (Jan. - Apr., Nov. - Dec.)**
632 **Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)**

633	PROPOSED	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
634	average Usage (Therms)	49,645	38,470	49,085	44,097	46,513	54,074	281,883
637	Winter:							
638	Cust. Chg	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$5,604.60
639	Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
640	Tailblock	\$3,921.99	\$3,039.12	\$3,877.69	\$3,483.63	\$3,674.49	\$4,271.87	\$22,268.79
641	HB Threshold							
642								
643	Summer:							
644	Cust. Chg							
645	Headblock							
646	Tailblock	\$ 0.0447						
647	HB Threshold							
648								
649	Total Base Rate Amount	\$4,856.09	\$3,973.22	\$4,811.79	\$4,417.73	\$4,608.59	\$5,205.97	\$27,873.39
650								
651	COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
652	COG amount - Winter	\$6,563.1204	\$5,085.7223	\$6,488.9993	\$5,829.5703	\$6,148.9603	\$7,148.6185	\$37,264.99
653								
654	COG Rate - (Summer)							
655	COG amount - Summer							
656								
657	LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
658	LDAC amount	\$4,418.44	\$3,423.82	\$4,368.54	\$3,924.60	\$4,139.62	\$4,812.61	\$25,087.63
659								
660	Total Bill	\$15,837.65	\$12,482.77	\$15,669.33	\$14,171.90	\$14,897.17	\$17,167.20	\$90,226.01

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
48,707	52,212	51,948	60,402	51,600	63,956	328,826	610,709
\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$934.10	\$5,604.60	\$11,209.20
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$2,177.19	\$2,333.89	\$2,322.09	\$2,699.99	\$2,306.52	\$2,858.84	\$14,698.52	\$36,967.32
\$3,111.29	\$3,267.99	\$3,256.19	\$3,634.09	\$3,240.62	\$3,792.94	\$20,303.12	\$48,176.52
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.7108
\$58,779.39	\$63,009.80	\$62,691.30	\$72,893.56	\$62,270.87	\$77,182.35	\$396,827.27	\$434,092.26
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0926
\$4,661.24	\$4,996.72	\$4,971.46	\$5,780.51	\$4,938.12	\$6,120.61	\$31,468.65	\$56,556.28
\$66,551.92	\$71,274.51	\$70,918.95	\$82,308.15	\$70,449.61	\$87,095.90	\$448,599.05	\$538,825.06

661 **Winter Season (Jan. - Apr., Nov. - Dec.)**
662 **Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)**

663	CURRENT	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter
664	average Usage (Therms)	49,645	38,470	49,085	44,097	46,513	54,074	281,883
667	Winter:							
668	Cust. Chg	\$806.42	\$806.42	\$806.42	\$806.42	\$806.42	\$806.42	\$4,838.52
669	Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
670	Tailblock	\$3,385.82	\$2,623.65	\$3,347.58	\$3,007.39	\$3,172.16	\$3,687.87	\$19,224.45
671	HB Threshold							
672								
673	Summer:							
674	Cust. Chg							
675	Headblock							
676	Tailblock	\$ 0.0386						
677	HB Threshold							
678								
679	Total Base Rate Amount	\$4,192.23	\$3,430.07	\$4,154.00	\$3,813.81	\$3,978.58	\$4,494.28	\$24,062.97
680								
681	COG Rate - (Winter)	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322	\$0.1322
682	COG amount - Winter	\$6,563.1204	\$5,085.7223	\$6,488.9993	\$5,829.5703	\$6,148.9603	\$7,148.6185	\$37,264.99
683								
684	COG Rate - (Summer)							
685	COG amount - Summer							
686								
687	LDAC	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
688	LDAC amount	\$4,418.44	\$3,423.82	\$4,368.54	\$3,924.60	\$4,139.62	\$4,812.61	\$25,087.63
689								
690	Total Bill	\$15,173.79	\$11,939.61	\$15,011.54	\$13,567.97	\$14,267.15	\$16,455.51	\$86,415.58

Summer Season (May - Oct.)

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer	Total
48,707	52,212	51,948	60,402	51,600	63,956	328,826	610,709
\$806.42	\$806.42	\$806.42	\$806.42	\$806.42	\$806.42	\$4,838.52	\$9,677.03
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,880.08	\$2,015.39	\$2,005.21	\$2,331.53	\$1,991.76	\$2,468.71	\$12,692.69	\$31,917.14
\$2,686.50	\$2,821.81	\$2,811.63	\$3,137.95	\$2,798.18	\$3,275.13	\$17,531.20	\$41,594.17
\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$1.2068	\$0.7108
\$58,779.39	\$63,009.80	\$62,691.30	\$72,893.56	\$62,270.87	\$77,182.35	\$396,827.27	\$434,092.26
\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0926
\$4,661.24	\$4,996.72	\$4,971.46	\$5,780.51	\$4,938.12	\$6,120.61	\$31,468.65	\$56,556.28
\$66,127.13	\$70,828.33	\$70,474.39	\$81,812.02	\$70,007.17	\$86,578.09	\$445,827.13	\$532,242.71

691 **DIFFERENCE:**

692	Total Bill	\$663.85	\$543.16	\$657.80	\$603.92	\$630.02	\$711.68	\$3,810.43
693	% Change	4.37%	4.55%	4.38%	4.45%	4.42%	4.32%	4.41%
694								
695								
696	Base Rate	\$663.85	\$543.16	\$657.80	\$603.92	\$630.02	\$711.68	\$3,810.43
697	% Change	15.84%	15.84%	15.84%	15.84%	15.84%	15.84%	15.84%
698								
699	COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
700	% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$424.79	\$446.18	\$444.57	\$496.14	\$442.44	\$517.81	\$2,771.92	\$6,582.35
0.64%	0.63%	0.63%	0.61%	0.63%	0.60%	0.62%	1.24%
\$424.79	\$446.18	\$444.57	\$496.14	\$442.44	\$517.81	\$2,771.92	\$6,582.35
15.81%	15.81%	15.81%	15.81%	15.81%	15.81%	15.81%	15.83%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



C. Drew Cayton

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Drew Cayton is a Principal Consultant Black & Veatch's Global Advisory practice as a regulatory subject matter expert advising clients in power and gas industries in jurisdictions throughout North America. Mr. Cayton has industry expertise in regulatory policy and rate making. He has more than fourteen years of investigation, litigation, and negotiation experience in matters set before the Federal Energy Regulatory Commission (FERC or Commission) and various state commissions.

Education

M.P.A., University
of North Carolina
Wilmington
B.A. Political
Science,
University of
North Carolina
Wilmington

Prior to joining Black & Veatch, Mr. Cayton spent six years as a consultant advising commercial, industrial, municipal, and utility clients on regulatory impacts at both the state and federal level. His work included investigating and analyzing utility and pipeline cost-of-service, cost allocation and rate design, depreciation, rate of return, and billing determinants.

Mr. Cayton spent seven years as an Energy Industry Analyst (Litigation) in FERC's Office of Administrative Litigation. As a technical case team leader, Mr. Cayton managed diverse teams tasked with executing extensive investigations into the propriety of various rate and tariff proposals before the FERC. He developed sound positions incorporating relevant Commission precedents, policies, rules, and regulations and then defended those positions in settlement and litigation proceedings.

Mr. Cayton holds a B.A. in Political Science and a M.P.A. from the University of North Carolina at Wilmington. He concentrated his graduate studies in public policy and public economics.

TESTIMONY



- Florida Gas Transmission Company, LLC, Docket No. RP10-21-00: Filed on behalf of FERC Trial Staff on cost-of-service Issues
- Trans-Alaska Pipeline System, Docket No. IS09-348: Filed on behalf of FERC Trial Staff on Throughput, Cost Allocation and Rate Design
- MIGC, LLC, Docket No. RP12-122: Filed on behalf of FERC Trial Staff on Throughput, Cost Allocation and Rate Design issues
- Sierra Pacific Power Company, Docket No. 18-02011: Filed on behalf of Sierra customers on rate making impacts of the Tax Cuts and Jobs Act of 2017
- Liberty CalPeco, Docket No. A17-10-018, Filed on behalf of CalPeco customers on Catastrophic Emergency Memorandum Account cost responsibility
- Northern Natural Gas, Docket Nos. RP19-59-000 and RP19-1353 on behalf of industrial client group (NNSA)
- Northern Natural Gas, Docket No. RP22-1033 on behalf of a group of local distribution companies

SELECTED PROJECTS

Cost-of-Service. Mr. Cayton assists clients in the development of complex and extensive cost-of-service models and is highly skilled in investigation and analysis of pipeline/utility revenue requirements to include rate base calculations, operating expense normalization, corporate overhead and other intercompany transactions, cost allocation, and taxes.

Natural Gas Experience

- ANR Pipeline, Docket No. RP16-440
- Columbia Gas Pipeline, Docket No. RP20-1060
- Columbia Gulf Pipeline, Docket No. RP16-302
- East Tennessee Gas Transmission, Docket No. RP19-63
- Eastern Gas Transmission and Storage, Docket No. RP21-1187
- Empire Pipeline, Docket No. RP16-300
- Florida Gas Transmission, Dockets No. RP10-21, RP15-101, RP21-441
- Great Lakes Gas Transmission, Docket No. RP17-598
- Kinder Morgan Interstate Transmission, Docket No. RP11-1494
- Liberty EnergyNorth, Docket No. DG20-105
- Maritimes & North East Pipeline, Docket No. RP15-1026
- MoGas, Docket No. RP18-887
- Northern Natural Gas, Docket Nos. RP10-1448, RP19-59, and RP22-1033



- National Fuel, Docket No. RP12-88
- Paiute Pipeline, Docket Nos. RP09-406, RP14-540, and RP19-1291

Natural Gas Experience Continued

- Panhandle Eastern Pipe Line Company, LP, Docket No. RP19-1523
- Southern Natural Gas Company, Docket No. RP13-886
- Southern Star Central Gas Pipeline, Docket No. RP21-778
- Tallgrass Interstate Gas Transmission, Docket No. RP16-137
- Texas Eastern, Docket No. RP21-1188
- Trailblazer, Docket No. RP13-1031
- Transcontinental, Docket No. RP12-993
- Transwestern, Docket No. RP15-23
- Tuscarora, Docket No. RP16-229
- Viking Gas Transmission, Docket No. RP19-1340
- Williston Basin Pipeline Company, Docket No. RP14-118
- Various Pre-Filing Settlements

Electric Experience

- City of Shelby, OH 2016 and 2019 cost and revenue analysis
- Peine vs AEP, Docket No. ER07-1069
- Liberty CalPeco, Docket No. A.17-10-1018
- Nevada Energy/Sierra Pacific ON Line, Docket No. ER13-1605
- Sierra Pacific, Docket Nos. 16-06006 and 18-0211
- Tri-State G&T, Docket No. ER20-676, et al.
- Various Formula Rate Cases

Cost Allocation and Rate Design. Mr. Cayton assists clients in analyzing the impact of various cost allocation methodologies and rate design proposals to include cost causation matching and billing determinates.

Natural Gas Experience

- ANR Pipeline, Docket No. RP16-440
- Columbia Gas Pipeline, Docket No. RP20-1060
- Columbia Gulf Pipeline, Docket No. RP16-302
- East Tennessee Gas Transmission, Docket No. RP19-63
- Eastern Gas Transmission and Storage, Docket No. RP21-1187
- MIGC, Docket No. RP12-122
- MoGas, Docket No. RP18-887
- Northern Border, Docket No. RP18-234
- Northern Natural Gas, Docket No. RP19-59 and RP22-1033



BLACK & VEATCH

- Ozark, Docket No. RP11-1495
- Paiute Pipeline, Docket No. RP19-1291

Natural Gas Experience Continued

- Southern Star Central Gas Pipeline Docket No. RP21-778
- Texas Eastern, Docket No. RP21-1188
- Trailblazer, Docket No. RP13-1031
- Transcontinental, Docket No. RP12-993
- Transwestern, Docket No. RP15-23
- Tuscarora, Docket No. RP16-229
- Viking Gas Transmission, Docket No. RP19-1340
- Williston Basin Pipeline Company, Docket No. RP14-118
- Various Pre-Filing Settlements

Electric Experience

- City of Shelby, OH 2016 and 2019 cost and revenue analysis
- Liberty CalPeco, Docket No. A.17-10-1018
- Peine vs AEP, Docket No. ER07-1069
- Sierra Pacific Power Company Docket Nos. 16-06006 and 18-02011
- VEPCO, Docket No. PUR-2021-00058
- Various Formula Rate Cases

Oil Experience

- *Trans-Alaska Pipeline System*, Docket No. IS09-348

PRESENTATIONS

- "New Tax Law and its Impact of Rates – Cost-of-Service" EBA 2018 Annual Meeting

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