

Liberty Utilities (EnergyNorth Natural Gas) Corp.**Off Peak 2020 Summer Cost of Gas Filing****Table of Contents**

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3	Off Peak 2020 Summer Cost of Gas Filing		
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5			OP 21
6		Reference	May - Oct
7	(a)	(b)	(c)
8			
9	Anticipated Direct Cost of Gas		
10	Purchased Gas:		
11	Demand Costs:	Sch. 5A, col (j), In 45	\$ 2,868,280
12	Supply Costs	Sch. 6, col (i), In 45	4,387,278
13			
14	Storage Gas:		
15	Demand, Capacity:	Sch. 5A, col (j), In 60	\$ -
16	Commodity Costs:	Sch. 6, col (i), In 48	-
17			
18	Produced Gas:	Sch. 6, col (i), In 54	\$ 29,014
19			
20	Hedge Contract (Savings)/Loss		\$ -
21			
22			
23	Total Unadjusted Cost of Gas		<u>\$ 7,284,571</u>
24			
25	Adjustments:		
26			
27	Prior Period (Over)/Under Recovery)	Sch. 3, col (c) In 28	\$ 105,886
28	Interest 11/01/19 - 10/31/20	Sch. 3, col (q) In 193	(3,492)
29	Prior Period Adjustments	Sch. 4, In 24 col (b)	-
30	Refunds from Suppliers	Sch. 4, In 24 col (c)	-
31	Broker Revenue	Sch. 4, In 24 col (d)	-
32	Fuel Financing	Sch. 4, In 24 col (e)	-
33	Transportation CGA Revenues	Sch. 4, In 24 col (f)	-
34	Interruptible Sales Margin	Sch. 4, In 24 col (g)	-
35	Capacity Release and Off System Sales Margins	Sch. 4, In 24 col (h) + col (i)	-
36	Hedging Costs	Sch. 4, In 24 col (j)	-
37	FPO Premium - Collection		-
38	Fixed Price Option Administrative Costs	Sch. 4, In 24 col (k)	-
39			
40	Total Adjustments		<u>\$ 102,394</u>
41			
42	Total Anticipated Direct Costs	Ins 23 + 40	<u>\$ 7,386,965</u>
43			
44	Anticipated Indirect Cost of Gas		
45	Working Capital		
46	Total Unadjusted Anticipated Cost of Gas	Ln 23	\$ 7,284,571
47	Lead Lag Days / 365	DG 10-017, 14.27 / 365	0.0391
48	Prime Rate		3.25%
49	Working Capital Percentage	In 47 * In 48	0.127%
50	Working Capital	In 46 * In 49	9,258
51	Plus: Working Capital Reconciliation	Sch. 3, col (c), In 98	(13,709)
52			
53	Total Working Capital Allowance	Ins 50 + 51	<u>\$ (4,451)</u>
54			
55	Bad Debt		
56	Total Unadjusted Anticipated Cost of Gas	In 23	\$ 7,284,571
57	Less Refunds	In 30	-
58	Plus Working Capital	In 53	(4,451)
59	Plus Prior Period (Over) Under Recovery	In 27	105,886
60	Subtotal		<u>\$ 7,386,006</u>
61	Bad Debt Percentage	per GTC 17(f)	1.11%
62			
63	Bad Debt Allowance	In 60 * In 61	\$ 81,985
64	Prior Period Bad Debt Allowance	Sch. 3, col (c), In 163	(326,326)
65			
66	Total Bad Debt Allowance	Ins 63 + 64	<u>\$ (244,341)</u>
67			
68	Production and Storage Capacity	per GTC17(f)	<u>\$ -</u>
69			
70	Miscellaneous Overhead	per GTC 17(f)	\$ 13,170
71	Sales Volume	Sch. 10B, In 23/1000	22,004
72	Divided by Total Sales	Sch. 10B, In 23/1000	111,369
73	Ratio		<u>19.76%</u>
74			
75	Miscellaneous Overhead	Ins 70 * 73	<u>\$ 2,602</u>
76			
77	Total Anticipated Indirect Cost of Gas	Ins 53 + 66 + 68 + 75	<u>\$ (246,190)</u>
78			
79	Total Cost of Gas	Ins 42 + 77	<u>\$ 7,140,775</u>
80			
81	Projected Forecast Sales (Therms)	Sch. 3, col (q), In 52	<u>22,681,422</u>

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4 Summary of Supply and Demand Forecast

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7 For Month of:

8 (a)

(b)

May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Off Peak Period
(c) (d) (e) (d) (e) (f) (g) May - Oct
(h)

9 I. Gas Volumes (Therms)

10

11 A. Firm Demand Volumes

12 Firm Gas Sales	Sch. 10B, In 23	93,311	245,810	195,494	199,708	315,470	701,487	516,861	
13 Lost Gas (Unaccounted for)		933,114	2,458,105	1,954,943	1,997,083	3,154,699	7,014,865	5,168,614	22,681,422
14 Company Use		70,818	33,976	29,401	30,115	53,654	106,872		324,836
15 Unbilled Therms		2,966	1,423	1,232	1,261	2,247	4,477		13,606
16		3,803,683	(185,535)	11,613	17,239	434,050	133,498	(5,168,614)	(954,066)
17 Total Firm Volumes	Sch. 6, In 93	4,810,581	2,307,969	1,997,188	2,045,699	3,644,650	7,259,712		22,065,798

18

19 B. Supply Volumes (Therms)

20 Pipeline Gas:

21 Dawn Supply	Sch. 6, In 63	-	-	-	-	-	858,740	-	858,740
22 Niagara Supply	Sch. 6, In 64	637,331	-	532,884	535,788	-	676,922	-	2,382,926
23 TGP Supply (Gulf)	Sch. 6, In 65	-	-	-	-	-	-	-	-
24 Dracut Supply 1 - Baseload	Sch. 6, In 66	-	-	-	-	-	-	-	-
25 Dracut Supply 2 - Swing	Sch. 6, In 67	3,933,940	2,438,570	-	-	3,103,570	1,319,579	-	10,795,659
26 City Gate Delivered Supply	Sch. 6, In 68	-	-	-	-	-	-	-	-
27 LNG Truck	Sch. 6, In 69	46,746	17,020	15,965	-	35,455	16,084	-	131,270
28 Propane Truck	Sch. 6, In 70	75,716	67,494	63,308	63,653	70,300	80,420	-	420,889
29 PNGTS	Sch. 6, In 71	202,129	-	169,004	169,925	-	214,685	-	755,742
30 Portland Natural Gas	Sch. 6, In 72	-	-	-	-	-	-	-	-
31 TGP Supply (Zone 4)	Sch. 6, In 73	3,508,614	2,994,951	4,054,983	2,293,151	3,119,464	5,460,834	-	21,431,995
32 Subtotal Pipeline Volumes		8,404,476	5,518,034	4,836,143	3,062,516	6,328,789	8,627,264	-	36,777,221

33

34 Storage Gas:

35 TGP Storage	Sch. 6, In 78	-	-	-	-	-	-	-	-
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36

37 Produced Gas:

38 LNG Vapor	Sch. 6, In 81	19,197.45	17,222.04	15,625.30	15,495.37	14,320.87	16,991.87	-	98,852.88
39 Propane	Sch. 6, In 82	-	-	-	-	-	-	-	-
40 Subtotal Produced Gas		19,197.45	17,222.04	15,625.30	15,495.37	14,320.87	16,991.87	-	98,852.88

41

42 Less - Gas Refill:

43 LNG Truck	Sch. 6, In 87	(47,000.65)	(17,837.11)	(15,625.30)	-	(29,664.65)	(13,476.31)	-	(123,604.02)
44 Propane	Sch. 6, In 88	(76,127.82)	(70,733.37)	(61,962.38)	(61,447.14)	(58,817.84)	(67,381.55)	-	(396,470.10)
45 TGP Storage Refill	Sch. 6, In 89	(3,489,964.08)	(3,138,716.56)	(2,776,992.28)	(970,864.79)	(2,609,977.65)	(1,303,686.48)	-	(14,290,201.84)
46 Subtotal Refills		(3,613,092.56)	(3,227,287.04)	(2,854,579.96)	(1,032,311.93)	(2,698,460.14)	(1,384,544.33)	-	(14,810,275.96)

47

48 Total Firm Sendout Volumes	Ins 32 + 35 + 40 + 46	4,810,580.89	2,307,968.79	1,997,187.84	2,045,698.94	3,644,649.63	7,259,711.64		22,065,797.73
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4 Summary of Supply and Demand Forecast

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50 II. Gas Costs

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52 A. Demand Costs

53 Supply

54	Niagara Supply	Sch.5A, In 12	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
55	Subtotal Supply Demand		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
56	Less Capacity Credit			-		-		-		-		-		-		-		-
57	Net Pipeline Demand Costs		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

58 Pipeline:

59	Pipeline:																		
60	Iroquois Gas Trans Service RTS 470-0	Sch.5A, In 16																	
61	Tenn Gas Pipeline 95346 Z5-Z6	Sch.5A, In 17																	
62	Tenn Gas Pipeline 2302 Z5-Z6	Sch.5A, In 18																	
63	Tenn Gas Pipeline 8587 Z0-Z6	Sch.5A, In 19																	
64	Tenn Gas Pipeline 8587 Z1-Z6	Sch.5A, In 20																	
65	Tenn Gas Pipeline 8587 Z4-Z6	Sch.5A, In 21																	
66	Tenn Gas Pipeline (Dracut) 42076 Z6-Z6	Sch.5A, In 22																	
67	Tenn Gas Pipeline (Concord Lateral) Z6-Z6	Sch.5A, In 23																	
68	Portland Natural Gas Trans Service	Sch.5A, In 24																	
69	ANE (TransCanada via Union to Iroquois)	Sch.5A, In 26																	
70	Portland Natural Gas	Sch.5A, In 25																	
71	TransCanada via Union to Portland	Sch.5A, In 27																	
72	Tenn Gas Pipeline Z4-Z6 stg 632	Sch.5A, In 28																	
73	Tenn Gas Pipeline Z4-Z6 stg 11234	Sch.5A, In 29																	
74	Tenn Gas Pipeline Z5-Z6 stg 11234	Sch.5A, In 30																	
75	National Fuel FST 2358	Sch.5A, In 31																	
76	Subtotal Pipeline Demand		\$	1,202,948	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	7,235,249	
77	Less Capacity Credit			(441,482)		(442,771)		(442,771)		(442,771)		(442,771)		(442,771)		(442,771)		(2,655,337)	
78	Net Pipeline Demand Costs		\$	761,466	\$	763,689	\$	763,689	\$	763,689	\$	763,689	\$	763,689	\$	763,689	\$	4,579,913	

80 Peaking Supply:

81	Tenn Gas Pipeline (Concord Lateral) Z6-Z6	Sch.5A, In 36	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
82	Granite Ridge Demand	Sch.5A, In 37		-		-		-		-		-		-		-		-
83	DOMAC Demand NSB041	Sch.5A, In 38		-		-		-		-		-		-		-		-
84	Subtotal Peaking Demand		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
85	Less Capacity Credit			-		-		-		-		-		-		-		-
86	Net Peaking Supply Demand Costs		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

88 Storage:

89	Dominion - Demand	Sch.5A, In 48	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
90	Dominion - Storage	Sch.5A, In 49		-		-		-		-		-		-		-		-
91	Honeoye - Demand	Sch.5A, In 50		-		-		-		-		-		-		-		-
92	National Fuel - Demand	Sch.5A, In 51		-		-		-		-		-		-		-		-
93	National Fuel - Capacity	Sch.5A, In 52		-		-		-		-		-		-		-		-
94	Tenn Gas Pipeline - Demand	Sch.5A, In 53		-		-		-		-		-		-		-		-
95	Tenn Gas Pipeline - Capacity	Sch.5A, In 54		-		-		-		-		-		-		-		-
96	Subtotal Storage Demand		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
97	Less Capacity Credit			-		-		-		-		-		-		-		-
98	Net Storage Demand Costs		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

100	Total Demand Charges	Ins 55 + 76 + 84 + 96	\$	1,202,948	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	1,206,460	\$	7,235,249
101	Total Capacity Credit	Ins 56 + 77 + 85 + 97		(441,482)		(442,771)		(442,771)		(442,771)		(442,771)		(442,771)		(442,771)		(2,655,337)
102	Net Demand Charges		\$	761,466	\$	763,689	\$	763,689	\$	763,689	\$	763,689	\$	763,689	\$	763,689	\$	4,579,913

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4 Summary of Supply and Demand Forecast

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106 B. Commodity Costs

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107 Pipeline:

108	Dawn Supply	Sch. 6, In 12	REDACTED						
109	Niagara Supply	Sch. 6, In 13	REDACTED						
110	TGP Supply (Gulf)	Sch. 6, In 14	REDACTED						
111	Dracut Supply 1 - Baseload	Sch. 6, In 15	REDACTED						
112	Dracut Supply 2 - Swing	Sch. 6, In 16	REDACTED						
113	City Gate Delivered Supply	Sch. 6, In 17	REDACTED						
114	LNG Truck	Sch. 6, In 18	REDACTED						
115	Portland Natural Gas	Sch. 6, In 21	REDACTED						
116	PNGTS	Sch. 6, In 20	REDACTED						
117	TGP Supply (Zone 4)	Sch. 6, In 22	REDACTED						
118	Subtotal Pipeline Commodity Costs		\$ 1,963,457	\$ 1,297,121	\$ 1,132,900	\$ 717,406	\$ 1,413,156	\$ 1,952,103	\$ 8,476,143

119

120 Storage:

121	TGP Storage - Withdrawals	Sch. 6, In 48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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122

123 Produced Gas Costs:

124	LNG Vapor	Sch. 6, In 51	REDACTED						
125	Propane	Sch. 6, In 52	REDACTED						
126	Subtotal Produced Gas Costs		\$ 8,811	\$ 5,372	\$ 4,276	\$ 3,780	\$ 3,493	\$ 3,281	\$ 29,014

127

128 Less Storage Refills:

129	LNG Truck	Sch. 6, In 38	REDACTED						
130	Propane	Sch. 6, In 39	REDACTED						
131	TGP Storage Refill	Sch. 6, In 40	REDACTED						
132	Storage Refill (Trans.)	Sch. 6, In 41	REDACTED						
133	Subtotal Storage Refill		\$ (1,063,304)	\$ (965,141)	\$ (863,665)	\$ (302,663)	\$ (810,143)	\$ (407,246)	\$ (4,412,162)

134

135	Total Supply Commodity Costs		\$ 908,964	\$ 337,352	\$ 273,512	\$ 418,523	\$ 606,507	\$ 1,548,138	\$ 4,092,995
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136

137 C. Supply Volumetric Transportation Costs:

138	Dawn Supply	Sch. 6, In 27	REDACTED						
139	Niagara Supply	Sch. 6, In 28	REDACTED						
140	TGP Supply (Zone 4)	Sch. 6, In 29	REDACTED						
141	Dracut Supply 1 - Baseload	Sch. 6, In 30	REDACTED						
142	Dracut Supply 2 - Swing	Sch. 6, In 31	REDACTED						
143	Subtotal Pipeline Volumetric Trans. Costs		\$ 61,389	\$ 44,480	\$ 55,136	\$ 33,342	\$ 47,461	\$ 81,489	\$ 323,297

144

145	TGP Storage - Withdrawals	Sch. 6, In 33	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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147	Total Supply Volumetric Trans. Costs	Ins 143 + 145	\$ 61,389	\$ 44,480	\$ 55,136	\$ 33,342	\$ 47,461	\$ 81,489	\$ 323,297
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148

149	Total Commodity Gas & Trans. Costs	Ins 135 + 147	\$ 970,352	\$ 381,832	\$ 328,648	\$ 451,865	\$ 653,968	\$ 1,629,626	\$ 4,416,292
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154 D. Supply and Demand Costs by Source

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157 Purchased Gas Demand Costs

158 Pipeline Gas Demand Costs Ins 55 + 76 \$ 1,202,948 \$ 1,206,460 \$ 1,206,460 \$ 1,206,460 \$ 1,206,460 \$ 1,206,460 \$ 7,235,249

159 Peaking Gas Demand Costs In 84 - - - - - - - -

160 Subtotal Purchased Gas Demand Costs \$ 1,202,948 \$ 1,206,460 \$ 1,206,460 \$ 1,206,460 \$ 1,206,460 \$ 1,206,460 \$ 7,235,249

161 Less Capacity Credit Ins 56 + 77 + 85 (441,482) (442,771) (442,771) (442,771) (442,771) (442,771) (2,655,337)

162 Net Purchased Gas Demand Costs \$ 761,466 \$ 763,689 \$ 763,689 \$ 763,689 \$ 763,689 \$ 763,689 \$ 4,579,913

163

164 Storage Gas Demand Costs

165 Storage Demand In 96 \$ - \$ - \$ - \$ - \$ - \$ - \$ -

166 Less Capacity Credit In 97 - - - - - - - -

167 Net Storage Demand Costs \$ - \$ - \$ - \$ - \$ - \$ - \$ -

168

169 **Total Demand Costs** Ins 162 + 167 \$ 761,466 \$ 763,689 \$ 763,689 \$ 763,689 \$ 763,689 \$ 763,689 \$ 4,579,913

170

171 Purchased Gas Supply

172 Commodity Costs In 118 \$ 1,963,457 \$ 1,297,121 \$ 1,132,900 \$ 717,406 \$ 1,413,156 \$ 1,952,103 \$ 8,476,143

173 Less Storage Inj.(TGP Storage) In 131 [REDACTED]

174 Less Storage Transportation In 132 [REDACTED]

175 Less LNG Truck In 129 [REDACTED]

176 Less Propane Truck In 130 [REDACTED]

177 Plus Transportation Costs In 143 [REDACTED]

178 Subtotal Purchased Gas Supply \$ 961,542 \$ 376,460 \$ 324,372 \$ 448,085 \$ 650,474 \$ 1,626,345 \$ 4,387,278

179

180 Storage Commodity Costs

181 Commodity Costs In 121 \$ - \$ - \$ - \$ - \$ - \$ - \$ -

182 Transportation Costs In 145 - - - - - - - -

183 Subtotal Storage Commodity Costs \$ - \$ - \$ - \$ - \$ - \$ - \$ -

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185 Produced Gas Commodity Costs In 126 \$ 8,811 \$ 5,372 \$ 4,276 \$ 3,780 \$ 3,493 \$ 3,281 \$ 29,014

186

187 **Subtotal Commodity Costs** Ins 178 + 183 + 185 \$ 970,352 \$ 381,832 \$ 328,648 \$ 451,865 \$ 653,968 \$ 1,629,626 \$ 4,416,292

188

189 Hedge Contract (Savings)/Loss \$ - \$ - \$ - \$ - \$ - \$ - \$ -

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191 **Total Commodity Costs** Ins 187 + 189 \$ 970,352 \$ 381,832 \$ 328,648 \$ 451,865 \$ 653,968 \$ 1,629,626 \$ 4,416,292

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193 **Total Demand Costs** In 102 \$ 761,466 \$ 763,689 \$ 763,689 \$ 763,689 \$ 763,689 \$ 763,689 \$ 4,579,913

194 **Total Supply Costs** In 191 970,352 381,832 328,648 451,865 653,968 1,629,626 4,416,292

195

196 **Total Direct Gas Costs** Ins 193 + 194 \$ 1,731,819 \$ 1,145,521 \$ 1,092,338 \$ 1,215,554 \$ 1,417,657 \$ 2,393,316 \$ 8,996,204

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4 Contracts Ranked on a per Unit Cost Basis

Off Peak

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9 Demand Costs

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Supplier

Contract

Contract Type

Contract

Unit Dth

Cost per

(a)

(b)

(c)

(d)

(e)

(f)

Supplier (a)	Contract (b)	Contract Type (c)	Contract Unit (d)	Unit Dth (MDQ/ACQ) (e)	Cost per Unit Dth (f)
ANE (TransCanada via Union to Iroquois)	Dawn - Parkway to Iroquois	Transportation	MDQ	-	
Dominion - Capacity Reservation	GSS 300076	Storage	ACQ	102,700	
Tenn Gas Pipeline - Cap. Reservations	FS-MA 523	Storage	ACQ	1,560,391	
National Fuel - Capacity Reservation	FSS-1 2357	Storage	ACQ	670,800	
Tenn Gas Pipeline - Demand	FS-MA 523	Storage	MDQ	21,844	
Dominion - Demand	GSS 300076	Storage	MDQ	934	
National Fuel - Demand	FSS-1 2357	Storage	MDQ	6,098	
Tenn Gas Pipeline	42076 FTA Z6-Z6	Transportation	MDQ	20,000	
National Fuel	FST N02358	Transportation	MDQ	6,098	
Iroquois Gas Trans Service	RTS 470-01	Transportation	MDQ	4,047	
Honeoye - Demand	SS-NY	Storage	MDQ	1,362	
Tenn Gas Pipeline	2302 Z5-Z6	Transportation	MDQ	3,122	
Tenn Gas Pipeline (short haul)	11234 Z5-Z6(stg)	Transportation	MDQ	1,957	
Tenn Gas Pipeline (short haul)	8587 Z4-Z6	Transportation	MDQ	3,811	
Tenn Gas Pipeline (short haul)	632 Z4-Z6 (stg)	Transportation	MDQ	15,265	
Tenn Gas Pipeline (short haul)	11234 Z4-Z6(stg)	Transportation	MDQ	7,082	
Tenn Gas Pipeline (Concord Lateral) Z6-Z6	Firm Transportation	Transportation	MDQ	30,000	
Tenn Gas Pipeline	95346 Z5-Z6	Transportation	MDQ	4,000	
TransCanada via Union to Portland	Union Parkway to Portland	Transportation	MDQ	5,077	
Portland Natural Gas Trans Service	FT-1999-001	Transportation	MDQ	1,000	
Tenn Gas Pipeline (long haul)	8587 Z1-Z6	Transportation	MDQ	14,561	
Tenn Gas Pipeline (long haul)	8587 Z0-Z6	Transportation	MDQ	7,035	
Portland Natural Gas	FTN	Transportation	MDQ	5,000	

Supply Costs - Commodity

LNG Truck		Pipeline	Dkt	13,127	
TGP Supply (Zone 4)		Pipeline	Dkt	2,143,200	
Niagara Supply		Pipeline	Dkt	238,293	
Dracut Supply 2 - Swing		Pipeline	Dkt	1,079,566	
Dawn Supply		Pipeline	Dkt	85,874	
TGP Citygate Supply		Pipeline	Dkt	-	
PNGTS		Pipeline	Dkt	75,574	
Dracut Supply 1 - Baseload		Pipeline	Dkt	-	
TGP Supply (Gulf)		Pipeline	Dkt	-	
LNG Vapor (Storage)		Produced	Dkt	9,885	
Propane		Pipeline	Dkt	-	

Supply Costs - Volumetric Transportation

Dracut Supply 1 - Baseload		Pipeline	Dkt	-	
TGP Supply (Zone 4)		Pipeline	Dkt	-	
Dracut Supply 2 - Swing		Pipeline	Dkt	1,079,566	
Dawn Supply		Storage	Dkt	85,874	
Niagara Supply		Pipeline	Dkt	238,293	

THIS DOCUMENT HAS BEEN REDACTED

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

3 Off Peak 2021 Summer Cost of Gas Filing
4 COG (Over)/Under Cumulative Recovery Balances and Interest Calculation

	Days in Month	Prior Period Balance Plus Nov Collections October 31, 2020	Nov-20 30	Dec-20 31	Jan-21 31	Feb-21 28	Mar-21 31	Apr-21 30	May-21 31	Jun-21 30	Jul-21 31	Aug-21 31	Sep-21 30	Oct-21 31	Nov-21 30	Off Peak Period Total	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	
Account 8840-2-0000-10-1920-1741 (formerly, 175.40) COG (Over)/Under Balance - Interest Calculation																	
13	Beginning Balance	Account 1920-1741 1/	\$ 105,886	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 108,673	\$ 11,952	\$ 132,196	\$ 299,653	\$ 575,743	\$ 541,205	\$ 321,577	\$ 105,886
14	Forecast Direct Gas Costs		-	-	-	-	-	-	-	1,446,546	860,249	807,066	930,282	1,132,385	2,108,044	-	7,284,571
15	Production & Storage & Misc Overhead		-	-	-	-	-	-	-	434	434	434	434	434	434	-	2,602
16	Projected Revenues w/o Int.	In 54 * In 64	-	-	-	-	-	-	-	(304,150)	(801,225)	(637,218)	(650,954)	(1,028,281)	(2,286,511)	(1,684,721)	(7,393,059)
17	Projected Unbilled Revenue	In 58 * In 64	-	-	-	-	-	-	-	(1,239,819)	(1,179,343)	(1,183,128)	(1,188,748)	(1,330,227)	(1,373,741)	-	(7,495,006)
18	Reverse Prior Month Unbilled		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Add Net Adjustments (with TGP Refund)		-	-	-	-	-	-	-	1,239,819	1,179,343	1,183,128	1,188,748	1,330,227	1,373,741	-	7,495,006
20	Gas Cost Billed	Account 1920-1741 2/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Monthly (Over)/Under Recovery		\$ 105,886	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 11,683	\$ 131,886	\$ 298,692	\$ 573,795	\$ 538,801	\$ 319,658	\$ 10,597	\$ 0
22	Average Monthly Balance	(In 13 + 21) / 2	\$ -	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 60,178	\$ 71,919	\$ 215,444	\$ 436,724	\$ 557,272	\$ 430,432	\$ 166,087	
24	Interest Rate	Prime Rate		5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%		
26	Interest Applied	In 22 * In 24 /365 *Days/Mo.	\$ -	\$ 457	\$ 474	\$ 476	\$ 432	\$ 480	\$ 467	\$ 268	\$ 310	\$ 961	\$ 1,947	\$ 2,405	\$ 1,919	\$ -	\$ 10,597
28	(Over)/Under Balance	In 21 + In 26	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 108,673	\$ 11,952	\$ 132,196	\$ 299,653	\$ 575,743	\$ 541,205	\$ 321,577	\$ 10,597	\$ 10,597
Calculation of COG with Interest																	
33	Beginning Balance	In 13	\$ 105,886	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 108,673	\$ 14,730	\$ 136,320	\$ 304,950	\$ 582,250	\$ 549,850	\$ 334,457	\$ 105,886
34	Forecast Direct Gas Costs	In 14	-	-	-	-	-	-	-	1,446,546	860,249	807,066	930,282	1,132,385	2,108,044	-	7,284,571
35	Prod Storage & Misc Overhead	In 15	-	-	-	-	-	-	-	434	434	434	434	434	434	-	2,602
36	Projected Revenues with Int.	In 54 * 66	-	-	-	-	-	-	-	(303,604)	(799,786)	(636,074)	(649,785)	(1,026,435)	(2,282,406)	(1,681,697)	(7,379,787)
37	Projected Unbilled Revenue	In 58 * 66	-	-	-	-	-	-	-	(1,237,593)	(1,177,226)	(1,181,004)	(1,186,614)	(1,327,839)	(1,371,275)	-	(7,481,551)
38	Reverse Prior Month Unbilled		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	Add Net Adjustments	In 19	-	-	-	-	-	-	-	1,237,593	1,177,226	1,181,004	1,186,614	1,327,839	1,371,275	-	7,481,551
40	Gas Cost Billed	In 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	Gas Cost Unbilled		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	Reverse Prior Month Unbilled		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	Add Interest	In 26	-	-	-	-	-	-	-	268	310	961	1,947	2,405	1,919	-	7,811
44	(Over)/Under Balance		\$ 105,886	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 14,723	\$ 136,304	\$ 304,927	\$ 582,219	\$ 549,812	\$ 334,405	\$ 24,035	\$ 21,083
46	Average Monthly Balance		\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206		\$ 61,698	\$ 75,517	\$ 220,624	\$ 443,585	\$ 566,031	\$ 442,127		
48	Interest Applied	In 24 * In 46 /365 *Days/Mo.	\$ 457	\$ 474	\$ 476	\$ 432	\$ 480	\$ 467	\$ 275	\$ 326	\$ 984	\$ 1,978	\$ 2,442	\$ 1,971	\$ -	\$ 10,763	
50	(Over)/Under Balance	In 43 + In 44 + In 48	\$ 105,886	\$ 106,343	\$ 106,817	\$ 107,293	\$ 107,725	\$ 108,206	\$ 14,730	\$ 136,320	\$ 304,950	\$ 582,250	\$ 549,850	\$ 334,457	\$ 24,035	\$ 24,035	
53	Forecast Sendout Therms	Sch 1							4,810,581	2,307,969	1,997,188	2,045,699	3,644,650	7,259,712		22,065,798	
54	Less Forecast Billing Therm Sales	Sch. 10B, In 23 May - Oct							933,114	2,458,105	1,954,943	1,997,083	3,154,699	7,014,865	5,168,614	22,681,422	
55	Less Forecast Unaccounted For	Sch 1							70,818	33,976	29,401	30,115	53,654	106,872		324,836	
56	Less Forecast Company Use	Sch 1							2,966	1,423	1,232	1,261	2,247	4,477		13,606	
57	Unbilled Volumes								3,803,683	(185,535)	11,613	17,239	434,050	133,498	(5,168,614)	(954,066)	
58	Gross Unbilled								3,803,683	3,618,148	3,629,760	3,647,000	4,081,050	4,214,548			
60	Beg Balance								-	3,803,683	3,618,148	3,629,760	3,647,000	4,081,050	4,214,548		
61	Incremental								3,803,683	(185,535)	11,613	17,239	434,050	133,498	(5,168,614)		
62	Ending Balance								3,803,683	3,618,148	3,629,760	3,647,000	4,081,050	4,214,548			
64	COG w/o Interest	Sch. 3, pg. 4, In 211 col. (c)							\$ 0.3260	\$ 0.3260	\$ 0.3260	\$ 0.3260	\$ 0.3260	\$ 0.3260	\$ 0.3260	\$ 0.3260	
66	COG With Interest	Sch. 3, pg. 4, In 211 col. (d)							\$ 0.3254	\$ 0.3254	\$ 0.3254	\$ 0.3254	\$ 0.3254	\$ 0.3254	\$ 0.3254	\$ 0.3254	

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.
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3 Off Peak 2021 Summer Cost of Gas Filing
4 COG (Over)/Under Cumulative Recovery Balances and Interest Calculation

	Days in Month	Prior Period Balance Plus Nov Collections October 31, 2020 (c)	Nov-20 30 (d)	Dec-20 31 (e)	Jan-21 31 (f)	Feb-21 28 (g)	Mar-21 31 (h)	Apr-21 30 (i)	May-21 31 (j)	Jun-21 30 (k)	Jul-21 31 (l)	Aug-21 31 (m)	Sep-21 30 (n)	Oct-21 31 (o)	Nov-21 30 (p)	Off Peak Period Total (q)	
76 Account 8840-2-0000-10-1163-1424 (formerly, 142.40) Working Capital (Over)/Under Balance - Interest Calculation																	
78	Beginning Balance	Account 1163-1424 1/	\$ (13,709)	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (14,070)	\$ (11,359)	\$ (9,865)	\$ (8,494)	\$ (6,951)	\$ (4,833)	\$ (763)	\$ (13,709)
80	Days Lag									0.0391	0.0391	0.0391	0.0391	0.0391	0.0391	0.0391	
81	Prime Rate									3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
82	Forecast Working Capital	In 34 * In 80 / 365 * In 81	-	-	-	-	-	-	-	1,838	1,093	1,026	1,182	1,439	2,679	-	9,258
84	Projected Revenues w/o Int.	In 123 * In 126	-	-	-	-	-	-	-	183	482	384	392	619	1,377	1,014	4,451
85	Projected Unbilled Revenue	In 124 * In 126	-	-	-	-	-	-	-	747	710	712	716	801	827	827	4,513
86	Reverse Prior Month Unbilled										(747)	(710)	(712)	(716)	(801)	(827)	(4,513)
87	Add Net Adjustments		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
89	Working Capital Billed	Account 1163-1424 2/															
92	Monthly (Over)/Under Recovery		\$ (13,709)	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (11,302)	\$ (9,819)	\$ (8,453)	\$ (6,916)	\$ (4,807)	\$ (750)	\$ (576)	\$ (0)
94	Average Monthly Balance	(In 78 + 92) / 2	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (14,010)	\$ (12,686)	\$ (10,589)	\$ (9,159)	\$ (7,705)	\$ (5,879)	\$ (2,791)		
96	Interest Rate	Prime Rate	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%		
98	Interest Applied	In 94 * In 96 / 365 * Days of Month	\$ (59)	\$ (61)	\$ (62)	\$ (56)	\$ (62)	\$ (60)	\$ (57)	\$ (46)	\$ (41)	\$ (34)	\$ (25)	\$ (12)		\$ (576)	
100	(Over)/Under Balance	In 92 + In 98	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (14,070)	\$ (11,359)	\$ (9,865)	\$ (8,494)	\$ (6,951)	\$ (4,833)	\$ (763)	\$ (576)	\$ (576)
103 Calculation of Working Capital with Interest																	
105	Beginning Balance		\$ (13,709)	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (14,070)	\$ (11,238)	\$ (9,686)	\$ (8,265)	\$ (6,669)	\$ (4,459)	\$ (206)	\$ (13,709)
106	Forecast Working Capital	In 82	-	-	-	-	-	-	-	1,838	1,093	1,026	1,182	1,439	2,679	-	9,258
107	Projected Rev. with Interest	In 123 * In 128	-	-	-	-	-	-	-	207	545	433	443	699	1,555	1,146	5,027
108	Projected Unbilled Revenue	In 124 * In 128	-	-	-	-	-	-	-	843	802	805	808	905	934		5,097
109	Reverse Prior Month Unbilled										(843)	(802)	(805)	(808)	(905)	(934)	(5,097)
110	Add Net Adjustments	In 88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Working Capital Billed	In 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	WC Unbilled																
113	Reverse WC Unbilled																
114	Add Interest	In 98	-	-	-	-	-	-	-	(57)	(46)	(41)	(34)	(25)	(12)		(215)
115	Monthly (Over)/Under Recovery		\$ (13,709)	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (11,238)	\$ (9,687)	\$ (8,266)	\$ (6,670)	\$ (4,460)	\$ (208)	\$ 6	\$ 361
117	Average Monthly Balance		\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (14,010)	\$ (12,654)	\$ (10,463)	\$ (8,976)	\$ (7,468)	\$ (5,565)	\$ (2,333)		
119	Interest Applied	In 96 * In 117 / 365 * Days of Month	(59)	(61)	(62)	(56)	(62)	(60)	(56)	(45)	(40)	(33)	(24)	(10)		\$ (570)	
121	(Over)/Under Balance	-In 114 +In 115 + In 119	\$ (13,709)	\$ (13,768)	\$ (13,830)	\$ (13,892)	\$ (13,947)	\$ (14,010)	\$ (14,070)	\$ (11,238)	\$ (9,686)	\$ (8,265)	\$ (6,669)	\$ (4,459)	\$ (206)	\$ 6	\$ 6
123	Forecast Therm Sales	In 53								933,114	2,458,105	1,954,943	1,997,083	3,154,699	7,014,865	5,168,614	22,681,422
124	Unbilled Therm	In 55								3,803,683	3,618,148	3,629,760	3,647,000	4,081,050	4,214,548	(954,066)	
125	Working Cap. Rate w/out Int.	Sch. 3, pg. 4, In 228 col. (c)								-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	
128	Working Capital Rate w/ Int.	Sch. 3, pg. 4, In 228 col. (d)								-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	-\$0.0002	

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.
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 3 Off Peak 2021 Summer Cost of Gas Filing
 4 COG (Over)/Under Cumulative Recovery Balances and Interest Calculation

	Days in Month	Prior Period Balance Plus Nov Collections October 31, 2020	Nov-20 30	Dec-20 31	Jan-21 31	Feb-21 28	Mar-21 31	Apr-21 30	May-21 31	Jun-21 30	Jul-21 31	Aug-21 31	Sep-21 30	Oct-21 31	Nov-21 30	Off Peak Period Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
Account 8840-2-0000-10-1163-1754 (formerly, 175.54) Bad Debt (Over)/Under Balance - Interest Calculation																
139	Forecast Direct Gas Costs	In 34 In 106 + (May includes prior period)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,446,546	\$ 860,249	\$ 807,066	\$ 930,282	\$ 1,132,385	\$ 2,108,044	\$ -	7,284,571
140	Forecast Working Capital	In 21 / 6	-	-	-	-	-	-	(11,871)	1,093	1,026	1,182	1,439	2,679	-	(4,451)
141	Prior Period Balance (with Refund)	In 21 / 6	-	-	-	-	-	-	17,648	17,648	17,648	17,648	17,648	17,648	-	105,886
142	Total Forecast Direct Gas Costs & Working Capital		-	-	-	-	-	-	1,452,323	878,990	825,739	949,112	1,151,472	2,128,370	-	7,280,120
144	Beginning Balance	Account 1163-1754 1/ Oct Collections & Unbilled	\$ (326,326)	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (334,914)	\$ (269,109)	\$ (234,870)	\$ (205,499)	\$ (174,108)	\$ (123,307)	\$ (23,000)	\$ (326,326)
146	Forecast Bad Debt	In 142 * 0.0111	-	-	-	-	-	-	16,121	9,757	9,166	10,535	12,781	23,625	-	81,985
148	Projected Revenues w/o int	In 184 * In 187	-	-	-	-	-	-	10,052	26,481	21,060	21,514	33,985	75,569	55,680	244,341
149	Projected Unbilled Revenue	In 185 * In 187	-	-	-	-	-	-	40,976	38,977	39,102	39,288	43,964	45,402	-	247,710
150	Reverse Prior Month Unbilled		-	-	-	-	-	-	(40,976)	(38,977)	(39,102)	(39,288)	(43,964)	(45,402)	-	(247,710)
152	Bad Debt Billed	Account 1163-1754 2/	-	-	-	-	-	-	-	-	-	-	-	-	-	-
153	Add Net Adjustments		-	-	-	-	-	-	-	-	-	-	-	-	-	-
155	Monthly (Over)/Under Recovery		\$ (326,326)	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (267,765)	\$ (234,870)	\$ (204,519)	\$ (173,264)	\$ (122,666)	\$ (22,674)	\$ (12,722)	\$ (0)
157	Average Monthly Balance	(In 144 + 155) / 2	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (333,475)	\$ (301,339)	\$ (251,989)	\$ (219,695)	\$ (189,381)	\$ (148,387)	\$ (72,990)	\$ (17,861)	
159	Interest Rate	Prime Rate		5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%		
161	Interest Applied	In 157 * In 159 / 365 * Days of Mo.	\$ (1,408)	\$ (1,461)	\$ (1,468)	\$ (1,332)	\$ (1,480)	\$ (1,439)	\$ (1,344)	\$ (1,087)	\$ (980)	\$ (844)	\$ (640)	\$ (325)		\$ (13,809)
162	(Over)/Under Balance	In 155 + In 161	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (333,475)	\$ (269,109)	\$ (235,957)	\$ (205,499)	\$ (174,108)	\$ (123,307)	\$ (23,000)	\$ (17,861)	\$ (13,809)
Calculation of Bad Debt with Interest																
168	Beginning Balance		\$ (326,326)	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (334,914)	\$ (266,215)	\$ (231,664)	\$ (201,078)	\$ (168,437)	\$ (115,418)	\$ (10,705)	\$ (326,326)
169	Forecast Bad Debt	In 146	-	-	-	-	-	-	16,121	9,757	9,166	10,535	12,781	23,625	-	81,985
170	Projected Revenues with int.	In 184 * 189	-	-	-	-	-	-	10,622	27,980	22,253	22,733	35,910	79,850	58,834	258,181
171	Projected Unbilled Revenue	In 185 * 189	-	-	-	-	-	-	43,297	41,185	41,317	41,514	46,454	47,974	-	261,741
172	Reverse Prior Month Unbilled		-	-	-	-	-	-	(43,297)	(41,185)	(41,317)	(41,514)	(46,454)	(47,974)	-	(261,741)
173	Bad Debt Billed	In 152	-	-	-	-	-	-	-	-	-	-	-	-	-	-
174	Add Interest	In 161	-	-	-	-	-	-	(1,344)	(1,087)	(980)	(844)	(640)	(325)	-	(5,221)
175	Add Net Adjustments	In 153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
176	Monthly (Over)/Under Recovery		\$ (326,326)	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (266,218)	\$ (231,677)	\$ (201,092)	\$ (168,458)	\$ (115,446)	\$ (10,749)	\$ 155	\$ 8,619
177																
178	Average Monthly Balance	(In 168 + 176) / 2	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (333,475)	\$ (300,566)	\$ (248,946)	\$ (216,378)	\$ (184,768)	\$ (141,942)	\$ (63,084)	\$ (5,275)	
180	Interest Applied	In 159 * In 178 / 365 * Days of Month	(1,408)	(1,461)	(1,468)	(1,332)	(1,480)	(1,439)	(1,340)	(1,074)	(965)	(824)	(612)	(281)	-	\$ (13,685)
182	(Over)/Under Balance	-In 174 + In 176 + In 180	\$ (326,326)	\$ (327,734)	\$ (329,195)	\$ (330,663)	\$ (331,995)	\$ (333,475)	\$ (266,215)	\$ (231,664)	\$ (201,078)	\$ (168,437)	\$ (115,418)	\$ (10,705)	\$ 155	\$ 155
184	Forecast Therm Sales	In 53							933,114	2,458,105	1,954,943	1,997,083	3,154,699	7,014,865	5,168,614	22,681,422
185	Unbilled Therm	In 55							3,803,683	3,618,148	3,629,760	3,647,000	4,081,050	4,214,548		
187	COG Rate Without Interest	Sch. 3, pg. 4, In 245 col. (c)							-\$0.0108	-\$0.0108	-\$0.0108	-\$0.0108	-\$0.0108	-\$0.0108	-\$0.0108	-\$0.0108
188																
189	COG With Interest	Sch. 3, pg. 4, In 245 col. (d)							-\$0.0114	-\$0.0114	-\$0.0114	-\$0.0114	-\$0.0114	-\$0.0114	-\$0.0114	-\$0.0114
191																
192																
193	Total Interest	In 48 + 119 + 180	\$ (1,010)	\$ (1,049)	\$ (1,053)	\$ (956)	\$ (1,062)	\$ (1,033)	\$ (1,122)	\$ (794)	\$ (21)	\$ 1,121	\$ 1,806	\$ 1,680	\$ -	\$ (3,492)

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

2

3 Off Peak 2021 Summer Cost of Gas Filing

4 Adjustments to Gas Costs

5

6	Adjustments	Prior Period	Refunds from	Broker	Fuel Financing	Transportation	Interruptible	Off System	Capacity	Net Option	Fixed Price	Total
7	(a)	Adjustments	Suppliers /	Revenue	(e)	CGA Revenues	Sales Margin	Sales Margin	Release Margin	Premiums	Option	Adjustments
8		(b)	Pipelines	(d)		(f)	(g)	(h)	(i)	(j)	Administrative	(m)
9			(c)								Costs	
9	Nov-19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Dec-19	-	-	-	-	-	-	-	-	-	-	-
11	Jan-20	-	-	-	-	-	-	-	-	-	-	-
12	Feb-20	-	-	-	-	-	-	-	-	-	-	-
13	Mar-20	-	-	-	-	-	-	-	-	-	-	-
14	Apr-20	-	-	-	-	-	-	-	-	-	-	-
15	May-20	-	-	-	-	-	-	-	-	-	-	-
16	Jun-20	-	-	-	-	-	-	-	-	-	-	-
17	Jul-20	-	-	-	-	-	-	-	-	-	-	-
18	Aug-20	-	-	-	-	-	-	-	-	-	-	-
19	Sep-20	-	-	-	-	-	-	-	-	-	-	-
20	Oct-20	-	-	-	-	-	-	-	-	-	-	-
21												
22	Total Off Peak Period	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

2

3 Off Peak 2021 Summer Cost of Gas Filing

4 Demand Costs

5

6

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9

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11 Supply

12 Niagara Supply

13 Subtotal Supply Demand & Reservation Charges

14

15 Pipeline

16 Iroquois Gas Trans Service RTS 470-0

17 Tenn Gas Pipeline 95346 Z5-Z6

18 Tenn Gas Pipeline 2302 Z5-Z6

19 Tenn Gas Pipeline 8587 Z0-Z6

20 Tenn Gas Pipeline 8587 Z1-Z6

21 Tenn Gas Pipeline 8587 Z4-Z6

22 Tenn Gas Pipeline (Dracut) 42076 Z6-Z6

23 Tenn Gas Pipeline (Concord Lateral) Z6-Z6

24 Portland Natural Gas Trans Service

25 Portland Natural Gas

26 ANE (TransCanada via Union to Iroquois)

27 TransCanada via Union to Portland

28 Tenn Gas Pipeline Z4-Z6 stg 632

29 Tenn Gas Pipeline Z4-Z6 stg 11234

30 Tenn Gas Pipeline Z5-Z6 stg 11234

31 National Fuel FST 2358

32

33 Subtotal Pipeline Demand Charges

34

35 Peaking Supply

36 Tenn Gas Pipeline (Concord Lateral) Z6-Z6

37 Granite Ridge Demand

38 DOMAC Demand NSB041

39 Subtotal Peaking Demand Charges

40

41 Subtotal Supply, Pipeline & Peaking

42

43 Less Transportation Capacity Credit

44

45 Total Supply, Pipeline & Peaking Demand

Peak
(b)

Reference
(c)

May-21
(d)

Jun-21
(e)

Jul-21
(f)

Aug-21
(g)

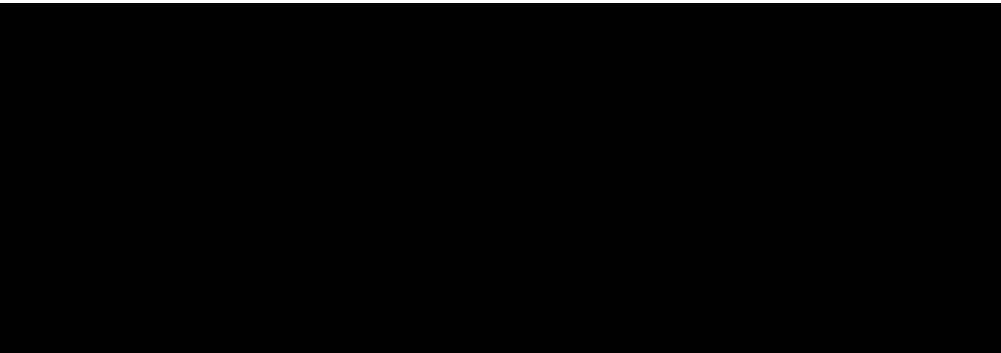
Sep-21
(h)

Oct-21
(i)

Off Peak
May - Oct
Total
(j)

Peak
May - Oct
Total
(k)

\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-



\$	1,406,094	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	4,531,247	\$	3,922,876
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\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

\$	1,406,094	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	1,409,606	\$	4,531,247	\$	3,922,876
----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------

\$	(516,036)	\$	(517,325)	\$	(517,325)	\$	(517,325)	\$	(517,325)	\$	(517,325)	\$	(517,325)	\$	(1,662,968)	\$	(1,439,696)
----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-------------	----	-------------

\$	890,057	\$	892,281	\$	892,281	\$	892,281	\$	892,281	\$	892,281	\$	892,281	\$	2,868,280	\$	2,483,181
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1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

2

3 Off Peak 2021 Summer Cost of Gas Filing

4 Demand Costs

Schedule 5A

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46

Schedule 5A

47 Storage

Page 2 of 2

48	Dominion - Demand	peak	Sch 5B, In 35 *	Sch 5C In 61 x	days	\$	1,746	\$	1,746	\$	1,746	\$	1,746	\$	1,746	\$	1,746	\$	-	\$	10,478
49	Dominion - Storage	peak	Sch 5B, In 36 *	Sch 5C In 62 x	days		1,489		1,489		1,489		1,489		1,489		1,489		-		8,935
50	Honeoye - Demand	peak	Sch 5B, In 37 *	Sch 5C In 65 x	days		8,351		8,351		8,351		8,351		8,351		8,351		-		50,105
51	National Fuel - Demand	peak	Sch 5B, In 39 *	Sch 5C In 67 x	days		15,444		15,444		15,444		15,444		15,444		15,444		-		92,663
52	National Fuel - Capacity	peak	Sch 5B, In 40 *	Sch 5C In 68 x	days		30,991		30,991		30,991		30,991		30,991		30,991		-		185,946
53	Tenn Gas Pipeline - Demand	peak	Sch 5B, In 41 *	Sch 5C In 71 x	days		29,240		29,240		29,240		29,240		29,240		29,240		-		175,442
54	Tenn Gas Pipeline - Capacity	peak	Sch 5B, In 42 *	Sch 5C In 72 x	days		28,555		28,555		28,555		28,555		28,555		28,555		-		171,331
55																					
56	Subtotal Storage Demand Costs					\$	115,817	\$	115,817	\$	115,817	\$	115,817	\$	115,817	\$	115,817	\$	-	\$	694,900
57																					
58	Less Transportation Capacity Credit					\$	(42,505)	\$	(42,505)	\$	(42,505)	\$	(42,505)	\$	(42,505)	\$	(42,505)	\$	-	\$	(255,028)
59																					
60	Total Storage Demand Costs		In 56 + In 58			\$	73,312	\$	73,312	\$	73,312	\$	73,312	\$	73,312	\$	73,312	\$	-	\$	439,872
61																					
62	Total Demand Charges		In 41 + In 56			\$	1,521,910	\$	1,525,423	\$	1,525,423	\$	1,525,423	\$	1,525,423	\$	1,525,423	\$	4,531,247	\$	4,617,777
63																					
64	Total Transportation Capacity Credit		In 43 + In 58			\$	(558,541)	\$	(559,830)	\$	(559,830)	\$	(559,830)	\$	(559,830)	\$	(559,830)	\$	(1,662,968)	\$	(1,694,724)
65																					
66	Total Demand Charges less Cap. Cr.		In 62 + In 64			\$	963,369	\$	965,593	\$	965,593	\$	965,593	\$	965,593	\$	965,593	\$	2,868,280	\$	2,923,053
67																					
68																					
69	Monthly Off Peak Demand					\$	752,281	\$	755,793	\$	755,793	\$	755,793	\$	755,793	\$	755,793	\$	4,531,247	\$	-
70	Monthly Off Peak Transportation Cap Credit						(276,087)		(277,376)		(277,376)		(277,376)		(277,376)		(277,376)		(1,662,968)		-
71	Total Off Peak Demand					\$	476,194	\$	478,417	\$	478,417	\$	478,417	\$	478,417	\$	478,417	\$	2,868,280	\$	-
72																					
73	Monthly Peak Demand					\$	769,629	\$	769,629	\$	769,629	\$	769,629	\$	769,629	\$	769,629	\$	-	\$	4,617,777
74	Monthly Peak Transportation Cap Credit						(282,454)		(282,454)		(282,454)		(282,454)		(282,454)		(282,454)		-		(1,694,724)
75	Total Peak Demand					\$	487,175	\$	487,175	\$	487,175	\$	487,175	\$	487,175	\$	487,175	\$	-	\$	2,923,053

1 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

2
3 **Off Peak 2021 Summer Cost of Gas Filing**

4 **Demand Volumes**

5				May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
6	(a)	Peak	Reference	(d)	(e)	(f)	(g)	(h)	(i)
7		(b)	(c)						
8	Supply								
9	Niagara Supply			-	-	-	-	-	-
10									
11	Pipeline								
12	Iroquois Gas Trans Service		RTS 470-01	4,047	4,047	4,047	4,047	4,047	4,047
13	Tenn Gas Pipeline		95346 Z5-Z6	4,000	4,000	4,000	4,000	4,000	4,000
14	Tenn Gas Pipeline		2302 Z5-Z6	3,122	3,122	3,122	3,122	3,122	3,122
15	Tenn Gas Pipeline (long haul)		8587 Z0-Z6	7,035	7,035	7,035	7,035	7,035	7,035
16	Tenn Gas Pipeline (long haul)		8587 Z1-Z6	14,561	14,561	14,561	14,561	14,561	14,561
17	Tenn Gas Pipeline (short haul)		8587 Z4-Z6	3,811	3,811	3,811	3,811	3,811	3,811
18	Tenn Gas Pipeline		42076 FTA Z6-Z6	20,000	20,000	20,000	20,000	20,000	20,000
19	Tenn Gas Pipeline (Concord Lateral)		Firm Transportation	30,000	30,000	30,000	30,000	30,000	30,000
20	Portland Natural Gas Trans Service		FT-1999-001	1,000	1,000	1,000	1,000	1,000	1,000
21	Portland Natural Gas		FTN	5,000	5,000	5,000	5,000	5,000	5,000
22	ANE (TransCanada via Union to Iroquois)		Dawn - Parkway to Iroquois	-	-	-	-	-	-
23	TransCanada via Union to Portland		Union Parkway to Portland	5,077	5,077	5,077	5,077	5,077	5,077
24	Tenn Gas Pipeline (short haul)	peak	632 Z4-Z6 (stg)	15,265	15,265	15,265	15,265	15,265	15,265
25	Tenn Gas Pipeline (short haul)	peak	11234 Z4-Z6(stg)	7,082	7,082	7,082	7,082	7,082	7,082
26	Tenn Gas Pipeline (short haul)	peak	11234 Z5-Z6(stg)	1,957	1,957	1,957	1,957	1,957	1,957
27	National Fuel	peak	FST N02358	6,098	6,098	6,098	6,098	6,098	6,098
28									
29	Peaking								
30	Tenn Gas Pipeline (Concord Lateral)	peak		-	-	-	-	-	-
31	Granite Ridge Demand	peak		-	-	-	-	-	-
32	DOMAC Liquid Demand Charge	peak	NSB041	-	-	-	-	-	-
33									
34	Storage								
35	Dominion - Demand	peak	GSS 300076	934	934	934	934	934	934
36	Dominion - Capacity Reservation	peak	GSS 300076	102,700	102,700	102,700	102,700	102,700	102,700
37	Honeoye - Demand	peak	SS-NY	1,362	1,362	1,362	1,362	1,362	1,362
38	Honeoye - Capacity	peak	SS-NY	245,380	245,380	245,380	245,380	245,380	245,380
39	National Fuel - Demand	peak	FSS-1 2357	6,098	6,098	6,098	6,098	6,098	6,098
40	National Fuel - Capacity Reservation	peak	FSS-1 2357	670,800	670,800	670,800	670,800	670,800	670,800
41	Tenn Gas Pipeline - Demand	peak	FS-MA 523	21,844	21,844	21,844	21,844	21,844	21,844
42	Tenn Gas Pipeline - Cap. Reservations	peak	FS-MA 523	1,560,391	1,560,391	1,560,391	1,560,391	1,560,391	1,560,391

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

2 d/b/a Liberty Utilities

3 Off Peak 2021 Summer Cost of Gas Filing

4 Demand Rates

				May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
				31	30	31	31	30	31	184	30	31	31	28	31	30
				Unit Rate	Unit Rate	Unit Rate	Unit Rate	Unit Rate	Unit Rate	Avg Rate						
6 Tariff Rates																
8 Supply																
9	Niagara Supply		\$ - Per Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11 Pipeline																
12	Iroquois Gas	RTS 470-01	\$ 5.2357 Forth Revised Sheet No. 4	\$ 0.1689	\$ 0.1745	\$ 0.1689	\$ 0.1689	\$ 0.1745	\$ 0.1689	\$ 0.1708	\$ 0.1745	\$ 0.1689	\$ 0.1689	\$ 0.1870	\$ 0.1689	\$ 0.1745
14	Tenn Gas Pipeline	95346 Z5-Z6	\$ 6.4123 15th Rev Sheet No. 14	\$ 0.4746	\$ 0.4904	\$ 0.4746	\$ 0.4746	\$ 0.4904	\$ 0.4746	\$ 0.4799	\$ 0.4904	\$ 0.4746	\$ 0.4746	\$ 0.5254	\$ 0.4746	\$ 0.4904
16	Tenn Gas Pipeline	2302 Z5-Z6	\$ 6.4123 15th Rev Sheet No. 14	\$ 0.2068	\$ 0.2137	\$ 0.2068	\$ 0.2068	\$ 0.2137	\$ 0.2068	\$ 0.2091	\$ 0.2137	\$ 0.2068	\$ 0.2068	\$ 0.2290	\$ 0.2068	\$ 0.2137
18	Tenn Gas Pipeline	8587 Z0-Z6	\$ 20.8047 FT-A (Z0 - Z6)	\$ 0.6711	\$ 0.6935	\$ 0.6711	\$ 0.6711	\$ 0.6935	\$ 0.6711	\$ 0.6786	\$ 0.6935	\$ 0.6711	\$ 0.6711	\$ 0.7430	\$ 0.6711	\$ 0.6935
20	Tenn Gas Pipeline	8587 Z1-Z6	\$ 18.4675 FT-A (Z1 - Z6)	\$ 0.5957	\$ 0.6156	\$ 0.5957	\$ 0.5957	\$ 0.6156	\$ 0.5957	\$ 0.6023	\$ 0.6156	\$ 0.5957	\$ 0.5957	\$ 0.6596	\$ 0.5957	\$ 0.6156
22	Tenn Gas Pipeline	8587 Z4-Z6	\$ 7.3005 FT-A (Z4 - Z6)	\$ 0.2355	\$ 0.2434	\$ 0.2355	\$ 0.2355	\$ 0.2434	\$ 0.2355	\$ 0.2381	\$ 0.2434	\$ 0.2355	\$ 0.2355	\$ 0.2607	\$ 0.2355	\$ 0.2434
24	TGP Dracut	42076 FTA Z6-Z	\$ 4.2512 15th Rev Sheet No. 14	\$ 0.1371	\$ 0.1417	\$ 0.1371	\$ 0.1371	\$ 0.1417	\$ 0.1371	\$ 0.1387	\$ 0.1417	\$ 0.1371	\$ 0.1371	\$ 0.1518	\$ 0.1371	\$ 0.1417
26	TGP Concord Lateral	Firm Transporta	\$ 12.1881 Per contract	\$ 0.3932	\$ 0.4063	\$ 0.3932	\$ 0.3932	\$ 0.4063	\$ 0.3932	\$ 0.3975	\$ 0.4063	\$ 0.3932	\$ 0.3932	\$ 0.4353	\$ 0.3932	\$ 0.4063
28	Portland Natural Gas	FT-1999-001	\$ 18.2633 Negot Dmd /CMDY=Part 4.1 V6	\$ 0.5891	\$ 0.6088	\$ 0.5891	\$ 0.5891	\$ 0.6088	\$ 0.5891	\$ 0.5957	\$ 0.6088	\$ 0.5891	\$ 0.5891	\$ 0.6523	\$ 0.5891	\$ 0.6088
30	Portland Natural Gas	FTN	\$ 22.8125 Negot Dmd /CMDY=Part 4.1 V6	\$ 0.7359	\$ 0.7604	\$ 0.7359	\$ 0.7359	\$ 0.7604	\$ 0.7359	\$ 0.7441	\$ 0.7604	\$ 0.7359	\$ 0.7359	\$ 0.8147	\$ 0.7359	\$ 0.7604
32	Tenn Gas Pipeline	632 Z4-Z6 (stg)	\$ 7.3005 15th Rev Sheet No. 14	\$ 0.2355	\$ 0.2434	\$ 0.2355	\$ 0.2355	\$ 0.2434	\$ 0.2355	\$ 0.2381	\$ 0.2434	\$ 0.2355	\$ 0.2355	\$ 0.2607	\$ 0.2355	\$ 0.2434
34	Tenn Gas Pipeline	11234 Z4-Z6(stc	\$ 7.3005 15th Rev Sheet No. 14	\$ 0.2355	\$ 0.2434	\$ 0.2355	\$ 0.2355	\$ 0.2434	\$ 0.2355	\$ 0.2381	\$ 0.2434	\$ 0.2355	\$ 0.2355	\$ 0.2607	\$ 0.2355	\$ 0.2434
36	Tenn Gas Pipeline	11234 Z5-Z6(stc	\$ 6.4123 15th Rev Sheet No. 14	\$ 0.2068	\$ 0.2137	\$ 0.2068	\$ 0.2068	\$ 0.2137	\$ 0.2068	\$ 0.2091	\$ 0.2137	\$ 0.2068	\$ 0.2068	\$ 0.2290	\$ 0.2068	\$ 0.2137
38	National Fuel	FST N02358	\$ 4.5019 4.010 Version 29.0.1 Pg 1	\$ 0.1452	\$ 0.1501	\$ 0.1452	\$ 0.1452	\$ 0.1501	\$ 0.1452	\$ 0.1468	\$ 0.1501	\$ 0.1452	\$ 0.1452	\$ 0.1608	\$ 0.1452	\$ 0.1501
40	ANE Union Gas		\$ 3.6320													
41	TransCanada Pipelines Limited		\$ 9.4867 Union Parkway to Iroquois													
42	Delivery Pressure Demand Charge		\$ 0.6704 Union Parkway to Iroquois													
43	Sub Total Demand Charges		\$ 13.7890													
44	Conversion rate GJ to MMBTU		\$ 1.0551													
45	Conversion rate to US\$		\$ 1.3539 1/0/1900													
46	Demand Rate/US\$		\$ 10.7451	\$ 0.3466	\$ 0.3582	\$ 0.3466	\$ 0.3466	\$ 0.3582	\$ 0.3466	\$ 0.3505	\$ 0.3582	\$ 0.3466	\$ 0.3466	\$ 0.3838	\$ 0.3466	\$ 0.3582
48	ANE Union Gas		\$ 3.6320													
49	TransCanada Pipelines Limited		\$ 15.9986													
50	Delivery Pressure Demand Charge		\$ 0.6704													
51	Sub Total Demand Charges		\$ 20.3009													
52	Conversion rate GJ to MMBTU		\$ 1.0551													
53	Conversion rate to US\$		\$ 1.3539 \$0.0000													
54	Demand Rate/US\$		\$ 15.8195	\$ 0.5103	\$ 0.5273	\$ 0.5103	\$ 0.5103	\$ 0.5273	\$ 0.5103	\$ 0.5160	\$ 0.5273	\$ 0.5103	\$ 0.5103	\$ 0.5650	\$ 0.5103	\$ 0.5273
56 Peaking																
57	Granite Ridge Demand		\$ - Per Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58	DOMAC Demand NSB041		\$ - Per Contract	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60 Storage																
61	Dominion - Demand	GSS 300076	\$ 1.8698 GSS Settled,Tariff Rec #10.30 V	\$ 0.0603	\$ 0.0623	\$ 0.0603	\$ 0.0603	\$ 0.0623	\$ 0.0603	\$ 0.0611	\$ 0.0623	\$ 0.0603	\$ 0.0603	\$ 0.0668	\$ 0.0603	\$ 0.0623
62	Dominion - Capacity	GSS 300076	\$ 0.0145 GSS Settled,Tariff Rec #10.30 V	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005	\$ 0.0005
63			\$ 1.8843	\$ 0.0608	\$ 0.0628	\$ 0.0608	\$ 0.0608	\$ 0.0628	\$ 0.0608	\$ 0.0616	\$ 0.0628	\$ 0.0608	\$ 0.0608	\$ 0.0673	\$ 0.0608	\$ 0.0628
65	Honeoye - Demand	SS-NY	\$ 6.1299 Sub 1st Rev Sheet No. 5	\$ 0.1977	\$ 0.2043	\$ 0.1977	\$ 0.1977	\$ 0.2043	\$ 0.1977	\$ 0.2004	\$ 0.2043	\$ 0.1977	\$ 0.1977	\$ 0.2189	\$ 0.1977	\$ 0.2043
67	National Fuel - Demand	FSS-1 2357	\$ 2.5326 4.020 Version 24.0.0 Pg 1	\$ 0.0817	\$ 0.0844	\$ 0.0817	\$ 0.0817	\$ 0.0844	\$ 0.0817	\$ 0.0828	\$ 0.0844	\$ 0.0817	\$ 0.0817	\$ 0.0905	\$ 0.0817	\$ 0.0844
68	National Fuel - Capacity	FSS-1 2357	\$ 0.0462 4.020 Version 24.0.0 Pg 1	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0015	\$ 0.0017	\$ 0.0015	\$ 0.0015
69			\$ 2.5788	\$ 0.0832	\$ 0.0860	\$ 0.0832	\$ 0.0832	\$ 0.0860	\$ 0.0832	\$ 0.0843	\$ 0.0860	\$ 0.0832	\$ 0.0832	\$ 0.0921	\$ 0.0832	\$ 0.0860
71	Tenn Gas Pipeline	FS-MA 523	\$ 1.3386 18th Rev Sheet No.61	\$ 0.0432	\$ 0.0446	\$ 0.0432	\$ 0.0432	\$ 0.0446	\$ 0.0432	\$ 0.0438	\$ 0.0446	\$ 0.0432	\$ 0.0432	\$ 0.0478	\$ 0.0432	\$ 0.0446

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

2

3 Off Peak 2021 Summer Cost of Gas Filing

4 Supply and Commodity Costs, Volumes and Rates

REDACTED
Schedule 6
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5									
6	For Month of:	Reference	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Off-Peak
7	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	May - Oct
8									(i)
9	Supply and Commodity Costs								
10									
11	Pipeline Gas:								
12	Dawn Supply	In 63 * In 104							
13	Niagara Supply	In 64 * In 109							
14	TGP Supply (Gulf)	In 65 * In 125							
15	Dracut Supply 1 - Baseload	In 66 * In 114							
16	Dracut Supply 2 - Swing	In 67 * In 119							
17	City Gate Delivered Supply	In 68 * In 131							
18	LNG Truck	In 69 * In 133							
19	Propane Truck	In 70 * In 135							
20	PNGTS	In 71 * In 140							
21	Portland Natural Gas								
22	TGP Supply (Zone 4)	In 73 * In 150							
23									
24	Subtotal Pipeline Gas Costs		\$ 1,963,457	\$ 1,297,121	\$ 1,132,900	\$ 717,406	\$ 1,413,156	\$ 1,952,103	\$ 8,495,817
25									
26	Volumetric Transportation Costs								
27	Dawn Supply	In 63 * In 197							
28	Niagara Supply	In 64 * In 208							
29	TGP Supply (Zone 4)	In 73 * In 246							
30	Dracut Supply 1 - Baseload	In 66 * In 257							
31	Dracut Supply 2 - Swing	In 67 * In 257							
32	City Gate Delivered Supply	In 68 * In 257							
33	TGP Storage - Withdrawals	In 78 * In 172							
34									
35	Total Volumetric Transportation Costs		\$ 61,389	\$ 44,480	\$ 55,136	\$ 33,342	\$ 47,461	\$ 81,489	\$ 323,297
36									
37	Less - Gas Refill:								
38	LNG Truck	In 87 * In 157							
39	Propane	In 88 * In 158							
40	TGP Storage Refill	In 89 * In 123							
41	Storage Refill (Trans.)	In 89 * In 236							
42									
43	Subtotal Refills		\$ (1,063,304)	\$ (965,141)	\$ (863,665)	\$ (302,663)	\$ (810,143)	\$ (407,246)	\$ (4,412,162)
44									
45	Total Supply & Pipeline Commodity Costs In 24 + In 35 + In 43		\$ 961,542	\$ 376,460	\$ 324,372	\$ 448,085	\$ 650,474	\$ 1,626,345	\$ 4,387,278
46									
47	Storage Gas:								
48	TGP Storage - Withdrawals	In 78 * In 164	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49									
50	Produced Gas:								
51	LNG Vapor	In 81 * In 152							
52	Propane	In 82 * In 154							
53									
54	Total Produced Gas	In 51 + In 52	\$ 8,811	\$ 5,372	\$ 4,276	\$ 3,780	\$ 3,493	\$ 3,281	\$ 29,014
55									
56									
57	Total Commodity Gas & Trans. Costs	In 45 + In 48 + In 54	\$ 970,352	\$ 381,832	\$ 328,648	\$ 451,865	\$ 653,968	\$ 1,629,626	\$ 4,416,292

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1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

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3 Off Peak 2021 Summer Cost of Gas Filing

4 Supply and Commodity Costs, Volumes and Rates

59

Schedule 6

60 Volumes (Therms)

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61

62 Pipeline Gas:

See Schedule 11A

63	Dawn Supply	-	-	-	-	-	858,740	858,740
64	Niagara Supply	637,331	-	532,884	535,788	-	676,922	2,382,926
65	TGP Supply (Gulf)	-	-	-	-	-	-	-
66	Dracut Supply 1 - Baseload	-	-	-	-	-	-	-
67	Dracut Supply 2 - Swing	3,933,940	2,438,570	-	-	3,103,570	1,319,579	10,795,659
68	City Gate Delivered Supply	-	-	-	-	-	-	-
69	LNG Truck	46,746	17,020	15,965	-	35,455	16,084	131,270
70	Propane Truck	75,716	67,494	63,308	63,653	70,300	80,420	420,889
71	PNGTS	202,129	-	169,004	169,925	-	214,685	755,742
72	Portland Natural Gas	-	-	-	-	-	-	-
73	TGP Supply (Zone 4)	3,508,614	2,994,951	4,054,983	2,293,151	3,119,464	5,460,834	21,431,995
74								
75	Subtotal Pipeline Volumes	8,404,476	5,518,034	4,836,143	3,062,516	6,328,789	8,627,264	36,777,221

76

77 Storage Gas:

78	TGP Storage	-	-	-	-	-	-	-
----	-------------	---	---	---	---	---	---	---

79

80 Produced Gas:

81	LNG Vapor	19,197	17,222	15,625	15,495	14,321	16,992	98,853
82	Propane	-	-	-	-	-	-	-

83

84 Subtotal Produced Gas

19,197	17,222	15,625	15,495	14,321	16,992	98,853
--------	--------	--------	--------	--------	--------	--------

85

86 Less - Gas Refill:

87	LNG Truck	(47,001)	(17,837)	(15,625)	-	(29,665)	(13,476)	(123,604)
88	Propane	(76,128)	(70,733)	(61,962)	(61,447)	(58,818)	(67,382)	(396,470)
89	TGP Storage Refill	(3,489,964)	(3,138,717)	(2,776,992)	(970,865)	(2,609,978)	(1,303,686)	(14,290,202)

90

91 Subtotal Refills

(3,613,093)	(3,227,287)	(2,854,580)	(1,032,312)	(2,698,460)	(1,384,544)	(14,810,276)
-------------	-------------	-------------	-------------	-------------	-------------	--------------

92

93 Total Sendout Volumes

4,810,581	2,307,969	1,997,188	2,045,699	3,644,650	7,259,712	22,065,798
-----------	-----------	-----------	-----------	-----------	-----------	------------

94

95

96

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

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3 Off Peak 2021 Summer Cost of Gas Filing

4 Supply and Commodity Costs, Volumes and Rates

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98 Gas Costs and Volumetric Transportation Rates

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Schedule 6
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100 Pipeline Gas:

101 Dawn Supply

Sch 7, In 10/10

Average Rate

102 NYMEX Price

103 Basis Differential

104 Net Commodity Costs

105

106 Niagara Supply

Sch 7, In 10/10

107 NYMEX Price

108 Basis Differential

109 Net Commodity Costs

110

111 Dracut Supply 1 - Baseload

Sch 7, In 10 / 10

112 Commodity Costs - NYMEX Price

113 Basis Differential

114 Net Commodity Costs

115

116 Dracut Supply 2 - Swing

Sch 7, In 10 / 10

117 Commodity Costs - NYMEX Price

118 Basis Differential

119 Net Commodity Costs

120

121

122 TGP Supply (Gulf)

Sch 7, In 10/10

123 NYMEX Price

124 Basis Differential

125 Net Commodity Costs

126

127

128 TGP Citygate Supply

Sch 7, In 10/10

129 NYMEX Price

130 Basis Differential

131 Net Commodity Costs

132

133 LNG Truck

Sch 7, In 10/10

\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000

134

135 Propane Truck

NYMEX - Propane

\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000

136

137 PNGTS

Sch 7, In 10/10

138 NYMEX Price

139 Additional Cost

140 Net Commodity Cost

141

142 PNGTS EXP

Sch 7, In 10/10

143 NYMEX Price

144 Basis Differential

145 Net Commodity Cost

146

147 TGP Supply (Zone 4)

Sch 7, In 10/10

148 NYMEX Price

149 Basis Differential

150 Net Commodity Cost

151

152 LNG Vapor (Storage)

Sch 13, In 97 /10

\$0.4590 \$0.3120 \$0.2737 \$0.2439 \$0.2439 \$0.1931 \$0.2876

153

154 Propane

Sch 13, In 67 /10

\$1.1273 \$1.0165 \$0.9346 \$0.8689 \$0.8116 \$0.7564 \$0.9192

155

156 Storage Refill:

157 LNG Truck

In 133

\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000

158 Propane

In 135

\$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000

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1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

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3 Off Peak 2021 Summer Cost of Gas Filing

4 Supply and Commodity Costs, Volumes and Rates

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Schedule 6

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177 Per Unit Volumetric Transportation Rates

178 Dawn Supply Volumetric Transportation Charge

Average Rate

179 Commodity Costs	In 104	\$0.2505	\$0.2502	\$0.2516	\$0.2525	\$0.2513	\$0.2483	\$0.2507
181 TransCanada - Commodity Rate/GJ	Dawn - Parkway to Iroquois	\$0.00020	\$0.00020	\$0.00020	\$0.00020	\$0.00020	\$0.00020	\$0.00020
182 Conversion Rate GL to MMBTU		1.0551	1.0551	1.0551	1.0551	1.0551	1.0551	1.0551
183 Conversion Rate to US\$	1/0/1900	1.3539	1.3539	1.3539	1.3539	1.3539	1.3539	1.3539
184 Commodity Rate/US\$	In 181 x In 182 x In 183	\$0.00029	\$0.00029	\$0.00029	\$0.00029	\$0.00029	\$0.00029	\$0.00029
185 TransCanada Fuel %	Dawn - Parkway to Iroquois	1.08%	0.94%	0.00%	0.00%	0.00%	0.00%	0.34%
186 TransCanada Fuel * Percentage	In 179 x In 185	\$0.00270	\$0.00235	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00084
187 Subtotal TransCanada		\$0.00298	\$0.00263	\$0.00029	\$0.00029	\$0.00029	\$0.00029	\$0.00113
188 IGTS - Z1 RTS Commodity	Forth Revised Sheet No. 4	\$0.00034	\$0.00034	\$0.00034	\$0.00034	\$0.00034	\$0.00034	\$0.00034
189 IGTS - Z1 RTS ACA Rate Commodity	Forth Revised Sheet No. 4	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011
190 IGTS - Z1 RTS Deferred Asset Surcharge	Forth Revised Sheet No. 4	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
191 Subtotal IGTS - Trans Charge - Z1 RTS Commodity		\$0.00045	\$0.00045	\$0.00045	\$0.00045	\$0.00045	\$0.00045	\$0.00045
192 TGP NET-NE - Comm. Segments 3 & 4	17th Rev Sheet No. 15	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011
193 IGTS -Fuel Use Factor - Percentage	Forth Revised Sheet No. 4	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
194 IGTS -Fuel Use Factor - Fuel * Percentage	In 179 x In 193	\$0.00250	\$0.00250	\$0.00252	\$0.00253	\$0.00251	\$0.00248	\$0.00251
195 TGP FTA Fuel Charge % Z 5-6	16th Rev Sheet No. 32	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%
196 TGP FTA Fuel * Percentage	In 179 x In 195	\$0.00210	\$0.00210	\$0.00211	\$0.00212	\$0.00211	\$0.00209	\$0.00211
197 Total Volumetric Transportation Charge - Dawn Supply		\$0.00815	\$0.00779	\$0.00547	\$0.00549	\$0.00547	\$0.00542	\$0.00630

198

199

200 Niagara Supply Volumetric Transportation Charge

201 Commodity Costs Ln 109

202

203 TGP FTA - FTA Z 5-6 Comm. Rate 17th Rev Sheet No. 15

204 TGP FTA - FTA Z 5-6 - ACA Rate 17th Rev Sheet No. 15

205 Subtotal TGP FTA - FTA Z 5-6 Commodity Rate

206 TGP FTA Fuel Charge % Z 5-6 16th Rev Sheet No. 32

207 TGP FTA Fuel * Percentage In 201 x In 206

208 Total Volumetric Transportation Rate - Niagara Supply

209

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1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

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3 Off Peak 2021 Summer Cost of Gas Filing

4 Supply and Commodity Costs, Volumes and Rates

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215 TGP Direct Volumetric Transportation Charge

Average Rate

216 Commodity Costs Ln 123

217							
218	TGP - Max Comm. Base Rate - Z 0-6	17th Rev Sheet No. 15	\$0.02723	\$0.02723	\$0.02723	\$0.02723	\$0.02723
219	TGP - Max Commodity ACA Rate - Z 0-6	17th Rev Sheet No. 15	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011
220	Subtotal TGP - Max Comm. Rate Z 0-6		\$0.02734	\$0.02734	\$0.02734	\$0.02734	\$0.02734
221	Prorated Percentage		32.60%	32.60%	32.60%	32.60%	32.60%
222	Prorated TGP - Max Commodity Rate - Z 0-6		\$0.00891	\$0.00891	\$0.00891	\$0.00891	\$0.00891
223	TGP - Max Comm. Base Rate - Z 1-6	17th Rev Sheet No. 15	\$0.02374	\$0.02374	\$0.02374	\$0.02374	\$0.02374
224	TGP - Max Commodity ACA Rate - Z 1-6	17th Rev Sheet No. 15	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011
225	Subtotal TGP - Max Commodity Rate - Z 1-6		\$0.02385	\$0.02385	\$0.02385	\$0.02385	\$0.02385
226	Prorated Percentage		67.40%	67.40%	67.40%	67.40%	67.40%
227	Prorated TGP - Trans Charge - Max Commodity Rate - Z 1-6		\$0.01607	\$0.01607	\$0.01607	\$0.01607	\$0.01607
228	TGP - Fuel Charge % - Z 0-6	16th Rev Sheet No. 32	4.84%	4.84%	4.84%	4.84%	4.84%
229	Prorated Percentage		32.6%	32.6%	32.6%	32.6%	32.6%
230	Prorated TGP Fuel Charge % - Z 0-6		1.58%	1.58%	1.58%	1.58%	1.58%
231	TGP - Fuel Charge % - Z 1-6	16th Rev Sheet No. 32	4.21%	4.21%	4.21%	4.21%	4.21%
232	Prorated Percentage		67.40%	67.40%	67.40%	67.40%	67.40%
233	Prorated TGP Fuel Charge - Fuel Charge % - Z 1-6		2.84%	2.84%	2.84%	2.84%	2.84%
234	TGP - Fuel Charge % - Z 0-6	In 216 x In 230	\$0.00412	\$0.00416	\$0.00420	\$0.00421	\$0.00416
235	TGP - Fuel Charge % - Z 1-6	In 216 x In 233	\$0.00740	\$0.00748	\$0.00755	\$0.00756	\$0.00749
236	Total Volumetric Transportation Rate - TGP (Direct)		\$0.03651	\$0.03663	\$0.03674	\$0.03676	\$0.03664

237

238 TGP (Zone 4 Purchase) Volumetric Transportation Charge

239 Commodity Costs Ln 123

240							
241	TGP - Max Comm. Base Rate - Z 4-6	17th Rev Sheet No. 15	\$0.00939	\$0.00939	\$0.00939	\$0.00939	\$0.00939
242	TGP - Max Commodity ACA Rate - Z 4-6	17th Rev Sheet No. 15	\$0.00011	\$0.00011	\$0.00011	\$0.00011	\$0.00011
243	Subtotal TGP - Max Commodity Rate - Z 4-6		\$0.00950	\$0.00950	\$0.00950	\$0.00950	\$0.00950
244	TGP - Fuel Charge % - Z 4-6	16th Rev Sheet No. 32	1.22%	1.22%	1.22%	1.22%	1.22%
245	TGP - Fuel Charge	In 239 x In 244	\$0.00286	\$0.00284	\$0.00288	\$0.00287	\$0.00265
246	Total Vol. Trans. Rate - TGP (Zone 6)		\$0.01236	\$0.01234	\$0.01238	\$0.01237	\$0.01215

247

248

249 TGP Dracut

250 Commodity Costs - NYMEX Price Ln 114

251							
252	TGP - Trans Charge - Comm. - Z 6-6	17th Rev Sheet No. 15					
253	TGP - Trans Charge - ACA Rate - Z 6-6	17th Rev Sheet No. 15					
254	Subtotal TGP - Trans Charge - Max Commodity Rate - Z 6-6						
255	TGP - Fuel Charge % - Z 6-6	16th Rev Sheet No. 32					
256	TGP - Fuel Charge	In 250 x In 255					
257	Total Volumetric Transportation Rate - TGP Dracut						

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1 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

2

3 **Off Peak 2021 Summer Cost of Gas Filing**

4 **NYMEX Futures @ Henry Hub**

5

6 For Month of:

Reference

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

May - Oct
Off Peak
Strip Average

7 (a)

(b)

(c)

(d)

(e)

(f)

(g)

(h)

(i)

8 **I. NYMEX Opening Prices as of:**

9

Opening Prices (15 day average)

Line 206

\$2.6817

\$2.7087

\$2.7427

\$2.7499

\$2.7376

\$2.7577

\$ 2.7297

10

\$2.6817

\$2.7087

\$2.7427

\$2.7499

\$2.7376

\$2.7577

\$ 2.7297

11

12

13

14 NYMEX Settlement - 15 Day Average

15

Days

Date

16

8/5/2020

\$2.6130

\$2.6450

\$2.6840

\$2.6910

\$2.6780

\$2.6960

\$ 2.6678

17

8/6/2020

\$2.6250

\$2.6540

\$2.6900

\$2.6970

\$2.6840

\$2.7040

\$ 2.6757

18

8/7/2020

\$2.6470

\$2.6740

\$2.7070

\$2.7120

\$2.6990

\$2.7170

\$ 2.6927

19

8/10/2020

\$2.6230

\$2.6530

\$2.6880

\$2.6960

\$2.6830

\$2.7010

\$ 2.6740

20

8/11/2020

\$2.6460

\$2.6740

\$2.7090

\$2.7160

\$2.7030

\$2.7220

\$ 2.6950

21

8/12/2020

\$2.6410

\$2.6690

\$2.7040

\$2.7100

\$2.6970

\$2.7170

\$ 2.6897

22

8/13/2020

\$2.6500

\$2.6780

\$2.7130

\$2.7190

\$2.7050

\$2.7250

\$ 2.6983

23

8/14/2020

\$2.6890

\$2.7140

\$2.7460

\$2.7520

\$2.7400

\$2.7630

\$ 2.7340

24

8/17/2020

\$2.6920

\$2.7170

\$2.7500

\$2.7570

\$2.7460

\$2.7680

\$ 2.7383

25

8/18/2020

\$2.7180

\$2.7430

\$2.7760

\$2.7840

\$2.7730

\$2.7940

\$ 2.7647

26

8/19/2020

\$2.7330

\$2.7590

\$2.7910

\$2.7990

\$2.7880

\$2.8090

\$ 2.7798

27

8/20/2020

\$2.7330

\$2.7590

\$2.7910

\$2.7990

\$2.7880

\$2.8090

\$ 2.7798

28

8/21/2020

\$2.7450

\$2.7690

\$2.8020

\$2.8100

\$2.7970

\$2.8170

\$ 2.7900

29

8/24/2020

\$2.7330

\$2.7600

\$2.7940

\$2.8030

\$2.7920

\$2.8120

\$ 2.7823

30

8/25/2020

\$2.7370

\$2.7620

\$2.7950

\$2.8030

\$2.7910

\$2.8120

\$ 2.7833

31

32

33

15 Day Average

\$2.6817

\$2.7087

\$2.7427

\$2.7499

\$2.7376

\$2.7577

Liberty Utilities (EnergyNorth Natural Gas) Corp.

1
 2 Off Peak 2021 Summer Cost of Gas Filing
 3 Annual Bill Comparisons, May 19 - Oct 19 vs May 20 - Oct 20 - Residential Heating Rate R-3
 4
 5

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6 November 1, 2020 - April 30, 2021
 7 Residential Heating (R3)

		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
10 Typical Usage (Therms)		62	110	123	148	132	92	667
11	7/1/2020 - Current							
12 Winter:								
13 Cust. Chg	\$ 15.50	\$ 15.50	\$ 15.50	\$ 15.50	\$ 15.50	\$ 15.50	\$ 15.50	\$ 93.00
14 Headblock	\$ 0.5678	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15 Tailblock	\$ 0.5678	\$ 35.20	\$ 62.46	\$ 69.84	\$ 84.03	\$ 74.95	\$ 52.24	\$ 378.72
16 HB Threshold	-	-	-	-	-	-	-	-
17								
18 Summer:	7/1/2020 - Current							
19 Cust. Chg	\$ 15.50							
20 Headblock	\$ 0.5678							
21 Tailblock	\$ 0.5678							
22 HB Threshold	-							
23								
24 Total Base Rate Amount		\$ 50.70	\$ 77.96	\$ 85.34	\$ 99.53	\$ 90.45	\$ 67.74	\$ 471.72
25								
26 COG Rate - (Seasonal)		\$ 0.5571	\$ 0.5571	\$ 0.5571	\$ 0.5571	\$ 0.5571	\$ 0.5571	\$ 0.5571
27 COG amount		\$ 34.54	\$ 61.28	\$ 68.52	\$ 82.45	\$ 73.54	\$ 51.25	\$ 371.59
28								
29 LDAC		\$ 0.0603	\$ 0.0603	\$ 0.0603	\$ 0.0603	\$ 0.0603	\$ 0.0603	\$ 0.0603
30 LDAC amount		\$ 3.74	\$ 6.63	\$ 7.41	\$ 8.92	\$ 7.96	\$ 5.55	\$ 40.21
31								
32 Total Bill		\$ 88.98	\$ 145.87	\$ 161.28	\$ 190.91	\$ 171.94	\$ 124.54	\$ 883.52

34 November 1, 2019 - April 30, 2020
 35 Residential Heating (R3)

		Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr
37 Typical Usage (Therms)		62	110	123	148	132	92	667
38								
39	7/1/19 - 6/30/20							
40 Winter:								
41 Cust. Chg	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 91.20
42 Headblock	\$ 0.5569	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43 Tailblock	\$ 0.5569	\$ 34.53	\$ 61.26	\$ 68.50	\$ 82.42	\$ 73.51	\$ 51.23	\$ 371.45
44 HB Threshold	-	-	-	-	-	-	-	-
45								
46 Summer:	7/1/19 - 6/30/20							
47 Cust. Chg	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 91.20
48 Headblock	\$ 0.5569	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49 Tailblock	\$ 0.5569	\$ 34.53	\$ 61.26	\$ 68.50	\$ 82.42	\$ 73.51	\$ 51.23	\$ 371.45
50 HB Threshold	-	-	-	-	-	-	-	-
51								
52 Total Base Rate Amount		\$ 49.73	\$ 76.46	\$ 83.70	\$ 97.62	\$ 88.71	\$ 66.43	\$ 462.65
53								
54 COG Rate - (Seasonal)		\$ 0.6203	\$ 0.6203	\$ 0.5653	\$ 0.4184	\$ 0.3499	\$ 0.2679	\$ 0.4632
55 COG amount		\$ 38.46	\$ 68.23	\$ 69.53	\$ 61.92	\$ 46.19	\$ 24.65	\$ 308.98
56								
57 LDAC		\$ 0.0310	\$ 0.0310	\$ 0.0310	\$ 0.0310	\$ 0.0310	\$ 0.0310	\$ 0.0310
58 LDAC amount		\$ 1.92	\$ 3.41	\$ 3.81	\$ 4.59	\$ 4.09	\$ 2.85	\$ 20.68
59								
60 Total Bill		\$ 90.11	\$ 148.10	\$ 157.04	\$ 164.13	\$ 138.99	\$ 93.93	\$ 792.31

62 DIFFERENCE:

63 Total Bill		\$ (1.13)	\$ (2.23)	\$ 4.23	\$ 26.77	\$ 32.95	\$ 30.60	\$ 91.21
64 % Change		-1.25%	-1.51%	2.70%	16.31%	23.71%	32.58%	11.51%
65								
66 Base Rate		\$ 0.98	\$ 1.50	\$ 1.64	\$ 1.91	\$ 1.74	\$ 1.30	\$ 9.07
67 % Change		1.96%	1.96%	1.96%	1.96%	1.96%	1.96%	1.96%
68								
69 COG & LDAC		\$ (2.10)	\$ (3.73)	\$ 2.59	\$ 24.86	\$ 31.22	\$ 29.30	\$ 82.14
70 % Change		-5.21%	-5.21%	3.54%	37.38%	62.09%	106.55%	24.92%
check		\$ (0.00)	\$ (0.00)	\$ (0.00)	\$ -	\$ -	\$ -	\$ (0.00)

May 1, 2020 - October 31, 2020

	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
	51	28	16	14	14	21	144	811
\$	15.50	15.50	15.50	15.50	15.50	15.50	93.00	186.00
\$	-	-	-	-	-	-	-	-
\$	28.96	15.90	9.08	7.95	7.95	11.92	81.76	460.49
\$	44.46	31.40	24.58	23.45	23.45	27.42	174.76	646.49
\$	0.3148	0.3148	0.3148	0.3148	0.3148	0.3148	0.3148	0.5141
\$	16.05	8.81	5.04	4.41	4.41	6.61	45.33	416.92
\$	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603
\$	3.07	1.69	0.96	0.84	0.84	1.27	8.68	48.89
\$	63.59	41.90	30.59	28.70	28.70	35.30	228.78	1,112.29

May 1, 2019 - October 31, 2019

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
	51	28	16	14	14	21	144	811
\$	15.20	15.20	15.50	15.50	15.50	15.50	92.40	183.60
\$	-	-	-	-	-	-	-	-
\$	28.40	15.59	9.08	7.95	7.95	11.92	80.90	452.35
\$	43.60	30.79	24.58	23.45	23.45	27.42	173.30	635.95
\$	0.2550	0.2550	0.3715	0.4757	0.4757	0.4757	0.3430	0.4419
\$	13.01	7.14	5.94	6.66	6.66	9.99	49.40	358.38
\$	0.0310	0.0310	0.0310	0.0310	0.0310	0.0310	0.0310	0.0310
\$	1.58	0.87	0.50	0.43	0.43	0.65	4.46	25.14
\$	58.19	38.80	31.02	30.54	30.54	38.06	227.16	1,019.47

\$	5.40	3.10	(0.44)	(1.84)	(1.84)	(2.76)	1.61	92.82
\$	9.28%	7.99%	-1.41%	-6.03%	-6.03%	-7.26%	0.71%	9.10%
\$	0.86	0.61	-	-	-	-	1.46	10.53
\$	1.96%	1.97%	0.00%	0.00%	0.00%	0.00%	0.84%	1.66%
\$	4.54	2.49	(0.44)	(1.84)	(1.84)	(2.76)	0.15	82.29
\$	31.15%	31.15%	-6.81%	-25.98%	-25.98%	-25.98%	0.28%	21.46%
\$	0.00	-	(0.00)	0.00	0.00	-	(0.00)	(0.00)

Liberty Utilities (EnergyNorth Natural Gas) Corp.

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 2 Off Peak 2021 Summer Cost of Gas Filing
 3 Annual Bill Comparisons, May 19 - Oct 19 vs May 20 - Oct 20 - Commercial Rate G-41
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 6 November 1, 2020 - April 30, 2021
 7 Commercial Rate (G-41)

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May 1, 2020 - October 31, 2020

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
10 Typical Usage (Therms)	89	277	504	457	331	297	1,955
11							
12 Winter:							
13 Cust. Chg	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 344.76
14 Headblock	\$ 0.4711	\$ 4.93	\$ 47.11	\$ 47.11	\$ 47.11	\$ 47.11	\$ 277.48
15 Tailblock	\$ 0.3165	\$ -	\$ 56.02	\$ 127.87	\$ 112.99	\$ 73.11	\$ 432.34
16 HB Threshold	100	\$41.93	\$47.11	\$47.11	\$47.11	\$47.11	
17							
18 Summer:							
19 Cust. Chg	\$ 57.46						
20 Headblock	\$ 0.4711						
21 Tailblock	\$ 0.3165						
22 HB Threshold	20						
23							
24 Total Base Rate Amount	\$ 99.39	\$ 160.59	\$ 232.44	\$ 217.56	\$ 177.68	\$ 166.92	\$ 1,054.58
25							
26 COG Rate - (Seasonal)	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552
27 COG amount	\$ 49.41	\$ 153.79	\$ 279.82	\$ 253.73	\$ 183.77	\$ 164.89	\$ 1,085.42
28							
29 LDAC	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549
30 LDAC amount	\$ 4.88	\$ 15.20	\$ 27.65	\$ 25.07	\$ 18.16	\$ 16.29	\$ 107.26
31							
32 Total Bill	\$ 153.68	\$ 329.58	\$ 539.91	\$ 496.36	\$ 379.61	\$ 348.11	\$ 2,247.25
33							

	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
	153	39	26	34	25	29	306	2,261
	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 344.76	\$ 689.52
	\$ 9.42	\$ 9.42	\$ 9.42	\$ 9.42	\$ 9.42	\$ 9.42	\$ 56.53	\$ 334.01
	\$ 42.09	\$ 6.01	\$ 1.90	\$ 4.43	\$ 1.58	\$ 2.85	\$ 58.87	\$ 491.21
	\$ 108.98	\$ 72.90	\$ 68.78	\$ 71.31	\$ 68.46	\$ 69.73	\$ 460.16	\$ 1,514.74
	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.5221
	\$ 47.57	\$ 12.13	\$ 8.08	\$ 10.57	\$ 7.77	\$ 9.02	\$ 95.14	\$ 1,180.55
	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549
	\$ 8.39	\$ 2.14	\$ 1.43	\$ 1.87	\$ 1.37	\$ 1.59	\$ 16.79	\$ 124.04
	\$ 164.94	\$ 87.16	\$ 78.29	\$ 83.75	\$ 77.61	\$ 80.34	\$ 572.08	\$ 2,819.33

May 1, 2019 - October 31, 2019

	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr
38 Typical Usage (Therms)	89	277	504	457	331	297	1,955
39							
40 Winter:							
41 Cust. Chg	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 338.16
42 Headblock	\$ 0.4621	\$ 4.621	\$ 46.21	\$ 46.21	\$ 46.21	\$ 46.21	\$ 272.18
43 Tailblock	\$ 0.3104	\$ 0.3165	\$ -	\$ 54.94	\$ 125.40	\$ 110.81	\$ 424.01
44 HB Threshold	100	100					
45							
46 Summer:							
47 Cust. Chg	\$ 56.36	\$ 57.46					
48 Headblock	\$ 0.4621	\$ 0.4711					
49 Tailblock	\$ 0.3104	\$ 0.3165					
50 HB Threshold	20	20					
51							
52 Total Base Rate Amount	\$ 97.49	\$ 157.51	\$ 227.97	\$ 213.38	\$ 174.27	\$ 163.72	\$ 1,034.34
53							
54 COG Rate - (Seasonal)	\$ 0.6190	\$ 0.6190	\$ 0.5640	\$ 0.4171	\$ 0.3486	\$ 0.2666	\$ 0.4583
55 COG amount	\$ 55.09	\$ 171.46	\$ 284.26	\$ 190.61	\$ 115.39	\$ 79.18	\$ 895.99
56							
57 LDAC	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478
58 LDAC amount	\$ 4.25	\$ 13.24	\$ 24.09	\$ 21.84	\$ 15.82	\$ 14.20	\$ 93.45
59							
60 Total Bill	\$ 156.83	\$ 342.21	\$ 536.32	\$ 425.84	\$ 305.48	\$ 257.10	\$ 2,023.78
61							

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
	153	39	26	34	25	29	306	2,261
	\$56.36	\$ 56.36	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 342.56	\$ 680.72
	\$ 9.24	\$ 9.24	\$ 9.42	\$ 9.42	\$ 9.42	\$ 9.42	\$ 56.17	\$ 328.35
	\$ 41.28	\$ 5.90	\$ 1.90	\$ 4.43	\$ 1.58	\$ 2.85	\$ 57.94	\$ 481.95
	\$ 106.89	\$ 71.50	\$ 68.78	\$ 71.31	\$ 68.46	\$ 69.73	\$ 456.67	\$ 1,491.02
	\$ 0.2504	\$ 0.2504	\$ 0.3669	\$ 0.4711	\$ 0.4711	\$ 0.4711	\$ 0.3238	\$ 0.4401
	\$ 38.31	\$ 9.77	\$ 9.54	\$ 16.02	\$ 11.78	\$ 13.66	\$ 99.07	\$ 995.06
	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478
	\$ 7.31	\$ 1.86	\$ 1.24	\$ 1.63	\$ 1.20	\$ 1.39	\$ 14.63	\$ 108.08
	\$ 152.51	\$ 83.13	\$ 79.56	\$ 88.96	\$ 81.44	\$ 84.78	\$ 570.37	\$ 2,594.16

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
62 DIFFERENCE:							
63 Total Bill	\$ (3.15)	\$ (12.64)	\$ 3.59	\$ 70.52	\$ 74.13	\$ 91.01	\$ 223.46
64 % Change	-2.01%	-3.69%	0.67%	16.56%	24.27%	35.40%	11.04%
65							
66 Base Rate	\$ 1.90	\$ 3.08	\$ 4.46	\$ 4.18	\$ 3.41	\$ 3.20	\$ 20.23
67 % Change	1.95%	1.96%	1.96%	1.96%	1.96%	1.96%	1.96%
68							
69 COG & LDAC	\$ (5.05)	\$ (15.72)	\$ (0.88)	\$ 66.34	\$ 70.72	\$ 87.81	\$ 203.23
70 % Change	-8.51%	-8.51%	-0.28%	31.22%	53.90%	94.04%	20.54%
check	\$ 0.00	\$ (0.00)	\$ (0.00)	\$ -	\$ -	\$ -	\$ -

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
	\$ 12.43	\$ 4.03	\$ (1.27)	\$ (5.21)	\$ (3.83)	\$ (4.44)	\$ 1.71	\$ 225.18
	8.15%	4.85%	-1.60%	-5.85%	-4.70%	-5.24%	0.30%	8.68%
	\$ 2.09	\$ 1.40	\$ -	\$ -	\$ -	\$ -	\$ 3.49	\$ 23.72
	1.96%	1.95%	0.00%	0.00%	0.00%	0.00%	0.76%	1.59%
	\$ 10.34	\$ 2.63	\$ (1.27)	\$ (5.21)	\$ (3.83)	\$ (4.44)	\$ (1.78)	\$ 201.45
	22.66%	22.66%	-11.80%	-29.51%	-29.51%	-29.51%	-1.56%	18.26%
	\$ -	\$ -	\$ 0.00	\$ -	\$ -	\$ 0.00	\$ 0.00	\$ -

Liberty Utilities (EnergyNorth Natural Gas) Corp.

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 2 Off Peak 2021 Summer Cost of Gas Filing
 4 Annual Bill Comparisons, May 19 - Oct 19 vs May 20 - Oct 20 - Commercial Rate G-42
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7 November 1, 2020 - April 30, 2021
 8 C&I High Winter Use Medium G-42

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
11 Typical Usage (Therms)	830	2,189	3,708	3,406	2,603	2,395	15,131
12							
13 Winter:	7/1/2020 - Current						
14 Cust. Chg	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34
15 Headblock	\$ 0.4284	\$ 355.57	\$ 428.40	\$ 428.40	\$ 428.40	\$ 428.40	\$ 2,497.57
16 Tailblock	\$ 0.2855	\$ -	\$ 339.46	\$ 773.13	\$ 686.91	\$ 457.66	\$ 2,655.44
17 HB Threshold	1,000						
18							
19 Summer:	7/1/2020 - Current						
20 Cust. Chg	\$ 172.39						
21 Headblock	\$ 0.4284						
22 Tailblock	\$ 0.2855						
23 HB Threshold	400						
24							
25 Total Base Rate Amount	\$ 527.96	\$ 940.25	\$ 1,373.92	\$ 1,287.70	\$ 1,058.45	\$ 999.06	\$ 6,187.35
26							
27 COG Rate - (Seasonal)	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552	\$ 0.5552
28 COG amount	\$ 460.82	\$ 1,215.33	\$ 2,058.68	\$ 1,891.01	\$ 1,445.19	\$ 1,329.70	\$ 8,400.73
29							
30 LDAC	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549
31 LDAC amount	\$ 45.54	\$ 120.09	\$ 203.43	\$ 186.86	\$ 142.81	\$ 131.39	\$ 830.12
32							
33 Total Bill	\$ 1,034.31	\$ 2,275.68	\$ 3,636.03	\$ 3,365.57	\$ 2,646.44	\$ 2,460.16	\$ 15,418.20

35 November 1, 2019 - April 30, 2020
 36 C&I High Winter Use Medium G-42

	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr
37 Typical Usage (Therms)	830	2,189	3,708	3,406	2,603	2,395	15,131
38							
39							
40							
41 Winter:	7/1/19 - 6/30/20		7/1/2020 - Current				
42 Cust. Chg	\$ 169.09	\$ 172.39	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 1,014.54
43 Headblock	\$ 0.4202	\$ 348.77	\$ 420.20	\$ 420.20	\$ 420.20	\$ 420.20	\$ 2,449.77
44 Tailblock	\$ 0.2800	\$ 0.2855	\$ 332.92	\$ 758.24	\$ 673.68	\$ 448.84	\$ 2,604.28
45 HB Threshold	1,000	1,000					
46							
47 Summer:	7/1/19 - 6/30/20		7/1/2020 - Current				
48 Cust. Chg	\$ 169.09	\$ 172.39					
49 Headblock	\$ 0.4202	\$ 0.4284					
50 Tailblock	\$ 0.2800	\$ 0.2855					
51 HB Threshold	400	400					
52							
53 Total Base Rate Amount	\$ 517.86	\$ 922.21	\$ 1,347.53	\$ 1,262.97	\$ 1,038.13	\$ 979.89	\$ 6,068.59
54							
55 COG Rate - (Seasonal)	\$ 0.6190	\$ 0.6190	\$ 0.5640	\$ 0.4171	\$ 0.3486	\$ 0.2666	\$ 0.4578
56 COG amount	\$ 513.77	\$ 1,354.99	\$ 2,091.31	\$ 1,420.64	\$ 907.41	\$ 638.51	\$ 6,926.63
57							
58 LDAC	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478
59 LDAC amount	\$ 39.67	\$ 104.63	\$ 177.24	\$ 162.81	\$ 124.42	\$ 114.48	\$ 723.26
60							
61 Total Bill	\$ 1,071.30	\$ 2,381.84	\$ 3,616.08	\$ 2,846.42	\$ 2,069.96	\$ 1,732.88	\$ 13,718.48

63 DIFFERENCE:

64 Total Bill	\$ (36.99)	\$ (106.16)	\$ 19.95	\$ 519.16	\$ 576.48	\$ 727.28	\$ 1,699.72
65 % Change	-3.45%	-4.46%	0.55%	18.24%	27.85%	41.97%	12.39%
66							
67 Base Rate	\$ 10.11	\$ 18.04	\$ 26.39	\$ 24.73	\$ 20.32	\$ 19.17	\$ 118.76
68 % Change	1.96%	1.96%	1.96%	1.96%	1.96%	1.96%	1.96%
69							
70 COG & LDAC	\$ (47.09)	\$ (124.20)	\$ (6.44)	\$ 494.42	\$ 556.16	\$ 708.11	\$ 1,580.96
71 % Change	-8.51%	-8.51%	-0.28%	31.22%	53.90%	94.04%	20.67%
check	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

May 1, 2020 - October 31, 2020

	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
	1,319	484	285	247	269	340	2,944	18,075
	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34	\$ 2,068.68
	\$ 171.36	\$ 171.36	\$ 122.09	\$ 105.81	\$ 115.24	\$ 145.66	\$ 831.52	\$ 3,329.10
	\$ 262.37	\$ 23.98	\$ -	\$ -	\$ -	\$ -	\$ 286.36	\$ 2,941.79
	\$ 606.12	\$ 367.73	\$ 294.48	\$ 278.20	\$ 287.63	\$ 318.05	\$ 2,152.22	\$ 8,339.57
	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.3109	\$ 0.5154
	\$ 410.08	\$ 150.48	\$ 88.61	\$ 76.79	\$ 83.63	\$ 105.71	\$ 915.29	\$ 9,316.02
	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549
	\$ 72.36	\$ 26.55	\$ 15.64	\$ 13.55	\$ 14.76	\$ 18.65	\$ 161.51	\$ 991.63
	\$ 1,088.56	\$ 544.76	\$ 398.73	\$ 368.55	\$ 386.02	\$ 442.41	\$ 3,229.02	\$ 18,647.22

May 1, 2019 - October 31, 2019

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
	1,319	484	285	247	269	340	2,944	18,075
	\$ 169.09	\$ 169.09	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,027.74	\$ 2,042.28
	\$ 168.08	\$ 168.08	\$ 122.09	\$ 105.81	\$ 115.24	\$ 145.66	\$ 824.96	\$ 3,274.73
	\$ 257.32	\$ 23.52	\$ -	\$ -	\$ -	\$ -	\$ 280.84	\$ 2,885.12
	\$ 594.49	\$ 360.69	\$ 294.48	\$ 278.20	\$ 287.63	\$ 318.05	\$ 2,133.54	\$ 8,202.13
	\$ 0.2504	\$ 0.2504	\$ 0.3669	\$ 0.4711	\$ 0.4711	\$ 0.4711	\$ 0.3258	\$ 0.4363
	\$ 330.28	\$ 121.19	\$ 104.57	\$ 116.36	\$ 126.73	\$ 160.17	\$ 959.30	\$ 7,885.93
	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478
	\$ 63.05	\$ 23.14	\$ 13.62	\$ 11.81	\$ 12.86	\$ 16.25	\$ 140.72	\$ 863.99
	\$ 987.82	\$ 505.02	\$ 412.67	\$ 406.37	\$ 427.21	\$ 494.47	\$ 3,233.57	\$ 16,952.04

	\$ 100.75	\$ 39.74	\$ (13.95)	\$ (37.83)	\$ (41.19)	\$ (52.07)	\$ (4.54)	\$ 1,695.18
	10.20%	7.87%	-3.38%	-9.31%	-9.64%	-10.53%	-0.14%	10.00%
	\$ 11.63	\$ 7.04	\$ -	\$ -	\$ -	\$ -	\$ 18.68	\$ 137.44
	1.96%	1.95%	0.00%	0.00%	0.00%	0.00%	0.88%	1.68%
	\$ 89.11	\$ 32.70	\$ (13.95)	\$ (37.83)	\$ (41.19)	\$ (52.07)	\$ (23.22)	\$ 1,557.74
	22.66%	22.66%	-11.80%	-29.51%	-29.51%	-29.51%	-2.11%	17.80%
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Liberty Utilities (EnergyNorth Natural Gas) Corp.

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 2 Off Peak 2021 Summer Cost of Gas Filing
 4 Annual Bill Comparisons, May 19 - Oct 19 vs May 20 - Oct 20 - Commercial Rate G-52
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7 November 1, 2020 - April 30, 2021
 8 Commercial Rate (G-52)

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
9 Typical Usage (Therms)	1,352	1,866	2,284	2,160	1,886	1,760	11,308
10							
11							
12							
13 Winter: 7/1/2020 - Current							
14 Cust. Chg \$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34
15 Headblock \$ 0.2439	\$ 243.90	\$ 243.90	\$ 243.90	\$ 243.90	\$ 243.90	\$ 243.90	\$ 1,463.40
16 Tailblock \$ 0.1624	\$ 57.16	\$ 140.64	\$ 208.52	\$ 188.38	\$ 143.89	\$ 123.42	\$ 862.02
17 HB Threshold 1,000							
18							
19 Summer: 7/1/2020 - Current							
20 Cust. Chg \$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34
21 Headblock \$ 0.1767	\$ 176.70	\$ 176.70	\$ 176.70	\$ 176.70	\$ 176.70	\$ 176.70	\$ 1,042.00
22 Tailblock \$ 0.1004	\$ 100.40	\$ 150.60	\$ 225.90	\$ 200.85	\$ 150.60	\$ 100.40	\$ 620.38
23 HB Threshold 1,000							
24							
25 Total Base Rate Amount	\$ 473.45	\$ 556.93	\$ 624.81	\$ 604.67	\$ 560.18	\$ 539.71	\$ 3,359.76
26							
27 COG Rate - (Seasonal)	\$ 0.5660	\$ 0.5660	\$ 0.5660	\$ 0.5660	\$ 0.5660	\$ 0.5660	\$ 0.5660
28 COG amount	\$ 765.23	\$ 1,056.16	\$ 1,292.74	\$ 1,222.56	\$ 1,067.48	\$ 996.16	\$ 6,400.33
29							
30 LDAC	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549
31 LDAC amount	\$ 74.17	\$ 102.37	\$ 125.31	\$ 118.50	\$ 103.47	\$ 96.56	\$ 620.38
32							
33 Total Bill	\$ 1,312.86	\$ 1,715.46	\$ 2,042.86	\$ 1,945.74	\$ 1,731.12	\$ 1,632.43	\$ 10,380.47
34							

35 November 1, 2019 - April 30, 2020
 36 Commercial Rate (G-52)

	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr
37 Typical Usage (Therms)	1,352	1,866	2,284	2,160	1,886	1,760	11,308
38							
39							
40							
41 Winter: 7/1/19 - 6/30/20 7/1/2020 - Current							
42 Cust. Chg \$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 1,014.54
43 Headblock \$ 0.2392	\$ 239.20	\$ 239.20	\$ 239.20	\$ 239.20	\$ 239.20	\$ 239.20	\$ 1,435.20
44 Tailblock \$ 0.1593	\$ 56.07	\$ 137.95	\$ 204.54	\$ 184.79	\$ 141.14	\$ 121.07	\$ 845.56
45 HB Threshold 1,000							
46							
47 Summer: 7/1/19 - 6/30/20 7/1/2020 - Current							
48 Cust. Chg \$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 1,014.54
49 Headblock \$ 0.1733	\$ 173.30	\$ 173.30	\$ 173.30	\$ 173.30	\$ 173.30	\$ 173.30	\$ 1,035.20
50 Tailblock \$ 0.0985	\$ 98.50	\$ 147.75	\$ 221.61	\$ 196.23	\$ 147.75	\$ 98.50	\$ 613.84
51 HB Threshold 1,000							
52							
53 Total Base Rate Amount	\$ 464.36	\$ 546.24	\$ 612.83	\$ 593.08	\$ 549.43	\$ 529.36	\$ 3,295.30
54							
55 COG Rate - (Seasonal)	\$ 0.6258	\$ 0.6258	\$ 0.5708	\$ 0.4239	\$ 0.3554	\$ 0.2734	\$ 0.4762
56 COG amount	\$ 846.08	\$ 1,167.74	\$ 1,303.71	\$ 915.62	\$ 670.28	\$ 481.18	\$ 5,384.62
57							
58 LDAC	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478
59 LDAC amount	\$ 64.63	\$ 89.19	\$ 109.18	\$ 103.25	\$ 90.15	\$ 84.13	\$ 540.52
60							
61 Total Bill	\$ 1,375.07	\$ 1,803.18	\$ 2,025.71	\$ 1,611.95	\$ 1,309.87	\$ 1,094.67	\$ 9,220.45
62							

63 DIFFERENCE:

64 Total Bill	\$ (62.21)	\$ (67.72)	\$ 17.15	\$ 333.79	\$ 421.26	\$ 537.76	\$ 1,160.02
65 % Change	-4.52%	-4.86%	0.85%	20.71%	32.16%	49.13%	12.58%
66							
67 Base Rate	\$ 9.09	\$ 10.68	\$ 11.98	\$ 11.60	\$ 10.75	\$ 10.36	\$ 64.45
68 % Change	1.96%	1.96%	1.95%	1.96%	1.96%	1.96%	1.96%
69							
70 COG & LDAC	\$ (71.30)	\$ (98.41)	\$ 5.17	\$ 322.19	\$ 410.51	\$ 527.41	\$ 1,095.56
71 % Change	-7.83%	-7.83%	0.37%	31.62%	53.98%	93.29%	18.49%
check	\$ 0.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (0.00)

May 1, 2020 - October 31, 2020

	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
1,497	1,128	1,032	1,025	1,050	897	6,629	17,937	
\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34	\$ 2,068.68	
\$ 176.70	\$ 176.70	\$ 176.70	\$ 176.70	\$ 176.70	\$ 158.50	\$ 1,042.00	\$ 2,505.40	
\$ 49.90	\$ 12.85	\$ 3.21	\$ 2.51	\$ 5.02	\$ -	\$ 73.49	\$ 935.51	
\$ 398.99	\$ 361.94	\$ 352.30	\$ 351.60	\$ 354.11	\$ 330.89	\$ 2,149.83	\$ 5,509.59	
\$ 0.3199	\$ 0.3199	\$ 0.3199	\$ 0.3199	\$ 0.3199	\$ 0.3199	\$ 0.3199	\$ 0.4750	
\$ 478.89	\$ 360.85	\$ 330.14	\$ 327.90	\$ 335.90	\$ 286.95	\$ 2,120.62	\$ 8,520.95	
\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	\$ 0.0549	
\$ 82.13	\$ 61.88	\$ 56.62	\$ 56.23	\$ 57.61	\$ 49.21	\$ 363.68	\$ 984.06	
\$ 960.01	\$ 784.67	\$ 739.06	\$ 735.73	\$ 747.61	\$ 667.05	\$ 4,634.13	\$ 15,014.60	

May 1, 2019 - October 31, 2019

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
1,497	1,128	1,032	1,025	1,050	897	6,629	17,937	
\$ 169.09	\$ 169.09	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,027.74	\$ 2,042.28	
\$ 173.30	\$ 173.30	\$ 176.70	\$ 176.70	\$ 176.70	\$ 158.50	\$ 1,035.20	\$ 2,470.40	
\$ 48.95	\$ 12.61	\$ 3.21	\$ 2.51	\$ 5.02	\$ -	\$ 72.31	\$ 917.87	
\$ 391.34	\$ 355.00	\$ 352.30	\$ 351.60	\$ 354.11	\$ 330.89	\$ 2,135.25	\$ 5,430.55	
\$ 0.2621	\$ 0.2621	\$ 0.3786	\$ 0.4828	\$ 0.4828	\$ 0.4828	\$ 0.3792	\$ 0.4403	
\$ 392.36	\$ 295.65	\$ 390.72	\$ 494.87	\$ 506.94	\$ 433.07	\$ 2,513.61	\$ 7,898.23	
\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	\$ 0.0478	
\$ 71.56	\$ 53.92	\$ 49.33	\$ 49.00	\$ 50.19	\$ 42.88	\$ 316.87	\$ 857.39	
\$ 855.26	\$ 704.57	\$ 792.35	\$ 895.47	\$ 911.24	\$ 806.84	\$ 4,965.72	\$ 14,186.17	

\$ 104.74	\$ 80.11	\$ (53.29)	\$ (159.73)	\$ (163.63)	\$ (139.79)	\$ (331.59)	\$ 828.43
12.25%	11.37%	-6.73%	-17.84%	-17.96%	-17.33%	-6.68%	5.84%
\$ 7.64	\$ 6.94	\$ -	\$ -	\$ -	\$ -	\$ 14.59	\$ 79.04
1.95%	1.96%	0.00%	0.00%	0.00%	0.00%	0.68%	1.46%
\$ 97.10	\$ 73.16	\$ (53.29)	\$ (159.73)	\$ (163.63)	\$ (139.79)	\$ (346.18)	\$ 749.39
20.93%	20.93%	-12.11%	-29.37%	-29.37%	-29.37%	-12.23%	8.56%
\$ -	\$ -	\$ 0.00	\$ -	\$ -	\$ -	\$ (0.00)	\$ (0.00)

Liberty Utilities (EnergyNorth Natural Gas) Corp.

2 Off Peak 2021 Summer Cost of Gas Filing

3 Residential Heating

	Summer 2019	Summer 2020
5 Customer Charge	\$ 15.50	\$ 15.50
6 First 20 Therms	\$ 0.5678	\$ 0.5678
7 Excess 20 Therms	\$ 0.5678	\$ 0.5678
8 LDAC	\$ 0.0310	\$ 0.0603
9 COG	\$ 0.3430	\$ 0.3148
10 Total Adjust	\$ 0.3740	\$ 0.3751

	Summer 2019 COG @	Summer 2020 Cgg @
16	\$ 0.3740	\$ 0.3751
18 Cooking alone	5 \$ 19.85	\$ 20.21
20	10 \$ 24.51	\$ 24.93
22	20 \$ 33.82	\$ 34.36
24 Water Heating alone	30 \$ 43.13	\$ 43.79
26	45 \$ 57.09	\$ 57.93
28	50 \$ 61.75	\$ 62.64
30 Heating Alone	80 \$ 85.02	\$ 86.22
32	125 \$ 139.02	\$ 140.90
34	150 \$ 154.84	\$ 156.93
36	200 \$ 201.39	\$ 204.08

Total	% Impact	Base Rate	% Impact	COG	% Impact	LDAC	% Impact
\$ Impact		\$ Impact		\$ Impact		\$ Impact	
\$ 0.00	0%						
\$ 0.36	2%	\$ 0.35	2%	\$ (0.14)	-1%	\$ 0.15	1%
\$ 0.42	2%	\$ 0.41	2%	\$ (0.28)	-1%	\$ 0.29	1%
\$ 0.54	2%	\$ 0.52	2%	\$ (0.56)	-2%	\$ 0.59	2%
\$ 0.66	2%	\$ 0.63	1%	\$ (0.85)	-2%	\$ 0.88	2%
\$ 0.84	1%	\$ 0.79	1%	\$ (1.27)	-2%	\$ 1.32	2%
\$ 0.90	1%	\$ 0.84	1%	\$ (1.41)	-2%	\$ 1.46	2%
\$ 1.20	1%	\$ 1.12	1%	\$ (2.12)	-2%	\$ 2.20	3%
\$ 1.89	1%	\$ 1.75	1%	\$ (3.76)	-3%	\$ 3.89	3%
\$ 2.09	1%	\$ 1.94	1%	\$ (4.24)	-3%	\$ 4.39	3%
\$ 2.69	1%	\$ 2.48	1%	\$ (5.65)	-3%	\$ 5.86	3%

2021 Summer Cost of Gas Filing
Capacity Assignment Calculations 2019-2020
Derivation of Class Assignments and Weightings

Basic assumptions:

- 1 Residential class pays average seasonal gas cost rate (using MBA method to allocate costs to seasons)
- 2 Residual gas costs are allocated to C&I HLF and LLF classes based on MBA method
- 3 The MBA method allocates capacity costs based on design day demands in two pieces:
 - a The base use portion of the class design day demand based on base use
 - b The remaining portion of design day demand based on remaining design day demand
- 4 Base demand is composed solely of pipeline supplies
- 5 Remaining demand consists of a portion of pipeline and all storage and peaking supplies

	Column A	Column B	Column C	Column D	Column E	Column F
	Design Day Demand, Dekatherm	Adjusted Design Day Demand, Dt	Percent of Total		Avg Daily Base Use Load, Dt	Remaining Design Day Demand
1	RATE R-1-Resi Non-Htg	532	558	0.3%	102	457
2	RATE R-3-Resi Htg	69,256	73,356	43.5%	3,545	69,812
3	RATE G-41 (T)	29,783	31,593	18.7%	770	30,823
4	RATE G-51 (S)	2,445	2,551	1.5%	739	1,812
5	RATE G-42 (V)	37,176	39,404	23.4%	1,473	37,931
6	RATE G-52	5,376	5,601	3.3%	1,781	3,820
7	RATE G-43	8,418	8,901	5.3%	663	8,239
8	RATE G-53	3,238	3,368	2.0%	1,146	2,222
9	RATE G-54	3,078	3,241	1.9%	461	2,780
10						
11	Total	159,300	168,574	100.0%	10,678	157,896
12						-
13	Residential Total	69,788	73,915	43.847%	3,647	70,268
14	LLF Total	75,376	79,898	47.397%	2,905	76,993
15	HLF Total	14,136	14,761	8.756%	4,126	10,635
16	Total	159,300	168,574	100.0%	10,678	157,896
17						
18	C&I Breakdown					
19	LLF Total				2,905	76,993
20	HLF Total				4,126	10,635
21	Total				7,031	87,628
22						
23	C&I Breakdown Percentage					
24	LLF Total				41.322%	87.863%
25	HLF Total				58.678%	12.137%
26	Total				100.0%	100.0%
27						
28		Capacity Cost	MDQ, Dt	\$/Dt-Mo.		
29	Pipeline	\$14,027,173	79,718	\$14.6633		
30	Storage	\$4,161,416	28,115	\$12.3345		
31						
32	Peaking	\$4,330,500				
33	Peaking Additional Costs (Concord Lateral Peaking x Differential)	\$0				
34	Subtotal Peaking Costs	\$4,330,500	60,741	\$5.9412		
35	Total	\$22,519,089	168,574	\$11.1321		
36						
37		Capacity Cost	MDQ, Dt	\$/Dt-Mo.		
38	Pipeline - Baseload	1,878,867	10,678	\$14.6633		
39	Pipeline - Remaining	12,148,306	69,040	\$14.6633		
40	Storage	4,161,416	28,115	\$12.3345		
41	Peaking	4,330,500	60,741	\$5.9412		
42	Total	22,519,089	168,574	\$11.1321		
43						
44						
45	Residential Allocation	Capacity Cost	MDQ, Dt	\$/Dt-Mo.		
46	Pipeline - Base	Line 38 * Line 13 Col C	823,827	4,682	\$14.6633	
47	Pipeline - Remaining	Line 39 * Line 13 Col C	5,326,656	30,272	\$14.6633	
48	Storage	Line 40 * Line 13 Col C	1,824,654	12,328	\$12.3345	
49	Peaking	Line 41 * Line 13 Col C	1,898,784	26,633	\$5.9412	
50	Total		9,873,887	73,915	\$11.1321	
51						

52 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

53

54 **2020 Summer Cost of Gas Filing**

55 **Capacity Assignment Calculations 2019-2020**

56 **Derivation of Class Assignments and Weightings**

57

58

				Ratios for COG		
59	C&I Allocation		Capacity Cost	MDQ, Dt	\$/Dt-Mo.	
60	Pipeline - Base	Line 38 - Line 46	1,055,040	5,996	\$14.6633	
61	Pipeline - Remaining	Line 39 - Line 47	6,821,650	38,768	\$14.6634	
62	Storage	Line 40 - Line 48	2,336,762	15,787	\$12.3345	
63	Peaking	Line 41 - Line 49	2,431,716	34,108	\$5.9412	
64	Total		56.153% 12,645,167	94,659	\$11.1322	1.0000
65						
66						
67	LLF - C&I Allocation		Capacity Cost	MDQ, Dt	\$/Dt-Mo.	
68	Pipeline - Base	Line 60 * Line 24 Col E	435,965	2,478	\$14.6612	
69	Pipeline - Remaining	Line 61 * Line 24 Col F	5,993,729	34,063	\$14.6633	
70	Storage	Line 62 * Line 24 Col F	2,053,157	13,871	\$12.3348	
71	Peaking	Line 63 * Line 24 Col F	2,136,587	29,968	\$5.9413	
72	Total		47.1575% 10,619,438	80,380	\$11.0096	0.9890
73			41.322%	84%		(Line 72 / Line 64)
74						
75	HLF - C&I Allocation		Capacity Cost	MDQ, Dt	\$/Dt-Mo.	
76	Pipeline - Base	Line 60 - Line 68	619,075	3,518	\$14.6645	
77	Pipeline - Remaining	Line 61 - Line 69	827,921	4,705	\$14.6639	
78	Storage	Line 62 - Line 70	283,605	1,916	\$12.3349	
79	Peaking	Line 63 - Line 71	295,129	4,140	\$5.9406	
80	Total		8.9956% 2,025,730	14,279	\$11.8223	1.0620
81						(Line 80 / Line 64)

83	Unit Cost	Residential	LLF C&I	HLF C&I
84				
85	Pipeline	\$ 14.6633	\$ 14.6633	\$ 14.6633
86	Storage	\$ 12.3345	\$ 12.3345	\$ 12.3345
87	Peaking	\$ -	\$ -	\$ -
88	Total	\$ 11.1321	\$ 11.0096	\$ 11.8223

91	Load Makeup	Residential	LLF C&I	HLF C&I
92				
93	Pipeline	47.29%	45.46%	57.59%
94	Storage	16.68%	17.26%	13.42%
95	Peaking	<u>36.03%</u>	37.28%	28.99%
96	Total	100.00%	100.00%	100.00%

99	Supply Makeup	Residential	LLF C&I	HLF C&I	Total
100					
101	Pipeline	43.85%	45.84%	10.32%	100.00%
102	Storage	43.85%	49.34%	6.81%	100.00%
103	Peaking	43.85%	49.34%	6.82%	100.00%

1 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

2
3 **2021 Summer Cost of Gas Filing**
4 **Correction Factor Calculation**

5	6	7	8	9	10	11	12	13	14
		d	e	f	g	h	i		
8	Data Source: Schedule 10B								Total
9		May	June	July	Aug	Sep	Oct		Sales
11	G-41	657,255	254,946	178,791	176,029	328,891	897,944		2,493,855
12	G-42	595,774	269,780	194,334	194,029	351,558	782,996		2,388,472
13	G-43	157,182	67,587	50,187	49,057	85,306	173,873		583,192
14	High Winter Use	1,410,210	592,313	423,313	419,114	765,755	1,854,813		5,465,519
16	G-51	195,387	169,912	164,465	179,005	184,791	208,334		1,101,895
17	G-52	202,045	182,364	185,459	191,337	204,592	248,396		1,214,192
18	G-53	288,665	243,500	253,364	256,465	248,944	302,915		1,593,852
19	G-54	45,899	40,322	44,580	41,065	42,484	44,925		259,275
21	Low Winter Use	731,996	636,098	647,868	667,872	680,810	804,571		4,169,214
23	Gross Total	2,142,206	1,228,411	1,071,181	1,086,986	1,446,566	2,659,384		9,634,734

26	Total Sales								9,634,734
27	Low Winter Use								4,169,214
28	Summer Ratio for Low Winter Use								1.0620 Schedule 10A p 2, In 80
29	High Winter Use								5,465,519
30	Summer Ratio for High Winter Use								0.9890 Schedule 10A p 2, In 72
32	Correction Factor =	Total Sales/((Low Winter Use x Winter Ratio for Low Winter Use)+(High Winter Use x Winter Ratio for High Winter Use)							
33	Correction Factor =								97.9826%

36 **Allocation Calculation for Miscellaneous Overhead**

38	Projected Winter Sales Volume				11/1/20 - 4/30/21		89,364,968	Sch.10B, In 23
39	Projected Annual Sales Volume				11/1/20 - 10/31/21		111,368,575	Sch.10B, In 23
40	Percentage of Winter Sales to Annual Sales						80.24%	

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

2 d/b/a Liberty Utilities

3 Off Peak 2021 Summer Cost of Gas Filing

4 2020 Summer Cost of Gas Filing

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6

Dry Therms

7 Firm Sales

8

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Subtotal PK 20-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Subtotal OP 21	Total
9 R-1	67,242	85,779	94,221	76,896	78,103	57,121	459,362	45,014	35,092	34,025	34,190	37,878	53,991	240,190	699,552
10 R-3	6,301,872	9,195,999	10,579,175	8,250,978	7,996,062	4,741,223	47,065,308	2,633,722	1,181,251	864,297	889,954	1,634,426	4,079,782	11,283,432	58,348,740
11 R-4	497,668	721,571	830,551	649,773	636,785	382,606	3,718,955	208,283	92,289	64,377	64,891	114,766	300,646	845,252	4,564,206
12 Total Residential.	6,866,783	10,003,350	11,503,946	8,977,647	8,710,950	5,180,950	51,243,625	2,887,019	1,308,632	962,699	989,034	1,787,070	4,434,419	12,368,874	63,612,499
13															
14 G-41	1,996,836	3,238,958	3,888,117	3,240,314	2,556,592	1,395,068	16,315,885	657,255	254,946	178,791	176,029	328,891	897,944	2,493,855	18,809,740
15 G-42	1,557,098	2,487,506	2,941,387	2,478,940	2,060,861	1,064,653	12,590,447	595,774	269,780	194,334	194,029	351,558	782,996	2,388,472	14,978,919
16 G-43	317,392	493,665	615,564	503,796	442,358	254,648	2,627,422	157,182	67,587	50,187	49,057	85,306	173,873	583,192	3,210,614
17 G-51	249,978	328,663	350,912	304,738	289,652	218,268	1,742,211	195,387	169,912	164,465	179,005	184,791	208,334	1,101,895	2,844,106
18 G-52	298,155	382,781	421,838	359,163	334,397	234,919	2,031,253	202,045	182,364	185,459	191,337	204,592	248,396	1,214,192	3,245,446
19 G-53	472,951	566,045	453,188	409,819	412,496	320,835	2,635,333	288,665	243,500	253,364	256,465	248,944	302,915	1,593,852	4,229,186
20 G-54	41,998	19,758	22,302	22,258	20,386	52,090	178,792	45,899	40,322	44,580	41,065	42,484	44,925	259,275	438,067
21 Total C/I	4,934,406	7,517,376	8,693,308	7,319,029	6,116,742	3,540,482	38,121,343	2,142,206	1,228,411	1,071,181	1,086,986	1,446,566	2,659,384	9,634,734	47,756,077
22															
23 Sales Volume	11,801,189	17,520,726	20,197,255	16,296,676	14,827,692	8,721,431	89,364,968	5,029,226	2,537,042	2,033,880	2,076,020	3,233,636	7,093,803	22,003,607	111,368,575
24															
25 Transportation Sales															
26															
27 G-41	564,370	804,050	947,199	829,377	707,117	472,512	4,324,627	269,638	128,170	94,542	87,932	152,293	314,747	1,047,322	5,371,949
28 G-42	1,970,141	2,735,523	3,169,949	2,762,428	2,368,941	1,632,317	14,639,298	964,155	473,043	370,329	386,901	671,164	1,228,176	4,093,769	18,733,067
29 G-43	784,362	1,036,834	1,197,355	1,071,284	979,562	649,351	5,718,747	449,617	289,492	255,281	278,213	366,350	557,917	2,196,870	7,915,616
30 G-51	98,848	105,296	110,026	98,612	101,851	95,501	610,133	86,996	77,987	71,427	68,055	73,165	83,209	460,839	1,070,972
31 G-52	574,360	666,400	697,367	617,228	576,744	509,638	3,641,739	434,086	380,619	381,003	377,876	408,943	485,204	2,467,732	6,109,470
32 G-53	791,280	948,364	1,078,987	937,963	941,239	750,834	5,448,666	698,893	631,500	608,885	619,782	607,168	777,777	3,944,006	9,392,672
33 G-54	1,614,023	1,405,905	1,350,282	1,151,611	1,231,396	1,319,849	8,073,065	1,589,916	1,585,398	1,656,869	1,776,411	1,717,743	1,770,941	10,097,278	18,170,344
34															
35 Total Trans. Sales	6,397,384	7,702,372	8,551,166	7,468,503	6,906,850	5,430,001	42,456,275	4,493,302	3,566,209	3,438,337	3,595,170	3,996,826	5,217,971	24,307,815	66,764,090
36															
37 Total All Sales	18,198,573	25,223,097	28,748,421	23,765,178	21,734,542	14,151,433	131,821,243	9,522,527	6,103,252	5,472,217	5,671,191	7,230,462	12,311,774	46,311,422	178,132,666

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

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3 Off Peak 2021 Summer Cost of Gas Filing

4 Normal and Design Year Volumes

5

6

7 Volumes (Therms)

Normal Year

8

9 For the Months of May 20 -October 20

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13 Pipeline Gas:

14 Dawn Supply

15 Niagara Supply

16 TGP Supply (Gulf)

17 Dracut Supply 1 - Baseload

18 Dracut Supply 2 - Swing

19 Constellation Combo

20 LNG Truck

21 Propane Truck

22 PNGTS

23 Portland Natural Gas

24 TGP Supply (Z4)

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27 Storage Gas:

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30 Produced Gas:

31 LNG Vapor

32 Propane

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35 Less - Gas Refills:

36 LNG Truck

37 Propane

38 TGP Storage Refill

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41 Total Sendout Volumes

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	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Off Peak May - Oct
Pipeline Gas:							
Dawn Supply	-	-	-	-	-	858,740	858,740
Niagara Supply	637,331	-	532,884	535,788	-	676,922	2,382,926
TGP Supply (Gulf)	-	-	-	-	-	-	0
Dracut Supply 1 - Baseload	-	-	-	-	-	-	0
Dracut Supply 2 - Swing	3,933,940	2,438,570	-	-	3,103,570	1,319,579	10,795,659
Constellation Combo	-	-	-	-	-	-	0
LNG Truck	46,746	17,020	15,965	-	35,455	16,084	131,270
Propane Truck	75,716	67,494	63,308	63,653	70,300	80,420	420,889
PNGTS	202,129	-	169,004	169,925	-	214,685	755,742
Portland Natural Gas	-	-	-	-	-	-	0
TGP Supply (Z4)	3,508,614	2,994,951	4,054,983	2,293,151	3,119,464	5,460,834	21,431,995
	8,404,476	5,518,034	4,836,143	3,062,516	6,328,789	8,627,264	36,777,221
Storage Gas:							
	-	-	-	-	-	-	0
Produced Gas:							
LNG Vapor	19,197	17,222	15,625	15,495	14,321	16,992	98,853
Propane	-	-	-	-	-	-	0
	19,197	17,222	15,625	15,495	14,321	16,992	98,853
Less - Gas Refills:							
LNG Truck	(47,001)	(17,837)	(15,625)	-	(29,665)	(13,476)	(123,604)
Propane	(76,128)	(70,733)	(61,962)	(61,447)	(58,818)	(67,382)	(396,470)
TGP Storage Refill	(3,489,964)	(3,138,717)	(2,776,992)	(970,865)	(2,609,978)	(1,303,686)	(14,290,202)
	(3,613,093)	(3,227,287)	(2,854,580)	(1,032,312)	(2,698,460)	(1,384,544)	(14,810,276)
Total Sendout Volumes	4,810,581	2,307,969	1,997,188	2,045,699	3,644,650	7,259,712	22,065,798

1 Liberty Utilities (EnergyNorth Natural Gas) Corp.

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3 Off Peak 2021 Summer Cost of Gas Filing

Schedule 11B

Page 1 of 1

43 Normal and Design Year Volumes

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46 Volumes (Therms)

Design Year

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48 For the Months of May 20 -October 20

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	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Off Peak May - Oct
Pipeline Gas:							
Dawn Supply	-	-	-	-	-	858,740	858,740
Niagara Supply	637,331	-	532,884	535,788	-	676,922	2,382,926
TGP Supply (Gulf)	-	-	-	-	-	-	0
Dracut Supply 1 - Baseload	-	-	-	-	-	-	0
Dracut Supply 2 - Swing	4,045,210	2,581,773	-	-	3,257,618	1,392,306	11,276,907
Constellation Combo	-	-	-	-	-	-	0
LNG Truck	46,746	17,020	15,965	-	35,455	16,084	131,270
Propane Truck	75,716	67,494	63,308	63,653	70,300	80,420	420,889
PNGTS	202,129	-	169,004	169,925	-	214,685	755,742
Portland Natural Gas	-	-	-	-	-	-	0
TGP Supply (Z4)	3,521,782	2,994,951	4,172,790	2,500,160	3,126,800	5,456,638	21,773,119
Subtotal Pipeline Volumes	8,528,914	5,661,237	4,953,950	3,269,525	6,490,172	8,695,796	37,599,593
Storage Gas:							
TGP Storage	-	-	-	-	-	-	0
Produced Gas:							
LNG Vapor	19,094	16,433	15,965	16,052	17,116	20,280	104,939
Propane	-	-	-	-	-	-	-
Subtotal Produced Gas	19,094	16,433	15,965	16,052	17,116	20,280	104,939
Less - Gas Refills:							
LNG Truck	(46,746)	(17,020)	(15,965)	-	(35,455)	(16,084)	(131,270)
Propane	(75,716)	(67,494)	(63,308)	(63,653)	(70,300)	(80,420)	(420,889)
TGP Storage Refill	(3,471,085)	(2,994,951)	(2,841,131)	(1,085,414)	(3,119,464)	(1,464,334)	(14,976,378)
Subtotal Refills	(3,593,547)	(3,079,464)	(2,920,403)	(1,149,066)	(3,225,219)	(1,560,838)	(15,528,536)
Total Sendout Volumes	4,954,460	2,598,206	2,049,512	2,136,510	3,282,070	7,155,238	22,175,995

1 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

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3 **Off Peak 2021 Summer Cost of Gas Filing**

4 **Capacity Utilization**

5 **Volumes (Therms)**

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11 **Pipeline Gas:**

12 Dawn Supply 858,740 4,000 7,360,000 12% 858,740 4,000 7,360,000 12%

13 Niagara Supply 2,382,926 3,122 5,744,480 41% 2,382,926 3,122 5,744,480 41%

14 TGP Supply (Gulf) - 21,596 39,736,640 0% - 21,596 39,736,640 0%

15 Dracut Supply 1 & 2 10,795,659 50,000 92,000,000 12% 11,276,907 50,000 92,000,000 12%

16 LNG Truck 131,270 - - - 131,270 - - -

17 Propane Truck 420,889 - - - 420,889 - - -

18 PNGTS 755,742 1,000 1,840,000 41% 755,742 1,000 1,840,000 41%

Portland Natural Gas - 1,784 3,282,560 0% - 1,784 3,282,560 0%

19 TGP Supply (Z4) 21,431,995 21,596 39,736,640 54% 21,773,119 21,596 39,736,640 55%

20 Other Purchased Resources - - - - - - - -

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22 Subtotal Pipeline Volumes 36,777,221 37,599,593

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24 **Storage Gas:**

25 0 0 25,792,710 0% - 25,792,710 0%

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27 **Produced Gas:**

28 LNG Vapor 98,853 104,939

29 Propane - -

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31 Subtotal Produced Gas 98,853 104,939

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33 **Less - Gas Refills:**

34 LNG Truck (123,604) (131,270)

35 Propane (396,470) (420,889)

36 TGP Storage Refill (14,290,202) (14,976,378)

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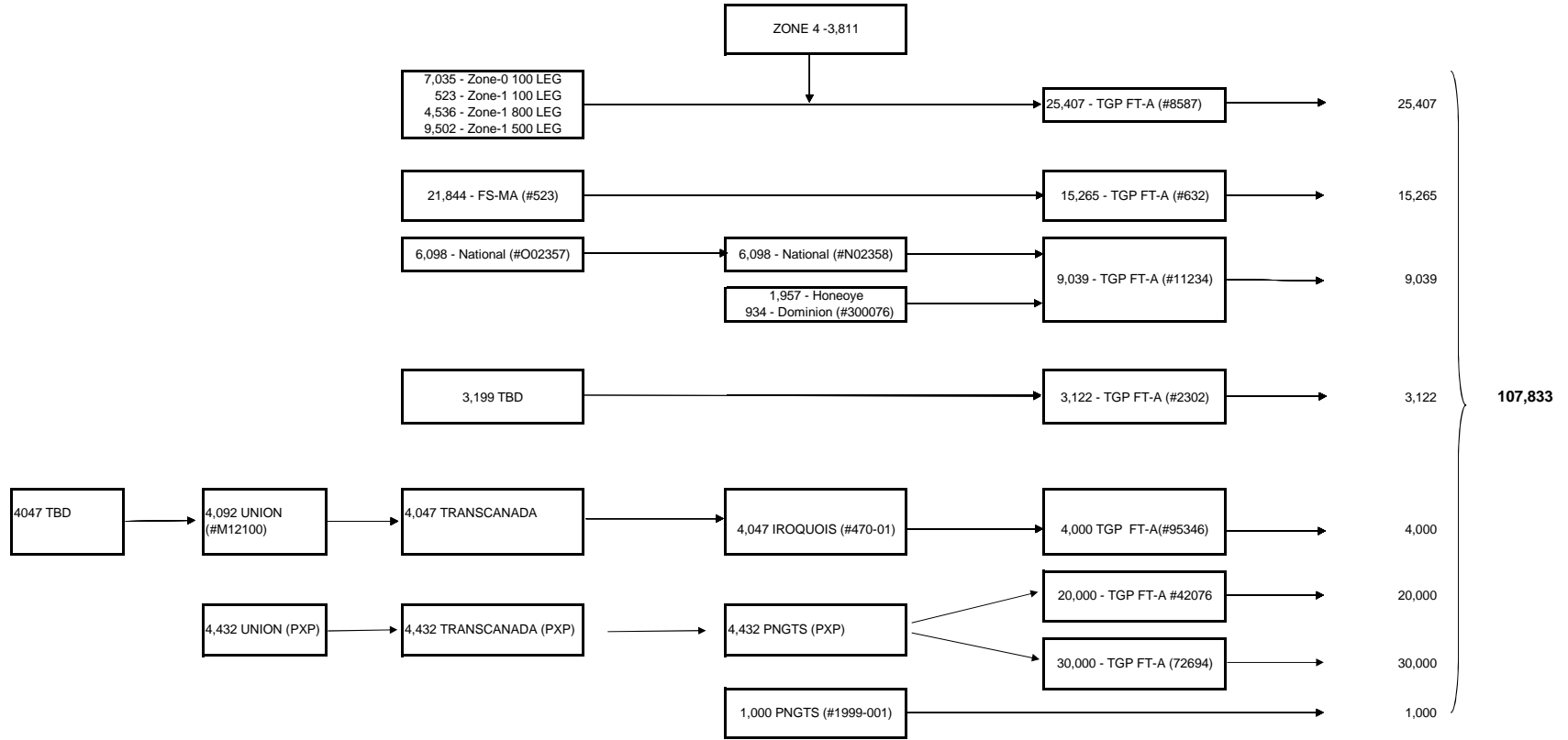
38 Subtotal Refills (14,810,276) (15,528,536)

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40 Total Sendout Volumes 22,065,798 22,175,995

Liberty Utilities (EnergyNorth Natural Gas) Corp.

Off Peak 2021 Summer Cost of Gas Filing
 Transportation Available for Pipeline Supply and Storage
 (MMBtu)



Liberty Utilities (EnergyNorth Natural Gas) Corp.

Off Peak 2021 Summer Cost of Gas Filing
 Agreements for Gas Supply and Transportation

SOURCE	RATE SCHEDULE	CONTRACT NUMBER	TYPE	MDQ MMBTU	MAQ * MMBTU	EXPIRATION DATE	NOTIFICATION DATE	RENEWAL OPTIONS
Niagara	NA	NA	Supply	3,147	1,148,655	1/0/1900	0	Terminates
ANE	NA	NA	Supply	4,047	611,097	Peak Only	N/A	Terminates
Constellation	FCS		Firm Combination Liquid and Vapor Svc	Up to 7 trucks	630,000	3/31/2021	N/A	Terminates
Dracut or Z6	NA	NA	Supply	Up to 20,000 / day	1,412,000	2/28/2021	N/A	Terminates
TGP Long-Haul	NA	NA	Supply	21,596	3,908,876	4/30/2021	N/A	Terminates
Northern Transport	NA	NA	Trucking	28,500 Gallons	900,000 Gallons		N/A	Terminates
Dominion Transmission Incorporated	GSS	300076	Storage	934	102,700	3/31/2023	3/31/2021	Mutually agreed upon
Honeye Storage Corporation	SS-NY	11234	Storage	1,957	245,380	3/31/2022	12 months notice	Evergreen Provision
National Fuel Gas Supply Corporation	FSS	002358	Storage	6,098	670,800	3/31/2022	3/31/2021	Evergreen Provision
National Fuel Gas Supply Corporation	FSST	N02358	Transportation	6,098	670,800	3/31/2022	3/31/2021	Evergreen Provision
Iroquois Gas Transmission System	RTS	47001	Transportation	4,047	1,477,155	11/1/2022	11/1/2021	Evergreen Provision
Portland Natural Gas Transmission System	FT 1999-01	1999-001	Transportation	1,000	365,000	11/30/2032	11/31/2031	Evergreen Provision
Portland Natural Gas Transmission System	FT	PXP	Transportation	4,432	1,617,680	10/31/2040	10/31/2039	Precedent Agreement
Tennessee Gas Pipeline Company	FS-MA	523	Storage	21,844	1,560,391	10/31/2025	10/31/2024	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	8587	Transportation	25,407	9,273,555	10/31/2025	10/31/2024	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	2302	Transportation	3,122	1,139,530	10/31/2025	10/31/2024	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	632	Transportation	15,265	5,571,725	10/31/2025	10/31/2024	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	11234	Transportation	9,039	3,299,235	10/31/2025	10/31/2024	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	72694	Transportation	30,000	10,950,000	10/31/2029	10/31/2028	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	95346	Transportation	4,000	1,460,000	11/30/2021	11/30/2020	Evergreen Provision
Tennessee Gas Pipeline Company	FTA	42076	Transportation	20,000	7,300,000	10/31/2025	10/31/2024	Evergreen Provision
TransCanada Pipeline	FT	41232	Transportation	4,047	1,477,155	10/31/2026	10/31/2024	Evergreen Provision
TransCanada Pipeline	FT	PXP	Transportation	4,432	1,617,680	10/31/2040	0	Precedent Agreement
Union Gas Limited	M12	M12200	Transportation	4,092	1,493,580	10/31/2022	10/31/2020	Evergreen Provision
Union Gas Limited	M12	PXP	Transportation	4,432	1,617,680	10/31/2040		Precedent Agreement

* MAQ is calculated on a 365 day calendar year.

1 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

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3 **Off Peak 2021 Summer Cost of Gas Filing**

4 **Storage Inventory**

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6 **Underground Storage Gas**

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	May-20 (Actual)	Jun-20 (Actual)	Jul-20 (Estimate)	Aug-20 (Estimate)	Sep-20 (Estimate)	Oct-20 (Estimate)	Total
Beginning Balance (MMBtu)	1,895,479	1,901,645	1,929,241	1,929,241	1,929,241	2,113,358	1,951,935
Injections (MMBtu) Sch 11A In 38 /10	11,436	27,746	-	-	184,117	184,117	1,902,705
Subtotal	1,906,915	1,929,391	1,929,241	1,929,241	2,113,358	2,297,475	
Storage Sale	-	-	-	-	-	-	
Withdrawals (MMBtu) Sch 11A In 28 /10	(5,270)	(150)	-	-	-	-	(1,368,064)
Ending Balance (MMBtu)	1,901,645	1,929,241	1,929,241	1,929,241	2,113,358	2,297,475	2,486,576
<hr/>							
Beginning Balance	\$ 9,092,272	\$ 9,085,950	\$ 9,164,894	\$ 9,164,894	\$ 9,164,894	\$ 9,764,338	\$ 3,609,668
Injections In 11 * In 36	18,859	78,943	-	-	599,444	603,838	4,898,012
Subtotal	\$ 9,111,130	\$ 9,164,894	\$ 9,164,894	\$ 9,164,894	\$ 9,764,338	\$ 10,368,176	
Storage Sale	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Withdrawals In 17 * In 34	\$ (25,180)	\$ -	\$ -	\$ -	\$ -	\$ -	(2,634,626)
Ending Balance	\$ 9,085,950	\$ 9,164,894	\$ 9,164,894	\$ 9,164,894	\$ 9,764,338	\$ 10,368,176	\$ 5,873,054
<hr/>							
Average Rate For Withdrawals In 22 /In 9	\$ 4.7779	\$ 4.7501	\$ 4.7505	\$ 4.7505	\$ 4.6203	\$ 4.5129	
TGP Storage Rate for Injections	\$ 1.6490	\$ 2.8452	\$ -	\$ -	\$ 3.2558	\$ 3.2796	
Actual or NYMEX plus TGP Transportation							

37 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

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39 **Off Peak 2021 Summer Cost of Gas Filing**

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41 **Liquid Propane Gas (LPG)**

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	May-20 (Actual)	Jun-20 (Actual)	Jul-20 (Estimate)	Aug-20 (Estimate)	Sep-20 (Estimate)	Oct-20 (Estimate)	Total
Beginning Balance	93,824	93,828	94,844	94,844	94,844	94,844	96,655
Injections Sch 11A In 37 /10	72	1,016	-	-	-	-	47,127
Subtotal	93,896	94,844	94,844	94,844	94,844	94,844	
Withdrawals Sch 11A In 32 /10	(68)	-	-	-	-	-	(61,632)
Adjustment for change in temperature	-	-	-	-	-	-	-
Adjustment for Transfer	-	-	-	-	-	-	-
Ending Balance	93,828	94,844	94,844	94,844	94,844	94,844	82,150
Beginning Balance	\$ 1,382,938	\$ 1,382,997	\$ 1,396,098	\$ 1,406,774	\$ 1,406,774	\$ 1,406,774	\$ 1,193,497
Injections In 46 * In 69	1,061	13,101	-	-	-	-	168,840
Subtotal	\$ 1,384,000	\$ 1,396,098	\$ 1,396,098	\$ 1,406,774	\$ 1,406,774	\$ 1,406,774	
Withdrawals In 52 * In 67	(1,002)	-	10,676	-	-	-	(763,126)
Ending Balance	\$ 1,382,997	\$ 1,396,098	\$ 1,406,774	\$ 1,406,774	\$ 1,406,774	\$ 1,406,774	\$ 599,211
Average Rate For Withdrawals	\$ 14.7397	\$ 14.7199	\$ 14.7199	\$ 14.8325	\$ 14.8325	\$ 14.8325	
Propane Rate for Injections Actual or Sch. 6, In 158 * 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

70 **Liberty Utilities (EnergyNorth Natural Gas) Corp.**

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72 **Off Peak 2021 Summer Cost of Gas Filing**

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74 **Liquid Natural Gas (LNG)**

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	May-20 (Actual)	Jun-20 (Actual)	Jul-20 (Estimate)	Aug-20 (Estimate)	Sep-20 (Estimate)	Oct-20 (Estimate)	Total
76 Beginning Balance	7,885	5,928	10,583	10,583	10,583	10,583	12,057
77 Injections Sch 11A In 36 /10	797	6,395	-	-	-	-	135,961
78 Subtotal	8,682	12,323	10,583	10,583	10,583	10,583	
81 Withdrawals Sch 11A In 31 /10	(2,754)	(1,740)	-	-	-	-	(131,667)
83 Ending Balance	5,928	10,583	10,583	10,583	10,583	10,583	16,351
86 Beginning Balance	\$ 34,430	\$ 25,885	\$ 42,850	\$ 42,850	\$ 42,850	\$ 42,850	\$ 135,659
88 Injections In 78 * In 99	3,480	24,011	-	-	-	-	653,097
90 Subtotal	\$ 37,910	\$ 49,896	\$ 42,850	\$ 42,850	\$ 42,850	\$ 42,850	
92 Withdrawals In 82 * In 97	(12,025)	(7,045)	-	-	-	-	(773,245)
94 Ending Balance	\$ 25,885	\$ 42,850	\$ 42,850	\$ 42,850	\$ 42,850	\$ 42,850	\$ 15,511
96 Average Rate For Withdrawals	\$ 4.3665	\$ 4.0490	\$ 4.0490	\$ 4.0490	\$ 4.0490	\$ 4.0490	
98 LNG Rate for Injections Actual or Sch. 6, In 157 * 10	\$ 4.3665	\$ 3.7546	\$ 3.8000	\$ 3.8000	\$ -	\$ -	