N.H.P.U.C No. 12
NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

New Hampshire Division
Period Covered: November 1, 2020 - April 31, 2021

	Column A	Column B	Column C
1	**ANTICIPATED DIRECT COST OF GAS**		
2	**Purchased Gas for Sales Service:**		
3	Demand Costs:	$ 4,596,721	
4	Supply Costs:	$ 8,233,230	
5			
6	**Storage & Peaking Gas for Sales Service:**		
7	Demand, Capacity:	$ 11,702,910	
8	Commodity Costs:	$ 2,618,320	
9			
10	**Inventory Finance Charge**	$ 1,266	
11			
12	**Capacity Release**	$ (3,272,870)	
13			
14	**Re-entry Rate & Conversion Rate Revenues**	$ (5,000)	
15			
16	**Total Anticipated Direct Cost of Gas**		$ 23,874,576
17			
18	**ANTICIPATED INDIRECT COST OF GAS**		
19	**Adjustments:**		
20	Prior Period Under/(Over) Collection	$ 614,082	
21	Interest	$ (44,016)	
22	Refunds	$ -	
23	Interruptible Margins	$ -	
24	Total Adjustments		$ 570,066
25			
26	**Working Capital:**		
27	Total Anticipated Direct Cost of Gas	$ 23,874,576	
28	Working Capital Allowance Percentage (10.02 [lag days]/365* prime rate)	0.0892%	
29	Working Capital Allowance	$ 21,301	
30			
31	Plus: Working Capital Reconciliation (Acct 173)	$ (35,910)	
32			
33	Total Working Capital Allowance		$ (14,609)
34			
35	**Bad Debt:**		
36	Bad Debt Allowance	$ 156,687	
37	Plus: Bad Debt Reconciliation (Acct 173)	$ (4,239)	
38	Total Bad Debt Allowance		$ 152,448
39			
40	**Local Production and Storage Capacity**		$ 476,106
41			
42	**Miscellaneous Overhead-81.23% Allocated to Winter Season**		$ 471,532
43			
44	**Total Anticipated Indirect Cost of Gas**		$ 1,655,544
45			
46	**Total Cost of Gas**		$ 25,530,120

(*) Prime Rate is 3.25%

N.H.P.U.C No. 12 **Summary**
NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

New Hampshire Division
Period Covered: November 1, 2020 - April 31, 2021

	Column A	Column D
1	**ANTICIPATED DIRECT COST OF GAS**	
2	**Purchased Gas for Sales Service:**	
3	Demand Costs:	Schedule 5-CAK, LN 71 + Schedule 5-CAK, LN 75
4	Supply Costs:	Schedule 9-CAK, LN 15
5		
6	**Storage & Peaking Gas for Sales Service:**	
7	Demand, Capacity:	Schedule 5-CAK, LN 73 + Schedule 5-CAK, LN 74
8	Commodity Costs:	Schedule 9-CAK, LN 17 + Schedule 9-CAK, LN 18
9		
10	**Inventory Finance Charge**	Schedule 9-CAK, LN 19
11		
12	**Capacity Release**	-(Schedule 5-CAK, LN 77)
13		
14	**Re-entry Rate & Conversion Rate Revenues**	Schedule 5-CAK, LN 79
15		
16	**Total Anticipated Direct Cost of Gas**	Sum (LN 3 : LN 14)
17		
18	**ANTICIPATED INDIRECT COST OF GAS**	
19	**Adjustments:**	
20	Prior Period Under/(Over) Collection	Schedule 13-CAK, PG 1
21	Interest	Schedule 15-CAK, LN 115: Total
22	Refunds	
23	Interruptible Margins	-(Schedule 5-CAK, LN 78)
24	Total Adjustments	Sum (LN 20 : LN 23)
25		
26	**Working Capital:**	
27	Total Anticipated Direct Cost of Gas	LN 16
28	Working Capital Allowance Percentage (10.02 [lag days]/365* prim	Tariff - NHPUC No. 12 , Section 6.1
29	Working Capital Allowance	LN 27 * LN 28
30		
31	Plus: Working Capital Reconciliation (Acct 173)	Schedule 13-CAK, Attachment A
32		
33	Total Working Capital Allowance	Sum (LN 29 : LN 31)
34		
35	**Bad Debt:**	
36	Bad Debt Allowance	Schedule 14-CAK, LN 16
37	Plus: Bad Debt Reconciliation (Acct 173)	Schedule 13-CAK, Attachment B
38	Total Bad Debt Allowance	LN 36 + LN 37
39		
40	**Local Production and Storage Capacity**	Schedule 5-CAK, LN 84
41		
42	**Miscellaneous Overhead-81.23% Allocated to Winter Season**	Schedule 5-CAK, LN 83
43		
44	**Total Anticipated Indirect Cost of Gas**	Sum (LN 24 : LN 42)
45		
46	**Total Cost of Gas**	LN 44 + LN 16

(*) Prime Rate is 3.25%

CALCULATION OF FIRM SALES COST OF GAS RATE
Period Covered: November 1, 2020 - April 31, 2021

Column A		**Column B**	**Column C**	
Total Anticipated Direct Cost of Gas		$ 23,874,576		
Projected Prorated Sales (11/01/20 - 04/30/21)		34,897,412		
Direct Cost of Gas Rate			$ 0.6841	per therm
Demand Cost of Gas Rate		$ 13,021,761	$ 0.3731	per therm
Commodity Cost of Gas Rate		$ 10,852,815	$ 0.3110	per therm
Total Direct Cost of Gas Rate		$ 23,874,576	$ 0.6841	per therm
Total Anticipated Indirect Cost of Gas		$ 1,655,544		
Projected Prorated Sales (11/01/20 - 04/30/21)		34,897,412		
Indirect Cost of Gas			$ 0.0474	per therm
TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE 05/01/20			**$ 0.7315**	**per therm**
RESIDENTIAL COST OF GAS RATE - 11/01/20		**COGwr**	**$ 0.7315**	**per therm**
	Maximum (COG+25%)		**$ 0.9144**	
COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/20		**COGwl**	**$ 0.6465**	**per therm**
	Maximum (COG+25%)		**$ 0.8081**	
C&I HLF Demand Costs Allocated per SMBA	$ 601,051			
PLUS: Residential Demand Reallocation to C&I HLF	$ 31,569			
C&I HLF Total Adjusted Demand Costs	$ 632,620			
C&I HLF Projected Prorated Sales (11/01/20 - 04/30/21)	2,277,711			
Demand Cost of Gas Rate	**$ 0.2777**			
C&I HLF Commodity Costs Allocated per SMBA	$ 733,070			
PLUS: Residential Commodity Reallocation to C&I HLF	$ (940)			
C&I HLF Total Adjusted Commodity Costs	$ 732,130			
C&I HLF Projected Prorated Sales (11/01/20 - 05/30/21)	2,277,711			
Commodity Cost of Gas Rate	**$ 0.3214**			
Indirect Cost of Gas	**$ 0.0474**			
Total C&I HLF Cost of Gas Rate	**$ 0.6465**			
COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/20		**COGwh**	**$ 0.7437**	**per therm**
	Maximum (COG+25%)		**$ 0.9296**	
C&I LLF Demand Costs Allocated per SMBA	$ 5,855,245			
PLUS: Residential Demand Reallocation to C&I LLF	$ 307,534			
C&I LLF Total Adjusted Demand Costs	$ 6,162,780			
C&I LLF Projected Prorated Sales (11/01/20 - 04/30/21)	15,933,486			
Demand Cost of Gas Rate	**$ 0.3868**			
C&I LLF Commodity Costs Allocated per SMBA	$ 4,937,736			
PLUS: Residential Commodity Reallocation to C&I LLF	$ (6,330)			
C&I LLF Total Adjusted Commodity Costs	$ 4,931,406			
C&I LLF Projected Prorated Sales (11/01/20 - 04/30/21)	15,933,486			
Commodity Cost of Gas Rate	**$ 0.3095**			
Indirect Cost of Gas	**$ 0.0474**			
Total C&I LLF Cost of Gas Rate	**$ 0.7437**			

48	CALCULATION OF FIRM SALES COST OF GAS RATE	
49	Period Covered: November 1, 2020 - April 31, 2021	
50		
51	**Column A**	**Column D**
52		
53	Total Anticipated Direct Cost of Gas	LN 16
54	Projected Prorated Sales (11/01/20 - 04/30/21)	Schedule 6-CAK, LN 11
55	**Direct Cost of Gas Rate**	LN 53 / LN 54
56		
57	**Demand Cost of Gas Rate**	Column B : SUM (LN 3 , LN 7 , LN 12) : COLUMN C: LN 5
58	**Commodity Cost of Gas Rate**	Column B : SUM (LN 4 , LN 8) : COLUMN C: LN 58 / LN 5
59	**Total Direct Cost of Gas Rate**	SUM (LN 57 : LN 58)
60		
61	Total Anticipated Indirect Cost of Gas	Column B : LN 44
62	Projected Prorated Sales (11/01/20 - 04/30/21)	Column B : LN 54
63	**Indirect Cost of Gas**	LN 61 / LN 62
64		
65		
66	**TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE 05/01/20**	LN 59 + LN 63
67		
68	**RESIDENTIAL COST OF GAS RATE - 11/01/20**	LN 66
69		LN 68 * 1.25
70		
71		
72	**COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/20**	LN 89
73		LN 72 * 1.25
74		
75	C&I HLF Demand Costs Allocated per SMBA	Schedule 7-CAK, LN 170
76	PLUS: Residential Demand Reallocation to C&I HLF	Schedule 12-CAK, LN 16
77	C&I HLF Total Adjusted Demand Costs	Sum (LN 75 : LN 76)
78	C&I HLF Projected Prorated Sales (11/01/20 - 04/30/21)	Schedule 6-CAK, LN 14
79	**Demand Cost of Gas Rate**	LN 77 / LN 78
80		
81	C&I HLF Commodity Costs Allocated per SMBA	Schedule 11-CAK, LN 83
82	PLUS: Residential Commodity Reallocation to C&I HLF	Schedule 12-CAK, LN 26
83	C&I HLF Total Adjusted Commodity Costs	Sum (LN 81 : LN 82)
84	C&I HLF Projected Prorated Sales (11/01/20 - 05/30/21)	LN 78
85	**Commodity Cost of Gas Rate**	LN 83 / LN 84
86		
87	**Indirect Cost of Gas**	LN 63
88		
89	**Total C&I HLF Cost of Gas Rate**	Sum (LN 79, LN 85, LN 87)
90		
91		
92	**COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/20**	LN 109
93		LN 92 * 1.25
94		
95	C&I LLF Demand Costs Allocated per SMBA	Schedule 7-CAK, LN 171
96	PLUS: Residential Demand Reallocation to C&I LLF	Schedule 12-CAK, LN 17
97	C&I LLF Total Adjusted Demand Costs	Sum (LN 95 : LN 96)
98	C&I LLF Projected Prorated Sales (11/01/20 - 04/30/21)	Schedule 6-CAK, LN 15
99	**Demand Cost of Gas Rate**	LN 97 / LN 98
100		
101	C&I LLF Commodity Costs Allocated per SMBA	Schedule 11-CAK, LN 84
102	PLUS: Residential Commodity Reallocation to C&I LLF	Schedule 12-CAK, LN 27
103	C&I LLF Total Adjusted Commodity Costs	Sum (LN 101 : LN 102)
104	C&I LLF Projected Prorated Sales (11/01/20 - 04/30/21)	LN 98
105	**Commodity Cost of Gas Rate**	LN 103 / LN 104
106		
107	**Indirect Cost of Gas**	LN 63
108		
109	**Total C&I LLF Cost of Gas Rate**	Sum (LN 99, LN 105, LN 107)

N.H.P.U.C No.12
NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

Summary Schedule

New Hampshire Division
Period Covered: May 1, 2021 - October 31, 2021

Column A	Column B	Column C
ANTICIPATED DIRECT COST OF GAS		
Purchased Gas:		
Demand Costs:	$ 842,503	
Supply Costs:	$ 2,140,506	
Storage & Peaking Gas:		
Demand, Capacity:	$ 332,957	
Commodity Costs:	$ 25,153	
Inventory Finance Charge	$ -	
Capacity Release	$ -	
Re-entry Rate & Conversion Rate Revenues	$ -	
Total Anticipated Direct Cost of Gas		$ 3,341,119
ANTICIPATED INDIRECT COST OF GAS		
Adjustments:		
Prior Period Under/(Over) Collection	$ 141,851	
Interest	$ (43,640)	
Refunds	$ -	
Interruptible Margins	$ -	
Total Adjustments		$ 98,211
Working Capital:		
Total Anticipated Direct Cost of Gas	$ 3,341,119	
Working Capital Allowance Percentage (10.02 [lag days]/365* prime rate)	0.089%	
Working Capital Allowance	$ 2,981	
Plus: Working Capital Reconciliation (Acct. 173)	$ (8,295)	
Total Working Capital Allowance		$ (5,314)
Bad Debt:		
Projected Bad Debt	$ 14,144	
Plus: Bad Debt Reconciliation (Acct 173)	$ (979)	
Total Bad Debt Expense		$ 13,165
Local Production and Storage Capacity		$ -
Miscellaneous Overhead-18.77% Allocated to Summer Season		$ 108,923
Total Anticipated Indirect Cost of Gas		$ 214,984
Total Cost of Gas		$ 3,556,103

(*) Prime Rate is 3.25%

N.H.P.U.C No.12
NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

New Hampshire Division
Period Covered: May 1, 2021 - October 31, 2021

	Column A	Column D
110	**ANTICIPATED DIRECT COST OF GAS**	
111	**Purchased Gas:**	
112	Demand Costs:	Schedule 5-CAK, LN 71 + Schedule 5-CAK, LN 75
113	Supply Costs:	Schedule 9-CAK, LN 15
114		
115	**Storage & Peaking Gas:**	
116	Demand, Capacity:	Schedule 5-CAK, LN 73
117	Commodity Costs:	Schedule 9-CAK, LN 17 + Schedule 9-CAK, LN 18
118		
119	**Inventory Finance Charge**	- (Schedule 9-CAK, LN 22)
120		
121	**Capacity Release**	- (Schedule 5-CAK, LN 77)
122		
123	**Re-entry Rate & Conversion Rate Revenues**	
124		
125	**Total Anticipated Direct Cost of Gas**	Sum (LN 112 : LN 123)
126		
127	**ANTICIPATED INDIRECT COST OF GAS**	
128	**Adjustments:**	
129	Prior Period Under/(Over) Collection	Schedule 13-CAK, PG 1
130	Interest	Schedule 15-CAK, LN 100: Total
131	Refunds	Company Analysis
132	Interruptible Margins	- (Schedule 5-CAK, LN 78)
133	Total Adjustments	Sum (LN 129 : LN 132)
134		
135	**Working Capital:**	
136	Total Anticipated Direct Cost of Gas	LN 125
137	Working Capital Allowance Percentage (10.02 [lag days]/365* prim	Tariff - NHPUC No. 12 , Section 6.1
138	Working Capital Allowance	LN 136 * LN 137
139	Plus: Working Capital Reconciliation (Acct. 173)	Schedule 13-CAK, Attachment A
140		
141	Total Working Capital Allowance	Sum (LN 138 : LN 139)
142		
143	**Bad Debt:**	
144	Projected Bad Debt	Schedule 14-CAK, LN 17
145	Plus: Bad Debt Reconciliation (Acct 173)	Schedule 13-CAK, Attachment B
146	Total Bad Debt Expense	Sum (LN 144 : LN 145)
147		
148	**Local Production and Storage Capacity**	Schedule 5-CAK, LN 84
149		
150	**Miscellaneous Overhead-18.77% Allocated to Summer Season**	Schedule 5-CAK, LN 83
151		
152	**Total Anticipated Indirect Cost of Gas**	Sum (LN 133 : LN 150)
153		
154	**Total Cost of Gas**	LN 152 + LN 125
155		

(*) Prime Rate is 3.25%

NORTHERN UTILITIES, INC.

CALCULATION OF FIRM SALES COST OF GAS RATE
Period Covered: May 1, 2021 - October 31, 2021

Column A		**Column B**	**Column C**	
Total Anticipated Direct Cost of Gas		$ 3,341,119		
Projected Prorated Sales (05/01/21 - 10/31/21)		8,061,210		
Direct Cost of Gas Rate			$ 0.4145	per therm
Demand Cost of Gas Rate		$ 1,175,460	$ 0.1458	per therm
Commodity Cost of Gas Rate		$ 2,165,659	$ 0.2687	per therm
Total Direct Cost of Gas Rate		$ 3,341,119	$ 0.4145	per therm
Total Anticipated Indirect Cost of Gas		$ 214,984		
Projected Prorated Sales (05/01/21 - 10/31/21)		8,061,210		
Indirect Cost of Gas			$ 0.0267	per therm
TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE 05/01/21			**$ 0.4412**	**per therm**
RESIDENTIAL COST OF GAS RATE - 05/01/21		**COGwr**	**$ 0.4412**	**per therm**
	Maximum (COG+25%)		**$ 0.5515**	
COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/21		**COGwl**	**$ 0.3943**	**per therm**
	Maximum (COG+25%)		**$ 0.4929**	
C&I HLF Demand Costs Allocated per SMBA	$ 178,339			
PLUS: Residential Demand Reallocation to C&I HLF	$ 10,993			
C&I HLF Total Adjusted Demand Costs	$ 189,332			
C&I HLF Projected Prorated Sales (05/01/21 - 10/31/21)	1,912,209			
Demand Cost of Gas Rate	**$ 0.0990**			
C&I HLF Commodity Costs Allocated per SMBA	$ 513,718			
PLUS: Residential Commodity Reallocation to C&I HLF	$ (69)			
C&I HLF Total Adjusted Commodity Costs	$ 513,650			
C&I HLF Projected Prorated Sales (05/01/21 - 10/31/21)	1,912,209			
Commodity Cost of Gas Rate	**$ 0.2686**			
Indirect Cost of Gas	**$ 0.0267**			
Total C&I HLF Cost of Gas Rate	**$ 0.3943**			
COM/IND HIGH WINTER USE COST OF GAS RATE - 05/01/21		**COGwh**	**$ 0.4733**	**per therm**
	Maximum (COG+25%)		**$ 0.5916**	
C&I LLF Demand Costs Allocated per SMBA	$ 452,907			
PLUS: Residential Demand Reallocation to C&I LLF	$ 27,917			
C&I LLF Total Adjusted Demand Costs	$ 480,823			
C&I LLF Projected Prorated Sales (05/01/21 - 10/31/21)	2,701,981			
Demand Cost of Gas Rate	**$ 0.1780**			
C&I LLF Commodity Costs Allocated per SMBA	$ 725,892			
PLUS: Residential Commodity Reallocation to C&I LLF	$ (97)			
C&I LLF Total Adjusted Commodity Costs	$ 725,795			
C&I LLF Projected Prorated Sales (05/01/21 - 10/31/21)	2,701,981			
Commodity Cost of Gas Rate	**$ 0.2686**			
Indirect Cost of Gas	**$ 0.0267**			
Total C&I LLF Cost of Gas Rate	**$ 0.4733**			

NORTHERN UTILITIES, INC.

156		
157	CALCULATION OF FIRM SALES COST OF GAS RATE	
158	Period Covered: May 1, 2021 - October 31, 2021	
159		
160	**Column A**	**Column D**
161		
162	Total Anticipated Direct Cost of Gas	LN 125
163	Projected Prorated Sales (05/01/21 - 10/31/21)	Schedule 6-CAK, LN 11
164	**Direct Cost of Gas Rate**	LN 162 / LN 163
165		
166	**Demand Cost of Gas Rate**	Column B : SUM (LN 112 , LN 116 , LN 121 , LN 123) : Co
167	**Commodity Cost of Gas Rate**	Column B : SUM (LN 113 , LN 117 , LN 119) : COLUMN C
168	**Total Direct Cost of Gas Rate**	SUM (LN 166 : LN 167)
169		
170	Total Anticipated Indirect Cost of Gas	Column B : LN 152
171	Projected Prorated Sales (05/01/21 - 10/31/21)	Column B : LN 163
172	**Indirect Cost of Gas**	LN 170 / LN 171
173		
174		
175	**TOTAL PERIOD AVERAGE COST OF GAS EFFECTIVE 05/01/21**	LN 168 + LN 172
176		
177	**RESIDENTIAL COST OF GAS RATE - 05/01/21**	LN 175
178		LN 177 * 1.25
179		
180		
181	**COM/IND LOW WINTER USE COST OF GAS RATE - 05/01/21**	LN 198
182		LN 181 * 1.25
183		
184	C&I HLF Demand Costs Allocated per SMBA	Schedule 7-CAK, LN 170
185	PLUS: Residential Demand Reallocation to C&I HLF	Schedule 12-CAK, LN 16
186	C&I HLF Total Adjusted Demand Costs	Sum (LN 184 : LN 185)
187	C&I HLF Projected Prorated Sales (05/01/21 - 10/31/21)	Schedule 6-CAK, LN 14
188	**Demand Cost of Gas Rate**	LN 186 / LN 187
189		
190	C&I HLF Commodity Costs Allocated per SMBA	Schedule 11-CAK, LN 83
191	PLUS: Residential Commodity Reallocation to C&I HLF	Schedule 12-CAK, LN 26
192	C&I HLF Total Adjusted Commodity Costs	Sum (LN 190 : LN 191)
193	C&I HLF Projected Prorated Sales (05/01/21 - 10/31/21)	LN 187
194	**Commodity Cost of Gas Rate**	LN 192 / LN 193
195		
196	**Indirect Cost of Gas**	LN 172
197		
198	**Total C&I HLF Cost of Gas Rate**	Sum (LN 188, LN 194, LN 196)
199		
200		
201	**COM/IND HIGH WINTER USE COST OF GAS RATE - 05/01/21**	LN 218
202		LN 201 * 1.25
203		
204	C&I LLF Demand Costs Allocated per SMBA	Schedule 7-CAK, LN 171
205	PLUS: Residential Demand Reallocation to C&I LLF	Schedule 12-CAK, LN 17
206	C&I LLF Total Adjusted Demand Costs	Sum (LN 204 : LN 205)
207	C&I LLF Projected Prorated Sales (05/01/21 - 10/31/21)	Schedule 6-CAK, LN 15
208	**Demand Cost of Gas Rate**	LN 206 / LN 207
209		
210	C&I LLF Commodity Costs Allocated per SMBA	Schedule 11-CAK, LN 84
211	PLUS: Residential Commodity Reallocation to C&I LLF	Schedule 12-CAK, LN 27
212	C&I LLF Total Adjusted Commodity Costs	Sum (LN 210 : LN 211)
213	C&I LLF Projected Prorated Sales (05/01/21 - 10/31/21)	LN 207
214	**Commodity Cost of Gas Rate**	LN 212 / LN 213
215		
216	**Indirect Cost of Gas**	LN 172
217		
218	**Total C&I LLF Cost of Gas Rate**	Sum (LN 208, LN 214, LN 216)

NORTHERN UTILITIES, INC.

N.H.P.U.C No. 12
NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

New Hampshire Division
Period Covered: November 1, 2020 - October 31, 2021

	Column A	Column B	Column C
219	**ANTICIPATED DIRECT COST OF GAS**		
220	**Purchased Gas for Sales Service:**		
221	Demand Costs:	$ 5,439,224	
222	Supply Costs:	$ 10,373,736	
223			
224	**Storage & Peaking Gas for Sales Service:**		
225	Demand, Capacity:	$ 12,035,867	
226	Commodity Costs:	$ 2,643,472	
227			
228	**Inventory Finance Charge**	$ 1,266	
229			
230	**Capacity Release**	$ (3,272,870)	
231			
232	**Re-entry Rate & Conversion Rate Revenues**	$ (5,000)	
233			
234	**Total Anticipated Direct Cost of Gas**		$ 27,215,695
235			
236	**ANTICIPATED INDIRECT COST OF GAS**		
237	**Adjustments:**		
238	Prior Period Under/(Over) Collection	$ 755,933	
239	Interest	$ (87,656)	
240	Refunds	$ -	
241	Interruptible Margins	$ -	
242	Total Adjustments		$ 668,277
243			
244	**Working Capital:**		
245	Total Anticipated Direct Cost of Gas	$ 27,215,695	
246	Working Capital Percentage	0.0892%	
247	Working Capital Allowance	$ 24,282	
248			
249	Plus: Working Capital Reconciliation (Acct 173)	$ (44,205)	
250			
251	Total Working Capital Allowance		$ (19,923)
252			
253	**Bad Debt:**		
254	Bad Debt Allowance	$ 170,831	
255	Plus: Bad Debt Reconciliation (Acct 173)	$ (5,218)	
256	Total Bad Debt Allowance		$ 165,613
257			
258	**Local Production and Storage Capacity**		$ 476,106
259			
260	**Miscellaneous Overhead**		$ 580,455
261			
262	**Total Anticipated Indirect Cost of Gas**		$ 1,870,528
263			
264	**Total Cost of Gas**		$ 29,086,223

NORTHERN UTILITIES, INC.

N.H.P.U.C No. 12
NORTHERN UTILITIES, INC.

Anticipated Cost of Gas

New Hampshire Division
Period Covered: November 1, 2020 - October 31, 2021

	Column A	Column D
219	**ANTICIPATED DIRECT COST OF GAS**	
220	**Purchased Gas for Sales Service:**	
221	Demand Costs:	LN 3 + LN 112
222	Supply Costs:	LN 4 + LN 113
223		
224	**Storage & Peaking Gas for Sales Service:**	
225	Demand, Capacity:	LN 7 + LN 116
226	Commodity Costs:	LN 8 + LN 117
227		
228	**Inventory Finance Charge**	LN 10 + LN 119
229		
230	**Capacity Release**	LN 12 + LN 121
231		
232	**Re-entry Rate & Conversion Rate Revenues**	LN 14 + LN 123
233		
234	**Total Anticipated Direct Cost of Gas**	LN 16 + LN 125
235		
236	**ANTICIPATED INDIRECT COST OF GAS**	
237	**Adjustments:**	
238	Prior Period Under/(Over) Collection	LN 20 + LN 129
239	Interest	LN 21 + LN 130
240	Refunds	LN 22 + LN 131
241	Interruptible Margins	LN 23 + LN 132
242	Total Adjustments	LN 24 + LN 133
243		
244	**Working Capital:**	
245	Total Anticipated Direct Cost of Gas	LN 27 + LN 136
246	Working Capital Percentage	LN 28 + LN 137
247	Working Capital Allowance	LN 29 + LN 138
248		
249	Plus: Working Capital Reconciliation (Acct 173)	LN 31 + LN 139
250		
251	Total Working Capital Allowance	LN 33 + LN 141
252		
253	**Bad Debt:**	
254	Bad Debt Allowance	LN 36 + LN 144
255	Plus: Bad Debt Reconciliation (Acct 173)	LN 37 + LN 145
256	Total Bad Debt Allowance	LN 38 + LN 146
257		
258	**Local Production and Storage Capacity**	LN 40 + LN 148
259		
260	**Miscellaneous Overhead**	LN 42 + LN 150
261		
262	**Total Anticipated Indirect Cost of Gas**	LN 44 + LN 152
263		
264	**Total Cost of Gas**	LN 46 + LN 154

Northern Utilities New Hampshire Division
Cost of Gas Rate Comparison - Residential Rate Classes
(rates per therm)

Proposed Rates	2019-2020 Actual Cost of Gas Rates							
November 2020 - April 2021	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Average Winter 19-20	Variance
$0.7315	$0.5861	$0.5626	$0.5626	$0.5626	$0.5626	$0.5626	$0.5665	$0.1650
May 2021 - October 2021	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Average Summer 2020	
$0.4412	$0.2375	$0.2375	$0.1496	$0.1496	$0.2968	$0.2968	$0.2280	$0.2132

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical Residential Heating Bill - 732 therms/year

Comparison of Winter 2020-2021 vs. Winter 2019-2020

1				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
2		Typical Usage: therms (*)		55	97	126	139	106	76	600	46	22	15	13	13	23	132	732
3		**Winter 2020 - 2021**																
4	Customer Charge	units @	$ 22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$133.20								
5	First	50 units @	$0.6920	$34.60	$34.60	$34.60	$34.60	$34.60	$34.60	$207.60								
6	Over	50 units @	$0.6920	$3.44	$32.36	$52.61	$61.77	$39.05	$18.28	$207.51								
7		COG 1	$0.7315	$40.21						$40.21								
8		COG 2	$0.7315		$70.79					$70.79								
9		COG 3	$0.7315			$92.18				$92.18								
10		COG 4	$0.7315				$101.87			$101.87								
11		COG 5	$0.7315					$77.85		$77.85								
12		COG 6	$0.7315						$55.90	$55.90								
13		LDAC	$0.1099	$6.04	$10.63	$13.85	$15.31	$11.70	$8.40	$65.93								
14		**Summer 2021**																
15	Customer Charge	units @	$ 22.20								$ 22.20	$22.20	$22.20	$22.20	$ 22.20	$22.20	$133.20	
16	First	50 units @	$0.6099								$28.14	$13.56	$9.18	$7.85	$7.80	$14.18	$80.71	
17	Over	50 units @	$0.6099								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	
20		COG 1	$0.4412								$20.35						$20.35	
21		COG 2	$0.4412									$9.81					$9.81	
22		COG 3	$0.4412										$6.64				$6.64	
23		COG 4	$0.4412											$5.68			$5.68	
24		COG 5	$0.4412												$5.65		$5.65	
25		COG 6	$0.4412													$10.26	$10.26	
26		Summer Period Weighted Avg. COG	$0.4412															
27		LDAC	$ 0.1099								$5.07	$2.44	$1.65	$1.41	$1.41	$2.55	$14.54	
28			**TOTAL**	$106.49	$170.58	$215.44	$235.75	$185.40	$139.38	**$1,053.04**	$75.76	$48.02	$39.67	$37.14	$37.06	$49.19	$286.83	$1,339.87

		Nov	Dec	Jan	Feb	Mar	Apr	Winter
Base Rate Change Winter	**$ Change**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
	% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
COG Change Winter	**$ Change**	$7.99	$16.34	$21.28	$23.52	$17.98	$12.91	**$100.03**
	% Change	8.30%	10.86%	11.25%	11.38%	11.01%	10.45%	**10.76%**
LDAC Change Winter	**$ Change**	$2.16	$3.80	$4.95	$5.47	$4.18	$3.00	**$23.57**
	% Change	2.24%	2.53%	2.62%	2.65%	2.56%	2.43%	**2.54%**

27				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
28		Typical Usage: therms		55	97	126	139	106	76	600	46	22	15	13	13	23	132	732
29		**Winter 2019 - 2020**																
30	Customer Charge	units @	$ 22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$133.20								
31	First	50 units @	$0.6920	$34.60	$34.60	$34.60	$34.60	$34.60	$34.60	$207.60								
32	Over	50 units @	$0.6920	$3.44	$32.36	$52.61	$61.77	$39.05	$18.28	$207.51								
33		COG 1	$0.5861	$32.22						$32.22								
34		COG 2	$0.5626		$54.44					$54.44								
35		COG 3	$0.5626			$70.90				$70.90								
36		COG 4	$0.5626				$78.35			$78.35								
37		COG 5	$0.5626					$59.88		$59.88								
38		COG 6	$0.5626						$42.99	$42.99								
39		Winter Period Weighted Avg. COG	$0.5648															
40		LDAC	$ 0.0706	$3.88	$6.83	$8.90	$9.83	$7.51	$5.40	$42.35								
41		**Summer 2020**																
42	Customer Charge	units @	$ 22.20								$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$133.20	
43	First	50 units @	$0.6099								$28.14	$13.56	$9.18	$7.85	$7.80	$14.18	$80.71	
44	Over	50 units @	$0.6099								$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	
45		COG 1	$0.2375								$10.96						$10.96	
46		COG 2	$0.2375									$5.28					$5.28	
47		COG 3	$0.1496										$2.25				$2.25	
48		COG 4	$0.1496											$1.92			$1.92	
49		COG 5	$0.2968												$3.80		$3.80	
50		COG 6	$0.2968													$6.90	$6.90	
51		Summer Period Weighted Avg. COG	$0.2351															
52		LDAC	$ 0.0706								$3.26	$1.57	$1.06	$0.91	$0.90	$1.64	$9.34	
53			**TOTAL**	$96.34	$150.44	$189.20	$206.75	$163.24	$123.47	**$929.44**	$64.55	$42.61	$34.69	$32.88	$34.71	$44.92	$254.36	$1,183.80
54			**Change**	$10.15	$20.15	$26.24	$28.99	$22.16	$15.91	**$123.60**	$11.21	$5.40	$4.98	$4.26	$2.35	$4.27	**$32.47**	$156.07
55			**% Chg**	10.54%	13.39%	13.87%	14.02%	13.57%	12.89%	**13.3%**	17.37%	12.68%	14.35%	12.95%	6.77%	9.51%	**12.77%**	13.18%

*-Note- Weighted by usage. Most recent 12 months actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-40 Commercial & Industrial Bill - 2,039 therms/year

Comparison of Winter 2020-2021 vs. Winter 2019-2020

				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
1				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
2		Typical Usage: therms (*)		150	272	377	404	302	202	1,708	125	54	33	30	32	57	331	2,039
3	**Winter 2020 - 2021**																	
4	Customer Charge	units @	$ 75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$450.54								
5	First	75 units @	$0.1865	$13.99	$13.99	$13.99	$13.99	$13.99	$13.99	$83.93								
6	Over	75 units @	$0.1865	$13.92	$36.82	$56.41	$61.42	$42.42	$23.61	$234.60								
7		COG 1	$0.7437	$111.29						$111.29								
8		COG 2	$0.7437		$202.59					$202.59								
9		COG 3	$0.7437			$280.72				$280.72								
10		COG 4	$0.7437				$300.71			$300.71								
11		COG 5	$0.7437					$224.93		$224.93								
12		COG 6	$0.7437						$149.91	$149.91								
13		LDAC	$0.0472	$7.06	$12.86	$17.82	$19.09	$14.28	$9.51	$80.61								
14	**Summer 2021**																	
15	Customer Charge	units @	$ 75.09								$ 75.09	$75.09	$75.09	$75.09	$ 75.09	$75.09	$450.54	
16	First	75 units @	$0.1865								$13.99	$10.01	$6.18	$5.61	$6.01	$10.62	$52.42	
17	Over	75 units @	$0.1865								$9.36	$0.00	$0.00	$0.00	$0.00	$0.00	$9.36	
18		COG 1	$0.4733								$59.24						$59.24	
19		COG 2	$0.4733									$25.40					$25.40	
20		COG 3	$0.4733										$15.68				$15.68	
21		COG 4	$0.4733											$14.25			$14.25	
22		COG 5	$0.4733												$15.25		$15.25	
23		COG 6	$0.4733													$26.96	$26.96	
24	Summer Period Weighted Avg. COG		$0.4733															
25		LDAC	$ 0.0472								$5.91	$2.53	$1.56	$1.42	$1.52	$2.69	$15.63	
26			**TOTAL**	$221.36	$341.35	$444.02	$470.30	$370.71	$272.11	**$2,119.84**	$163.59	$113.04	$98.52	$96.37	$97.86	$115.36	$684.73	$2,804.57
	Base Rate Change Winter		**$ Change**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**								
			% Change	0%	0%	0%	0%	0%	0%	**0%**								
	COG Change Winter		**$ Change**	$20.28	$43.31	$60.02	$64.29	$48.09	$32.05	**$268.04**								
			% Change	10%	15%	16%	16%	15%	13%	**15%**								
	LDAC Change Winter		**$ Change**	$1.69	$3.08	$4.27	$4.57	$3.42	$2.28	**$19.30**								
			% Change	0.8%	1.0%	1.1%	1.1%	1.1%	1.0%	**1.1%**								
27				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
28		Typical Usage: therms		150	272	377	404	302	202	1,708	125	54	33	30	32	57	331	2,039
29	**Winter 2019 - 2020**																	
30	Customer Charge	units @	$ 75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$450.54								
31	First	75 units @	$0.1865	$13.99	$13.99	$13.99	$13.99	$13.99	$13.99	$83.93								
32	Over	75 units @	$0.1865	$13.92	$36.82	$56.41	$61.42	$42.42	$23.61	$234.60								
33		COG 1	$0.6082	$91.02						$91.02								
34		COG 2	$0.5847		$159.28					$159.28								
35		COG 3	$0.5847			$220.70				$220.70								
36		COG 4	$0.5847				$236.42			$236.42								
37		COG 5	$0.5847					$176.84		$176.84								
38		COG 6	$0.5847						$117.86	$117.86								
39	Winter Period Weighted Avg. COG		$0.5868															
40		LDAC	$ 0.0359	$5.37	$9.78	$13.55	$14.52	$10.86	$7.24	$61.31								
41	**Summer 2020**																	
42	Customer Charge	units @	$ 75.09								$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$450.54	
43	First	75 units @	$0.1865								$13.99	$10.01	$6.18	$5.61	$6.01	$10.62	$52.42	
44	Over	75 units @	$0.1865								$9.36	$0.00	$0.00	$0.00	$0.00	$0.00	$9.36	
45		COG 1	$0.2723								$34.08						$34.08	
46		COG 2	$0.2723									$14.61					$14.61	
47		COG 3	$0.1844										$6.11				$6.11	
48		COG 4	$0.1844											$5.55			$5.55	
49		COG 5	$0.3316												$10.68		$10.68	
50		COG 6	$0.3316													$18.89	$18.89	
51	Summer Period Weighted Avg. COG		$0.2715															
52		LDAC	$ 0.0359								$4.49	$1.93	$1.19	$1.08	$1.16	$2.04	$11.89	
53			**TOTAL**	$199.39	$294.95	$379.74	$401.44	$319.20	$237.78	**$1,832.50**	$137.01	$101.64	$88.57	$87.33	$92.94	$106.64	$614.14	$2,446.64
54			**Change**	$21.97	$46.39	$64.28	$68.86	$51.51	$34.33	**$287.34**	$26.57	$11.39	$9.95	$9.04	$4.93	$8.71	**$70.59**	$357.93
55			**% Chg**	11.02%	15.73%	16.93%	17.15%	16.14%	14.44%	**15.68%**	19.40%	11.21%	11.23%	10.35%	5.30%	8.17%	**11.49%**	14.63%

*-Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-41 Commercial & Industrial Bill - 20,286 therms/year

Comparison of Winter 2020-2021 vs. Winter 2019-2020

1				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
2		Typical Usage: therms (*)		1,609	2,618	3,574	3,800	2,951	1,974	16,526	1,276	613	397	347	422	704	3,760	20,286
3	**Winter 2020 - 2021**																	
4	Customer Charge	units @	$ 222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84								
5	All	units @	$0.2425	$390.15	$634.93	$866.78	$921.42	$715.66	$478.69	$4,007.63								
6		COG 1	$0.7437	$1,196.53						$1,196.53								
7		COG 2	$0.7437		$1,947.21					$1,947.21								
8		COG 3	$0.7437			$2,658.23				$2,658.23								
9		COG 4	$0.7437				$2,825.80			$2,825.80								
10		COG 5	$0.7437					$2,194.80		$2,194.80								
11		COG 6	$0.7437						$1,468.05	$1,468.05								
12		LDAC	$0.0472	$75.94	$123.58	$168.71	$179.34	$139.30	$93.17	$780.04								
13	**Summer 2021**																	
14	Customer Charge	units @	$ 222.64								$ 222.64	$222.64	$222.64	$222.64	$ 222.64	$222.64	$1,335.84	
15	All	units @	$0.1895								$241.86	$116.18	$75.24	$65.84	$80.04	$133.38	$712.54	
16		COG 1	$0.4733								$604.07						$604.07	
17		COG 2	$0.4733									$290.18					$290.18	
18		COG 3	$0.4733										$187.92				$187.92	
19		COG 4	$0.4733											$164.45			$164.45	
20		COG 5	$0.4733												$199.90		$199.90	
21		COG 6	$0.4733													$333.14	$333.14	
22	Summer Period Weighted Avg. COG		$0.4733															
23		LDAC	$ 0.0472								$60.24	$28.94	$18.74	$16.40	$19.94	$33.22	$177.48	
24			TOTAL	$1,885.26	$2,928.37	$3,916.35	$4,149.20	$3,272.40	$2,262.56	**$18,414.13**	$1,128.82	$657.94	$504.54	$469.33	$522.51	$722.38	$4,005.53	$22,419.66
	Base Rate Change Winter		**$ Change**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**								
			% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**								
	COG Change Winter		**$ Change**	$218.00	$416.31	$568.32	$604.14	$469.24	$313.86	**$2,589.88**								
			% Change	13.22%	16.77%	17.18%	17.25%	16.94%	16.29%	**16.56%**								
	LDAC Change Winter		**$ Change**	$18.18	$29.59	$40.39	$42.94	$33.35	$22.31	**$186.75**								
			% Change	1.102%	1.192%	1.221%	1.226%	1.204%	1.158%	**1.194%**								
25				Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
26		Typical Usage: therms		1,609	2,618	3,574	3,800	2,951	1,974	16,526	1,276	613	397	347	422	704	3,760	20,286
27	**Winter 2019 - 2020**																	
28	Customer Charge	units @	$ 222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84								
29	All	units @	$0.2425	$390.15	$634.93	$866.78	$921.42	$715.66	$478.69	$4,007.63								
30		COG 1	$0.6082	$978.52						$978.52								
31		COG 2	$0.5847		$1,530.91					$1,530.91								
32		COG 3	$0.5847			$2,089.91				$2,089.91								
33		COG 4	$0.5847				$2,221.66			$2,221.66								
34		COG 5	$0.5847					$1,725.56		$1,725.56								
35		COG 6	$0.5847						$1,154.19	$1,154.19								
36	Winter Period Weighted Avg. COG		$0.5870															
37		LDAC	$ 0.0359	$57.76	$94.00	$128.32	$136.41	$105.95	$70.87	$593.29								
38	**Summer 2020**																	
39	Customer Charge	units @	$ 222.64								$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84	
40	All	units @	$0.1895								$241.86	$116.18	$75.24	$65.84	$80.04	$133.38	$712.54	
41		COG 1	$0.2723								$347.54						$347.54	
42		COG 2	$0.2723									$166.95					$166.95	
43		COG 3	$0.1844										$73.22				$73.22	
44		COG 4	$0.1844											$64.07			$64.07	
45		COG 5	$0.3316												$140.05		$140.05	
46		COG 6	$0.3316													$233.40	$233.40	
47	Summer Period Weighted Avg. COG		$0.2727															
48		LDAC	$ 0.0359								$45.82	$22.01	$14.25	$12.47	$15.16	$25.27	$134.99	
49			**TOTAL**	$1,649.08	$2,482.48	$3,307.64	$3,502.12	$2,769.81	$1,926.39	**$15,637.51**	$857.86	$527.78	$385.35	$365.03	$457.89	$614.69	$3,208.60	$18,846.11
50			**Change**	$236.18	$445.89	$608.71	$647.08	$502.59	$336.17	**$2,776.62**	$270.96	$130.16	$119.19	$104.31	$64.62	$107.69	**$796.93**	$3,573.55
51			**% Chg**	14.32%	17.96%	18.40%	18.48%	18.15%	17.45%	**17.76%**	31.59%	24.66%	30.93%	28.57%	14.11%	17.52%	**24.84%**	18.96%

*-Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-51 Commercial & Industrial Bill - 18,560 therms/year

Comparison of Winter 2020-2021 vs. Winter 2019-2020

1			Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
2	Typical Usage: therms (*)		1,509	1,802	2,123	2,164	1,959	1,145	10,702	1,488	1,251	1,329	1,194	1,072	1,524	7,858	18,560
3	**Winter 2020 - 2021**																
4	Customer Charge units @	$ 222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84								
5	First 1,300 units @	$0.1712	$222.56	$222.56	$222.56	$222.56	$222.56	$195.97	$1,308.77								
6	Over 1,300 units @	$0.1399	$29.28	$70.28	$115.17	$120.81	$92.17	$0.00	$427.72								
7	COG 1	$0.6465	$975.75						$975.75								
8	COG 2	$0.6465		$1,165.25					$1,165.25								
9	COG 3	$0.6465			$1,372.66				$1,372.66								
10	COG 4	$0.6465				$1,398.74			$1,398.74								
11	COG 5	$0.6465					$1,266.40		$1,266.40								
12	COG 6	$0.6465						$740.05	$740.05								
13	LDAC	$0.0472	$71.24	$85.07	$100.22	$102.12	$92.46	$54.03	$505.13								
14	**Summer 2021**																
15	Customer Charge units @	$ 222.64								$ 222.64	$222.64	$222.64	$222.64	$ 222.64	$222.64	$1,335.84	
16	First 1,000 units @	$0.1337								$133.70	$133.70	$133.70	$133.70	$133.70	$133.70	$802.20	
17	Over 1,000 units @	$0.1087								$53.01	$27.25	$35.76	$21.09	$7.84	$56.99	$201.93	
18	COG 1	$0.3943								$586.58						$586.58	
19	COG 2	$0.3943									$493.14					$493.14	
20	COG 3	$0.3943										$524.00				$524.00	
21	COG 4	$0.3943											$470.80			$470.80	
22	COG 5	$0.3943												$422.73		$422.73	
23	COG 6	$0.3943													$601.02	$601.02	
24	Summer Period Weighted Avg. COG	$0.3943															
25	LDAC	$ 0.0472								$70.22	$59.03	$62.73	$56.36	$50.60	$71.95	$370.88	
26		**TOTAL**	$1,521.46	$1,765.80	$2,033.24	$2,066.88	$1,896.23	$1,212.70	**$10,496.31**	$1,066.14	$935.76	$978.83	$904.58	$837.51	$1,086.30	$5,809.12	$16,305.44
	Base Rate Change Winter	**$ Change**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**								
		% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**								
	COG Change Winter	**$ Change**	$228.66	$315.42	$371.56	$378.62	$342.80	$200.32	**$1,837.38**								
		% Change	17.92%	22.06%	22.69%	22.76%	22.39%	20.04%	**21.52%**								
	LDAC Change Winter	**$ Change**	$17.05	$20.37	$23.99	$24.45	$22.14	$12.94	**$120.93**								
		% Change	1.34%	1.42%	1.47%	1.47%	1.45%	1.29%	**1.42%**								
27			Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
28	Typical Usage: therms		1,509	1,802	2,123	2,164	1,959	1,145	10,702	1,488	1,251	1,329	1,194	1,072	1,524	7,858	18,560
29	**Winter 2019 - 2020**																
30	Customer Charge units @	$ 222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84								
31	First 1,300 units @	$0.1712	$222.56	$222.56	$222.56	$222.56	$222.56	$195.97	$1,308.77								
32	Over 1,300 units @	$0.1399	$29.28	$70.28	$115.17	$120.81	$92.17	$0.00	$427.72								
33	COG 1	$0.4950	$747.09						$747.09								
34	COG 2	$0.4715		$849.83					$849.83								
35	COG 3	$0.4715			$1,001.10				$1,001.10								
36	COG 4	$0.4715				$1,020.12			$1,020.12								
37	COG 5	$0.4715					$923.60		$923.60								
38	COG 6	$0.4715						$539.73	$539.73								
39	Winter Period Weighted Avg. COG	$0.4748															
40	LDAC	$ 0.0359	$54.18	$64.71	$76.22	$77.67	$70.32	$41.09	$384.20								
41	**Summer 2020**																
42	Customer Charge units @	$ 222.64								$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84	
43	First 1,000 units @	$0.1337								$133.70	$133.70	$133.70	$133.70	$133.70	$133.70	$802.20	
44	Over 1,000 units @	$0.1087								$53.01	$27.25	$35.76	$21.09	$7.84	$56.99	$201.93	
45	COG 1	$0.2050								$304.97						$304.97	
46	COG 2	$0.2050									$256.39					$256.39	
47	COG 3	$0.1171										$155.62				$155.62	
48	COG 4	$0.1171											$139.82			$139.82	
49	COG 5	$0.2643												$283.36		$283.36	
50	COG 6	$0.2643													$402.87	$402.87	
51	Summer Period Weighted Avg. COG	$0.1964															
52	LDAC	$ 0.0359								$53.41	$44.90	$47.71	$42.86	$38.49	$54.72	$282.09	
53		**TOTAL**	$1,275.75	$1,430.02	$1,637.69	$1,663.81	$1,531.30	$999.44	**$8,538.00**	$767.72	$684.88	$595.43	$560.11	$686.02	$870.92	$4,165.07	$12,703.07
54		**Change**	$245.71	$335.79	$395.55	$403.07	$364.93	$213.26	**$1,958.32**	$298.42	$250.89	$383.40	$344.47	$151.49	$215.38	**$1,644.05**	$3,602.36
55		**% Chg**	19.26%	23.48%	24.15%	24.23%	23.83%	21.34%	**22.94%**	38.87%	36.63%	64.39%	61.50%	22.08%	24.73%	**39.47%**	28.36%

*-Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. -- NEW HAMPSHIRE DIVISION

Impact of Rate Changes on Residential Heating Bills by Usage Level
Forecast Winter 2020-2021 vs. Actual Winter 2019-2020

Residential Heating	Winter 2019- 2020	Winter 2020- 2021
Customer Charge	$22.20	$22.20
First 50 Therms	$0.6920	$0.6920
Over 50 therms	$0.6920	$0.6920
LDAC	$0.0706	$0.1099
CGA	$0.5648	$0.7315

	Usage (Therms)	Winter 2019-2020 Bill Amount	Winter 2020-2021 Bill Amount	Total Bill		Base Rate		CGA		LDAC	
	5	$28.84	$29.87	$1.03	3.6%	$0.00	0.0%	$0.83	2.9%	$0.20	0.7%
	10	$35.47	$37.53	$2.06	5.8%	$0.00	0.0%	$1.67	4.7%	$0.39	1.1%
	20	$48.75	$52.87	$4.12	8.5%	$0.00	0.0%	$3.33	6.8%	$0.79	1.6%
	25	$55.38	$60.54	$5.15	9.3%	$0.00	0.0%	$4.17	7.5%	$0.98	1.8%
	30	$62.02	$68.20	$6.18	10.0%	$0.00	0.0%	$5.00	8.1%	$1.18	1.9%
	45	$81.93	$91.20	$9.27	11.3%	$0.00	0.0%	$7.50	9.2%	$1.77	2.2%
	50	$88.57	$98.87	$10.30	11.6%	$0.00	0.0%	$8.34	9.4%	$1.97	2.2%
	75	$121.75	$137.21	$15.45	12.7%	$0.00	0.0%	$12.51	10.3%	$2.95	2.4%
Monthly*	125	$188.12	$213.88	$25.76	13.7%	$0.00	0.0%	$20.84	11.1%	$4.91	2.6%
	150	$221.30	$252.21	$30.91	14.0%	$0.00	0.0%	$25.01	11.3%	$5.90	2.7%
	200	$287.67	$328.88	$41.21	14.3%	$0.00	0.0%	$33.35	11.6%	$7.86	2.7%

* Monthly amount for benchmarking purposes, does not represent the average monthly use of Northern's residential class.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical Residential Heating Bill - 132 therms/Summer

Comparison of Summer 2021 vs. Summer 2020

#	Item		Rate	May	June	July	August	Sept	October	Summer
1				May	June	July	August	Sept	October	Summer
2	Typical Usage: therms(*)			46	22	15	13	13	23	132
3	**Summer 2021**									
4	Customer Charge	units @	$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$133.20
5	First 50	units @	$0.6099	$28.14	$13.56	$9.18	$7.85	$7.80	$14.18	$80.71
6	Over 50	units @	$0.6099	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7		COG 1	$0.4412	$20.35						$20.35
8		COG 2	$0.4412		$9.81					$9.81
9		COG 3	$0.4412			$6.64				$6.64
10		COG 4	$0.4412				$5.68			$5.68
11		COG 5	$0.4412					$5.65		$5.65
12		COG 6	$0.4412						$10.26	$10.26
13	Summer Period 2021 Avg. COG		$0.4412 *							
14		LDAC	$0.1099	$5.07	$2.44	$1.65	$1.41	$1.41	$2.55	$14.54
15			**TOTAL**	$75.76	$48.02	$39.67	$37.14	$37.06	$49.19	**$286.83**
	Base Rate Change		**$ Change**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
			% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
	COG Change		**$ Change**	$9.40	$4.53	$4.39	$3.75	$1.85	$3.36	**$27.27**
			% Change	14.56%	10.63%	12.65%	11.41%	5.32%	7.47%	**10.72%**
	LDAC Change		**$ Change**	$1.81	$0.87	$0.59	$0.51	$0.50	$0.91	**$5.20**
			% Change	2.81%	2.05%	1.70%	1.54%	1.45%	2.03%	**2.04%**
16				May	June	July	August	Sept	October	Summer
17	Typical Usage: therms			46	22	15	13	13	23	132
18	**Summer 2020**									
19	Customer Charge	units @	$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$22.20	$133.20
20	First 50	units @	$0.6099	$28.14	$13.56	$9.18	$7.85	$7.80	$14.18	$80.71
21	Over 50	units @	$0.6099	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
22		COG 1	$0.2375	$10.96						$10.96
23		COG 2	$0.2375		$5.28					$5.28
24		COG 3	$0.1496			$2.25				$2.25
25		COG 4	$0.1496				$1.92			$1.92
26		COG 5	$0.2968					$3.80		$3.80
27		COG 6	$0.2968						$6.90	$6.90
28	Summer Period 2020 Avg. COG		$0.2351 *							
29		LDAC	$0.0706	$3.26	$1.57	$1.06	$0.91	$0.90	$1.64	$9.34
30			**TOTAL**	$64.55	$42.61	$34.69	$32.88	$34.71	$44.92	**$254.36**
31			**Change**	$11.21	$5.40	$4.98	$4.26	$2.35	$4.27	**$32.47**
32			**% Chg**	17.37%	12.68%	14.35%	12.95%	6.77%	9.51%	**12.77%**

*-Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-40 Commercial & Industrial Bill - 331 therms/Summer

Comparison of Summer 2021 vs. Summer 2020

				May	June	July	August	Sept	October	Summer
1				**May**	**June**	**July**	**August**	**Sept**	**October**	**Summer**
2	Typical Usage: therms(*)			125	54	33	30	32	57	**331**
3	**Summer 2021**									
4	Customer Charge	units @	$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$450.54
5	First	75 units @	$0.1865	$13.99	$10.01	$6.18	$5.61	$6.01	$10.62	$52.42
6	Over	75 units @	$0.1865	$9.36	$0.00	$0.00	$0.00	$0.00	$0.00	$9.36
7		COG 1	$0.4733	$59.24						$59.24
8		COG 2	$0.4733		$25.40					$25.40
9		COG 3	$0.4733			$15.68				$15.68
10		COG 4	$0.4733				$14.25			$14.25
11		COG 5	$0.4733					$15.25		$15.25
12		COG 6	$0.4733						$26.96	$26.96
13		Summer Period 2021 Avg. COG	$0.4733 *							
14		LDAC	$0.0472	$5.91	$2.53	$1.56	$1.42	$1.52	$2.69	$15.63
15			**TOTAL**	$163.59	$113.04	$98.52	$96.37	$97.86	$115.36	**$684.73**
	Base Rate Change		**$ Change**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
			% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
	COG Change		**$ Change**	$25.16	$10.79	$9.57	$8.70	$4.56	$8.07	**$66.85**
			% Change	18.36%	10.61%	10.81%	9.96%	4.91%	7.57%	**10.89%**
	LDAC Change		**$ Change**	$1.41	$0.61	$0.37	$0.34	$0.36	$0.64	**$3.74**
			% Change	1.03%	0.60%	0.42%	0.39%	0.39%	0.60%	0.61%
16				**May**	**June**	**July**	**August**	**Sept**	**October**	**Summer**
17	Typical Usage: therms			125	54	33	30	32	57	**331**
18	**Summer 2020**									
19	Customer Charge	units @	$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$75.09	$450.54
20	First	75 units @	$0.1865	$13.99	$10.01	$6.18	$5.61	$6.01	$10.62	$52.42
21	Over	75 units @	$0.1865	$9.36	$0.00	$0.00	$0.00	$0.00	$0.00	$9.36
22		COG 1	$0.2723	$34.08						$34.08
23		COG 2	$0.2723		$14.61					$14.61
24		COG 3	$0.1844			$6.11				$6.11
25		COG 4	$0.1844				$5.55			$5.55
26		COG 5	$0.3316					$10.68		$10.68
27		COG 6	$0.3316						$18.89	$18.89
28		Summer Period 2020 Avg. COG	$0.2715 *							
29		LDAC	$0.0359	$4.49	$1.93	$1.19	$1.08	$1.16	$2.04	$11.89
30			**TOTAL**	$137.01	$101.64	$88.57	$87.33	$92.94	$106.64	**$614.14**
31			**Change**	$26.57	$11.39	$9.95	$9.04	$4.93	$8.71	**$70.59**
32			**% Chg**	19.40%	11.21%	11.23%	10.35%	5.30%	8.17%	**11.49%**

*-Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-41 Commercial & Industrial Bill - 3,760 therms/Summer

Comparison of Summer 2021 vs. Summer 2020

Line	Description		Rate	May	June	July	August	Sept	October	Summer
1				May	June	July	August	Sept	October	Summer
2	Typical Usage: therms(1)			1,276	613	397	347	422	704	3,760
3	**Summer 2021**									
4	Customer Charge	units @	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84
5	All	units @	$0.1895	$241.86	$116.18	$75.24	$65.84	$80.04	$133.38	$712.54
6		COG 1	$0.4733	$604.07						$604.07
7		COG 2	$0.4733		$290.18					$290.18
8		COG 3	$0.4733			$187.92				$187.92
9		COG 4	$0.4733				$164.45			$164.45
10		COG 5	$0.4733					$199.90		$199.90
11		COG 6	$0.4733						$333.14	$333.14
12	Summer Period 2021 Avg. COG		$0.4733 *							
13		LDAC	$0.0472	$60.24	$28.94	$18.74	$16.40	$19.94	$33.22	$177.48
14		**TOTAL**		$1,128.82	$657.94	$504.54	$469.33	$522.51	$722.38	**$4,005.53**
	Base Rate Change	**$ Change**		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
		% Change		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
	COG Change	**$ Change**		$256.54	$123.23	$114.71	$100.38	$59.85	$99.74	**$754.44**
		% Change		29.90%	23.35%	29.77%	27.50%	13.07%	16.23%	**23.51%**
	LDAC Change	**$ Change**		$14.42	$6.93	$4.49	$3.93	$4.77	$7.95	**$42.49**
		% Change		1.68%	1.31%	1.16%	1.08%	1.04%	1.29%	1.32%
15				May	June	July	August	Sept	October	Summer
16	Typical Usage: therms			1,276	613	397	347	422	704	3,760
17	**Summer 2020**									
18	Customer Charge	units @	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84
19	All	units @	$0.1895	$241.86	$116.18	$75.24	$65.84	$80.04	$133.38	$712.54
20		COG 1	$0.2723	$347.54						$347.54
21		COG 2	$0.2723		$166.95					$166.95
22		COG 3	$0.1844			$73.22				$73.22
23		COG 4	$0.1844				$64.07			$64.07
24		COG 5	$0.3316					$140.05		$140.05
25		COG 6	$0.3316						$233.40	$233.40
26	Summer Period 2020 Avg. COG		$0.2727 *							
27		LDAC	$0.0359	$45.82	$22.01	$14.25	$12.47	$15.16	$25.27	$134.99
28		**TOTAL**		$857.86	$527.78	$385.35	$365.03	$457.89	$614.69	**$3,208.60**
29		**Change**		$270.96	$130.16	$119.19	$104.31	$64.62	$107.69	**$796.93**
30		**% Chg**		31.59%	24.66%	30.93%	28.57%	14.11%	17.52%	**24.84%**

*-Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical G-51 Commercial & Industrial Bill - 7,858 therms/Summer

Comparison of Summer 2021 vs. Summer 2020

				May	June	July	August	Sept	October	Summer
2		Typical Usage: therms(1)		1,488	1,251	1,329	1,194	1,072	1,524	7,858
3	**Summer 2021**									
4	Customer Charge	units @	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84
5	First	1,000 units @	$0.1337	$133.70	$133.70	$133.70	$133.70	$133.70	$133.70	$802.20
6	Over	1,000 units @	$0.1087	$53.01	$27.25	$35.76	$21.09	$7.84	$56.99	$201.93
7		COG 1	$0.3943	$586.58						$586.58
8		COG 2	$0.3943		$493.14					$493.14
9		COG 3	$0.3943			$524.00				$524.00
10		COG 4	$0.3943				$470.80			$470.80
11		COG 5	$0.3943					$422.73		$422.73
12		COG 6	$0.3943						$601.02	$601.02
13		Summer Period 2021 Avg. COG	$0.3943 *							
14		LDAC	$0.0472	$70.22	$59.03	$62.73	$56.36	$50.60	$71.95	$370.88
15		**TOTAL**		$1,066.14	$935.76	$978.83	$904.58	$837.51	$1,086.30	$5,809.12
	Base Rate Change	**$ Change**		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
		% Change		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**
	COG Change	**$ Change**		$281.61	$236.75	$368.38	$330.98	$139.37	$198.16	**$1,555.26**
		% Change		36.68%	34.57%	61.87%	59.09%	20.32%	22.75%	**37.34%**
	LDAC Change	**$ Change**		$16.81	$14.13	$15.02	$13.49	$12.11	$17.22	**$88.79**
		% Change		2.19%	2.06%	2.52%	2.41%	1.77%	1.98%	2.13%
16				**May**	**June**	**July**	**August**	**Sept**	**October**	**Summer**
17		Typical Usage: therms		1,488	1,251	1,329	1,194	1,072	1,524	7,858
18	**Summer 2020**									
19	Customer Charge	units @	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$222.64	$1,335.84
20	First	1,000 units @	$0.1337	$133.70	$133.70	$133.70	$133.70	$133.70	$133.70	$802.20
21	Over	1,000 units @	$0.1087	$53.01	$27.25	$35.76	$21.09	$7.84	$56.99	$201.93
22		COG 1	$0.2050	$304.97						$304.97
23		COG 2	$0.2050		$256.39					$256.39
24		COG 3	$0.1171			$155.62				$155.62
25		COG 4	$0.1171				$139.82			$139.82
26		COG 5	$0.2643					$283.36		$283.36
27		COG 6	$0.2643						$402.87	$402.87
28		Summer Period 2020 Avg. COG	$0.1964 *							
29		LDAC	$0.0359	$53.41	$44.90	$47.71	$42.86	$38.49	$54.72	$282.09
30		**TOTAL**		$767.72	$684.88	$595.43	$560.11	$686.02	$870.92	**$4,165.07**
31		**Change**		$298.42	$250.89	$383.40	$344.47	$151.49	$215.38	**$1,644.05**
32		**% Chg**		38.87%	36.63%	64.39%	61.50%	22.08%	24.73%	**39.47%**

*-Note- Weighted by usage.

NORTHERN UTILITIES, INC. -- NEW HAMPSHIRE DIVISION

Impact of Rate Changes on Residential Heating Bills by Usage Level

Forecast Summer 2021 vs. Actual Summer 2020

Residential Heating	Summer 2020	Summer 2021
Customer Charge	$22.20	$22.20
First 50 Therms	$0.6099	$0.6099
Over 50 therms	$0.6099	$0.6099
LDAC	$0.0706	$0.1099
CGA	$0.2351	$0.4412

	Usage (Therms)	Summer 2019 Bill Amount	Summer 2020 Bill Amount	Total Bill		Base Rate		COG		LDAC	
	5	$26.78	$28.01	$1.23	4.6%	$0.00	0.0%	$1.03	3.8%	$0.20	0.7%
	10	$31.36	$33.81	$2.45	7.8%	$0.00	0.0%	$2.06	6.6%	$0.39	1.2%
	20	$40.51	$45.42	$4.91	12.1%	$0.00	0.0%	$4.12	10.2%	$0.79	2.0%
Monthly*	25	$45.09	$51.23	$6.13	13.6%	$0.00	0.0%	$5.15	11.4%	$0.98	2.2%
	30	$49.67	$57.03	$7.36	14.8%	$0.00	0.0%	$6.18	12.4%	$1.18	2.4%
	45	$63.40	$74.45	$11.04	17.4%	$0.00	0.0%	$9.27	14.6%	$1.77	2.8%
	50	$67.98	$80.25	$12.27	18.0%	$0.00	0.0%	$10.30	15.2%	$1.97	2.9%
	75	$90.87	$109.28	$18.40	20.3%	$0.00	0.0%	$15.46	17.0%	$2.95	3.2%
	125	$136.65	$167.33	$30.67	22.4%	$0.00	0.0%	$25.76	18.9%	$4.91	3.6%
	150	$159.54	$196.35	$36.81	23.1%	$0.00	0.0%	$30.91	19.4%	$5.90	3.7%
	200	$205.32	$254.40	$49.08	23.9%	$0.00	0.0%	$41.22	20.1%	$7.86	3.8%

* Monthly amount for benchmarking purposes, does not represent the average monthly use of Northern's residential class.

Northern Utilities
Simplified Market Based Allocator (MBA) Calculations
ALLOCATION OF NORTHERN FIXED CAPACITY COSTS BETWEEN ME & NH DIVISIONS

Total Fixed Capacity Costs To Be Allocated

	NUI Total	
Pipeline Demand	$ 17,304,236	
Storage Demand	$ 23,261,749	
On-system Peaking Demand	$ 3,145,503	
Subtotal Demand	$ 43,711,488	
Capacity Release (Credit)	$ -	
Asset Management (Credit)	$ (8,074,404)	
Total Net Demand Costs	$ 35,637,084	
Off-System Peaking Demand	$ 9,621,667	PR Allocation on Page 5
Total Demand Costs	$ 45,258,750	

Proportional Responsibility (PR) Allocators

Allocation of Product and Pipeline Demand Costs (including Injections) to Months

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
Design Year Pipeline Sendout	1,224,769	1,252,887	1,252,886	1,246,859	1,497,106	1,116,363	730,195	489,319	423,088	442,673	508,970	866,778	11,051,893
Rank	5	2	3	4	1	6	8	10	12	11	9	7	
% Max Month	81.81%	83.69%	83.69%	83.28%	100.00%	74.57%	48.77%	32.68%	28.26%	29.57%	34.00%	57.90%	
PR	1.45%	0.00%	0.13%	0.37%	16.31%	2.78%	1.85%	0.31%	2.36%	0.12%	0.15%	1.30%	27.12%
CumPR	10.31%	10.81%	10.81%	10.68%	27.12%	8.86%	4.78%	2.79%	2.36%	2.47%	2.93%	6.08%	100.00%
Product and Pipeline Demand Costs	$ 1,783,811	$ 1,870,870	$ 1,870,864	$ 1,847,641	$ 4,693,666	$ 1,533,210	$ 826,879	$ 482,015	$ 407,520	$ 428,100	$ 507,252	$1,052,407	$ 17,304,236

Allocation of Storage Injection Fees to Months

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
Storage Injection Volume	-	-	-	-	-	-	-	-	-	-	-	-	-
Design Year Pipeline Sendout	1,224,769	1,252,887	1,252,886	1,246,859	1,497,106	1,116,363	730,195	489,319	423,088	442,673	508,970	866,778	11,051,893
% of Deliveries Injected	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Injection Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Allocation of Storage Demand Costs to Months

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
Design Year Storage	417,268	1,068,963	1,145,840	982,364	496,705	-	-	-	-	-	-	-	4,111,140
Rank	5	2	1	3	4	6	6	6	6	6	6	6	
% Max Month	36.42%	93.29%	100.00%	85.73%	43.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
PR	7.28%	3.78%	6.71%	14.13%	1.73%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.63%
CumPR	7.28%	26.92%	33.63%	23.14%	9.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Storage Demand Costs	$ 1,694,195	$ 6,262,846	$ 7,823,525	$ 5,383,824	$ 2,097,360	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23,261,749
Plus Injection Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL	$ 1,694,195	$ 6,262,846	$ 7,823,525	$ 5,383,824	$ 2,097,360	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23,261,749

Allocation of All Peaking Demand Costs Excluding Off-System Peaking

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
Design Year Peaking Volumes	1,795	50,051	41,215	9,030	10,076	1,800	1,860	1,800	1,860	1,860	1,800	1,860	125,007
Rank	12	1	2	4	3	11	8	10	7	6	9	5	
% Max Month	3.59%	100.00%	82.34%	18.04%	20.13%	3.60%	3.72%	3.60%	3.72%	3.72%	3.60%	3.72%	
PR	0.30%	17.66%	31.11%	3.58%	0.70%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	53.35%
CumPR	0.30%	53.35%	35.70%	3.90%	4.59%	0.30%	0.31%	0.30%	0.31%	0.31%	0.30%	0.31%	100.00%
Peaking Demand Costs	$ 9,401	$ 1,678,273	$ 1,122,925	$ 122,556	$ 144,459	$ 9,429	$ 9,901	$ 9,429	$ 9,901	$ 9,901	$ 9,429	$ 9,901	$ 3,145,503

Northern Utilities
Simplified Market Based Allocator (MBA) Calculations
ALLOCATION OF NORTHERN FIXED CAPACITY COSTS BETWEEN ME & NH DIVISIONS

LN	Description	Source
1		
2		`
3	Pipeline Demand	Schedule 20-FXW, PG 1, LN 1
4	Storage Demand	Schedule 20-FXW, PG 1, LN 2 & 3
5	On-system Peaking Demand	(Schedule 20-FXW, PG 1, LN 4 + 5) - LN 12
6	Subtotal Demand	Sum LN 3 : LN 5
7		
8	Capacity Release (Credit)	Schedule FXW-20, PG 6
9	Asset Management (Credit)	Schedule FXW-20, PG 6
10	Total Net Demand Costs	Sum LN 6 : LN 9
11		
12	Off-System Peaking Demand	Schedule FXW-20, PG 5
13		
14	Total Demand Costs	LN 10 + LN 12
15		
16	**Proportional Responsibility (PR) Allocators**	
17		
18	**Allocation of Product and Pipeline Demand Costs (including Injections) to Months**	
19		
20	Design Year Pipeline Sendout	Company Analysis
21	Rank	LN 20 Ranking
22	% Max Month	LN 20 / LN 20 MAX
23	PR	The difference between LN 22 for the month and LN 22 for next highest rank
24	CumPR	Cumulative Values, LN 23
25	Product and Pipeline Demand Costs	LN 24 * LN 3
26		
27	**Allocation of Storage Injection Fees to Months**	
28		
29	Storage Injection Volume	Company Analysis
30	Design Year Pipeline Sendout	LN 20
31	% of Deliveries Injected	LN 29 / Sum (LN 29 : LN 30)
32	Injection Fees	LN 31 * LN 25
33		
34	**Allocation of Storage Demand Costs to Months**	
35		
36	Design Year Storage	Company Analysis
37	Rank	LN 36 Ranking
38	% Max Month	LN 36 / LN 36 MAX
39	PR	The difference between LN 38 for the month and LN 38 for next highest rank
40	CumPR	Cumulative Values, LN 39
41	Storage Demand Costs	LN 40 * LN 4
42	Plus Injection Fees	LN 32
43	TOTAL	LN 41 + LN 42
44		
45	**Allocation of All Peaking Demand Costs Excluding Off-System Peaking**	
46		
47	Design Year Peaking Volumes	Company Analysis
48	Rank	LN 47 Ranking
49	% Max Month	LN 47 / LN 47 MAX
50	PR	The difference between LN 49 for the month and LN 49 for next highest rank
51	CumPR	Cumulative Values, LN 50
52	Peaking Demand Costs	LN 51 * LN 5

Northern Utilities
Simplified Market Based Allocator (MBA) Calculations
ALLOCATION OF NORTHERN FIXED CAPACITY COSTS BETWEEN ME & NH DIVISIONS

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
Pipeline & Product Demand	$ 1,783,811	$ 1,870,870	$ 1,870,864	$ 1,847,641	$ 4,693,666	$ 1,533,210	$ 826,879	$ 482,015	$ 407,520	$ 428,100	$ 507,252	$1,052,407	$ 17,304,236
Storage Incld Inj Fees	$ 1,694,195	$ 6,262,846	$ 7,823,525	$ 5,383,824	$ 2,097,360	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23,261,749
On-system Peaking	$ 9,401	$ 1,678,273	$ 1,122,925	$ 122,556	$ 144,459	$ 9,429	$ 9,901	$ 9,429	$ 9,901	$ 9,901	$ 9,429	$ 9,901	$ 3,145,503
Less Injection Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Less: Capacity Release	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Less: Asset Mgmt	$ (1,345,734)	$ (1,345,734)	$ (1,345,734)	$ (1,345,734)	$ (1,345,734)	$(1,345,734)	$ -	$ -	$ -	$ -	$ -	$ -	$ (8,074,404)
Total Demand	$ 2,141,673	$ 8,466,255	$ 9,471,580	$ 6,008,286	$ 5,589,751	$ 196,906	$ 836,780	$ 491,444	$ 417,421	$ 438,000	$ 516,681	$1,062,308	$ 35,637,084

Capacity Cost Allocator based on Design Year Firm Sendout

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
Therms													
Maine	970,397	1,432,432	1,623,320	1,399,774	1,200,683	695,176	428,509	285,862	241,624	257,015	290,717	515,450	9,340,959
New Hampshire	673,434	1,010,593	1,155,199	988,213	803,205	422,982	303,545	205,257	183,324	187,518	220,053	353,188	6,506,511
Total	1,643,831	2,443,026	2,778,519	2,387,987	2,003,887	1,118,157	732,055	491,119	424,948	444,533	510,770	868,638	15,847,470

Percentage of Total	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
Maine	59.03%	58.63%	58.42%	58.62%	59.92%	62.17%	58.54%	58.21%	56.86%	57.82%	56.92%	59.34%	58.78%
New Hampshire	40.97%	41.37%	41.58%	41.38%	40.08%	37.83%	41.46%	41.79%	43.14%	42.18%	43.08%	40.66%	41.22%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Allocation of Demand Costs by Division

Maine	$1,264,287	$4,964,065	$5,533,670	$3,521,896	$3,349,248	$122,419	$489,810	$286,051	$237,344	$253,238	$294,082	$630,373	$20,946,484
New Hampshire	$877,386	$3,502,190	$3,937,910	$2,486,391	$2,240,502	$74,486	$346,970	$205,393	$180,077	$184,762	$222,600	$431,935	$14,690,600
Total	$ 2,141,673	$ 8,466,255	$ 9,471,580	$ 6,008,286	$ 5,589,751	$ 196,906	$ 836,780	$ 491,444	$ 417,421	$ 438,000	$ 516,681	$ 1,062,308	$ 35,637,084

Detailed Allocation of Demand Costs by Division

Maine	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	
Pipeline & Product Demand	$ 1,053,031	$ 1,096,957	$ 1,093,032	$ 1,083,038	$ 2,812,335	$ 953,220	$ 484,015	$ 280,563	$ 231,715	$ 247,514	$ 288,715	$ 624,498	$ 10,248,634	59.23%
Storage Incld Injection Fees	$ 1,000,129	$ 3,672,128	$ 4,570,811	$ 3,155,852	$ 1,256,689	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,655,610	58.70%
On-system Peaking	$ 5,549	$ 984,031	$ 656,057	$ 71,839	$ 86,556	$ 5,862	$ 5,795	$ 5,488	$ 5,629	$ 5,724	$ 5,367	$ 5,875	$ 1,843,774	58.62%
Less: Injection Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.00%
Capacity Release (Credit)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.00%
Asset Management (Credit)	$ (794,423)	$ (789,051)	$ (786,231)	$ (788,833)	$ (806,332)	$ (836,663)	$ -	$ -	$ -	$ -	$ -	$ -	$ (4,801,534)	59.47%
Total Allocated Demand	$ 1,264,287	$ 4,964,065	$ 5,533,670	$ 3,521,896	$ 3,349,248	$ 122,419	$ 489,810	$ 286,051	$ 237,344	$ 253,238	$ 294,082	$ 630,373	$ 20,946,484	58.78%

New Hampshire	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	
Pipeline & Product Demand	$ 730,780	$ 773,913	$ 777,832	$ 764,604	$ 1,881,331	$ 579,990	$ 342,864	$ 201,452	$ 175,806	$ 180,586	$ 218,537	$ 427,909	$ 7,055,602	40.77%
Storage Incld Injection Fees	$ 694,067	$ 2,590,717	$ 3,252,713	$ 2,227,971	$ 840,671	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,606,139	41.30%
On-system Peaking	$ 3,851	$ 694,242	$ 466,868	$ 50,717	$ 57,902	$ 3,567	$ 4,105	$ 3,941	$ 4,271	$ 4,176	$ 4,062	$ 4,026	$ 1,301,729	41.38%
Less: Injection Fees	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.00%
Capacity Release	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.00%
Asset Management	$ (551,311)	$ (556,682)	$ (559,503)	$ (556,901)	$ (539,402)	$ (509,070)	$ -	$ -	$ -	$ -	$ -	$ -	$ (3,272,870)	40.53%
Total Allocated Demand	$ 877,386	$ 3,502,190	$ 3,937,910	$ 2,486,391	$ 2,240,502	$ 74,486	$ 346,970	$ 205,393	$ 180,077	$ 184,762	$ 222,600	$ 431,935	$ 14,690,600	41.22%

Northern Utilities
Simplified Market Based Allocator (MBA) Calculations
ALLOCATION OF NORTHERN FIXED CAPACITY COSTS BETWEEN ME & NH DIVISIONS

53		
54	Pipeline & Product Demand	LN 25
55	Storage	LN 43
56	Peaking	LN 52
57	Less: Injection Fees	-(LN 32)
58	Less: Capacity Release	-(LN 8 / 5)
59	Less: Asset Management	-(LN 9 / 6)
60	Total Demand	Sum (LN 54 : LN 59)
61		
62	**Capacity Cost Allocator based on Design Year Firm Sendout**	
63		
64	**Therms**	
65	Maine	Company Analysis
66	New Hampshire	Company Analysis
67	Total	LN 65 + LN 66
68		
69	**Percentage of Total**	
70	Maine	LN 65 / LN 67
71	New Hampshire	LN 66 / LN 67
72	Total	LN 70 + LN 71
73		
74	**Allocation of Demand Costs by Division**	
75	Maine	LN 60 * LN 70
76	New Hampshire	LN 60 * LN 71
77	Total	LN 75 + LN 76
78		
79	**Detailed Allocation of Demand Costs by Division**	
80	**Maine**	
81	Pipeline & Product Demand	LN 54 * LN 70
82	Storage	LN 55 * LN 70
83	Peaking	LN 56 * LN 70
84	Injection Fees	LN 57 * LN 70
85	Capacity Release (Credit)	LN 58 * LN 70
86	Asset Management (Credit)	LN 59 * LN 70
87	**Total Allocated Demand**	Sum (LN 81 : LN 86)
88		
89	**New Hampshire**	
90	Pipeline & Product Demand	LN 54 * LN 71
91	Storage	LN 55 * LN 71
92	Peaking	LN 56 * LN 71
93	Injection Fees	LN 57 * LN 71
94	Capacity Release	LN 58 * LN 71
95	Asset Management (Credit)	LN 59 * LN 71
96	**Total Allocated Demand**	Sum (LN 90 : LN 95)

Northern Utilities
Simplified Market Based Allocator (MBA) Calculations
ALLOCATION OF NORTHERN FIXED CAPACITY COSTS BETWEEN ME & NH DIVISIONS

97 **Off-System Peaking Demand Costs** $ 9,621,667

99 **Allocation of Off-system Peaking Demand Costs to Months**

Line		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
101	Design Year Peaking Volumes	-	71,125	338,579	149,734	-	-	-	-	-	-	-	-	559,438
102	Rank	4	3	1	2	4	4	4	4	4	4	4	4	
103	% Max Month	0.00%	21.01%	100.00%	44.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
104	PR	0.00%	7.00%	55.78%	11.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	74.39%
105	CumPR	0.00%	7.00%	74.39%	18.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
106	Peaking Demand Costs	$ -	$ 673,742	$ 7,157,244	$ 1,790,682	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,621,667

108 **Capacity Cost Allocator based on Design Year Sales**

Line		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
110	**Therms**													
111	Maine	788,728	1,172,256	1,329,620	1,139,227	980,037	561,673	338,637	220,772	185,065	196,409	219,374	398,451	7,530,248
112	New Hampshire	489,823	761,929	872,056	751,266	598,189	301,181	187,947	113,317	97,262	98,070	124,373	227,619	4,623,030
113	Total	1,278,551	1,934,184	2,201,676	1,890,493	1,578,225	862,854	526,584	334,089	282,327	294,479	343,746	626,070	12,153,278

Line	**Percentage of Total**	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
116	Maine	61.69%	60.61%	60.39%	60.26%	62.10%	65.09%	64.31%	66.08%	65.55%	66.70%	63.82%	63.64%	60.38%
117	New Hampshire	38.31%	39.39%	39.61%	39.74%	37.90%	34.91%	35.69%	33.92%	34.45%	33.30%	36.18%	36.36%	39.62%
118	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

120 **Allocation of Off-System Peaking Demand Costs by Division**

Line		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
121	Maine	$0	$408,336	$4,322,350	$1,079,080	$0	$0	$0	$0	$0	$0	$0	$0	$5,809,767
122	New Hampshire	$0	$265,405	$2,834,893	$711,601	$0	$0	$0	$0	$0	$0	$0	$0	$3,811,900
123	Total	$ -	$ 673,742	$ 7,157,244	$ 1,790,682	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,621,667

Total Weighted Average MPR Factor

Line	**Maine**	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	
125	Total Pipeline, Storage & On-system	$ 1,264,287	$ 4,964,065	$ 5,533,670	$ 3,521,896	$ 3,349,248	$ 122,419	$ 489,810	$ 286,051	$ 237,344	$ 253,238	$ 294,082	$ 630,373	$ 20,946,484	58.78%
126	Total Off-system Peaking	$0	$408,336	$4,322,350	$1,079,080	$0	$0	$0	$0	$0	$0	$0	$0	$ 5,809,767	60.38%
127	Total Demand Cost Allocation	$ 1,264,287	$ 5,372,401	$ 9,856,020	$ 4,600,976	$ 3,349,248	$ 122,419	$ 489,810	$ 286,051	$ 237,344	$ 253,238	$ 294,082	$ 630,373	$ 26,756,250	**59.12%**

Line	**New Hampshire**	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	
130	Total Pipeline, Storage & On-system	$ 877,386	$ 3,502,190	$ 3,937,910	$ 2,486,391	$ 2,240,502	$ 74,486	$ 346,970	$ 205,393	$ 180,077	$ 184,762	$ 222,600	$ 431,935	$ 14,690,600	41.22%
131	Total Off-system Peaking	$0	$265,405	$2,834,893	$711,601	$0	$0	$0	$0	$0	$0	$0	$0	$ 3,811,900	39.62%
132	Total Demand Cost Allocation	$ 877,386	$ 3,767,595	$ 6,772,803	$ 3,197,992	$ 2,240,502	$ 74,486	$ 346,970	$ 205,393	$ 180,077	$ 184,762	$ 222,600	$ 431,935	$ 18,502,500	**40.88%**

Line	**Total Northern**	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual
135	Total Pipeline, Storage & On-system	$ 2,141,673	$ 8,466,255	$ 9,471,580	$ 6,008,286	$ 5,589,751	$ 196,906	$ 836,780	$ 491,444	$ 417,421	$ 438,000	$ 516,681	$ 1,062,308	$ 35,637,084
136	Total Off-system Peaking	$ -	$ 673,742	$ 7,157,244	$ 1,790,682	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,621,667
137	Total Demand Cost Allocation	$ 2,141,673	$ 9,139,996	$ 16,628,823	$ 7,798,968	$ 5,589,751	$ 196,906	$ 836,780	$ 491,444	$ 417,421	$ 438,000	$ 516,681	$ 1,062,308	$ 45,258,751

97	**Off-System Peaking Demand Costs**	LN 12
98		
99	**Allocation of Off-system Peaking Demand Costs to Months**	
100		
101	Design Year Peaking Volumes	Company Analysis
102	Rank	LN 101 Ranking
103	% Max Month	LN 101 / LN 101 MAX
104	PR	The difference between LN 103 for the month and LN 103 for next highest rank
105	CumPR	Cumulative Values, LN 104
106	Peaking Demand Costs	LN 105 * LN 97
107		
108	**Capacity Cost Allocator based on Design Year Sales**	
109		
110	**Therms**	
111	Maine	Company Analysis
112	New Hampshire	Company Analysis
113	Total	LN 111 + LN 112
114		
115	**Percentage of Total**	
116	Maine	LN 111 / LN 113
117	New Hampshire	LN 112 / LN 113
118	Total	LN 116 + LN 117
119		
120	**Allocation of Off-System Peaking Demand Costs by Division**	
121	Maine	LN 106 * LN 116
122	New Hampshire	LN 106 * LN 117
123	Total	LN 121 + LN 122

Total Weighted Average MPR Factor

124	**Maine**	
125	Total Pipeline, Storage & On-system	LN 87
126	Total Off-system Peaking	LN 121
127	Total Demand Cost Allocation	LN 125 + LN 126
128		
129	**New Hampshire**	
130	Total Pipeline, Storage & On-system	LN 96
131	Total Off-system Peaking	LN 122
132	Total Demand Cost Allocation	LN 130 + Ln 131
133		
134	**Total Northern**	
135	Total Pipeline, Storage & On-system	LN 125 + LN 130
136	Total Off-system Peaking	LN 126 + LN 131
137	Total Demand Cost Allocation	LN 127 + LN 132

Northern Utilities - NEW HAMPSHIRE DIVISION
Simplified Market Based Allocator (SMBA) Calculations
DEMAND COSTS

NH Division Total Annual Demand Cost Allocation

1	**Resource**	**Costs**
2	Pipeline & Product Demand	$ 7,055,602
3	Storage	$ 9,606,139
4	On-system Peaking	$ 1,301,729
5	Total Gross Demand Cost	$ 17,963,470
6		
7	Capacity Assignment Demand Revenue Estimate	$ 4,419,945
8	NH Total Pipeline, Storage & Peaking Demand Cost	$ 17,963,470
9	Capacity Assignment as % of Total Gross Demand Cost	24.61%
10		
11		**Costs**
12	Pipeline & Product Demand	$ 1,736,044
13	Storage	$ 2,363,608
14	On-system Peaking	$ 320,293
15	Total Capacity Assignment Credit	$ 4,419,945
16		
17	NH Net Annual Demand Cost (Less Capacity Assignment)	
18		**Costs**
19	Pipeline & Product Demand	$ 5,319,558
20	Storage	$ 7,242,531
21	On-system Peaking	$ 981,436
22	Total Net Demand Cost (Less Capacity Assignment)	$ 13,543,525
23		
24	**DEVELOPMENT OF BASE AND REMAINING PIPELINE DEMAND COSTS**	
25		MMBtu/day
26	Pipeline MDQ	16,548
27	Less 24.61% NH Transp. Capacity Assignment	(4,072)
28	Net Pipeline MDQ	12,477
29		
30	Net Pipeline MDQ	12,477
31	Less: Firm Sales Base Use	3,176
32	Remaining Pipeline MDQ	9,300
33		
34		**Unit Cost**
35	Pipeline Unit Cost	$426.36
36		
37		**Costs**
38	Pipeline & Product Demand	$ 5,319,558
39	Less: Base Pipeline Use	$ 1,354,234
40	Remaining Pipeline Use	$ 3,965,324

1	**Resource**	
2	Pipeline & Product Demand	Schedule 4-CAK, LN 90 + Schedule 4-CAK, LN 93
3	Storage	Schedule 4-CAK, LN 91
4	On-system Peaking	Schedule 4-CAK, LN 92
5	Total Gross Demand Cost	Sum (LN 2 : LN 4)
6		
7	Capacity Assignment Demand Revenue Estimate	Schedule 21-FXW, Page 1
8	NH Total Pipeline, Storage & Peaking Demand Cost	LN 5
9	Capacity Assignment as % of Total Gross Demand Cost	LN 7 / LN 8
10		
11		
12	Pipeline & Product Demand	LN 2 * LN 9
13	Storage	LN 3 * LN 9
14	On-system Peaking	LN 4 * LN 9
15	Total Capacity Assignment Credit	Sum (LN 12 : LN 14)
16		
17	NH Net Annual Demand Cost (Less Capacity Assignment)	
18		
19	Pipeline & Product Demand	LN 2 - LN 12
20	Storage	LN 3 - LN 13
21	On-system Peaking	LN 4 - LN 14
22	Total Net Demand Cost (Less Capacity Assignment)	LN 5 - LN 15
23		
24	**DEVELOPMENT OF BASE AND REMAINING PIPELINE DEMAND (**	
25		
26	Pipeline MDQ	Company Analysis
27	Less 24.61% NH Transp. Capacity Assignment	-(LN 26) * LN 9
28	Net Pipeline MDQ	Sum (LN 26 : LN 27)
29		
30	Net Pipeline MDQ	LN 28
31	Less: Firm Sales Base Use	Schedule 6-CAK, LN 48 / 10
32	Remaining Pipeline MDQ	LN 30 - LN 31
33		
34		
35	Pipeline Unit Cost	LN 19 / LN 30
36		
37		
38	Pipeline & Product Demand	LN 19
39	Less: Base Pipeline Use	LN 35 * LN 31
40	Remaining Pipeline Use	LN 38 - LN 39

Northern Utilities - NEW HAMPSHIRE DIVISION
Simplified Market Based Allocator (SMBA) Calculations
DEMAND COSTS

41 **NH DIVISION MONTHLY PROPORTIONAL RESPONSIBILITY (PR ALLOCATORS)**
42 (Based on NH Firm Sales Sendout for Remaining Temperature Sensitive Load)
43

Line	All Months	Nov	Dec	Jan	Feb	Mar	Apr
45	Remaining Load for All Months	3,659,596	5,722,698	7,005,839	5,903,964	4,894,132	2,432,845
46	Rank	5	3	1	2	4	6
47	% Max Month	52.24%	81.68%	100.00%	84.27%	69.86%	34.73%
48	PR	3.50%	3.94%	15.73%	1.29%	4.41%	2.83%
49	CumPR	8.61%	16.96%	33.98%	18.26%	13.02%	5.11%

50

Line	Peak Months Only	Nov	Dec	Jan	Feb	Mar	Apr
52	Remaining Load for Peak Months Only	3,659,596	5,722,698	7,005,839	5,903,964	4,894,132	2,432,845
53	Rank	5	3	1	2	4	6
54	% Max Month	52.24%	81.68%	100.00%	84.27%	69.86%	34.73%
55	PR	3.50%	3.94%	15.73%	1.29%	4.41%	5.79%
56	CumPR	9.29%	17.64%	34.66%	18.93%	13.70%	5.79%

57
58 **DEMAND COST PR ALLOCATORS**

Line		Nov	Dec	Jan	Feb	Mar	Apr
60	Pipeline - Base	8.33%	8.33%	8.33%	8.33%	8.33%	8.33%
61	Pipeline - Remaining	8.61%	16.96%	33.98%	18.26%	13.02%	5.11%
62	Storage & Peaking	8.61%	16.96%	33.98%	18.26%	13.02%	5.11%
63	Capacity Release	9.29%	17.64%	34.66%	18.93%	13.70%	5.79%
64	Off-system Peaking	9.29%	17.64%	34.66%	18.93%	13.70%	5.79%
65	Interr. Margins & Off Sys Sales	9.29%	17.64%	34.66%	18.93%	13.70%	5.79%

66
67 **DEMAND COSTS ALLOCATED TO MONTHS**

Line		Nov	Dec	Jan	Feb	Mar	Apr
69	Pipeline - Base	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853
70	Pipeline - Remaining	$ 341,611	$ 672,623	$ 1,347,586	$ 723,921	$ 516,299	$ 202,743
71	Total Pipeline	$ 454,464	$ 785,476	$ 1,460,438	$ 836,774	$ 629,152	$ 315,596
72							
73	Storage & On-system Peaking	$ 708,492	$ 1,395,000	$ 2,794,854	$ 1,501,392	$ 1,070,790	$ 420,482
74	Off-system Peaking	$354,116	$672,320	$1,321,167	$721,633	$522,045	$220,620
75	CNG Expense	$ 10,309	$ 20,298	$ 40,667	$ 21,847	$ 15,581	$ 6,118
76	Less Credits to Demand Cost						
77	Cap Rel Margins & Asset Mgt Credits	$ 304,041	$ 577,249	$ 1,134,345	$ 619,589	$ 448,224	$ 189,423
78	Interruptible Margins	$ -	$ -	$ -	$ -	$ -	$ -
79	Conversion Rate and Re-entry Rate Credits	$ 464	$ 882	$ 1,733	$ 947	$ 685	$ 289
80	Total Direct Demand Costs	$ 1,222,876	$ 2,294,963	$ 4,481,049	$ 2,461,110	$ 1,788,659	$ 773,104

81

Line	
82	Indirect Demand Costs/(Credits)
83	Miscellaneous Overhead
84	Local Production & Storage
85	Subtotal

Northern Utilities - NEW HAMPSHIRE DIVISION
Simplified Market Based Allocator (SMBA) Calculations
DEMAND COSTS

NH DIVISION MONTHLY PROPORTIONAL RESPONSIBILITY (PR ALLOCATORS)
(Based on NH Firm Sales Sendout for Remaining Temperature Sensitive Load)

All Months	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Annual**	**Winter**	**Summer**
Remaining Load for All Months	747,254	206,402	0	7,319	127,084	1,242,537	31,949,670	29,619,074	2,330,596
Rank	8	9	12	11	10	7			
% Max Month	10.67%	2.95%	0.00%	0.10%	1.81%	17.74%			
PR	0.97%	0.13%	0.00%	0.01%	0.17%	1.01%	33.98%		
CumPR	1.27%	0.31%	0.00%	0.01%	0.18%	2.28%	100.00%	95.95%	4.05%

Peak Months Only	**Annual**	**Winter**	**Summer**
Remaining Load for Peak Months Only	29,619,074	29,619,074	
Rank			
% Max Month			
PR	34.66%		
CumPR	100.00%	100.00%	0.00%

DEMAND COST PR ALLOCATORS

	May	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Annual**	**Winter**	**Summer**
Pipeline - Base	8.33%	8.33%	8.33%	8.33%	8.33%	8.33%	100.00%	50.00%	50.00%
Pipeline - Remaining	1.27%	0.31%	0.00%	0.01%	0.18%	2.28%	100.00%	95.95%	4.05%
Storage & Peaking	1.27%	0.31%	0.00%	0.01%	0.18%	2.28%	100.00%	95.95%	4.05%
Capacity Release	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%
Off-system Peaking	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%
Interr. Margins & Off Sys Sales	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%

DEMAND COSTS ALLOCATED TO MONTHS

	May	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Annual**	**Winter**	**Summer**	**Winter**	**Summer**
Pipeline - Base	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 1,354,234	$ 677,117	$ 677,117	50.00%	50.00%
Pipeline - Remaining	$ 50,409	$ 12,144	$ -	$ 377	$ 7,155	$ 90,456	$ 3,965,324	$ 3,804,783	$ 160,541	95.95%	4.05%
Total Pipeline	$ 163,262	$ 124,996	$ 112,853	$ 113,229	$ 120,008	$ 203,309	$ 5,319,558	$ 4,481,900	$ 837,658	84.25%	15.75%
Storage & On-system Peaking	$ 104,547	$ 25,185	$ -	$ 781	$ 14,840	$ 187,604	$ 8,223,967	$ 7,891,010	$ 332,957	95.95%	4.05%
Off-system Peaking	$0	$0	$0	$0	$0	$0	$ 3,811,900	$ 3,811,900	$ -	100.00%	0.00%
CNG Expense	$ 1,521	$ 366	$ -	$ 11	$ 216	$ 2,730	$ 119,666	$ 114,821	$ 4,845		
Less Credits to Demand Cost											
Cap Rel Margins & Asset Mgt Credits	$ -	$ -	$ -	$ -	$ -	$ -	$3,272,870	$ 3,272,870	$ -	100.00%	0.00%
Interruptible Margins	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
Conversion Rate and Re-entry Rate Credits	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,000	$ 5,000	$ -		
Total Direct Demand Costs	$ 269,330	$ 150,548	$ 112,853	$ 114,022	$ 135,064	$ 393,643	$ 14,197,221	$ 13,021,761	$ 1,175,460	91.72%	8.28%

Indirect Demand Costs/(Credits)	Annual	Winter	Summer	Winter	Summer
Miscellaneous Overhead	$ 580,455	$ 471,532	$ 108,923	81.23%	18.77%
Local Production & Storage	$ 476,106	$ 476,106	$ -	100.00%	0.00%
Subtotal	$ 1,056,561	$ 947,638	$ 108,923	89.69%	10.31%

Northern Utilities - NEW HAMPSHIRE DIVISION
Simplified Market Based Allocator (SMBA) Calculations
DEMAND COSTS

LN	Description	Source
41	**NH DIVISION MONTHLY PROPORTIONAL RESPONSIBILITY (PR /ALLOCATORS)**	
42	(Based on NH Firm Sales Sendout for Remaining Temperature Sensitive Load)	
43		
44	**All Months**	
45	Remaining Load for All Months	Schedule 6-CAK, LN 80
46	Rank	Rank LN 45
47	% Max Month	LN 45 / MAX Month LN 45
48	PR	The difference between LN 47 for the month and LN 47 for next highest rank
49	CumPR	Cumulative Values, LN 48
50		
51	**Peak Months Only**	
52	Remaining Load for Peak Months Only	LN 45
53	Rank	Rank LN 52
54	% Max Month	LN 52 / MAX Month LN 52
55	PR	The difference between LN 54 for the month and LN 54 for next highest rank
56	CumPR	Cumulative Values, LN 55
57		
58	**DEMAND COST PR ALLOCATORS**	
59		
60	Pipeline - Base	1/12
61	Pipeline - Remaining	LN 49
62	Storage & Peaking	LN 49
63	Capacity Release	LN 56
64	Off-system Peaking	LN 56
65	Interr. Margins & Off Sys Sales	LN 56
66		
67	**DEMAND COSTS ALLOCATED TO MONTHS**	
68		
69	Pipeline - Base	LN 39 * LN 60
70	Pipeline - Remaining	LN 40 * LN 61
71	Total Pipeline	LN 69 + LN 70
72		
73	Storage & On-system Peaking	LN 62 * (Sum LN 20 : LN 21)
74	Off-system Peaking	Schedule 4-CAK, LN 122,* LN 64
75	CNG Expense	
76	Less Credits to Demand Cost	
77	Cap Rel Margins & Asset Mgt Credits	Schedule 4-CAK, LN 95 * LN 63
78	Interruptible Margins	
79	Conversion Rate and Re-entry Rate Credits	Company Analysis
80	Total Direct Demand Costs	LN 71 + LN 73 + LN 74 - (Sum LN 76 : LN 79)
81		
82	Indirect Demand Costs/(Credits)	
83	Miscellaneous Overhead	Company Analysis
84	Local Production & Storage	Company Analysis
85	Subtotal	LN 83 + LN 84

Northern Utilities - NEW HAMPSHIRE DIVISION
2020 - 2021 Period

Line No.	Forecasted Normal Sales By Class- Therms Calendar Month Firm Sales Volumes Normal Winter	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
1	Res Heat	2,155,744	3,134,826	3,734,531	3,175,010	2,747,578	1,577,689	714,418	478,211	403,153	409,190	445,492	918,725	19,894,567	16,525,377	3,369,189
2	Res General	20,981	30,510	36,347	30,902	26,741	15,355	16,503	11,047	9,313	9,453	10,291	21,223	238,668	160,837	77,830
3	**Total Residential**	**2,176,725**	**3,165,337**	**3,770,878**	**3,205,911**	**2,774,319**	**1,593,044**	**730,922**	**489,258**	**412,466**	**418,643**	**455,783**	**939,948**	**20,133,234**	**16,686,215**	**3,447,020**
4	G50 Low Annual-Low Winter	87,827	127,715	152,148	129,352	111,938	64,276	109,003	72,964	61,512	62,433	67,972	140,176	1,187,315	673,256	514,059
5	G40 Low Annual-High Winter	998,430	1,451,890	1,729,643	1,470,501	1,272,537	730,704	269,791	180,590	152,245	154,526	168,234	346,945	8,926,038	7,653,706	1,272,332
6	G51 Med Annual-Low Winter	142,064	206,586	246,107	209,234	181,066	103,970	192,270	128,700	108,500	110,125	119,894	247,255	1,995,772	1,089,028	906,744
7	G41 Med Annual-High Winter	899,058	1,307,386	1,557,494	1,324,144	1,145,883	657,978	261,437	174,998	147,531	149,741	163,025	336,201	8,124,875	6,891,943	1,232,933
8	G52 High Annual-Low Winter	67,238	97,775	116,480	99,029	85,697	49,208	104,200	69,748	58,801	59,682	64,976	133,999	1,006,833	515,427	491,406
9	G42 High Annual-High Winter	181,044	263,270	313,634	266,644	230,748	132,498	41,713	27,921	23,539	23,891	26,011	53,641	1,584,553	1,387,837	196,716
10	**Total C&I**	**2,375,660**	**3,454,622**	**4,115,505**	**3,498,905**	**3,027,869**	**1,738,635**	**978,414**	**654,922**	**552,128**	**560,397**	**610,112**	**1,258,218**	**22,825,387**	**18,211,197**	**4,614,190**
11	**Total Sales**	**4,552,386**	**6,619,959**	**7,886,383**	**6,704,817**	**5,802,188**	**3,331,679**	**1,709,335**	**1,144,180**	**964,593**	**979,040**	**1,065,895**	**2,198,166**	**42,958,621**	**34,897,412**	**8,061,210**
12																
13	Residential Heat & Non Heat	2,176,725	3,165,337	3,770,878	3,205,911	2,774,319	1,593,044	730,922	489,258	412,466	418,643	455,783	939,948	20,133,234	16,686,215	3,447,020
14	SALES HLF CLASSES	297,129	432,077	514,735	437,615	378,702	217,455	405,473	271,412	228,812	232,239	252,842	521,430	4,189,921	2,277,711	1,912,209
15	SALES LLF CLASSES	2,078,532	3,022,546	3,600,771	3,061,290	2,649,167	1,521,181	572,940	383,510	323,315	328,157	357,270	736,788	18,635,467	15,933,486	2,701,981
16	**Total Firm Sales**	**4,552,386**	**6,619,959**	**7,886,383**	**6,704,817**	**5,802,188**	**3,331,679**	**1,709,335**	**1,144,180**	**964,593**	**979,040**	**1,065,895**	**2,198,166**	**42,958,621**	**34,897,412**	**8,061,210**
17																
18	**ESTIMATED SENDOUT BY CLASS - Therms**															
19	Calendar Month Sendout Volumes (Includes Loss & Unaccounted For)															
20	Normal Winter	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Annual**	**Winter**	**SUMMER**
21	Res Heat	2,184,200	3,176,206	3,783,827	3,216,920	2,783,846	1,598,514	723,848	484,523	408,474	414,592	451,372	930,852	20,157,175	16,743,512	3,413,663
22	Res General	21,258	30,913	36,827	31,309	27,094	15,558	16,721	11,193	9,436	9,577	10,427	21,503	241,818	162,960	78,858
23	G50 Low Annual-Low Winter	88,986	129,401	154,156	131,060	113,416	65,125	110,442	73,927	62,324	63,257	68,869	142,026	1,202,988	682,143	520,845
24	G40 Low Annual-High Winter	1,011,609	1,471,055	1,752,474	1,489,912	1,289,334	740,350	273,352	182,974	154,255	156,565	170,455	351,525	9,043,861	7,754,735	1,289,127
25	G51 Med Annual-Low Winter	143,940	209,313	249,355	211,996	183,456	105,343	194,808	130,399	109,932	111,578	121,477	250,519	2,022,116	1,103,403	918,713
26	G41 Med Annual-High Winter	910,925	1,324,643	1,578,053	1,341,623	1,161,009	666,664	264,888	177,308	149,478	151,717	165,177	340,639	8,232,124	6,982,916	1,249,207
27	G52 High Annual-Low Winter	68,125	99,066	118,018	100,336	86,828	49,858	105,575	70,669	59,577	60,469	65,834	135,767	1,020,123	522,231	497,892
28	G42 High Annual-High Winter	183,434	266,745	317,774	270,164	233,793	134,247	42,263	28,290	23,850	24,207	26,354	54,350	1,605,470	1,406,157	199,313
29	**Subtotal**															
30	Residential	2,205,458	3,207,119	3,820,654	3,248,229	2,810,940	1,614,072	740,570	495,716	417,910	424,169	461,799	952,356	20,398,993	16,906,473	3,492,520
31	SALES HLF CLASSES	301,051	437,780	521,529	443,392	383,701	220,325	410,826	274,995	231,833	235,305	256,180	528,312	4,245,227	2,307,777	1,937,450
32	SALES LLF CLASSES	2,105,968	3,062,443	3,648,301	3,101,699	2,684,136	1,541,260	580,503	388,572	327,583	332,489	361,986	746,514	18,881,455	16,143,808	2,737,647
33	**Total Firm Sales**	4,612,477	6,707,343	7,990,484	6,793,320	5,878,777	3,375,658	1,731,899	1,159,283	977,326	991,963	1,079,965	2,227,182	43,525,675	35,358,058	8,167,618

Northern Utilities - NEW HAMPSHIRE DIVISION
2020 - 2021 Period

Line No.	Forecasted Normal Sales By Class- Therms Calendar Month Firm Sales Volumes Firm Sales	
1	Res Heat	(Schedule 17-FXW, Page 1) * 10
2	Res General	(Schedule 17-FXW, Page 1) * 10
3	**Total Residential**	Sum LN 1 : LN 2
4	G50 Low Annual-Low Winter	(Schedule 17-FXW, Page 1) * 10
5	G40 Low Annual-High Winter	(Schedule 17-FXW, Page 1) * 10
6	G51 Med Annual-Low Winter	(Schedule 17-FXW, Page 1) * 10
7	G41 Med Annual-High Winter	(Schedule 17-FXW, Page 1) * 10
8	G52 High Annual-Low Winter	(Schedule 17-FXW, Page 1) * 10
9	G42 High Annual-High Winter	(Schedule 17-FXW, Page 1) * 10
10	**Total C&I**	Sum LN 4 : LN 9
11	**Total Sales**	LN 3 + LN 10
12		
13	Residential Heat & Non Heat	LN 3
14	SALES HLF CLASSES	LN 4 + LN 6 + LN 8
15	SALES LLF CLASSES	LN 5 + LN 7 + LN 9
16	**Total Firm Sales**	Sum LN 13 : LN 15
17		
18	**ESTIMATED SENDOUT BY CLASS - Therms**	
19	Calendar Month Sendout Volumes (Includes Loss & Unaccounted For)	Unaccounted For)
20	Normal Winter	
21	Res Heat	LN 1 x Adj factor (Schedule 17-FXW, Page 3)
22	Res General	LN 2 x Adj factor (Schedule 17-FXW, Page 3)
23	G50 Low Annual-Low Winter	LN 4 x Adj factor (Schedule 17-FXW, Page 3)
24	G40 Low Annual-High Winter	LN 5 x Adj factor (Schedule 17-FXW, Page 3)
25	G51 Med Annual-Low Winter	LN 6 x Adj factor (Schedule 17-FXW, Page 3)
26	G41 Med Annual-High Winter	LN 7 x Adj factor (Schedule 17-FXW, Page 3)
27	G52 High Annual-Low Winter	LN 8 x Adj factor (Schedule 17-FXW, Page 3)
28	G42 High Annual-High Winter	LN 9 x Adj factor (Schedule 17-FXW, Page 3)
29	**Subtotal**	
30	Residential	LN 21 + LN 22
31	SALES HLF CLASSES	LN 23 + LN 25 + LN 27
32	SALES LLF CLASSES	LN 24 + LN 26 + LN 28
33	**Total Firm Sales**	Sum LN 30 : LN 32

Northern Utilities - NEW HAMPSHIRE DIVISION
Sendout by Class - Allocation between Base & Remaining Sendout

34		
35	**DAILY BASE GAS ENTITLEMENT - Therms/day**	
36	Res Heat	13,275
37	Res General	307
38	G50 Low Annual-Low Winter	2,025
39	G40 Low Annual-High Winter	5,013
40	G51 Med Annual-Low Winter	3,573
41	G41 Med Annual-High Winter	4,858
42	G52 High Annual-Low Winter	1,936
43	G42 High Annual-High Winter	775
44	**Subtotal**	
45	Residential	13,582
46	SALES HLF CLASSES	7,534
47	SALES LLF CLASSES	10,646
48	**Total Firm Sales**	**31,763**

49	**BASE SENDOUT BY CLASS - Therms**															
50	Days per Month	30	31	31	28	31	30	31	30	31	31	30	31			
51		**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Annual**	**Winter**	**SUMMER**
52	Res Heat	398,258	411,533	411,533	371,707	411,533	398,258	411,533	398,258	408,474	411,533	398,258	411,533	4,842,409	2,402,821	2,439,588
53	Res General	9,200	9,507	9,507	8,587	9,507	9,200	9,507	9,200	9,436	9,507	9,200	9,507	111,863	55,507	56,356
54	G50 Low Annual-Low Winter	60,765	62,790	62,790	56,714	62,790	60,765	62,790	60,765	62,324	62,790	60,765	62,790	738,838	366,614	372,224
55	G40 Low Annual-High Winter	150,397	155,410	155,410	140,371	155,410	150,397	155,410	150,397	154,255	155,410	150,397	155,410	1,828,675	907,395	921,280
56	G51 Med Annual-Low Winter	107,182	110,755	110,755	100,037	110,755	105,343	110,755	107,182	109,932	110,755	107,182	110,755	1,301,390	644,827	656,562
57	G41 Med Annual-High Winter	145,740	150,598	150,598	136,024	150,598	145,740	150,598	145,740	149,478	150,598	145,740	150,598	1,772,048	879,297	892,751
58	G52 High Annual-Low Winter	58,087	60,023	60,023	54,215	60,023	49,858	60,023	58,087	59,577	60,023	58,087	60,023	698,050	342,229	355,821
59	G42 High Annual-High Winter	23,253	24,028	24,028	21,703	24,028	23,253	24,028	23,253	23,850	24,028	23,253	24,028	282,733	140,293	142,440
60	**Subtotal**															
61	Residential	407,458	421,040	421,040	380,294	421,040	407,458	421,040	407,458	417,910	421,040	407,458	421,040	4,954,272	2,458,328	2,495,944
62	SALES HLF CLASSES	226,034	233,569	233,569	210,965	233,569	215,965	233,569	226,034	231,833	233,569	226,034	233,569	2,738,277	1,353,670	1,384,607
63	SALES LLF CLASSES	319,390	330,036	330,036	298,097	330,036	319,390	330,036	319,390	327,583	330,036	319,390	330,036	3,883,456	1,926,985	1,956,471
64	**Total Firm Sales**	952,882	984,644	984,644	889,356	984,644	942,813	984,644	952,882	977,326	984,644	952,882	984,644	11,576,005	5,738,983	5,837,022
65																
66	**REMAINING SENDOUT BY CLASS - Therms**															
67		**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Annual**	**Winter**	**SUMMER**
68	Res Heat	1,785,942	2,764,673	3,372,294	2,845,213	2,372,313	1,200,257	312,316	86,266	-	3,059	53,115	519,320	15,314,766	14,340,691	974,074
69	Res General	12,058	21,407	27,320	22,723	17,588	6,358	7,215	1,993	-	71	1,227	11,997	129,955	107,454	22,502
70	G50 Low Annual-Low Winter	28,221	66,611	91,366	74,346	50,626	4,360	47,652	13,162	-	467	8,104	79,236	464,150	315,529	148,621
71	G40 Low Annual-High Winter	861,212	1,315,645	1,597,064	1,349,541	1,133,924	589,953	117,942	32,577	-	1,155	20,058	196,115	7,215,186	6,847,339	367,847
72	G51 Med Annual-Low Winter	36,757	98,558	138,600	111,959	72,701	-	84,053	23,217	-	823	14,295	139,764	720,727	458,576	262,151
73	G41 Med Annual-High Winter	765,185	1,174,045	1,427,455	1,205,599	1,010,411	520,924	114,290	31,568	-	1,119	19,437	190,042	6,460,076	6,103,620	356,456
74	G52 High Annual-Low Winter	10,038	39,043	57,994	46,121	26,805	-	45,552	12,582	-	446	7,747	75,744	322,073	180,002	142,072
75	G42 High Annual-High Winter	160,181	242,717	293,746	248,461	209,765	110,994	18,235	5,037	-	179	3,101	30,321	1,322,737	1,265,863	56,873
76	**Subtotal**															
77	Residential	1,798,001	2,786,080	3,399,614	2,867,936	2,389,900	1,206,615	319,530	88,259	-	3,129	54,342	531,316	15,444,721	14,448,145	996,576
78	SALES HLF CLASSES	75,017	204,211	287,960	232,426	150,132	4,360	177,257	48,961	-	1,736	30,146	294,744	1,506,950	954,107	552,843
79	SALES LLF CLASSES	1,786,578	2,732,407	3,318,265	2,803,602	2,354,100	1,221,870	250,467	69,182	-	2,453	42,596	416,477	14,997,999	14,216,823	781,176
80	**Total Firm Sales**	3,659,596	5,722,698	7,005,839	5,903,964	4,894,132	2,432,845	747,254	206,402	-	7,319	127,084	1,242,537	31,949,670	29,619,074	2,330,596

Northern Utilities - NEW HAMPSHIRE DIVISION
Sendout by Class - Allocation between Base & Remaining Sendout

34		
35	DAILY BASE GAS ENTITLEMENT - Therms/day	
36	Res Heat	Avg (LN 21 Jul : LN 21 Aug) / 31 days
37	Res General	Avg (LN 22 Jul : LN 22 Aug) / 31 days
38	G50 Low Annual-Low Winter	Avg (LN 23 Jul : LN 23 Aug) / 31 days
39	G40 Low Annual-High Winter	Avg (LN 24 Jul : LN 24 Aug) / 31 days
40	G51 Med Annual-Low Winter	Avg (LN 25 Jul : LN 25 Aug) / 31 days
41	G41 Med Annual-High Winter	Avg (LN 26 Jul : LN 26 Aug) / 31 days
42	G52 High Annual-Low Winter	Avg (LN 27 Jul : LN 27 Aug) / 31 days
43	G42 High Annual-High Winter	Avg (LN 28 Jul : LN 28 Aug) / 31 days
44	**Subtotal**	
45	Residential	LN 36 + LN 37
46	SALES HLF CLASSES	LN 38 + LN 40 + LN 42
47	SALES LLF CLASSES	LN 39 + LN 41 + LN 43
48	**Total Firm Sales**	Sum LN 45 : LN 47
49	**BASE SENDOUT BY CLASS - Therms**	
50	Days per Month	
51		
52	Res Heat	MIN(LN 36 * LN 50, LN 21)
53	Res General	MIN(LN 37 * LN 50, LN 22)
54	G50 Low Annual-Low Winter	MIN(LN 38 * LN 50, LN 23)
55	G40 Low Annual-High Winter	MIN(LN 39 * LN 50, LN 24)
56	G51 Med Annual-Low Winter	MIN(LN 40 * LN 50, LN 25)
57	G41 Med Annual-High Winter	MIN(LN 41 * LN 50, LN 26)
58	G52 High Annual-Low Winter	MIN(LN 42 * LN 50, LN 27)
59	G42 High Annual-High Winter	MIN(LN 43 * LN 50, LN 28)
60	**Subtotal**	
61	Residential	LN 52 + LN 53
62	SALES HLF CLASSES	LN 54 + LN 56 + LN 58
63	SALES LLF CLASSES	LN 55 + LN 57 + LN 59
64	**Total Firm Sales**	Sum LN 61 : LN 63
65		
66	REMAINING SENDOUT BY CLASS - Therms	
67		
68	Res Heat	LN 21 - LN 52
69	Res General	LN 22 - LN 53
70	G50 Low Annual-Low Winter	LN 23 - LN 54
71	G40 Low Annual-High Winter	LN 24 - LN 55
72	G51 Med Annual-Low Winter	LN 25 - LN 56
73	G41 Med Annual-High Winter	LN 26 - LN 57
74	G52 High Annual-Low Winter	LN 27 - LN 58
75	G42 High Annual-High Winter	LN 28 - LN 59
76	**Subtotal**	
77	Residential	LN 68 + LN 69
78	SALES HLF CLASSES	LN 70 + LN 72 + LN 74
79	SALES LLF CLASSES	LN 71 + LN 73 + LN 75
80	**Total Firm Sales**	Sum LN 77 : LN 79

Northern Utilities - NEW HAMPSHIRE DIVISION
Allocation of Demand Costs to Customer Classes

Base Capacity Costs

1	**BASE SENDOUT BY CLASS**	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Annual**	**Winter**	**SUMMER**
2	**Total Therms**															
3	Res Heat	398,258	411,533	411,533	371,707	411,533	398,258	411,533	398,258	408,474	411,533	398,258	411,533	4,842,409	2,402,821	2,439,588
4	Res General	9,200	9,507	9,507	8,587	9,507	9,200	9,507	9,200	9,436	9,507	9,200	9,507	111,863	55,507	56,356
5	G50 Low Annual-Low Winter	60,765	62,790	62,790	56,714	62,790	60,765	62,790	60,765	62,324	62,790	60,765	62,790	738,838	366,614	372,224
6	G40 Low Annual-High Winter	150,397	155,410	155,410	140,371	155,410	150,397	155,410	150,397	154,255	155,410	150,397	155,410	1,828,675	907,395	921,280
7	G51 Med Annual-Low Winter	107,182	110,755	110,755	100,037	110,755	105,343	110,755	107,182	109,932	110,755	107,182	110,755	1,301,390	644,827	656,562
8	G41 Med Annual-High Winter	145,740	150,598	150,598	136,024	150,598	145,740	150,598	145,740	149,478	150,598	145,740	150,598	1,772,048	879,297	892,751
9	G52 High Annual-Low Winter	58,087	60,023	60,023	54,215	60,023	49,858	60,023	58,087	59,577	60,023	58,087	60,023	698,050	342,229	355,821
10	G42 High Annual-High Winter	23,253	24,028	24,028	21,703	24,028	23,253	24,028	23,253	23,850	24,028	23,253	24,028	282,733	140,293	142,440
11	Total Firm Sales	952,882	984,644	984,644	889,356	984,644	942,813	984,644	952,882	977,326	984,644	952,882	984,644	11,576,005	5,738,983	5,837,022
12																
13	**% of Total**															
14	Res Heat	41.80%	41.80%	41.80%	41.80%	41.80%	42.24%	41.80%	41.80%	41.80%	41.80%	41.80%	41.80%			
15	Res General	0.97%	0.97%	0.97%	0.97%	0.97%	0.98%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%			
16	G50 Low Annual-Low Winter	6.38%	6.38%	6.38%	6.38%	6.38%	6.45%	6.38%	6.38%	6.38%	6.38%	6.38%	6.38%			
17	G40 Low Annual-High Winter	15.78%	15.78%	15.78%	15.78%	15.78%	15.95%	15.78%	15.78%	15.78%	15.78%	15.78%	15.78%			
18	G51 Med Annual-Low Winter	11.25%	11.25%	11.25%	11.25%	11.25%	11.17%	11.25%	11.25%	11.25%	11.25%	11.25%	11.25%			
19	G41 Med Annual-High Winter	15.29%	15.29%	15.29%	15.29%	15.29%	15.46%	15.29%	15.29%	15.29%	15.29%	15.29%	15.29%			
20	G52 High Annual-Low Winter	6.10%	6.10%	6.10%	6.10%	6.10%	5.29%	6.10%	6.10%	6.10%	6.10%	6.10%	6.10%			
21	G42 High Annual-High Winter	2.44%	2.44%	2.44%	2.44%	2.44%	2.47%	2.44%	2.44%	2.44%	2.44%	2.44%	2.44%			
22	Total Firm Sales	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
23																

24	**PIPELINE BASE DEMAND COSTS**	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Annual**	**Winter**	**SUMMER**
25	TOTAL PIPELINE BASE DEMAND COST	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 112,853	$ 1,354,234	$ 677,117	$ 677,117
26	Res Heat	$ 47,167	$ 47,167	$ 47,167	$ 47,167	$ 47,167	$ 47,671	$ 47,167	$ 47,167	$ 47,167	$ 47,167	$ 47,167	$ 47,167	$ 566,507	$ 283,505	$ 283,002
27	Res General	$ 1,090	$ 1,090	$ 1,090	$ 1,090	$ 1,090	$ 1,101	$ 1,090	$ 1,090	$ 1,090	$ 1,090	$ 1,090	$ 1,090	$ 13,087	$ 6,549	$ 6,538
28	G50 Low Annual-Low Winter	$ 7,197	$ 7,197	$ 7,197	$ 7,197	$ 7,197	$ 7,273	$ 7,197	$ 7,197	$ 7,197	$ 7,197	$ 7,197	$ 7,197	$ 86,436	$ 43,256	$ 43,179
29	G40 Low Annual-High Winter	$ 17,812	$ 17,812	$ 17,812	$ 17,812	$ 17,812	$ 18,002	$ 17,812	$ 17,812	$ 17,812	$ 17,812	$ 17,812	$ 17,812	$ 213,934	$ 107,062	$ 106,872
30	G51 Med Annual-Low Winter	$ 12,694	$ 12,694	$ 12,694	$ 12,694	$ 12,694	$ 12,609	$ 12,694	$ 12,694	$ 12,694	$ 12,694	$ 12,694	$ 12,694	$ 152,243	$ 76,079	$ 76,164
31	G41 Med Annual-High Winter	$ 17,260	$ 17,260	$ 17,260	$ 17,260	$ 17,260	$ 17,445	$ 17,260	$ 17,260	$ 17,260	$ 17,260	$ 17,260	$ 17,260	$ 207,310	$ 103,747	$ 103,563
32	G52 High Annual-Low Winter	$ 6,879	$ 6,879	$ 6,879	$ 6,879	$ 6,879	$ 5,968	$ 6,879	$ 6,879	$ 6,879	$ 6,879	$ 6,879	$ 6,879	$ 81,642	$ 40,365	$ 41,277
33	G42 High Annual-High Winter	$ 2,754	$ 2,754	$ 2,754	$ 2,754	$ 2,754	$ 2,783	$ 2,754	$ 2,754	$ 2,754	$ 2,754	$ 2,754	$ 2,754	$ 33,077	$ 16,553	$ 16,524
34																
35	Residential	$ 48,257	$ 48,257	$ 48,257	$ 48,257	$ 48,257	$ 48,772	$ 48,257	$ 48,257	$ 48,257	$ 48,257	$ 48,257	$ 48,257	$ 579,594	$ 290,055	$ 289,539
36	SALES HLF CLASSES	$ 26,770	$ 26,770	$ 26,770	$ 26,770	$ 26,770	$ 25,851	$ 26,770	$ 26,770	$ 26,770	$ 26,770	$ 26,770	$ 26,770	$ 320,320	$ 159,700	$ 160,620
37	SALES LLF CLASSES	$ 37,826	$ 37,826	$ 37,826	$ 37,826	$ 37,826	$ 38,230	$ 37,826	$ 37,826	$ 37,826	$ 37,826	$ 37,826	$ 37,826	$ 454,320	$ 227,362	$ 226,958
38																

Northern Utilities - NEW HAMPSHI
Allocation of Demand Costs to Cus

Base Capacity Costs

1	**BASE SENDOUT BY CLASS**	
2	**Total Therms**	
3	Res Heat	Schedule 6-CAK, LN 52
4	Res General	Schedule 6-CAK, LN 53
5	G50 Low Annual-Low Winter	Schedule 6-CAK, LN 54
6	G40 Low Annual-High Winter	Schedule 6-CAK, LN 55
7	G51 Med Annual-Low Winter	Schedule 6-CAK, LN 56
8	G41 Med Annual-High Winter	Schedule 6-CAK, LN 57
9	G52 High Annual-Low Winter	Schedule 6-CAK, LN 58
10	G42 High Annual-High Winter	Schedule 6-CAK, LN 59
11	Total Firm Sales	Sum LN 3 : LN 10
12		
13	**% of Total**	
14	Res Heat	LN 3 / LN 11
15	Res General	LN 4 / LN 11
16	G50 Low Annual-Low Winter	LN 5 / LN 11
17	G40 Low Annual-High Winter	LN 6 / LN 11
18	G51 Med Annual-Low Winter	LN 7 / LN 11
19	G41 Med Annual-High Winter	LN 8 / LN 11
20	G52 High Annual-Low Winter	LN 9 / LN 11
21	G42 High Annual-High Winter	LN 10 / LN 11
22	Total Firm Sales	LN 11 / LN 11
23		
24	**PIPELINE BASE DEMAND COSTS**	
25	TOTAL PIPELINE BASE DEMAND COST	Schedule 5-CAK, LN 69
26	Res Heat	LN 25 * LN 14
27	Res General	LN 25 * LN 15
28	G50 Low Annual-Low Winter	LN 25 * LN 16
29	G40 Low Annual-High Winter	LN 25 * LN 17
30	G51 Med Annual-Low Winter	LN 25 * LN 18
31	G41 Med Annual-High Winter	LN 25 * LN 19
32	G52 High Annual-Low Winter	LN 25 * LN 20
33	G42 High Annual-High Winter	LN 25 * LN 21
34		
35	Residential	LN 26 + LN 27
36	SALES HLF CLASSES	LN 28 + LN 30 + LN 32
37	SALES LLF CLASSES	LN 29 + LN 31 + LN 33
38		

Remaining Capacity Costs

	Column A	Column B	Column C	Column D
	Design Day Demand (MMBtu)	Avg Daily Base Use Load (MMBtu)	Remaining Design Day Demand (MMBtu)	% of Total Remaining Design Day Demand
Res Heat	23,486	1,327	22,158	50.39%
Res General	229	31	198	0.45%
G50 Low Annual-Low Winter	659	203	457	1.04%
G40 Low Annual-High Winter	10,113	501	9,612	21.86%
G51 Med Annual-Low Winter	1,108	357	751	1.71%
G41 Med Annual-High Winter	9,205	486	8,720	19.83%
G52 High Annual-Low Winter	559	194	365	0.83%
G42 High Annual-High Winter	1,795	78	1,717	3.90%
TOTAL	47,154	3,177	43,977	100.00%

REMAINING PIPELINE DEMAND

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
NH DIVISION TOTAL - REMAINING PIPELI	$ 341,611	$ 672,623	$ 1,347,586	$ 723,921	$ 516,299	$ 202,743	$ 50,409	$ 12,144	$ -	$ 377	$ 7,155	$ 90,456	$ 3,965,324	$ 3,804,783	$ 160,541
Res Heat	$ 172,124	$ 338,906	$ 678,992	$ 364,754	$ 260,142	$ 102,154	$ 25,399	$ 6,119	$ -	$ 190	$ 3,605	$ 45,577	$ 1,997,960	$ 1,917,070	$ 80,890
Res General	$ 1,535	$ 3,022	$ 6,054	$ 3,252	$ 2,320	$ 911	$ 226	$ 55	$ -	$ 2	$ 32	$ 406	$ 17,815	$ 17,094	$ 721
G50 Low Annual-Low Winter	$ 3,547	$ 6,984	$ 13,992	$ 7,516	$ 5,361	$ 2,105	$ 523	$ 126	$ -	$ 4	$ 74	$ 939	$ 41,172	$ 39,505	$ 1,667
G40 Low Annual-High Winter	$ 74,666	$ 147,016	$ 294,543	$ 158,228	$ 112,848	$ 44,314	$ 11,018	$ 2,654	$ -	$ 82	$ 1,564	$ 19,771	$ 866,704	$ 831,615	$ 35,090
G51 Med Annual-Low Winter	$ 5,832	$ 11,482	$ 23,004	$ 12,358	$ 8,814	$ 3,461	$ 861	$ 207	$ -	$ 6	$ 122	$ 1,544	$ 67,691	$ 64,950	$ 2,741
G41 Med Annual-High Winter	$ 67,733	$ 133,365	$ 267,194	$ 143,536	$ 102,370	$ 40,199	$ 9,995	$ 2,408	$ -	$ 75	$ 1,419	$ 17,935	$ 786,230	$ 754,398	$ 31,831
G52 High Annual-Low Winter	$ 2,835	$ 5,582	$ 11,183	$ 6,008	$ 4,285	$ 1,683	$ 418	$ 101	$ -	$ 3	$ 59	$ 751	$ 32,907	$ 31,575	$ 1,332
G42 High Annual-High Winter	$ 13,340	$ 26,266	$ 52,623	$ 28,269	$ 20,161	$ 7,917	$ 1,968	$ 474	$ -	$ 15	$ 279	$ 3,532	$ 154,844	$ 148,575	$ 6,269
TOTAL	$ 341,611	$ 672,623	$ 1,347,586	$ 723,921	$ 516,299	$ 202,743	$ 50,409	$ 12,144	$ -	$ 377	$ 7,155	$ 90,456	$ 3,965,324	$ 3,804,783	$ 160,541
Residential	$ 173,658	$ 341,928	$ 685,046	$ 368,006	$ 262,461	$ 103,064	$ 25,625	$ 6,173	$ -	$ 191	$ 3,637	$ 45,984	$ 2,015,776	$ 1,934,165	$ 81,611
SALES HLF CLASSES	$ 12,213	$ 24,048	$ 48,179	$ 25,882	$ 18,459	$ 7,249	$ 1,802	$ 434	$ -	$ 13	$ 256	$ 3,234	$ 141,770	$ 136,030	$ 5,740
SALES LLF CLASSES	$ 155,740	$ 306,647	$ 614,360	$ 330,033	$ 235,379	$ 92,430	$ 22,981	$ 5,536	$ -	$ 172	$ 3,262	$ 41,239	$ 1,807,778	$ 1,734,588	$ 73,190

STORAGE AND ON-SYSTEM PEAKING DEMAND

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
NH DIVISION TOTAL - PEAKING & STORA	$ 708,492	$ 1,395,000	$ 2,794,854	$ 1,501,392	$ 1,070,790	$ 420,482	$ 104,547	$ 25,185	$ -	$ 781	$ 14,840	$ 187,604	$ 8,223,967	$ 7,891,010	$ 332,957
Res Heat	$ 356,980	$ 702,882	$ 1,408,209	$ 756,488	$ 539,526	$ 211,863	$ 52,677	$ 12,690	$ -	$ 394	$ 7,477	$ 94,526	$ 4,143,712	$ 3,975,949	$ 167,763
Res General	$ 3,183	$ 6,267	$ 12,557	$ 6,745	$ 4,811	$ 1,889	$ 470	$ 113	$ -	$ 4	$ 67	$ 843	$ 36,949	$ 35,453	$ 1,496
G50 Low Annual-Low Winter	$ 7,356	$ 14,484	$ 29,019	$ 15,589	$ 11,118	$ 4,366	$ 1,086	$ 261	$ -	$ 8	$ 154	$ 1,948	$ 85,389	$ 81,932	$ 3,457
G40 Low Annual-High Winter	$ 154,856	$ 304,906	$ 610,874	$ 328,161	$ 234,043	$ 91,905	$ 22,851	$ 5,505	$ -	$ 171	$ 3,244	$ 41,005	$ 1,797,520	$ 1,724,745	$ 72,775
G51 Med Annual-Low Winter	$ 12,094	$ 23,814	$ 47,710	$ 25,630	$ 18,279	$ 7,178	$ 1,785	$ 430	$ -	$ 13	$ 253	$ 3,203	$ 140,388	$ 134,705	$ 5,684
G41 Med Annual-High Winter	$ 140,477	$ 276,596	$ 554,153	$ 297,690	$ 212,312	$ 83,372	$ 20,729	$ 4,994	$ -	$ 155	$ 2,942	$ 37,197	$ 1,630,618	$ 1,564,601	$ 66,018
G52 High Annual-Low Winter	$ 5,880	$ 11,577	$ 23,194	$ 12,460	$ 8,886	$ 3,490	$ 868	$ 209	$ -	$ 6	$ 123	$ 1,557	$ 68,249	$ 65,486	$ 2,763
G42 High Annual-High Winter	$ 27,666	$ 54,474	$ 109,138	$ 58,629	$ 41,814	$ 16,420	$ 4,083	$ 983	$ -	$ 30	$ 579	$ 7,326	$ 321,142	$ 308,140	$ 13,002
TOTAL	$ 708,492	$ 1,395,000	$ 2,794,854	$ 1,501,392	$ 1,070,790	$ 420,482	$ 104,547	$ 25,185	$ -	$ 781	$ 14,840	$ 187,604	$ 8,223,967	$ 7,891,010	$ 332,957
Residential	$ 360,163	$ 709,150	$ 1,420,766	$ 763,234	$ 544,337	$ 213,753	$ 53,147	$ 12,803	$ -	$ 397	$ 7,544	$ 95,369	$ 4,180,661	$ 4,011,402	$ 169,259
SALES HLF CLASSES	$ 25,330	$ 49,875	$ 99,923	$ 53,678	$ 38,283	$ 15,033	$ 3,738	$ 900	$ -	$ 28	$ 531	$ 6,707	$ 294,027	$ 282,123	$ 11,904
SALES LLF CLASSES	$ 322,999	$ 635,976	$ 1,274,165	$ 684,480	$ 488,170	$ 191,697	$ 47,663	$ 11,482	$ -	$ 356	$ 6,765	$ 85,528	$ 3,749,280	$ 3,597,486	$ 151,794

Off-SYSTEM PEAKING DEMAND & CNG EXPENSE

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
NH DIVISION - OFF-SYSTEM PEAKING	$ 364,425	$ 692,618	$ 1,361,835	$ 743,480	$ 537,625	$ 226,738	$ -	$ 1,521	$ 366	$ -	$ 11	$ 216	$ 3,928,836	$ 3,926,721	$ 2,115
Res Heat	$ 183,618	$ 348,981	$ 686,171	$ 374,608	$ 270,887	$ 114,244	$ -	$ 766	$ 185	$ -	$ 6	$ 109	$ 1,979,576	$ 1,978,510	$ 1,066
Res General	$ 1,637	$ 3,112	$ 6,118	$ 3,340	$ 2,415	$ 1,019	$ -	$ 7	$ 2	$ -	$ 0	$ 1	$ 17,651	$ 17,642	$ 10
G50 Low Annual-Low Winter	$ 3,784	$ 7,191	$ 14,140	$ 7,720	$ 5,582	$ 2,354	$ -	$ 16	$ 4	$ -	$ 0	$ 2	$ 40,793	$ 40,771	$ 22
G40 Low Annual-High Winter	$ 79,653	$ 151,386	$ 297,657	$ 162,503	$ 117,509	$ 49,558	$ -	$ 333	$ 80	$ -	$ 2	$ 47	$ 858,729	$ 858,267	$ 462
G51 Med Annual-Low Winter	$ 6,221	$ 11,823	$ 23,247	$ 12,692	$ 9,178	$ 3,871	$ -	$ 26	$ 6	$ -	$ 0	$ 4	$ 67,068	$ 67,032	$ 36
G41 Med Annual-High Winter	$ 72,257	$ 137,330	$ 270,020	$ 147,414	$ 106,598	$ 44,957	$ -	$ 302	$ 73	$ -	$ 2	$ 43	$ 778,995	$ 778,576	$ 419
G52 High Annual-Low Winter	$ 3,024	$ 5,748	$ 11,302	$ 6,170	$ 4,462	$ 1,882	$ -	$ 13	$ 3	$ -	$ 0	$ 2	$ 32,605	$ 32,587	$ 18
G42 High Annual-High Winter	$ 14,231	$ 27,046	$ 53,179	$ 29,033	$ 20,994	$ 8,854	$ -	$ 59	$ 14	$ -	$ 0	$ 8	$ 153,419	$ 153,336	$ 83
TOTAL	$ 364,425	$ 692,618	$ 1,361,835	$ 743,480	$ 537,625	$ 226,738	$ -	$ 1,521	$ 366	$ -	$ 11	$ 216	$ 3,928,836	$ 3,926,721	$ 2,115
Residential	$ 185,256	$ 352,093	$ 692,290	$ 377,949	$ 273,302	$ 115,263	$ -	$ 773	$ 186	$ -	$ 6	$ 110	$ 1,997,227	$ 1,996,152	$ 1,075
SALES HLF CLASSES	$ 14,666	$ 27,875	$ 54,807	$ 29,921	$ 21,637	$ 9,125	$ -	$ 61	$ 15	$ -	$ 0	$ 9	$ 158,117	$ 158,032	$ 85
SALES LLF CLASSES	$ 349,758	$ 664,744	$ 1,307,027	$ 713,558	$ 515,989	$ 217,613	$ -	$ 1,460	$ 352	$ -	$ 11	$ 207	$ 3,770,719	$ 3,768,689	$ 2,030

Remaining Capacity Costs

LN		
39		
40	Res Heat	Company Analysis
41	Res General	Company Analysis
42	G50 Low Annual-Low Winter	Company Analysis
43	G40 Low Annual-High Winter	Company Analysis
44	G51 Med Annual-Low Winter	Company Analysis
45	G41 Med Annual-High Winter	Company Analysis
46	G52 High Annual-Low Winter	Company Analysis
47	G42 High Annual-High Winter	Company Analysis
48	TOTAL	Sum LN 40 : LN 47
49		
50	**REMAINING PIPELINE DEMAND**	
51		
52	NH DIVISION TOTAL - REMAINING PIPELI	Schedule 5-CAK, LN 70
53		
54	Res Heat	LN 40 Col D * LN 52
55	Res General	LN 41 Col D * LN 52
56	G50 Low Annual-Low Winter	LN 42 Col D * LN 52
57	G40 Low Annual-High Winter	LN 43 Col D * LN 52
58	G51 Med Annual-Low Winter	LN 44 Col D * LN 52
59	G41 Med Annual-High Winter	LN 45 Col D * LN 52
60	G52 High Annual-Low Winter	LN 46 Col D * LN 52
61	G42 High Annual-High Winter	LN 47 Col D * LN 52
62	TOTAL	Sum LN 54 : LN 61
63		
64	Residential	LN 54 + LN 55
65	SALES HLF CLASSES	LN 56 + LN 58 + LN 60
66	SALES LLF CLASSES	LN 57 + LN 59 + LN 61
67		
68	**STORAGE AND ON-SYSTEM PEAKING DE**	**EMAND**
69		
70	NH DIVISION TOTAL - PEAKING & STORA	Schedule 5-CAK, LN 73
71		
72	Res Heat	LN 40 Col D * LN 70
73	Res General	LN 41 Col D * LN 70
74	G50 Low Annual-Low Winter	LN 42 Col D * LN 70
75	G40 Low Annual-High Winter	LN 43 Col D * LN 70
76	G51 Med Annual-Low Winter	LN 44 Col D * LN 70
77	G41 Med Annual-High Winter	LN 45 Col D * LN 70
78	G52 High Annual-Low Winter	LN 46 Col D * LN 70
79	G42 High Annual-High Winter	LN 47 Col D * LN 70
80	TOTAL	Sum LN 72 : LN 79
81		
82	Residential	LN 72 + LN 73
83	SALES HLF CLASSES	LN 74 + LN 76 + LN 78
84	SALES LLF CLASSES	LN 75 + LN 77 + LN 79
85		
86	**Off-SYSTEM PEAKING DEMAND & CNG E**	
87		
88	NH DIVISION - OFF-SYSTEM PEAKING	Schedule 5-CAK, LN 74
89		
90	Res Heat	LN 40 Col D * LN 88
91	Res General	LN 41 Col D * LN 88
92	G50 Low Annual-Low Winter	LN 42 Col D * LN 88
93	G40 Low Annual-High Winter	LN 43 Col D * LN 88
94	G51 Med Annual-Low Winter	LN 44 Col D * LN 88
95	G41 Med Annual-High Winter	LN 45 Col D * LN 88
96	G52 High Annual-Low Winter	LN 46 Col D * LN 88
97	G42 High Annual-High Winter	LN 47 Col D * LN 88
98	TOTAL	Sum LN 90 : LN 97
99		
100	Residential	LN 90 + LN 91
101	SALES HLF CLASSES	LN 92 + LN 94 + LN 96
102	SALES LLF CLASSES	LN 93 + LN 95 + LN 97
103		
104		

CAPACITY RELEASE MARGINS & ASSET MANAGEMENT CREDIT BY CLASS

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
NH DIVISION - MONTHLY CAP. RELEASE	$ (304,041)	$ (577,249)	$ (1,134,345)	$ (619,589)	$ (448,224)	$ (189,423)	$ -	$ -	$ -	$ -	$ -	$ -	$ (3,272,870)	$ (3,272,870)	$ -
Res Heat	$ (153,194)	$ (290,851)	$ (571,549)	$ (312,185)	$ (225,841)	$ (95,442)	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,649,062)	$ (1,649,062)	$ -
Res General	$ (1,366)	$ (2,593)	$ (5,096)	$ (2,784)	$ (2,014)	$ (851)	$ -	$ -	$ -	$ -	$ -	$ -	$ (14,704)	$ (14,704)	$ -
G50 Low Annual-Low Winter	$ (3,157)	$ (5,994)	$ (11,778)	$ (6,433)	$ (4,654)	$ (1,967)	$ -	$ -	$ -	$ -	$ -	$ -	$ (33,982)	$ (33,982)	$ -
G40 Low Annual-High Winter	$ (66,455)	$ (126,170)	$ (247,935)	$ (135,424)	$ (97,969)	$ (41,402)	$ -	$ -	$ -	$ -	$ -	$ -	$ (715,354)	$ (715,354)	$ -
G51 Med Annual-Low Winter	$ (5,190)	$ (9,854)	$ (19,364)	$ (10,577)	$ (7,651)	$ (3,234)	$ -	$ -	$ -	$ -	$ -	$ -	$ (55,870)	$ (55,870)	$ -
G41 Med Annual-High Winter	$ (60,284)	$ (114,455)	$ (224,914)	$ (122,850)	$ (88,872)	$ (37,558)	$ -	$ -	$ -	$ -	$ -	$ -	$ (648,933)	$ (648,933)	$ -
G52 High Annual-Low Winter	$ (2,523)	$ (4,790)	$ (9,414)	$ (5,142)	$ (3,720)	$ (1,572)	$ -	$ -	$ -	$ -	$ -	$ -	$ (27,161)	$ (27,161)	$ -
G42 High Annual-High Winter	$ (11,873)	$ (22,541)	$ (44,296)	$ (24,195)	$ (17,503)	$ (7,397)	$ -	$ -	$ -	$ -	$ -	$ -	$ (127,804)	$ (127,804)	$ -
TOTAL	$ (304,041)	$ (577,249)	$ (1,134,345)	$ (619,589)	$ (448,224)	$ (189,423)	$ -	$ -	$ -	$ -	$ -	$ -	$ (3,272,870)	$ (3,272,870)	$ -
Residential	$ (154,560)	$ (293,445)	$ (576,645)	$ (314,969)	$ (227,855)	$ (96,293)	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,663,766)	$ (1,663,766)	$ -
SALES HLF CLASSES	$ (10,870)	$ (20,638)	$ (40,556)	$ (22,152)	$ (16,025)	$ (6,772)	$ -	$ -	$ -	$ -	$ -	$ -	$ (117,013)	$ (117,013)	$ -
SALES LLF CLASSES	$ (138,611)	$ (263,166)	$ (517,144)	$ (282,469)	$ (204,344)	$ (86,357)	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,492,091)	$ (1,492,091)	$ -

MISCELLANEOUS CREDITS BY CLASS (Includes Re-entry Rate & Conversion Rate Revenues)

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
NH DIVISION - MISCELLANEOUS CREDITS	$ (464)	$ (882)	$ (1,733)	$ (947)	$ (685)	$ (289)	$ -	$ -	$ -	$ -	$ -	$ -	$ (5,000)	$ (5,000)	$ -
Res Heat	$ (234)	$ (444)	$ (873)	$ (477)	$ (345)	$ (146)	$ -	$ -	$ -	$ -	$ -	$ -	$ (2,519)	$ (2,519)	$ -
Res General	$ (2)	$ (4)	$ (8)	$ (4)	$ (3)	$ (1)	$ -	$ -	$ -	$ -	$ -	$ -	$ (22)	$ (22)	$ -
G50 Low Annual-Low Winter	$ (5)	$ (9)	$ (18)	$ (10)	$ (7)	$ (3)	$ -	$ -	$ -	$ -	$ -	$ -	$ (52)	$ (52)	$ -
G40 Low Annual-High Winter	$ (102)	$ (193)	$ (379)	$ (207)	$ (150)	$ (63)	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,093)	$ (1,093)	$ -
G51 Med Annual-Low Winter	$ (8)	$ (15)	$ (30)	$ (16)	$ (12)	$ (5)	$ -	$ -	$ -	$ -	$ -	$ -	$ (85)	$ (85)	$ -
G41 Med Annual-High Winter	$ (92)	$ (175)	$ (344)	$ (188)	$ (136)	$ (57)	$ -	$ -	$ -	$ -	$ -	$ -	$ (991)	$ (991)	$ -
G52 High Annual-Low Winter	$ (4)	$ (7)	$ (14)	$ (8)	$ (6)	$ (2)	$ -	$ -	$ -	$ -	$ -	$ -	$ (41)	$ (41)	$ -
G42 High Annual-High Winter	$ (18)	$ (34)	$ (68)	$ (37)	$ (27)	$ (11)	$ -	$ -	$ -	$ -	$ -	$ -	$ (195)	$ (195)	$ -
TOTAL	$ (464)	$ (882)	$ (1,733)	$ (947)	$ (685)	$ (289)	$ -	$ -	$ -	$ -	$ -	$ -	$ (5,000)	$ (5,000)	$ -
Residential	$ (236)	$ (448)	$ (881)	$ (481)	$ (348)	$ (147)	$ -	$ -	$ -	$ -	$ -	$ -	$ (2,542)	$ (2,542)	$ -
SALES HLF CLASSES	$ (19)	$ (35)	$ (70)	$ (38)	$ (28)	$ (12)	$ -	$ -	$ -	$ -	$ -	$ -	$ (201)	$ (201)	$ -
SALES LLF CLASSES	$ (446)	$ (846)	$ (1,663)	$ (908)	$ (657)	$ (278)	$ -	$ -	$ -	$ -	$ -	$ -	$ (4,799)	$ (4,799)	$ -

TOTAL NON-BASE CAPACITY COSTS

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
Res Heat	$ 559,294	$ 1,099,474	$ 2,200,951	$ 1,183,188	$ 844,368	$ 332,673	$ 78,076	$ 19,575	$ 185	$ 583	$ 11,088	$ 140,212	$ 6,469,667	$ 6,219,948	$ 249,719
Res General	$ 4,987	$ 9,804	$ 19,625	$ 10,550	$ 7,529	$ 2,966	$ 696	$ 175	$ 2	$ 5	$ 99	$ 1,250	$ 57,689	$ 55,462	$ 2,227
G50 Low Annual-Low Winter	$ 11,525	$ 22,657	$ 45,355	$ 24,382	$ 17,400	$ 6,855	$ 1,609	$ 403	$ 4	$ 12	$ 228	$ 2,889	$ 133,320	$ 128,174	$ 5,146
G40 Low Annual-High Winter	$ 242,619	$ 476,946	$ 954,761	$ 513,261	$ 366,282	$ 144,312	$ 33,869	$ 8,492	$ 80	$ 253	$ 4,810	$ 60,823	$ 2,806,506	$ 2,698,180	$ 108,327
G51 Med Annual-Low Winter	$ 18,949	$ 37,250	$ 74,568	$ 40,086	$ 28,607	$ 11,271	$ 2,645	$ 663	$ 6	$ 20	$ 376	$ 4,750	$ 219,191	$ 210,731	$ 8,460
G41 Med Annual-High Winter	$ 220,091	$ 432,661	$ 866,110	$ 465,604	$ 332,273	$ 130,912	$ 30,724	$ 7,703	$ 73	$ 230	$ 4,363	$ 55,176	$ 2,545,919	$ 2,447,651	$ 98,268
G52 High Annual-Low Winter	$ 9,212	$ 18,109	$ 36,251	$ 19,488	$ 13,907	$ 5,479	$ 1,286	$ 322	$ 3	$ 10	$ 183	$ 2,309	$ 106,559	$ 102,446	$ 4,113
G42 High Annual-High Winter	$ 43,346	$ 85,210	$ 170,576	$ 91,698	$ 65,439	$ 25,782	$ 6,051	$ 1,517	$ 14	$ 45	$ 859	$ 10,867	$ 501,406	$ 482,052	$ 19,353
TOTAL	$ 1,110,023	$ 2,182,110	$ 4,368,196	$ 2,348,257	$ 1,675,806	$ 660,251	$ 154,956	$ 38,850	$ 366	$ 1,158	$ 22,007	$ 278,276	$ 12,840,257	$ 12,344,644	$ 495,613
Residential	$ 564,281	$ 1,109,278	$ 2,220,576	$ 1,193,738	$ 851,897	$ 335,639	$ 78,772	$ 19,750	$ 186	$ 588	$ 11,187	$ 141,462	$ 6,527,356	$ 6,275,410	$ 251,945
SALES HLF CLASSES	$ 39,686	$ 78,016	$ 156,173	$ 83,956	$ 59,914	$ 23,606	$ 5,540	$ 1,389	$ 13	$ 41	$ 787	$ 9,949	$ 459,070	$ 441,351	$ 17,719
SALES LLF CLASSES	$ 506,056	$ 994,817	$ 1,991,446	$ 1,070,563	$ 763,995	$ 301,006	$ 70,644	$ 17,712	$ 167	$ 528	$ 10,033	$ 126,865	$ 5,853,831	$ 5,627,883	$ 225,948

TOTAL CAPACITY COSTS

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	SUMMER
Res Heat	$ 606,461	$ 1,146,641	$ 2,248,118	$ 1,230,355	$ 891,535	$ 380,344	$ 125,243	$ 66,742	$ 47,352	$ 47,750	$ 58,255	$ 187,379	$ 7,036,174	$ 6,503,454	$ 532,720
Res General	$ 6,077	$ 10,893	$ 20,715	$ 11,640	$ 8,619	$ 4,068	$ 1,786	$ 1,264	$ 1,091	$ 1,095	$ 1,188	$ 2,340	$ 70,775	$ 62,011	$ 8,764
G50 Low Annual-Low Winter	$ 18,722	$ 29,853	$ 52,551	$ 31,578	$ 24,596	$ 14,129	$ 8,805	$ 7,600	$ 7,200	$ 7,209	$ 7,425	$ 10,086	$ 219,755	$ 171,430	$ 48,325
G40 Low Annual-High Winter	$ 260,431	$ 494,758	$ 972,573	$ 531,073	$ 384,094	$ 162,314	$ 51,681	$ 26,304	$ 17,892	$ 18,065	$ 22,622	$ 78,635	$ 3,020,441	$ 2,805,242	$ 215,199
G51 Med Annual-Low Winter	$ 31,643	$ 49,944	$ 87,262	$ 52,780	$ 41,301	$ 23,880	$ 15,339	$ 13,357	$ 12,700	$ 12,714	$ 13,070	$ 17,444	$ 371,434	$ 286,810	$ 84,624
G41 Med Annual-High Winter	$ 237,352	$ 449,921	$ 883,370	$ 482,864	$ 349,533	$ 148,357	$ 47,985	$ 24,964	$ 17,333	$ 17,490	$ 21,624	$ 72,436	$ 2,753,229	$ 2,551,398	$ 201,831
G52 High Annual-Low Winter	$ 16,091	$ 24,988	$ 43,130	$ 26,367	$ 20,787	$ 11,447	$ 8,165	$ 7,202	$ 6,882	$ 6,889	$ 7,062	$ 9,189	$ 188,201	$ 142,811	$ 45,390
G42 High Annual-High Winter	$ 46,100	$ 87,964	$ 173,330	$ 94,452	$ 68,193	$ 28,566	$ 8,805	$ 4,271	$ 2,768	$ 2,799	$ 3,613	$ 13,620	$ 534,482	$ 498,605	$ 35,877
TOTAL	$ 1,222,876	$ 2,294,963	$ 4,481,049	$ 2,461,110	$ 1,788,659	$ 773,104	$ 267,809	$ 151,703	$ 113,219	$ 114,010	$ 134,859	$ 391,129	$ 14,194,491	$ 13,021,761	$ 1,172,730
Residential	$ 612,538	$ 1,157,534	$ 2,268,833	$ 1,241,995	$ 900,154	$ 384,411	$ 127,029	$ 68,006	$ 48,443	$ 48,845	$ 59,444	$ 189,719	$ 7,106,949	$ 6,565,465	$ 541,485
SALES HLF CLASSES	$ 66,456	$ 104,786	$ 182,943	$ 110,726	$ 86,684	$ 49,456	$ 32,310	$ 28,159	$ 26,783	$ 26,811	$ 27,557	$ 36,719	$ 779,390	$ 601,051	$ 178,339
SALES LLF CLASSES	$ 543,882	$ 1,032,643	$ 2,029,273	$ 1,108,389	$ 801,821	$ 339,237	$ 108,470	$ 55,538	$ 37,993	$ 38,354	$ 47,859	$ 164,692	$ 6,308,152	$ 5,855,245	$ 452,907
% ALLOCATION BETWEEN SALES HLF AND LLF															
SALES HLF CLASSES														9.31%	28.25%
SALES LLF CLASSES														90.69%	71.75%

105	**CAPACITY RELEASE MARGINS & ASSET MANAGEMENT CREDIT BY CLASS**	
106		
107	NH DIVISION - MONTHLY CAP. RELEASE	Schedule 5-CAK, LN 77
108		
109	Res Heat	LN 40 Col D * LN 107
110	Res General	LN 41 Col D * LN 107
111	G50 Low Annual-Low Winter	LN 42 Col D * LN 107
112	G40 Low Annual-High Winter	LN 43 Col D * LN 107
113	G51 Med Annual-Low Winter	LN 44 Col D * LN 107
114	G41 Med Annual-High Winter	LN 45 Col D * LN 107
115	G52 High Annual-Low Winter	LN 46 Col D * LN 107
116	G42 High Annual-High Winter	LN 47 Col D * LN 107
117	TOTAL	Sum LN 109 : LN 116
118		
119	Residential	LN 109 + LN 110
120	SALES HLF CLASSES	LN 111 + LN 113 + LN 115
121	SALES LLF CLASSES	LN 112 + LN 114 + LN 116
122		
123	**MISCELLANEOUS CREDITS BY CLASS (I**	**Includes Re-entry Rate & Conversion Ra**
124		
125	NH DIVISION - MISCELLANEOUS CREDIT	Schedule 5-CAK, LN 78 + LN 79
126		
127	Res Heat	LN 40 Col D * LN 125
128	Res General	LN 41 Col D * LN 125
129	G50 Low Annual-Low Winter	LN 42 Col D * LN 125
130	G40 Low Annual-High Winter	LN 43 Col D * LN 125
131	G51 Med Annual-Low Winter	LN 44 Col D * LN 125
132	G41 Med Annual-High Winter	LN 45 Col D * LN 125
133	G52 High Annual-Low Winter	LN 46 Col D * LN 125
134	G42 High Annual-High Winter	LN 47 Col D * LN 125
135	TOTAL	Sum LN 127 : LN 134
136		
137	Residential	LN 127 + LN 128
138	SALES HLF CLASSES	LN 129 + LN 131 + LN 133
139	SALES LLF CLASSES	LN 130 + LN 132 + LN 134
140		
141	**TOTAL NON-BASE CAPACITY COSTS**	
142		
143	Res Heat	Sum of Ln 54, 72, 90, 109, 127
144	Res General	Sum of Ln 55, 73, 91, 110, 128
145	G50 Low Annual-Low Winter	Sum of Ln 56, 74, 92, 111, 129
146	G40 Low Annual-High Winter	Sum of Ln 57, 75, 93, 112, 130
147	G51 Med Annual-Low Winter	Sum of Ln 58, 76, 94, 113, 131
148	G41 Med Annual-High Winter	Sum of Ln 59, 77, 95, 114, 132
149	G52 High Annual-Low Winter	Sum of Ln 60, 78, 96, 115, 133
150	G42 High Annual-High Winter	Sum of Ln 61, 79, 97, 116, 134
151	TOTAL	Sum LN 143 : LN 150
152		
153	Residential	LN 143 + LN 144
154	SALES HLF CLASSES	LN 145 + LN 147 + LN 149
155	SALES LLF CLASSES	LN 146 + LN 148 + LN 150
156		
157	**TOTAL CAPACITY COSTS**	
158		
159	Res Heat	LN 143 + LN 26
160	Res General	LN 144 + LN 27
161	G50 Low Annual-Low Winter	LN 145 + LN 28
162	G40 Low Annual-High Winter	LN 146 + LN 29
163	G51 Med Annual-Low Winter	LN 147 + LN 30
164	G41 Med Annual-High Winter	LN 148 + LN 31
165	G52 High Annual-Low Winter	LN 149 + LN 32
166	G42 High Annual-High Winter	LN 150 + LN 33
167	TOTAL	Sum LN 159 : LN 166
168		
169	Residential	LN 159 + LN 160
170	SALES HLF CLASSES	LN 161 + LN 163 + LN 165
171	SALES LLF CLASSES	LN 162 + LN 164 + LN 166
172		
173	% ALLOCATION BETWEEN SALES HLF A	
174	SALES HLF CLASSES	LN 170 / (LN170 + LN 171)
175	SALES LLF CLASSES	LN 171 / (LN 170 + LN 171)

Northern Utilities
ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
1	**Supply Volumes - MMBtu**															
2	Total Baseload Pipeline	373,790	326,938	326,938	296,353	396,783	914,522	499,328	337,173	291,023	294,102	320,183	619,360	4,996,492	2,635,323	2,361,169
3	Total Remaining Pipeline	557,121	661,024	661,024	597,054	661,024	3,595	0	0	0	0	0	0	3,140,843	3,140,843	0
4	Total Storage	233,918	670,393	760,704	779,661	440,846	0	0	0	0	0	0	0	2,885,522	2,885,522	0
5	Total Peaking	1,794	25,246	241,465	35,494	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	318,687	307,647	11,040
6	Total Off-system Sales													0	0	
7	Subtotal	1,166,624	1,683,601	1,990,131	1,708,562	1,500,507	919,911	501,188	338,973	292,883	295,962	321,983	621,220	11,341,545	8,969,336	2,372,209
8	Less Interruptible - Maine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Less Interruptible - New Hampshire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Total Firm Supply	1,166,624	1,683,601	1,990,131	1,708,562	1,500,507	919,911	501,188	338,973	292,883	295,962	321,983	621,220	11,341,545	8,969,336	2,372,209
11	Total Firm Pipeline Sendout	373,790	326,938	326,938	296,353	396,783	914,522	499,328	337,173	291,023	294,102	320,183	619,360	4,996,492	2,635,323	2,361,169
12	**Variable Costs**															
13	Base Pipeline Costs Modeled in Sendout™	$ 1,083,860	$ 1,099,844	$ 1,146,675	$ 1,033,098	$ 1,329,637	$ 2,564,932	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126	$ 14,475,437	$ 8,258,046	$ 6,217,391
14	NYMEX Price Used for Forecast	$2.324	$2.485	$2.588	$2.556	$2.473	$2.277	$2.261	$2.297	$2.336	$2.345	$2.329	$2.354			
15	NYMEX Price Used for Update	$2.324	$2.485	$2.588	$2.556	$2.473	$2.277	$2.261	$2.297	$2.336	$2.345	$2.329	$2.354			
16	Increase/(Decrease) NYMEX Price	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
17	Increase/(Decrease) in Pipeline Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ -	
18	Total Updated Pipeline Costs	$ 1,083,860	$ 1,099,844	$ 1,146,675	$ 1,033,098	$ 1,329,637	$ 2,564,932	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126	$ 14,475,437	$ 8,258,046	$ 6,217,391
19	Remaining Pipeline Costs Modeled in Sendout™	$ 1,726,682	$ 2,590,803	$ 3,157,895	$ 2,794,434	$ 2,387,373	$ 11,321	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,668,508	$ 12,668,508	$ -
20	NYMEX Price Used for Forecast	$2.324	$2.485	$2.588	$2.556	$2.473	$2.277	$2.261	$2.297	$2.336	$2.345	$2.329	$2.354			
21	NYMEX Price Used for Update	$2.324	$2.485	$2.588	$2.556	$2.473	$2.277	$2.261	$2.297	$2.336	$2.345	$2.329	$2.354			
22	Increase/(Decrease) NYMEX Price	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
23	Increase/(Decrease) in Pipeline Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
24	Total Updated Pipeline Costs	$ 1,726,682	$ 2,590,803	$ 3,157,895	$ 2,794,434	$ 2,387,373	$ 11,321	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,668,508	$ 12,668,508	$ -
25															$ -	
26	Total Pipeline Baseload	$ 1,083,860	$ 1,099,844	$ 1,146,675	$ 1,033,098	$ 1,329,637	$ 2,564,932	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126	$ 14,475,437	$ 8,258,046	$ 6,217,391
27	Total Remaining Pipeline	$ 1,726,682	$ 2,590,803	$ 3,157,895	$ 2,794,434	$ 2,387,373	$ 11,321	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,668,508	$ 12,668,508	$ -
28	Total Storage	$ 428,329	$ 1,214,353	$ 1,379,721	$ 1,415,781	$ 804,385	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,242,569	$ 5,242,569	$ -
29	Total Peaking	$ 7,289	$ 129,949	$ 953,958	$ 216,183	$ 12,852	$ 12,307	$ 12,561	$ 12,075	$ 12,411	$ 12,390	$ 11,902	$ 12,263	$ 1,406,140	$ 1,332,538	$ 73,602
30	Total Off-sytem Sales	$ -				$ -								$ -	$ -	
31																
32	Subtotal	$ 3,246,160	$ 5,034,949	$ 6,638,249	$ 5,459,497	$ 4,534,247	$ 2,588,560	$ 1,334,812	$ 898,737	$ 787,212	$ 794,469	$ 844,375	$ 1,631,389	$ 33,792,655	$ 27,501,662	$ 6,290,994
33																
34	Interruptible Cost Estimate															
35	Variable Pipeline Costs	$ 2,810,541	$ 3,690,647	$ 4,304,570	$ 3,827,533	$ 3,717,010	$ 2,576,253	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126	$ 27,143,945	$ 20,926,554	$ 6,217,391
36	Average Supply Cost ($/MMBtu)	$ 3.019	$ 3.736	$ 4.357	$ 4.284	$ 3.514	$ 2.806	$ 2.648	$ 2.630	$ 2.662	$ 2.659	$ 2.600	$ 2.614			
37	Interruptible Cost - Maine	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
38	Interruptible Cost - New Hampshire	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
39																
40	Firm Sales Baseload Pipeline	$ 1,083,860	$ 1,099,844	$ 1,146,675	$ 1,033,098	$ 1,329,637	$ 2,564,932	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126	$ 14,475,437	$ 8,258,046	$ 6,217,391
41	Firm Sales Remaining Pipeline	$ 1,726,682	$ 2,590,803	$ 3,157,895	$ 2,794,434	$ 2,387,373	$ 11,321	$ -	$ -	$ -	$ -	$ -	$ -			
42	Total Storage	$ 428,329	$ 1,214,353	$ 1,379,721	$ 1,415,781	$ 804,385	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,242,569	$ 5,242,569	$ -
43	Total Peaking	$ 7,289	$ 129,949	$ 953,958	$ 216,183	$ 12,852	$ 12,307	$ 12,561	$ 12,075	$ 12,411	$ 12,390	$ 11,902	$ 12,263	$ 1,406,140	$ 1,332,538	$ 73,602
44	Off-system Sales	$ -	$ -	$ -	$ -	$ -	$ -							$ -	$ -	
45	Total Firm Sales Variable Costs	$ 3,246,160	$ 5,034,949	$ 6,638,249	$ 5,459,497	$ 4,534,247	$ 2,588,560	$ 1,334,812	$ 898,737	$ 787,212	$ 794,469	$ 844,375	$ 1,631,389	$ 21,124,147	$ 14,833,153	$ 6,290,994

Northern Utilities
ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

1	**Supply Volumes - MMBtu**	
2	Total Pipeline	Schedule 23-FXW, Page 2
3	Total Remaining Pipeline	Schedule 23-FXW, Page 2
4	Total Storage	Schedule 23-FXW, Page 2
5	Total Peaking	Schedule 23-FXW, Page 2
6	Total Off-system Sales	NA
7	Subtotal	SUM LN 2: LN 6
8	Less Interruptible - Maine	Company Analysis
9	Less Interruptible - New Hampshire	Company Analysis
10	Total Firm Supply	LN 7 - LN 8 - LN 9
11	Total Firm Pipeline Sendout	LN 2 + LN 3- LN 8 - LN 9
12	**Variable Costs**	
13	Pipeline Costs Modeled in Sendout™	Schedule 23-FXW, Page 1
14	NYMEX Price Used for Forecast	Schedule FXW-30, PG 1, LN 16
15	NYMEX Price Used for Update	Schedule FXW-30, PG 1, LN 16
16	Increase/(Decrease) NYMEX Price	LN 14 - LN 15
17	Increase/(Decrease) in Pipeline Costs	LN 2 * LN 16
18	Total Updated Pipeline Costs	LN 13 + LN 17
19	Remaining Pipeline Costs Modeled in Sendout™	Schedule 23-FXW, Page 1
20	NYMEX Price Used for Forecast	Schedule FXW-30, PG 1, LN 16
21	NYMEX Price Used for Update	Schedule FXW-30, PG 1, LN 16
22	Increase/(Decrease) NYMEX Price	LN 20 - LN 21
23	Increase/(Decrease) in Pipeline Costs	LN 2 * LN 22
24	Total Updated Pipeline Costs	LN 19 + LN 23
25		
26	Total Pipeline Baseload	LN 18
27	Total Remaining Pipeline	LN 24
28	Total Storage	Schedule 23-FXW, Page 1
29	Total Peaking	Schedule23-FXW, Page 1
30	Total Off-sytem Sales	NA
31		
32	Subtotal	Sum LN 19 : LN 22
33		
34	Interruptible Cost Estimate	Company Analysis
35	Variable Pipeline Costs Excld Hedges	LN 18 + LN 24
36	Average Supply Cost ($/MMBtu)	LN 35 /(LN 2 + LN 3)
37	Interruptible Cost - Maine	LN 36 * LN 8
38	Interruptible Cost - New Hampshire	LN 36 * LN 9
39		
40	Firm Sales Pipeline Commodity	LN 26 - LN 37 - LN 38
41	Firm Sales Remaining Pipeline	LN 27 - LN 37 - LN 38
42	Total Storage	LN 28
43	Total Peaking	LN 29
44	Off-system Sales	LN 30
45	Total Firm Sales Variable Costs	SUM LN 40 : LN 44

Northern Utilities
ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

Commodity Allocation Factors
Firm Sales Sendout for Normal Winter, MMBtu

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
Maine	705,389	1,012,886	1,191,105	1,029,250	912,646	582,355	328,003	223,048	195,153	196,769	213,990	398,508	6,989,104	5,433,632	1,555,472
New Hampshire	461,248	670,734	799,048	679,332	587,878	337,566	173,190	115,928	97,733	99,196	107,997	222,718	4,352,568	3,535,806	816,762
Total	1,166,637	1,683,621	1,990,153	1,708,582	1,500,524	919,921	501,193	338,977	292,885	295,966	321,987	621,226	11,341,671	8,969,438	2,372,233
Percentage of Total															
Maine	60.46%	60.16%	59.85%	60.24%	60.82%	63.30%	65.44%	65.80%	66.63%	66.48%	66.46%	64.15%	61.62%	60.58%	65.57%
New Hampshire	39.54%	39.84%	40.15%	39.76%	39.18%	36.70%	34.56%	34.20%	33.37%	33.52%	33.54%	35.85%	38.38%	39.42%	34.43%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Commodity Allocation by Jurisdiction

	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
Maine															
Firm Sales Baseload Pipeline	$ 655,339	$ 661,679	$ 686,284	$ 622,338	$ 808,710	$ 1,623,728	$ 865,340	$ 583,428	$ 516,259	$ 519,956	$ 553,256	$ 1,038,647	$ 9,134,964	$ 5,058,079	$ 4,076,885
Firm Sales Remaining Pipeline	$ 1,044,012	$ 1,558,658	$ 1,889,997	$ 1,683,367	$ 1,452,044	$ 7,167	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,635,246	$ 7,635,246	$ -
Storage	$ 258,983	$ 730,569	$ 825,762	$ 852,866	$ 489,242	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,157,422	$ 3,157,422	$ -
Peaking	$ 4,407	$ 78,179	$ 570,943	$ 130,229	$ 7,817	$ 7,791	$ 8,220	$ 7,946	$ 8,270	$ 8,237	$ 7,910	$ 7,867	$ 847,815	$ 799,365	$ 48,450
Off-system Sales	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Maine Commodity Costs	$ 1,962,741	$ 3,029,086	$ 3,972,986	$ 3,288,801	$ 2,757,812	$ 1,638,686	$ 873,560	$ 591,373	$ 524,528	$ 528,194	$ 561,166	$ 1,046,513	$ 20,775,447	$ 16,650,112	$ 4,125,335
Maine Inventory Finance Costs	$ 267	$ 423	$ 515	$ 441	$ 371	$ 203	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,222	$ 2,222	$ -
Total Maine Variable Costs	$ 1,963,008	$ 3,029,509	$ 3,973,502	$ 3,289,242	$ 2,758,183	$ 1,638,889	$ 873,560	$ 591,373	$ 524,528	$ 528,194	$ 561,166	$ 1,046,513	$ 20,777,669	$ 16,652,334	$ 4,125,335
New Hampshire															
Firm Sales Baseload Pipeline	$ 428,520	$ 438,165	$ 460,391	$ 410,760	$ 520,928	$ 941,204	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479	$ 5,340,473	$ 3,199,967	$ 2,140,506
Firm Sales Remaining Pipeline	$ 682,670	$ 1,032,145	$ 1,267,898	$ 1,111,067	$ 935,329	$ 4,154	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,033,263	$ 5,033,263	$ -
Storage	$ 169,346	$ 483,784	$ 553,959	$ 562,914	$ 315,143	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,085,147	$ 2,085,147	$ -
Peaking	$ 2,882	$ 51,770	$ 383,015	$ 85,954	$ 5,035	$ 4,516	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396	$ 558,325	$ 533,172	$ 25,153
Off-system Sales	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total New Hampshire Commodity Costs	$ 1,283,418	$ 2,005,863	$ 2,665,263	$ 2,170,696	$ 1,776,435	$ 949,874	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875	$ 13,017,208	$ 10,851,549	$ 2,165,659
New Hampshire Inventory Finance Costs	$ 156	$ 245	$ 299	$ 252	$ 209	$ 104	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,266	$ 1,266	$ -
Total New Hampshire Variable Costs	$ 1,283,575	$ 2,006,108	$ 2,665,562	$ 2,170,948	$ 1,776,644	$ 949,978	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875	$ 13,018,474	$ 10,852,815	$ 2,165,659
Northern Utilities															
Firm Sales Baseload Pipeline	$ 1,083,860	$ 1,099,844	$ 1,146,675	$ 1,033,098	$ 1,329,637	$ 2,564,932	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126	$ 14,475,437	$ 8,258,046	$ 6,217,391
Firm Sales Remaining Pipeline	$ 1,726,682	$ 2,590,803	$ 3,157,895	$ 2,794,434	$ 2,387,373	$ 11,321	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,668,508	$ 12,668,508	$ -
Storage	$ 428,329	$ 1,214,353	$ 1,379,721	$ 1,415,781	$ 804,385	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,242,569	$ 5,242,569	$ -
Peaking	$ 7,289	$ 129,949	$ 953,958	$ 216,183	$ 12,852	$ 12,307	$ 12,561	$ 12,075	$ 12,411	$ 12,390	$ 11,902	$ 12,263	$ 1,406,140	$ 1,332,538	$ 73,602
Off-system Sales	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Northern Commodity Costs	$ 3,246,160	$ 5,034,949	$ 6,638,249	$ 5,459,497	$ 4,534,247	$ 2,588,560	$ 1,334,812	$ 898,737	$ 787,212	$ 794,469	$ 844,375	$ 1,631,389	$ 33,792,655	$ 27,501,662	$ 6,290,994
Northern Inventory Finance Costs	$ 424	$ 668	$ 815	$ 694	$ 580	$ 307	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,488	$ 3,488	$ -
Total Northern Variable Costs	$ 3,246,583	$ 5,035,617	$ 6,639,064	$ 5,460,190	$ 4,534,828	$ 2,588,867	$ 1,334,812	$ 898,737	$ 787,212	$ 794,469	$ 844,375	$ 1,631,389	$ 33,796,143	$ 27,505,149	$ 6,290,994

Northern Utilities
ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

46	**Commodity Allocation Factors**	
47	Firm Sales Sendout for Normal Winter, MMBtu	
48		
49	Maine	Company Analysis
50	New Hampshire	Schedule 17-FXW, LN 33 / 10
51	Total	LN 49 + LN 50
52		
53	**Percentage of Total**	
54	Maine	LN 49 / LN 51
55	New Hampshire	LN 50 / LN 51
56	Total	LN 54 + LN 55
57		
58	**Commodity Allocation by Jurisdiction**	
59	**Maine**	
60	Firm Sales Pipeline Commodity	LN 40 * LN 54
61	Firm Sales Remaining Pipeline	LN 41 * LN 54
62	Storage	LN 42 * LN 54
63	Peaking	LN 43 * LN 54
64	Off-system Sales	LN 44 * LN 54
65	Total Maine Commodity Costs	SUM LN 60 : LN 64
66	Maine Inventory Finance Costs	LN 107
67	Total Maine Variable Costs	LN 55 + LN 56
68	**New Hampshire**	
69	Firm Sales Pipeline Commodity Excld Hedge	LN 40 * LN 55
70	Firm Sales Remaining Pipeline	LN 41 * LN 55
71	Storage	LN 42 * LN 55
72	Peaking	LN 43 * LN 55
73	Off-system Sales	LN 44 * LN 55
74	Total New Hampshire Commodity Costs	SUM LN 69 : LN 73
75	New Hampshire Inventory Finance Costs	LN 112
76	Total New Hampshire Variable Costs	LN 74 + LN 75
77	**Northern Utilities**	
78	Firm Sales Pipeline Commodity Excld Hedge	LN 60 + LN 69
79	Firm Sales Remaining Pipeline	LN 61 + LN 70
80	Storage	LN 62 + LN 71
81	Peaking	LN 63 + LN 72
82	Off-system Sales	LN 64 + LN 73
83	Total Northern Commodity Costs	LN 65 + LN 74
84	Northern Inventory Finance Costs	LN 66 + LN 75
85	Total Northern Variable Costs	LN 67 + LN 76
86		

Northern Utilities
ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

Northern Utilities
Simplified Market Based Allocator (MBA) Calculations
ALLOCATION OF NORTHERN INVENTORY FINANCE CHARGE

Col A	Col B	Col C	Col D	Col E	Col F	Col G	Col H	Col I	Col J	Col K	Col L	Col M	Col N	Col O	Col P
Inventory Finance Charge	**Nov-20**	**Dec-20**	**Jan-21**	**Feb-21**	**Mar-21**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Annual**	**Winter**	**Summer**
Storage	$ 341	$ 286	$ 177	$ 73	$ 12	$ -	$ 59	$ 173	$ 230	$ 287	$ 398	$ 506	$ 2,543		$ 1,653
Peaking	$ 50	$ 65	$ 79	$ 81	$ 81	$ 81	$ 84	$ 88	$ 87	$ 82	$ 82	$ 86	$ 945		$ 509
Total	$ 392	$ 351	$ 255	$ 153	$ 93	$ 81	$ 143	$ 261	$ 317	$ 370	$ 480	$ 592	$ 3,488		$ 2,162
Inventory Finance Charge Allocation by Jurisdiction															
Maine	$ 237	$ 211	$ 153	$ 92	$ 57	$ 51	$ 93	$ 172	$ 211	$ 246	$ 319	$ 380	$ 2,222		$ 1,421
New Hampshire	$ 155	$ 140	$ 103	$ 61	$ 36	$ 30	$ 49	$ 89	$ 106	$ 124	$ 161	$ 212	$ 1,266		$ 741
Total	$ 392	$ 351	$ 255	$ 153	$ 93	$ 81	$ 143	$ 261	$ 317	$ 370	$ 480	$ 592	$ 3,488		$ 2,162
Inventory Finance Charge Allocation by Month															
Maine															
Firm Sales Normal Remaining Sendout	515,750	816,925	995,144	852,252	716,685	392,716	0	0	0	0	0	0	0	4,289,472	0
Monthly % Sendout of Total Winter	12.02%	19.04%	23.20%	19.87%	16.71%	9.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
ME Allocated Inventory Finance Charge	$ 267	$ 423	$ 515	$ 441	$ 371	$ 203	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,222	$ -
New Hampshire															
Firm Sales Normal Remaining Sendout	365,960	572,270	700,584	590,396	489,413	243,285	0	0	0	0	0	0	0	2,961,907	0
Monthly % Sendout of Total Winter	12.36%	19.32%	23.65%	19.93%	16.52%	8.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
NH Allocated Inventory Finance Charge	$ 156	$ 245	$ 299	$ 252	$ 209	$ 104	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,266	$ -

Northern Utilities
ALLOCATION OF COMMODITY COSTS BETWEEN ME & NH DIVISIONS

87 **Northern Utilities**
88 **Simplified Market Based Allocator (MBA) Calculations**
89 **ALLOCATION OF NORTHERN INVENTORY FINANCE CHARGE**
90
91
92

LN		
93	**Inventory Finance Charge**	
94	Storage	"Schedule 10-CAK - Carrying Costs"
95	Peaking	"Schedule 10-CAK - Carrying Costs"
96	Total	SUM LN 94 : LN 95
97		
98	**Inventory Finance Charge Allocation by Jurisdiction**	
99	Maine	LN 54 * LN 96
100	New Hampshire	LN 55 * LN 96
101	Total	SUM LN 99 : LN 100
102		
103	**Inventory Finance Charge Allocation by Month**	
104	**Maine**	
105	Firm Sales Remaining Sendout	Company Analysis
106	Monthly % Sendout of Total Winter	LN 105 / LN 105 COL O
107	ME Allocated Inventory Finance Charge	LN 106 * LN 99 COL N
108		
109	**New Hampshire**	
110	Firm Sales Remaining Sendout	NH Schedule 6-CAK, LN 80 / 10
111	Monthly % Sendout of Total Winter	LN 110 / LN 110 COL O
112	NH Allocated Inventory Finance Charge	LN 111 * LN 100 COL N

Northern Utilities - NEW HAMPSHIRE DIVISION
COMMODITY COSTS

		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
	Supply Volumes - Therms															
1	New Hampshire Sales Pipeline Baseload	1,477,837	1,302,480	1,312,657	1,178,299	1,554,524	3,355,845	1,725,456	1,153,115	971,111	985,716	1,073,916	2,220,490	18,311,446	10,181,642	8,129,804
2	New Hampshire Sales Pipeline Remaining	2,202,664	2,633,441	2,654,018	2,373,887	2,589,772	13,192	0	0	0	0	0	0	12,466,975	12,466,975	0
3	New Hampshire Sales Storage	924,831	2,670,766	3,054,233	3,099,930	1,727,153	0	0	0	0	0	0	0	11,476,915	11,476,915	0
4	New Hampshire Sales Peaking	7,093	100,577	969,485	141,125	7,263	6,583	6,427	6,156	6,207	6,234	6,037	6,668	1,269,855	1,232,125	37,730
5	Total New Hampshire Firm Sales Sendout	4,612,425	6,707,264	7,990,394	6,793,242	5,878,711	3,375,620	1,731,883	1,159,271	977,318	991,950	1,079,953	2,227,158	43,525,190	35,357,657	8,167,534
6																
7	New Hampshire Interruptible Sendout (Pipeline)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8																
9	Total Firm Sendout	4,612,425	6,707,264	7,990,394	6,793,242	5,878,711	3,375,620	1,731,883	1,159,271	977,318	991,950	1,079,953	2,227,158	43,525,190	35,357,657	8,167,534
10	Total Firm Sales	4,552,386	6,619,959	7,886,383	6,704,817	5,802,188	3,331,679	1,709,335	1,144,180	964,593	979,040	1,065,895	2,198,166	42,958,621	34,897,412	8,061,210
11	Difference (LAUF & Company Use)	60,039	87,305	104,010	88,426	76,524	43,941	22,548	15,091	12,725	12,911	14,058	28,993	566,569	460,245	106,324
12	Percent Difference	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
13																
14	**Variable Costs**															
15	New Hampshire Sales Pipeline Baseload	$ 428,520	$ 438,165	$ 460,391	$ 410,760	$ 520,928	$ 941,204	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479	$ 5,340,473	$ 3,199,967	$ 2,140,506
16	New Hampshire Sales Pipeline Remaining	$ 682,670	$ 1,032,145	$ 1,267,898	$ 1,111,067	$ 935,329	$ 4,154	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,033,263	$ 5,033,263	$ -
17	New Hampshire Total Storage	$ 169,346	$ 483,784	$ 553,959	$ 562,914	$ 315,143	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,085,147	$ 2,085,147	$ -
18	New Hampshire Total Peaking	$ 2,882	$ 51,770	$ 383,015	$ 85,954	$ 5,035	$ 4,516	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396	$ 558,325	$ 533,172	$ 25,153
19	New Hampshire Inventory Finance Charge	$ 156	$ 245	$ 299	$ 252	$ 209	$ 104	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,266	$ 1,266	$ -
20	Total New Hampshire Sales Variable Costs	$ 1,283,575	$ 2,006,108	$ 2,665,562	$ 2,170,948	$ 1,776,644	$ 949,978	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875	$ 13,018,474	$ 10,852,815	$ 2,165,659
21														$ -	$ -	$ -
22	New Hampshire Interruptible Commodity Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
23	Total New Hampshire Commodity Costs	$ 1,283,575	$ 2,006,108	$ 2,665,562	$ 2,170,948	$ 1,776,644	$ 949,978	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875	$ 13,018,474	$ 10,852,815	$ 2,165,659
24																
25	**Supply Cost/Therm**															
26	New Hampshire Sales Pipeline Baseload	$ 0.290	$ 0.336	$ 0.351	$ 0.349	$ 0.335	$ 0.280	$ 0.265	$ 0.263	$ 0.266	$ 0.266	$ 0.260	$ 0.261	$ 0.292	$ 0.314	$ 0.263
27	New Hampshire Sales Pipeline Remaining	$ 0.310	$ 0.392	$ 0.478	$ 0.468	$ 0.361	$ 0.315	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.404	$ 0.404	$ -
28	New Hampshire Storage Excld Inventory Finance Costs	$ 0.183	$ 0.181	$ 0.181	$ 0.182	$ 0.182	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.182	$ 0.182	$ -
29	New Hampshire Peaking Excld Inventory Finance Costs	$ 0.406	$ 0.515	$ 0.395	$ 0.609	$ 0.693	$ 0.686	$ 0.675	$ 0.671	$ 0.667	$ 0.666	$ 0.661	$ 0.659	$ 0.440	$ 0.433	$ 0.667
30	New Hampshire Inventory Finance Costs per Dth Stor and Peak	$ 0.000	$ 0.000	$ 0.000	$ 0.000	$ 0.000	$ 0.016	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.000	$ 0.000	$ -
31	Weighted Average Cost per Dth Sendout	$ 0.278	$ 0.299	$ 0.334	$ 0.320	$ 0.302	$ 0.281	$ 0.266	$ 0.265	$ 0.269	$ 0.268	$ 0.262	$ 0.263	$ 0.299	$ 0.307	$ 0.265
32																
33	New Hampshire Interruptible Cost / Therm	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
34																
35	**Commodity Costs**															
36	Base Commodity, therms	952,882	984,644	984,644	889,356	984,644	942,813	984,644	952,882	977,326	984,644	952,882	984,644	11,576,005	5,738,983	5,837,022
37	Base Commodity Cost	$ 276,302	$ 331,242	$ 345,346	$ 310,033	$ 329,959	$ 264,428	$ 260,740	$ 250,579	$ 260,197	$ 261,838	$ 247,748	$ 257,405	$ 3,395,816	$ 1,857,310	$ 1,538,506
38	Remaining Commodity	$ 1,007,273	$ 1,674,866	$ 2,320,216	$ 1,860,915	$ 1,446,686	$ 685,550	$ 200,512	$ 56,785	$ 2,487	$ 4,438	$ 35,461	$ 327,470	$ 9,622,658	$ 8,995,505	$ 627,152
39	Total Commodity	$ 1,283,575	$ 2,006,108	$ 2,665,562	$ 2,170,948	$ 1,776,644	$ 949,978	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875	$ 13,018,474	$ 10,852,815	$ 2,165,659

Northern Utilities - NEW HAMPSHIRE DIVISION
COMMODITY COSTS

	Supply Volumes - Therms	
1	New Hampshire Sales Pipeline	Schedule 8-CAK, LN 2 * LN 55 * 10
	New Hampshire Sales Pipeline Remaining	Schedule 8-CAK, LN 3 * LN 55 * 10
3	New Hampshire Sales Storage	Schedule 8-CAK, LN 4 * LN 55 * 10
4	New Hampshire Sales Peaking	Schedule 8-CAK, LN 5 * LN 55 * 10
5	Total New Hampshire Firm Sales Sendout	Sum LN 1 : LN 4
6		
7	New Hampshire Interruptible Sendout (Pipeline)	Schedule 8-CAK, LN 9 * 10
8		
9	Total Firm Sendout	LN 5
10	Total Firm Sales	Schedule 6-CAK, LN 11
11	Difference (LAUF & Company Use)	LN 9 - LN 10
12	Percent Difference	LN 11 / LN 9
13		
14	**Variable Costs**	
15	New Hampshire Sales Pipeline Commodity	Schedule 8-CAK, LN 69
16	New Hampshire Sales Pipeline Remaining	Schedule 8-CAK, LN 70
17	New Hampshire Total Storage	Schedule 8-CAK, LN 71
18	New Hampshire Total Peaking	Schedule 8-CAK, LN 72
19	New Hampshire Inventory Finance Charge	Schedule 8-CAK, LN 75
20	Total New Hampshire Sales Variable Costs	Sum LN 15 : LN 19
21		
22	New Hampshire Interruptible Commodity Costs	Schedule 8-CAK, LN 38
23	Total New Hampshire Commodity Costs	LN 20 + LN 22
24		
25	**Supply Cost/Therm**	
26	New Hampshire Sales Pipeline Commodity	LN 15 / LN 1
	New Hampshire Sales Pipeline Remaining	LN 16 / LN 2
28	New Hampshire Storage Excld Inventory Finance Costs	LN 17 / LN 3
29	New Hampshire Peaking Excld Inventory Finance Costs	LN 18 / LN 4
30	New Hampshire Inventory Finance Costs per Dth Stor and Peak	LN 19 / Sum (LN 3 : LN 4)
31	Weighted Average Cost per Dth Sendout	LN 20 / LN 9
32		
33	New Hampshire Interruptible Cost / Therm	LN 22 / LN 7
34		
35	**Commodity Costs**	
36	Base Commodity, therms	Schedule 6-CAK, LN 64
37	Base Commodity Cost	Min (LN 26 * LN 36), LN 20
38	Remaining Commodity	LN 23 - LN 37
39	Total Commodity	LN 37 + LN 38

REDACTED

Northern Utilities, Inc.
Storage Inventory and Activity Costs

Denotes Confidential Information

Tennessee Storage

Month	Beginning Inventory Volume	Injections	Withdrawals	Ending Inventory Volume	Beginning Inventory Cost	Beginning Inventory Rate	Injection Rate	Injected Value	Withdrawal Rate	Withdrawn Value	Ending Inventory Value	Interest Rate	Carrying Costs	Ending Inventory Value Excluding	Withdrawn Value plus Charges
Nov-19	210,095	-	-	210,095	314,932	$ 1.50	NA	$ -	$ 1.50	$ -	$ 314,932	1.30%	$ 341	$ 314,932	$ -
Dec-19	210,095	-	67,473	142,622	$ 314,932	$ 1.50	NA	$ -	$ 1.50	$ 101,142	$ 213,790	1.30%	$ 286	$ 213,790	$ 101,142
Jan-20	142,622	-	67,473	75,149	$ 213,790	$ 1.50	NA	$ -	$ 1.50	$ 101,142	$ 112,648	1.30%	$ 177	$ 112,648	$ 101,142
Feb-20	75,149	-	60,587	14,561	$ 112,648	$ 1.50	NA	$ -	$ 1.50	$ 90,820	$ 21,827	1.30%	$ 73	$ 21,827	$ 90,820
Mar-20	14,561	-	14,561	-	$ 21,827	$ 1.50	NA	$ -	$ 1.50	$ 21,827	$ -	1.30%	$ 12	$ -	$ 21,827
Apr-20	-	-	-	-	$ -	NA	NA	$ -	$ -	$ -	$ -	1.30%	$ -	$ -	$ -
May-20	-	42,775	-	42,775	$ -	NA	$ 2.53	$ 108,013	$ -	$ -	$ 108,013	1.30%	$ 59	$ 108,013	$ -
Jun-20	42,775	41,395	-	84,171	$ 108,013	$ 2.53	$ 2.52	$ 104,203	$ 2.52	$ -	$ 212,216	1.30%	$ 173	$ 212,216	$ -
Jul-20	84,171	-	-	84,171	$ 212,216	$ 2.52	NA	$ -	$ 2.52	$ -	$ 212,216	1.30%	$ 230	$ 212,216	$ -
Aug-20	84,171	41,754	-	125,924	$ 212,216	$ 2.52	$ 2.54	$ 106,096	$ 2.53	$ -	$ 318,313	1.30%	$ 287	$ 318,312	$ -
Sep-20	125,924	41,395	-	167,320	$ 318,313	$ 2.53	$ 2.37	$ 97,955	$ 2.49	$ -	$ 416,268	1.30%	$ 398	$ 416,267	$ -
Oct-20	167,320	42,775	-	210,095	$ 416,268	$ 2.49	$ 2.39	$ 102,260	$ 2.47	$ -	$ 518,527	1.30%	$ 506	$ 518,526	$ -

Union Storage

Month	Beginning Inventory Volume	Injections	Withdrawals	Ending Inventory Volume	Beginning Inventory Cost	Beginning Inventory Rate	Injection Rate	Injected Value	Withdrawal Rate	Withdrawn Value	Ending Inventory Value	Interest Rate	Carrying Costs	Ending Inventory Value Excluding	Withdrawn Value plus Charges
Nov-19	3,240,502	-	242,662	2,997,840	$ 5,696,802	$ 1.76	NA	$ -	$ 1.76	$ 426,600	$ 5,270,202			$ 5,270,202	$ 426,600
Dec-19	2,997,840	-	626,554	2,371,286	$ 5,270,202	$ 1.76	NA	$ -	$ 1.76	$ 1,101,482	$ 4,168,720			$ 4,168,720	$ 1,101,482
Jan-20	2,371,286	-	720,240	1,651,045	$ 4,168,720	$ 1.76	NA	$ -	$ 1.76	$ 1,266,183	$ 2,902,538			$ 2,902,538	$ 1,266,183
Feb-20	1,651,045	-	746,937	904,108	$ 2,902,538	$ 1.76	NA	$ -	$ 1.76	$ 1,313,115	$ 1,589,422			$ 1,589,422	$ 1,313,115
Mar-20	904,108	-	442,456	461,652	$ 1,589,422	$ 1.76	NA	$ -	$ 1.76	$ 777,838	$ 811,585			$ 811,585	$ 777,838
Apr-20	461,652	-	-	461,652	$ 811,585	$ 1.76	NA	$ -	$ 1.76		$ 811,585			$ 811,585	$ -
May-20	461,652	748,903	-	1,210,556	$ 811,585	$ 2	$ 2.62	$1,959,757	$ 2.29		$ 2,771,342			$ 2,771,342	$ -
Jun-20	1,210,556	724,745	-	1,935,301	$ 2,771,342	$ 2.29	$ 2.60	$1,887,135	$ 2.41		$ 4,658,476			$ 4,658,476	$ -
Jul-20	1,935,301	340,007	-	2,275,308	$ 4,658,476	$ 2.41	$ 2.63	$ 894,258	$ 2.44		$ 5,552,735			$ 5,552,735	$ -
Aug-20	2,275,308	-	-	2,275,308	$ 5,552,735	$ 2.44	NA	$ -	$ 2.44		$ 5,552,735			$ 5,552,735	$ -
Sep-20	2,275,308	-	-	2,275,308	$ 5,552,735	$ 2.44	NA	$ -	$ 2.44		$ 5,552,735			$ 5,552,735	$ -
Oct-20	2,275,308	748,903	-	3,024,211	$ 5,552,735	$ 2.44	$ -	$1,944,847	$ 2.48		$ 7,497,581			$ 7,497,581	$ -

LNG Storage

Month	Beginning Inventory Volume	Injections	Withdrawals	Ending Inventory Volume	Beginning Inventory Cost	Beginning Inventory Rate	Injection Rate	Injected Value	Withdrawal Rate	Withdrawn Value	Ending Inventory Value	Interest Rate	Carrying Costs	Ending Inventory Value Excluding	Withdrawn Value plus Charges
Nov-19	12,000	1,794	1,794	12,000	[redacted]										
Dec-19	12,000	22,761	22,761	12,000											
Jan-20	12,000	51,303	52,503	10,800											
Feb-20	10,800	33,254	33,254	10,800											
Mar-20	10,800	1,854	1,854	10,800											
Apr-20	10,800	1,794	1,794	10,800											
May-20	10,800	3,060	1,860	12,000											
Jun-20	12,000	1,800	1,800	12,000											
Jul-20	12,000	1,860	1,860	12,000											
Aug-20	12,000	660	1,860	10,800											
Sep-20	10,800	3,000	1,800	12,000											
Oct-20	12,000	1,860	1,860	12,000											

Northern Utilities - NEW HAMPSHIRE DIVISION
Allocation of Commodity Costs to Customer Classes

Base Commodity Costs

	BASE SENDOUT BY CLASS	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
2	**Total Therms**															
3	Res Heat	398,258	411,533	411,533	371,707	411,533	398,258	411,533	398,258	408,474	411,533	398,258	411,533	4,842,409	2,402,821	2,439,588
4	Res General	9,200	9,507	9,507	8,587	9,507	9,200	9,507	9,200	9,436	9,507	9,200	9,507	111,863	55,507	56,356
5	G50 Low Annual-Low Winter	60,765	62,790	62,790	56,714	62,790	60,765	62,790	60,765	62,324	62,790	60,765	62,790	738,838	366,614	372,224
6	G40 Low Annual-High Winter	150,397	155,410	155,410	140,371	155,410	150,397	155,410	150,397	154,255	155,410	150,397	155,410	1,828,675	907,395	921,280
7	G51 Med Annual-Low Winter	107,182	110,755	110,755	100,037	110,755	105,343	110,755	107,182	109,932	110,755	107,182	110,755	1,301,390	644,827	656,562
8	G41 Med Annual-High Winter	145,740	150,598	150,598	136,024	150,598	145,740	150,598	145,740	149,478	150,598	145,740	150,598	1,772,048	879,297	892,751
9	G52 High Annual-Low Winter	58,087	60,023	60,023	54,215	60,023	49,858	60,023	58,087	59,577	60,023	58,087	60,023	698,050	342,229	355,821
10	G42 High Annual-High Winter	23,253	24,028	24,028	21,703	24,028	23,253	24,028	23,253	23,850	24,028	23,253	24,028	282,733	140,293	142,440
11	Total Firm Sales	952,882	984,644	984,644	889,356	984,644	942,813	984,644	952,882	977,326	984,644	952,882	984,644	11,576,005	5,738,983	5,837,022
12	**% of Total**															
13	Res Heat	41.80%	41.80%	41.80%	41.80%	41.80%	42.24%	41.80%	41.80%	41.80%	41.80%	41.80%	41.80%			
14	Res General	0.97%	0.97%	0.97%	0.97%	0.97%	0.98%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%			
15	G50 Low Annual-Low Winter	6.38%	6.38%	6.38%	6.38%	6.38%	6.45%	6.38%	6.38%	6.38%	6.38%	6.38%	6.38%			
16	G40 Low Annual-High Winter	15.78%	15.78%	15.78%	15.78%	15.78%	15.95%	15.78%	15.78%	15.78%	15.78%	15.78%	15.78%			
17	G51 Med Annual-Low Winter	11.25%	11.25%	11.25%	11.25%	11.25%	11.17%	11.25%	11.25%	11.25%	11.25%	11.25%	11.25%			
18	G41 Med Annual-High Winter	15.29%	15.29%	15.29%	15.29%	15.29%	15.46%	15.29%	15.29%	15.29%	15.29%	15.29%	15.29%			
19	G52 High Annual-Low Winter	6.10%	6.10%	6.10%	6.10%	6.10%	5.29%	6.10%	6.10%	6.10%	6.10%	6.10%	6.10%			
20	G42 High Annual-High Winter	2.44%	2.44%	2.44%	2.44%	2.44%	2.47%	2.44%	2.44%	2.44%	2.44%	2.44%	2.44%			
21	Total Firm Sales	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			

22	BASE COMMODITY COSTS	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
23	TOTAL BASE COMMODITY	$ 276,302	$ 331,242	$ 345,346	$ 310,033	$ 329,959	$ 264,428	$ 260,740	$ 250,579	$ 260,197	$ 261,838	$ 247,748	$ 257,405	$ 3,395,816	$ 1,857,310	$ 1,538,506
24	Res Heat	$ 115,481	$ 138,443	$ 144,338	$ 129,579	$ 137,906	$ 111,698	$ 108,976	$ 104,730	$ 108,750	$ 109,435	$ 103,547	$ 107,583	$ 1,420,464	$ 777,444	$ 643,020
25	Res General	$ 2,668	$ 3,198	$ 3,334	$ 2,993	$ 3,186	$ 2,580	$ 2,517	$ 2,419	$ 2,512	$ 2,528	$ 2,392	$ 2,485	$ 32,814	$ 17,959	$ 14,854
26	G50 Low Annual-Low Winter	$ 17,620	$ 21,123	$ 22,023	$ 19,771	$ 21,041	$ 17,043	$ 16,627	$ 15,979	$ 16,593	$ 16,697	$ 15,799	$ 16,415	$ 216,730	$ 118,620	$ 98,110
27	G40 Low Annual-High Winter	$ 43,610	$ 52,281	$ 54,507	$ 48,934	$ 52,079	$ 42,181	$ 41,154	$ 39,550	$ 41,068	$ 41,327	$ 39,103	$ 40,627	$ 536,421	$ 293,592	$ 242,828
28	G51 Med Annual-Low Winter	$ 31,079	$ 37,259	$ 38,845	$ 34,873	$ 37,115	$ 29,545	$ 29,329	$ 28,186	$ 29,268	$ 29,452	$ 27,867	$ 28,954	$ 381,771	$ 208,716	$ 173,055
29	G41 Med Annual-High Winter	$ 42,259	$ 50,662	$ 52,819	$ 47,418	$ 50,466	$ 40,875	$ 39,879	$ 38,325	$ 39,796	$ 40,047	$ 37,892	$ 39,369	$ 519,810	$ 284,501	$ 235,309
30	G52 High Annual-Low Winter	$ 16,843	$ 20,192	$ 21,052	$ 18,899	$ 20,114	$ 13,983	$ 15,895	$ 15,275	$ 15,861	$ 15,961	$ 15,103	$ 15,691	$ 204,871	$ 111,084	$ 93,786
31	G42 High Annual-High Winter	$ 6,743	$ 8,083	$ 8,427	$ 7,566	$ 8,052	$ 6,522	$ 6,363	$ 6,115	$ 6,350	$ 6,390	$ 6,046	$ 6,281	$ 82,936	$ 45,393	$ 37,544
32																
33	Residential	$ 118,148	$ 141,641	$ 147,672	$ 132,572	$ 141,092	$ 114,278	$ 111,494	$ 107,149	$ 111,262	$ 111,963	$ 105,939	$ 110,068	$ 1,453,278	$ 795,404	$ 657,874
34	SALES HLF CLASSES	$ 65,542	$ 78,574	$ 81,920	$ 73,543	$ 78,270	$ 60,571	$ 61,850	$ 59,440	$ 61,722	$ 62,111	$ 58,769	$ 61,059	$ 803,371	$ 438,421	$ 364,951
35	SALES LLF CLASSES	$ 92,612	$ 111,027	$ 115,754	$ 103,918	$ 110,597	$ 89,578	$ 87,396	$ 83,990	$ 87,214	$ 87,764	$ 83,041	$ 86,278	$ 1,139,167	$ 623,485	$ 515,681

Northern Utilities - NEW HAMPSHIRE DIVISION
Allocation of Commodity Costs to Customer Classes

Base Commodity Costs

1	**BASE SENDOUT BY CLASS**	
2	**Total Therms**	
3	Res Heat	Schedule 6-CAK, LN 52
4	Res General	Schedule 6-CAK, LN 53
5	G50 Low Annual-Low Winter	Schedule 6-CAK, LN 54
6	G40 Low Annual-High Winter	Schedule 6-CAK, LN 55
7	G51 Med Annual-Low Winter	Schedule 6-CAK, LN 56
8	G41 Med Annual-High Winter	Schedule 6-CAK, LN 57
9	G52 High Annual-Low Winter	Schedule 6-CAK, LN 58
10	G42 High Annual-High Winter	Schedule 6-CAK, LN 59
11	Total Firm Sales	Sum LN 3 : LN 10
12	**% of Total**	
13	Res Heat	LN 3 / LN 11
14	Res General	LN 4 / LN 11
15	G50 Low Annual-Low Winter	LN 5 / LN 11
16	G40 Low Annual-High Winter	LN 6 / LN 11
17	G51 Med Annual-Low Winter	LN 7 / LN 11
18	G41 Med Annual-High Winter	LN 8 / LN 11
19	G52 High Annual-Low Winter	LN 9 / LN 11
20	G42 High Annual-High Winter	LN 10 / LN 11
21	Total Firm Sales	Sum LN 13 : LN 20

22	**BASE COMMODITY COSTS**	
23	TOTAL BASE COMMODITY	Schedule 9-CAK, LN 37
24	Res Heat	LN 23 * LN 13
25	Res General	LN 23 * LN 14
26	G50 Low Annual-Low Winter	LN 23 * LN 15
27	G40 Low Annual-High Winter	LN 23 * LN 16
28	G51 Med Annual-Low Winter	LN 23 * LN 17
29	G41 Med Annual-High Winter	LN 23 * LN 18
30	G52 High Annual-Low Winter	LN 23 * LN 19
31	G42 High Annual-High Winter	LN 23 * LN 20
32		
33	Residential	LN 24 + LN 25
34	SALES HLF CLASSES	LN 26 + LN 28 + LN 30
35	SALES LLF CLASSES	LN 27 + LN 29 + LN 31

Northern Utilities - NEW HAMPSHIRE DIVISION
Allocation of Commodity Costs to Customer Classes

Remaining Commodity Costs

		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
36	**REMAINING SENDOUT BY CLASS**															
37	**Total Therms**															
38	Res Heat	1,785,942	2,764,673	3,372,294	2,845,213	2,372,313	1,200,257	312,316	86,266	-	3,059	53,115	519,320	15,314,766	14,340,691	974,074
39	Res General	12,058	21,407	27,320	22,723	17,588	6,358	7,215	1,993	-	71	1,227	11,997	129,955	107,454	22,502
40	G50 Low Annual-Low Winter	28,221	66,611	91,366	74,346	50,626	4,360	47,652	13,162	-	467	8,104	79,236	464,150	315,529	148,621
41	G40 Low Annual-High Winter	861,212	1,315,645	1,597,064	1,349,541	1,133,924	589,953	117,942	32,577	-	1,155	20,058	196,115	7,215,186	6,847,339	367,847
42	G51 Med Annual-Low Winter	36,757	98,558	138,600	111,959	72,701	-	84,053	23,217	-	823	14,295	139,764	720,727	458,576	262,151
43	G41 Med Annual-High Winter	765,185	1,174,045	1,427,455	1,205,599	1,010,411	520,924	114,290	31,568	-	1,119	19,437	190,042	6,460,076	6,103,620	356,456
44	G52 High Annual-Low Winter	10,038	39,043	57,994	46,121	26,805	-	45,552	12,582	-	446	7,747	75,744	322,073	180,002	142,072
45	G42 High Annual-High Winter	160,181	242,717	293,746	248,461	209,765	110,994	18,235	5,037	-	179	3,101	30,321	1,322,737	1,265,863	56,873
46	Total Firm Sales	3,659,596	5,722,698	7,005,839	5,903,964	4,894,132	2,432,845	747,254	206,402	-	7,319	127,084	1,242,537	31,949,670	29,619,074	2,330,596
47	**% of Total**															
48	Res Heat	48.80%	48.31%	48.14%	48.19%	48.47%	49.34%	41.80%	41.80%	41.80%	41.80%	41.80%	41.80%			
49	Res General	0.33%	0.37%	0.39%	0.38%	0.36%	0.26%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%			
50	G50 Low Annual-Low Winter	0.77%	1.16%	1.30%	1.26%	1.03%	0.18%	6.38%	6.38%	6.38%	6.38%	6.38%	6.38%			
51	G40 Low Annual-High Winter	23.53%	22.99%	22.80%	22.86%	23.17%	24.25%	15.78%	15.78%	15.78%	15.78%	15.78%	15.78%			
52	G51 Med Annual-Low Winter	1.00%	1.72%	1.98%	1.90%	1.49%	0.00%	11.25%	11.25%	11.25%	11.25%	11.25%	11.25%			
53	G41 Med Annual-High Winter	20.91%	20.52%	20.38%	20.42%	20.65%	21.41%	15.29%	15.29%	15.29%	15.29%	15.29%	15.29%			
54	G52 High Annual-Low Winter	0.27%	0.68%	0.83%	0.78%	0.55%	0.00%	6.10%	6.10%	6.10%	6.10%	6.10%	6.10%			
55	G42 High Annual-High Winter	4.38%	4.24%	4.19%	4.21%	4.29%	4.56%	2.44%	2.44%	2.44%	2.44%	2.44%	2.44%			
56	Total Firm Sales	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			

		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
57	**REMAINING COMMODITY COSTS**															
58	REMAINING COMMODITY	$ 1,007,273	$ 1,674,866	$ 2,320,216	$ 1,860,915	$ 1,446,686	$ 685,550	$ 200,512	$ 56,785	$ 2,487	$ 4,438	$ 35,461	$ 327,470	$ 9,622,658	$ 8,995,505	$ 627,152
59	Res Heat	$ 491,566	$ 809,139	$ 1,116,847	$ 896,804	$ 701,246	$ 338,220	$ 83,804	$ 23,733	$ 1,039	$ 1,855	$ 14,821	$ 136,866	$ 4,615,940	$ 4,353,821	$ 262,119
60	Res General	$ 3,319	$ 6,265	$ 9,048	$ 7,162	$ 5,199	$ 1,792	$ 1,936	$ 548	$ 24	$ 43	$ 342	$ 3,162	$ 38,840	$ 32,785	$ 6,055
61	G50 Low Annual-Low Winter	$ 7,768	$ 19,495	$ 30,259	$ 23,434	$ 14,965	$ 1,229	$ 12,787	$ 3,621	$ 159	$ 283	$ 2,261	$ 20,883	$ 137,142	$ 97,148	$ 39,993
62	G40 Low Annual-High Winter	$ 237,041	$ 385,051	$ 528,921	$ 425,372	$ 335,183	$ 166,242	$ 31,648	$ 8,963	$ 393	$ 700	$ 5,597	$ 51,686	$ 2,176,797	$ 2,077,811	$ 98,986
63	G51 Med Annual-Low Winter	$ 10,117	$ 28,845	$ 45,902	$ 35,289	$ 21,490	$ -	$ 22,554	$ 6,387	$ 280	$ 499	$ 3,989	$ 36,835	$ 212,187	$ 141,644	$ 70,544
64	G41 Med Annual-High Winter	$ 210,611	$ 343,609	$ 472,749	$ 380,002	$ 298,673	$ 146,791	$ 30,668	$ 8,685	$ 380	$ 679	$ 5,424	$ 50,085	$ 1,948,355	$ 1,852,435	$ 95,921
65	G52 High Annual-Low Winter	$ 2,763	$ 11,427	$ 19,207	$ 14,537	$ 7,923	$ -	$ 12,223	$ 3,462	$ 152	$ 271	$ 2,162	$ 19,962	$ 94,088	$ 55,857	$ 38,231
66	G42 High Annual-High Winter	$ 44,088	$ 71,036	$ 97,284	$ 78,314	$ 62,006	$ 31,277	$ 4,893	$ 1,386	$ 61	$ 108	$ 865	$ 7,991	$ 399,309	$ 384,005	$ 15,304
67																
68	Residential	$ 494,885	$ 815,404	$ 1,125,895	$ 903,966	$ 706,445	$ 340,011	$ 85,740	$ 24,282	$ 1,063	$ 1,898	$ 15,163	$ 140,028	$ 4,654,780	$ 4,386,606	$ 268,174
69	SALES HLF CLASSES	$ 20,648	$ 59,767	$ 95,368	$ 73,260	$ 44,378	$ 1,229	$ 47,564	$ 13,470	$ 590	$ 1,053	$ 8,412	$ 77,680	$ 443,417	$ 294,649	$ 148,768
70	SALES LLF CLASSES	$ 491,741	$ 799,695	$ 1,098,953	$ 883,688	$ 695,862	$ 344,310	$ 67,208	$ 19,033	$ 834	$ 1,487	$ 11,886	$ 109,762	$ 4,524,461	$ 4,314,250	$ 210,211

Total Commodity Costs

		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Annual	Winter	Summer
71	**TOTAL COMMODITY COSTS**															
72	TOTAL COMMODITY	$ 1,283,575	$ 2,006,108	$ 2,665,562	$ 2,170,948	$ 1,776,644	$ 949,978	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875	$ 13,018,474	$ 10,852,815	$ 2,165,659
73	Res Heat	$ 607,046	$ 947,582	$ 1,261,185	$ 1,026,383	$ 839,152	$ 449,918	$ 192,780	$ 128,463	$ 109,789	$ 111,290	$ 118,368	$ 244,449	$ 6,036,404	$ 5,131,265	$ 905,139
74	Res General	$ 5,987	$ 9,463	$ 12,382	$ 10,156	$ 8,385	$ 4,372	$ 4,453	$ 2,968	$ 2,536	$ 2,571	$ 2,734	$ 5,647	$ 71,653	$ 50,744	$ 20,909
75	G50 Low Annual-Low Winter	$ 25,387	$ 40,618	$ 52,281	$ 43,204	$ 36,006	$ 18,271	$ 29,414	$ 19,600	$ 16,751	$ 16,980	$ 18,060	$ 37,297	$ 353,871	$ 215,768	$ 138,103
76	G40 Low Annual-High Winter	$ 280,651	$ 437,332	$ 583,428	$ 474,306	$ 387,262	$ 208,424	$ 72,801	$ 48,512	$ 41,460	$ 42,027	$ 44,700	$ 92,313	$ 2,713,217	$ 2,371,403	$ 341,814
77	G51 Med Annual-Low Winter	$ 41,196	$ 66,104	$ 84,747	$ 70,163	$ 58,605	$ 29,545	$ 51,883	$ 34,573	$ 29,547	$ 29,951	$ 31,856	$ 65,788	$ 593,958	$ 350,360	$ 243,598
78	G41 Med Annual-High Winter	$ 252,870	$ 394,271	$ 525,569	$ 427,420	$ 349,139	$ 187,666	$ 70,547	$ 47,010	$ 40,177	$ 40,726	$ 43,316	$ 89,455	$ 2,468,165	$ 2,136,935	$ 331,230
79	G52 High Annual-Low Winter	$ 19,606	$ 31,619	$ 40,259	$ 33,437	$ 28,038	$ 13,983	$ 28,118	$ 18,737	$ 16,013	$ 16,232	$ 17,264	$ 35,654	$ 298,959	$ 166,942	$ 132,017
80	G42 High Annual-High Winter	$ 50,831	$ 79,119	$ 105,711	$ 85,880	$ 70,058	$ 37,799	$ 11,256	$ 7,501	$ 6,410	$ 6,498	$ 6,911	$ 14,273	$ 482,246	$ 429,398	$ 52,848
81																
82	Residential	$ 613,033	$ 957,045	$ 1,273,567	$ 1,036,538	$ 847,537	$ 454,290	$ 197,234	$ 131,430	$ 112,325	$ 113,861	$ 121,102	$ 250,096	$ 6,108,058	$ 5,182,009	$ 926,048
83	SALES HLF CLASSES	$ 86,190	$ 138,341	$ 177,288	$ 146,804	$ 122,648	$ 61,800	$ 109,414	$ 72,910	$ 62,312	$ 63,163	$ 67,180	$ 138,739	$ 1,246,788	$ 733,070	$ 513,718
84	SALES LLF CLASSES	$ 584,352	$ 910,722	$ 1,214,708	$ 987,606	$ 806,459	$ 433,888	$ 154,604	$ 103,023	$ 88,047	$ 89,251	$ 94,927	$ 196,040	$ 5,663,628	$ 4,937,736	$ 725,892
85																
86	% ALLOCATION BETWEEN HLF & LLF															
87	HLF CLASSES%														12.93%	41.44%
88	LLF CLASSES %														87.07%	58.56%

Northern Utilities - NEW HAMPSHIRE DIVISION
Allocation of Commodity Costs to Customer Classes

Remaining Commodity Costs

36	**REMAINING SENDOUT BY CLASS**	
37	**Total Therms**	
38	Res Heat	Schedule 6-CAK, LN 68
39	Res General	Schedule 6-CAK, LN 69
40	G50 Low Annual-Low Winter	Schedule 6-CAK, LN 70
41	G40 Low Annual-High Winter	Schedule 6-CAK, LN 71
42	G51 Med Annual-Low Winter	Schedule 6-CAK, LN 72
43	G41 Med Annual-High Winter	Schedule 6-CAK, LN 73
44	G52 High Annual-Low Winter	Schedule 6-CAK, LN 74
45	G42 High Annual-High Winter	Schedule 6-CAK, LN 75
46	Total Firm Sales	Sum LN 38 : LN 45
47	**% of Total**	
48	Res Heat	LN 38 / LN 46
49	Res General	LN 39 / LN 46
50	G50 Low Annual-Low Winter	LN 40 / LN 46
51	G40 Low Annual-High Winter	LN 41 / LN 46
52	G51 Med Annual-Low Winter	LN 42 / LN 46
53	G41 Med Annual-High Winter	LN 43 / LN 46
54	G52 High Annual-Low Winter	LN 44 / LN 46
55	G42 High Annual-High Winter	LN 45 / LN 46
56	Total Firm Sales	Sum LN 62 : LN 69

57	**REMAINING COMMODITY COSTS**	
58	REMAINING COMMODITY	Schedule 9-CAK, LN 38
59	Res Heat	LN 58 * LN 48
60	Res General	LN 58 * LN 49
61	G50 Low Annual-Low Winter	LN 58 * LN 50
62	G40 Low Annual-High Winter	LN 58 * LN 51
63	G51 Med Annual-Low Winter	LN 58 * LN 52
64	G41 Med Annual-High Winter	LN 58 * LN 53
65	G52 High Annual-Low Winter	LN 58 * LN 54
66	G42 High Annual-High Winter	LN 58 * LN 55
67		
68	Residential	LN 59 + LN 60
69	SALES HLF CLASSES	LN 61 + LN 63 + LN 65
70	SALES LLF CLASSES	LN 62 + LN 64 + LN 66

Total Commodity Costs

71	**TOTAL COMMODITY COSTS**	
72	TOTAL COMMODITY	Schedule 9-CAK, LN 39
73	Res Heat	LN 24 + LN 59
74	Res General	LN 25 + LN 60
75	G50 Low Annual-Low Winter	LN 26 + LN 61
76	G40 Low Annual-High Winter	LN 27 + LN 62
77	G51 Med Annual-Low Winter	LN 28 + LN 63
78	G41 Med Annual-High Winter	LN 29 + LN 64
79	G52 High Annual-Low Winter	LN 30 + LN 65
80	G42 High Annual-High Winter	LN 31 + LN 66
81		
82	Residential	LN 73 + LN 74
83	SALES HLF CLASSES	LN 75 + LN 77 + LN 79
84	SALES LLF CLASSES	LN 76 + LN 78 + LN 80

Northern Utilities - NEW HAMPSHIRE DIVISION
Supporting Detail to Proposed Tariff Sheets
Demand and Commodity Cost Reallocation to HLF and LLF Customers

		Winter	Summer	Annual	
1	Demand	$ 13,021,761	$ 1,175,460	$ 14,197,221	Schedule 5-CAK, LN 80
2	Commodity	$ 10,852,815	$ 2,165,659	$ 13,018,474	Schedule 9-CAK, LN 39
3	Total	$ 23,874,576	$ 3,341,119	$ 27,215,695	LN 1 + LN 2
4					
5	Forecasted Firm Sales (Therms)	34,897,412	8,061,210	42,958,621	Schedule 6-CAK, LN 11
6	Forecasted Residential Sales (Therms)	16,686,215	3,447,020	20,133,234	Schedule 6-CAK, LN 3
7	Average Residential Rate:	**Winter**	**Summer**	**Annual**	
8	Average Demand Rate	$0.3731	$0.1458		LN 1 / LN 5
9	Average Commodity Rate	$0.3110	$0.2687		LN 2 / LN 5
10	Average Rate	$0.6841	$0.4145		LN 3 / LN 5
11					
12	**Residential Reallocation:**	**Winter**	**Summer**	**Annual**	
13	Demand Costs Allocated To Residential per SMBA	$ 6,565,465	$ 541,485	$ 7,106,949	Schedule 7-CAK, LN 169
14	Demand Costs Allocated To Residential per Avg Res. Rate	$ 6,226,361	$ 502,575	$ 6,728,937	LN 8 * LN 6
15	**Demand Reallocation:**	$ 339,103	$ 38,909	$ 378,012	LN 13 - LN 14
16	**HLF Allocation**	$ 31,569	$ 10,993	$ 42,562	LN 15 * LN 20
17	**LLF Allocation**	$ 307,534	$ 27,917	$ 335,451	LN 15 * LN 21
18					
19	**SMBA Capacity Cost Allocation (%)**				
20	HLF	9.31%	28.25%		Schedule 7-CAK, LN 174
21	LLF	90.69%	71.75%		Schedule 7-CAK, LN 175
22					
23	Commodity Costs Allocated To Residential per SMBA	$ 5,182,009	$ 926,048	$ 6,108,058	Schedule 11-CAK, LN 82
24	Commodity Costs Allocated To Residential per Avg Res. Rate	$ 5,189,279	$ 926,214	$ 6,115,493	LN 9 * LN 6
25	**Commodity Reallocation:**	$ (7,269)	$ (166)	$ (7,435)	LN 23 - LN 24
26	**HLF Allocation**	$ (940)	$ (69)	$ (1,009)	LN 25 * LN 30
27	**LLF Allocation**	$ (6,330)	$ (97)	$ (6,427)	LN 25 * LN 31
28					
29	**SMBA Commodity Cost Allocation (%)**				
30	HLF	12.93%	41.44%		Schedule 11-CAK, LN 87
31	LLF	87.07%	58.56%		Schedule 11-CAK, LN 88

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
SCHEDULE 1: SUMMARY OF ANNUAL BALANCE
August 2019 - October 2020

	AMOUNT	
Annual Beginning Balance	$ (3,464,049)	FORM III SCHEDULE 2
Less: Reported Collections	$ (21,019,661)	FORM III SCHEDULE 3
Add: Cost of Firm Gas Allowable	$ 25,380,497	FORM III SCHEDULE 4
Add: Interest	$ (140,854)	FORM III SCHEDULE 2
Annual Ending Balance	$ 755,934	

Allocation of Reconciliation Balance to 2020 / 2021 Winter Season and 2021 Summer Season

Winter Season Sales (DTHs)	3,489,741	Schedule 6-CAK
Summer Season Sales(DTHs)	806,121	Schedule 6-CAK
Winter Season Sales Percentage	81.23%	
Summer Season Sales Percentage	18.77%	
Reconciliation Allocated to Winter Season	$ 614,082	
Reconciliation Allocated to Summer Season	$ 141,851	

FORM III
Schedule 2

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
SCHEDULE 2: ADJUSTMENTS TO REPORTED SUMMER, WINTER AND ANNUAL ACCOUNTS
August 2019 - October 2020
Acct 191

	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20 (Estimated)	Sep-20 (Estimated)	Oct-20 (Estimated)	Total
Inital Account Beginning Balance	$ (3,461,695)															
Adjustment (1)	$ (2,354)															
Adjusted Beginning Balance	$ (3,464,049)	$ (3,215,882)	$ (2,923,112)	$ (2,723,393)	$ (2,989,174)	$ (2,517,994)	$ (2,468,978)	$ (2,618,103)	$ (3,303,713)	$ (3,378,341)	$ (2,940,853)	$ (2,158,585)	$ (1,456,073)	$ (657,097)	$ 85,829	
Plus: Cost of Firm Gas (Schedule 4)	$ 503,369	$ 564,496	$ 688,371	$ 2,323,608	$ 4,459,112	$ 3,863,342	$ 3,017,046	$ 2,280,546	$ 1,757,285	$ 941,598	$ 913,641	$ 808,418	$ 944,082	$ 1,032,655	$ 1,282,928	$ 25,380,497
Less: Reported Collections (Schedule 3)	$ (239,929)	$ (257,690)	$ (476,327)	$ (2,576,921)	$ (3,975,911)	$ (3,804,475)	$ (3,156,122)	$ (2,954,460)	$ (1,818,714)	$ (491,628)	$ (121,301)	$ (101,018)	$ (142,248)	$ (288,956)	$ (613,962)	$ (21,019,661)
Annual Account Ending Balance	$ (3,200,609)	$ (2,909,076)	$ (2,711,068)	$ (2,976,705)	$ (2,505,974)	$ (2,459,127)	$ (2,608,054)	$ (3,292,016)	$ (3,365,142)	$ (2,928,371)	$ (2,148,512)	$ (1,451,185)	$ (654,240)	$ 86,601	$ 754,795	
Month's Average Balance	$ (3,332,329)	$ (3,062,479)	$ (2,817,090)	$ (2,850,049)	$ (2,747,574)	$ (2,488,561)	$ (2,538,516)	$ (2,955,059)	$ (3,334,427)	$ (3,153,356)	$ (2,544,682)	$ (1,804,885)	$ (1,055,157)	$ (285,248)	$ 420,312	
Interest Rate (Prime Rate)	5.50%	5.50%	5.25%	5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	
Interest Applied	$ (15,273)	$ (14,036)	$ (12,325)	$ (12,469)	$ (12,021)	$ (9,851)	$ (10,048)	$ (11,697)	$ (13,199)	$ (12,482)	$ (10,073)	$ (4,888)	$ (2,858)	$ (773)	$ 1,138	$ (140,854)
Annual Account Ending Balance w/int	$ (3,215,882)	$ (2,923,112)	$ (2,723,393)	$ (2,989,174)	$ (2,517,994)	$ (2,468,978)	$ (2,618,103)	$ (3,303,713)	$ (3,378,341)	$ (2,940,853)	$ (2,158,585)	$ (1,456,073)	$ (657,097)	$ 85,829	$ 755,934	

(1)Reflects Fuel Tax Recovery Expense of $7,567 plus ATV charges, plus interest of ($9,921), not included in 2018-2019 reconciliation.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
SCHEDULE 3: REVENUE BACKUP TO REPORTED COLLECTIONS
August 2019 - October 2020

													Estimated[1]		
	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Total
Accrued Revenue	$ (8,337)	$ 20,647	$ 56,363	$ 1,192,976	$ 576,774	$ 57,927	$ (603,756)	$ (238,411)	$ (305,768)	$ (557,865)	$ (187,584)	$ (64,808)				
Billed Revenue	$ 248,265	$ 237,043	$ 419,963	$ 1,383,945	$ 3,399,138	$ 3,746,548	$ 3,759,878	$ 3,192,870	$ 2,124,482	$ 1,049,493	$ 308,884	$ 165,827				
Calendarized Revenue	$ 239,929	$ 257,690	$ 476,327	$ 2,576,921	$ 3,975,911	$ 3,804,475	$ 3,156,122	$ 2,954,460	$ 1,818,714	$ 491,628	$ 121,301	$ 101,018	$ 142,248	$ 288,956	$ 613,962	$ 21,019,661

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
SCHEDULE 4: PURCHASED GAS COSTS
August 2019 - October 2020

													Estimated (1)			
Commodity Costs	**Aug-19**	**Sep-19**	**Oct-19**	**Nov-19**	**Dec-19**	**Jan-20**	**Feb-20**	**Mar-20**	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Total**
American Excavators	$ -	$ -	$ -	$ -	$ (1,122)	$ -	$ -	$ -	$ -	$ -	$ -	$ -				
DTE Energy Trading	$ 51,298	$ 35,417	$ 33,946	$ 41,919	$ 45,230	$ 48,436	$ -	$ -	$ -	$ -	$ -	$ -				
Emera Energy Services Corp.	$ 162,425	$ 154,484	$ 179,909	$ 302,973	$ 397,799	$ 484,075	$ 328,399	$ 225,308	$ 187,931	$ 570,088	$ 428,898	$ 98,409				**$ 3,520,697**
Repsol	$ -	$ -	$ -	$ -	$ 708,647	$ 1,666,425	$ 1,649,529	$ 1,714,594	$ 802,063	$ -	$ -	$ -				**$ 6,541,258**
Shell	$ -	$ 9,657	$ 8,520	$ 10,017	$ 312,844	$ 342,855	$ 279,022	$ 188,111	$ 214,872	$ 54,346	$ 4,647	$ 4,078				**$ 1,428,969**
Southwestern	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 27,187	$ 29,402	$ 24,531				
Subtotal - Commodity	$ 213,723	$ 199,558	$ 222,375	$ 354,909	$ 1,463,398	$ 2,541,790	$ 2,256,950	$ 2,128,014	$ 1,204,866	$ 651,620	$ 462,946	$ 127,018				**$ 11,827,168**
Transportation																
Granite	$ 73	$ 86	$ 169	$ 372	$ 521	$ 524	$ 441	$ 277	$ 371	$ (2,711)	$ 103	$ 60				**$ 284**
Emera	$ -	$ -	$ 190	$ 215	$ 335	$ 360	$ 394	$ 389	$ 155	$ 490	$ 221	$ 107				**$ 2,857**
Emera Energy Services	$ -	$ -	$ -	$ -	$ 1,069	$ 1,131	$ 1,708	$ 1,691	$ 681							
Maritimes		$ 647	$ 303	$ 1,213	$ 3,588	$ 10,673	$ 7,736	$ -	$ -	$ 30,387	$ 10,504	$ 43				**$ 65,094**
Tennessee	$ 2,788	$ 2,647	$ 2,401	$ 2,723	$ 2,454	$ 2,730	$ 2,707	$ 2,571	$ 2,539	$ 2,526	$ 2,429	$ 2,133				**$ 30,649**
Subtotal - Commodity Transportation	$ 2,861	$ 3,380	$ 3,062	$ 4,524	$ 7,967	$ 15,417	$ 12,987	$ 4,928	$ 3,745	$ 30,692	$ 13,257	$ 2,343				**$ 105,163**
Commodity Cost Estimates	$ 202,617	$ 225,079	$ 359,561	$ 1,473,647	$ 2,557,717	$ 2,304,354	$ 2,160,209	$ 1,208,937	$ 679,019	$ 339,930	$ 168,987	$ 124,887				**$ 11,804,944**
Commodity Cost Reversals	$ (216,511)	$ (202,617)	$ (225,079)	$ (359,561)	$ (1,473,647)	$ (2,557,717)	$ (2,304,354)	$ (2,160,209)	$ (1,208,937)	$ (679,019)	$ (339,930)	$ (168,987)				**$ (11,896,568)**
Subtotal - Estimates	$ (13,894)	$ 22,462	$ 134,482	$ 1,114,086	$ 1,084,070	$ (253,363)	$ (144,145)	$ (951,272)	$ (529,918)	$ (339,089)	$ (170,943)	$ (44,100)				**$ 24,339,788**
Subtotal - Supply	$ 202,690	$ 225,399	$ 359,919	$ 1,473,519	$ 2,555,435	$ 2,303,845	$ 2,125,792	$ 1,181,670	$ 678,693	$ 343,223	$ 305,260	$ 85,261				**$ 11,840,707**
Withdrawal - Underground Storage	$ 701	$ 9,246	$ (11,577)	$ 14,188	$ 958,654	$ 645,431	$ 441,433	$ 282,796	$ 1,075	$ (803)	$ (3)	$ (14)				**$ 2,341,126**
ATV Reconciliation Charges	$ (1,673)	$ 4,800	$ 10,401					$ -		$ -	$ -	$ -				**$ 13,528**
Off System Sales	$ -	$ -	$ -	$ (83)	$ -	$ -	$ (49,725)	$ (302,011)	$ -	$ -	$ (6,006)	$ -				**$ (357,825)**
Net OBA Adjustment	$ 15	$ (59)	$ (166)	$ (894)	$ 2,875	$ (379)	$ (1,127)	$ 681	$ (57)	$ 496	$ 2,984	$ 204				**$ 4,572**
Company Managed	$ -	$ -	$ -	$ -	$ -	$ -	$ (159,275)	$ (96,147)	$ -	$ (114,704)	$ -	$ -				**$ (370,126)**
LNG Withdrawal / Boiloff	$ 6,089	$ 5,606	$ 4,102	$ 3,602	$ 11,370	$ 15,954	$ 3,607	$ 5,567	$ 3,424	$ 3,763	$ 3,779	$ 3,078				**$ 69,941**
Supplier Balancing	$ (6,750)	$ 94	$ (874)	$ (12,836)	$ (9,957)	$ -	$ 22,245	$ 20,978	$ (0)	$ 1,193	$ -	$ (57,586)				**$ (43,494)**
Inventory Finance Charge	$ 342	$ 331	$ 416	$ 430	$ 448	$ 348	$ 210	$ 77	$ 35	$ 36	$ 43	$ 53				**$ 2,768**
Subtotal - Other Commodity	$ (1,276)	$ 20,018	$ 2,302	$ 4,406	$ 963,390	$ 661,353	$ 257,368	$ (88,060)	$ 4,478	$ (110,019)	$ 797	$ (54,266)				**$ 1,660,491**
Sales for Resale Estimates	$ -	$ -	$ (83)	$ (72,317)	$ (86,958)	$ (145,872)	$ (364,568)	$ (52,147)	$ -	$ (6,006)	$ -	$ -				**$ (727,951)**
Sales for Resale Reversals	$ -	$ -	$ -	$ 83	$ 72,317	$ 86,958	$ 145,872	$ 364,568	$ 52,147	$ -	$ 6,006	$ -				**$ 727,951**
Subtotal - Estimates	$ -	$ -	$ (83)	$ (72,234)	$ (14,642)	$ (58,913)	$ (218,696)	$ 312,422	$ 52,147	$ (6,006)	$ 6,006	$ -				**$ (0)**
Total Commodity Costs	$ 201,414	$ 245,417	$ 362,138	$ 1,405,691	$ 3,504,183	$ 2,906,284	$ 2,164,464	$ 1,406,032	$ 735,318	$ 227,198	$ 312,063	$ 30,995	$ 184,082	$ 272,655	$ 522,928	**$ 14,480,862**

(1) Monthly estimates provided in Table 2 of Northern 's August 2020 Monthly Cost of Gas Report, submitted in DG 19-154 on August 21, 2020.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
SCHEDULE 4: PURCHASED GAS COSTS
August 2019 - October 2020

Demand Costs	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Total
													Estimated [1]			
Pipeline Reservation																
Alberta Northeast	3,951	4,429	4,229	4,545	3,878	3,713	4,089	3,705	3,735	3,589	3,764	3,588				**47,215**
Algonquin	14,984	14,984	14,984	14,620	14,212	14,191	14,177	14,196	14,209	14,212	14,212	14,212				**173,193**
Emera	289,782	290,885	294,813	290,399	276,100	275,910	273,342	258,063	260,833	259,272	265,473	272,060				**3,306,930**
Granite State	165,766	165,766	165,766	225,679	225,679	225,679	225,679	225,679	225,679	144,287	144,287	144,287				**2,284,235**
Iroquois	15,686	15,698	15,698	15,698	14,890	14,890	14,890	14,890	14,890	14,390	14,390	14,390				**180,404**
Portland	322,027	322,027	322,027	322,027	305,455	305,455	305,455	305,455	305,455	305,455	305,455	305,455				**3,731,748**
Tennessee	158,898	158,898	158,898	158,898	137,938	137,938	137,938	137,938	137,938	137,938	137,938	137,938				**1,739,096**
Texas Eastern	3,593	3,663	3,663	3,663	3,474	3,486	3,486	3,466	3,466	(3,320)	2,865	2,865				**34,369**
Total Pipeline Reservation	974,688	976,350	980,079	1,035,529	981,627	981,263	979,056	963,392	966,205	875,823	888,384	894,795				**11,497,190**
Product Demand																
Excelon	-	-	-	-	134,934	134,934	134,934	134,934	134,934	-	-	-				**674,670**
Repsol	-	-	-		335,475	335,475	335,475	335,475	335,475	335,475	335,475	335,475				**2,683,804**
Total Product Demand	-	-	-	-	470,409	470,409	470,409	470,409	470,409	335,475	335,475	335,475				**3,358,474**
Storage Pipeline Transportation and Demand Reservation																
Emera	104,394	104,394	104,394	104,394	99,021	99,021	99,021	99,021	99,021	99,021	99,021	99,021				**1,209,745**
Tennessee	5,026	5,026	5,026	5,026	4,362	4,362	4,362	4,362	4,362	4,362	4,362	4,362				**55,000**
Total Storage & Demand Reservation	109,420	109,420	109,420	109,420	103,383	103,383	103,383	103,383	103,383	103,383	103,383	103,383				**1,264,746**
Demand Cost Estimates	1,339,212	1,336,006	1,337,245	1,742,188	1,746,046	1,747,272	1,742,921	1,730,240	1,592,764	1,593,883	1,601,745	1,602,865				**19,112,392**
Demand Cost Reversals	(1,345,233)	(1,339,212)	(1,336,006)	(1,337,245)	(1,742,188)	(1,746,046)	(1,747,272)	(1,742,921)	(1,730,240)	(1,592,764)	(1,593,883)	(1,601,745)				**(18,854,760)**
Subtotal	(6,021)	(3,206)	1,239	404,943	3,858	1,226	(4,351)	(12,681)	(137,476)	1,119	7,862	1,120				**257,632**
Capacity Release[2]	(790,626)	(781,719)	(782,739)	(794,966)	(756,594)	(749,060)	(853,186)	(802,727)	(755,612)	(663,064)	(754,897)	(572,755)				**(9,057,944)**
Other A&G Allowance	18,234	18,234	18,234	77,924	77,924	77,924	77,924	77,924	77,924	18,818	18,818	18,818				**578,702**
Local Production and Storage Allowance	-	-	-	79,351	79,351	79,351	79,351	79,351	79,351	-	-	-				**476,106**
Conversion & Re-entry Fees	-	-	-	(125)	(715)	(313)	(497)	(469)	(282)	-	(47)	(43)				**(2,490)**
Fuel Tax Recovery	-	-	-	1,637	-	845	492	-	-	-	-	-				
Total Indirect Demand Costs	(772,392)	(763,485)	(764,505)	(636,178)	(600,034)	(591,252)	(695,916)	(645,921)	(598,619)	(644,245)	(736,126)	(553,980)				**(8,002,652)**
Estimates - Cap Release & Comp Managed	(12,753)	(12,753)	(12,753)	(8,550)	(12,866)	(20,838)	(20,838)	(24,906)	193,159	236,002	238,602	235,231				**776,737**
Reversals - Cap Release & Comp Managed	9,014	12,753	12,753	12,753	8,550	12,866	20,838	20,838	24,906	(193,159)	(236,002)	(238,602)				**(532,492)**
Subtotal	**(3,739)**	**-**	**-**	**4,203**	**(4,316)**	**(7,971)**	**(0)**	**(4,068)**	**218,064**	**42,844**	**2,600**	**(3,371)**				**244,245**
Annual Demand Costs	**301,955**	**319,079**	**326,233**	**917,917**	**954,928**	**957,058**	**852,582**	**874,515**	**1,021,967**	**714,399**	**601,578**	**777,423**	**760,000**	**760,000**	**760,000**	**10,899,635**
Total Gas Costs	**503,369**	**564,496**	**688,371**	**2,323,608**	**4,459,112**	**3,863,342**	**3,017,046**	**2,280,546**	**1,757,285**	**941,598**	**913,641**	**808,418**	**944,082**	**1,032,655**	**1,282,928**	**25,380,497**

(1) Monthly estimates provided in Table 2 of Northern 's August 2020 Monthly Cost of Gas Report, submitted in DG 19-154 on August 21, 2020.
(2) Includes Asset Management Agreement Revenue

REDACTED

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
COST OF GAS ADJUSTMENT - FORM III, Schedule 4 - UNITS
August 2019 - October 2020

Indicates Confidential Data

													Estimated (1)			
Commodity Volumes:	**Aug-19**	**Sep-19**	**Oct-19**	**Nov-19**	**Dec-19**	**Jan-20**	**Feb-20**	**Mar-20**	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Total**
Amercian Excavators	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				
DTE Energy Trading	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Emera Energy Services Corp.	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Repsol	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Shell	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Southwestern	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Commodity Supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Granite	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Emera	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Emera Energy Services	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Maritimes	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Tennessee	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Commodity Transportation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Commodity Volume Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Commodity Volume Reversals	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Withdrawal - Underground Storage	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
ATV Reconciliation Charges	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Off System Sales	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Net OBA Adjustment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Company Managed	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
LNG Withdrawal / Boiloff	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Supplier Balancing	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Inventory Finance Charge	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Other Commodity	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Sales for Resale Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Sales for Resale Reversals	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Total Commodity Volumes	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	102,888	104,952	212,494	[redacted]

(1) Monthly estimates provided in Table 2 of Northern 's August 2020 Monthly Cost of Gas Report, submitted in DG 19-154 on August 21, 2020.

REDACTED

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
COST OF GAS ADJUSTMENT - FORM III, Schedule 4 - IN COST PER UNIT
August 2019 - October 2020

Indicates Confidential Data

Commodity Costs per Unit:	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20 (Estimated [1])	Sep-20 (Estimated [1])	Oct-20 (Estimated [1])	Total
DTE Energy Trading	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Emera Energy Services Corp.	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ -	$ -	$ -	[redacted]
Repsol	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Shell	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Commodity Supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 2.97	$ 2.96	$ 2.94	[redacted]
Granite	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Emera	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Maritimes	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Tennessee	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Commodity Transportation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	n/a	n/a	n/a	[redacted]
Commodity Cost Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Commodity Cost Reversals	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	n/a	n/a	n/a	[redacted]
Subtotal - Supply	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Withdrawal - Underground Storage	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
ATV Reconciliation Charges	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Off System Sales	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Net OBA Adjustment	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Company Managed	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
LNG Withdrawal / Boiloff	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Supplier Balancing	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Inventory Finance Charge	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Other Commodity	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	n/a	n/a	n/a	[redacted]
Off System Sales Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Off System Sales Reversals	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Subtotal - Estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]				[redacted]
Total Commodity Costs per unit	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	n/a	n/a	n/a	[redacted]

(1) Monthly estimates provided in Table 2 of Northern 's August 2020 Monthly Cost of Gas Report, submitted in DG 19-154 on August 21, 2020.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
2019-20 ANNUAL COG RECONCILIATION
SCHEDULE 5: PURCHASED AND MADE VOLUMES
August 2019 - July 2020

New Hampshire	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Total
Throughput IN													
BTU Factor	1.028	1.028	1.029	1.029	1.046	1.044	1.043	1.038	1.034	1.03	1.03	1.028	
GST Meter Throughput (MCF)	360,759	379,250	510,562	876,507	1,005,765	1,006,889	976,058	791,711	615,328	422,342	331,534	319,992	7,596,697
Salem Meter (MCF)	13,855	15,452	23,593	53,919	69,400	70,252	64,973	47,723	35,941	19,185	12,555	12,385	439,233
GST Meter Throughpurt (DTH)	370,860	389,869	525,368	901,926	1,052,030	1,051,192	1,018,028	821,796	636,249	435,012	341,480	328,952	7,872,763
Salem Meter (DTH)	14,243	15,885	24,277	55,483	72,592	73,343	67,767	49,536	37,163	19,761	12,932	12,732	455,713
LNG/Propane													-
Total Throughput	385,103	405,754	549,645	957,408	1,124,623	1,124,535	1,085,795	871,332	673,412	454,773	354,412	341,684	8,328,476
Throughput OUT													
Residential Gas													
Charged	33,543	33,560	61,023	137,359	275,547	308,630	314,338	267,885	187,152	133,925	57,494	37,696	1,848,152
Uncharged Current	20,628	26,989	34,565	145,376	187,406	175,894	133,743	124,942	96,210	77,823	27,146	19,236	1,069,958
Uncharged Prior	(19,641)	(20,628)	(26,989)	(34,565)	(145,376)	(187,406)	(175,894)	(133,743)	(124,942)	(96,210)	(77,823)	(27,146)	(1,070,363)
Total Residential Gas	**34,530**	**39,921**	**68,599**	**248,170**	**317,577**	**297,118**	**272,187**	**259,084**	**158,420**	**115,538**	**6,817**	**29,786**	1,847,747
Interruptible				-	-	-	-	-	-	-	-	-	-
<u>*Commercial/Industrial Gas*</u>													
Charged	63,888	58,215	99,415	176,754	316,318	357,569	354,433	300,785	191,390	125,938	70,071	51,500	2,166,276
Uncharged Current	39,291	46,817	56,310	166,042	210,637	199,203	153,152	140,961	98,680	73,182	33,084	26,280	1,243,639
Uncharged Prior	(35,371)	(39,291)	(46,817)	(56,310)	(166,042)	(210,637)	(199,203)	(153,152)	(140,961)	(98,680)	(73,182)	(33,084)	(1,252,730)
Total C/I Gas	**67,808**	**65,741**	**108,908**	**286,486**	**360,913**	**346,135**	**308,382**	**288,594**	**149,109**	**100,440**	**29,973**	**44,696**	2,157,185
Transportation													
Charged	283,342	283,407	324,974	384,074	424,574	463,812	465,018	436,781	328,526	305,631	268,538	258,068	4,226,745
Uncharged Current	109,764	143,521	123,944	230,866	207,419	192,420	164,668	155,566	138,156	131,504	83,249	84,128	1,765,205
Uncharged Prior	(89,667)	(109,764)	(143,521)	(123,944)	(230,866)	(207,419)	(192,420)	(164,668)	(155,566)	(138,156)	(131,504)	(83,249)	(1,770,744)
Total Transportation	**303,439**	**317,164**	**305,397**	**490,996**	**401,127**	**448,813**	**437,266**	**427,679**	**311,116**	**298,979**	**220,283**	**258,947**	**4,221,206**
Company Use	**140**	**100**	**89**	**84**	**240**	**294**	**289**	**257**	**180**	**141**	**60**	**64**	**1,938**
Total Throughput OUT	**405,917**	**422,926**	**482,993**	**########**	**1,079,857**	**1,092,360**	**1,018,124**	**975,614**	**618,825**	**515,098**	**257,133**	**333,493**	**8,228,076**
Total Throughput IN	**385,103**	**405,754**	**549,645**	**957,408**	**1,124,623**	**1,124,535**	**1,085,795**	**871,332**	**673,412**	**454,773**	**354,412**	**341,684**	**8,328,476**
Difference IN/OUT	(20,814)	(17,172)	66,653	(68,328)	44,766	32,175	67,671	(104,282)	54,587	(60,325)	97,279	8,191	100,400
%													1.21%

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
DEFERRED WORKING CAPITAL ALLOWANCE ON PURCHASED GAS COSTS
August 2019 - October 2020

ANNUAL BALANCE SEASON - Acct 173

	BEGINNING BALANCE	WORKING CAP ALLOWANCE (1)	WORKING CAP PERCENTAGE	WORKING CAP COLLECTIONS	WORKING CAP DEFERRED	ENDING BALANCE	AVE MONTHLY BALANCE	INTEREST RATE	INTEREST	ENDING BAL W/ INTEREST
	A	B	C	D	E = B + D	F = A + E	G = (A + F) / 2	H	I = G * (H / 12)	K = F + I + J
August 2019	$ (44,680)									
Adjustment	$ (14)									
August 2019	$ (44,694)	760	0.1510%	(1,117)	(357)	(45,051)	(44,872)	5.50%	(206)	(45,257)
September	$ (45,257)	852	0.1510%	(1,179)	(326)	(45,583)	(45,420)	5.50%	(208)	(45,791)
October	$ (45,791)	992	0.1441%	(2,163)	(1,172)	(46,963)	(46,377)	5.25%	(203)	(47,165)
November	$ (47,165)	3,346	0.1441%	(3,713)	(367)	(47,533)	(47,349)	5.25%	(207)	(47,740)
December	$ (47,740)	6,426	0.1441%	(4,924)	1,501	(46,239)	(46,989)	5.25%	(206)	(46,444)
January 2020	$ (46,444)	5,037	0.1304%	(4,735)	302	(46,142)	(46,293)	4.75%	(183)	(46,326)
February	$ (46,326)	3,934	0.1304%	(3,938)	(4)	(46,330)	(46,328)	4.75%	(183)	(46,513)
March	$ (46,513)	2,974	0.1304%	(3,686)	(712)	(47,225)	(46,869)	4.75%	(186)	(47,411)
April	$ (47,411)	2,292	0.1304%	(2,266)	25	(47,385)	(47,398)	4.75%	(188)	(47,573)
May	$ (47,573)	*1,228*	0.1304%	*396*	1,624	(45,949)	(46,761)	4.75%	(185)	(46,134)
June	$ (46,134)	*1,191*	0.1304%	*3*	1,194	(44,940)	(45,537)	4.75%	(180)	(45,120)
July	$ (45,120)	*721*	0.0892%	*37*	758	(44,363)	(44,741)	3.25%	(121)	(44,484)
Estimated August	$ (44,484)	*725*	0.0892%	*(500)*	225	(44,259)	(44,371)	3.25%	(120)	(44,379)
Estimated September	$ (44,379)	*733*	0.0892%	*(500)*	233	(44,146)	(44,262)	3.25%	(120)	(44,266)
Estimated October	$ (44,266)	*1,030*	0.0892%	*(850)*	180	(44,085)	(44,176)	3.25%	(120)	(44,205)

(1) Working Capital Allowance calculated by taking monthly Total Gas Costs from Schedule 4, Page 2, and multiplying by (10.02/365)* prime interest rate.

Winter Season Sales Percentage		81.23%
Summer Season Sales Percentage		18.77%
Reconciliation Allocated to Winter Season	$	(35,910)
Reconciliation Allocated to Summer Season	$	(8,295)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
BAD DEBT EXPENSE - CALCULATION OF COLLECTION ALLOWANCE
August 2019 - October 2020

ANNUAL BALANCE- Acct 173

	BEGINNING BALANCE	ACUTAL BAD DEBT	BAD DEBT COLLECTIONS	DEFERRED BALANCE	ENDING BALANCE	AVE MO BALANCE	INTEREST RATE	INTEREST	END BAL W/ INTEREST
	A	B	C	D = B + C	E = A + D	F = (A + E) / 2	G	H = (F *G) / 12	J = E + H + I
August 2019	($54,439)	22,785	(843)	21,942	(32,498)	(43,469)	5.50%	(199)	(32,697)
September	($32,697)	35,296	(889)	34,406	1,709	(15,494)	5.50%	(71)	1,638
October	$1,638	32,853	(1,636)	31,218	32,856	17,247	5.25%	75	32,931
November	$32,931	14,220	(17,732)	(3,512)	29,419	31,175	5.25%	136	29,556
December	$29,556	7,458	(29,550)	(22,092)	7,464	18,510	5.25%	81	7,545
January 2020	$7,545	24,377	(28,395)	(4,018)	3,527	5,536	4.75%	22	3,549
February	$3,549	1,585	(23,616)	(22,031)	(18,483)	(7,467)	4.75%	(30)	(18,512)
March	($18,512)	1,221	(22,104)	(20,882)	(39,395)	(28,953)	4.75%	(115)	(39,509)
April	($39,509)	3,544	(13,600)	(10,056)	(49,565)	(44,537)	4.75%	(176)	(49,741)
May	($49,741)	6,444	(3,051)	3,393	(46,349)	(48,045)	4.75%	(190)	(46,539)
June	($46,539)	11,487	(876)	10,611	(35,928)	(41,233)	4.75%	(163)	(36,091)
July	($36,091)	12,480	(1,197)	11,282	(24,809)	(30,450)	3.25%	(82)	(24,891)
Estimated August	($24,891)	10,000	(850)	9,150	(15,741)	(20,316)	3.25%	(55)	(15,796)
Estimated September	($15,796)	10,000	(875)	9,125	(6,671)	(11,234)	3.25%	(30)	(6,702)
Estimated October	($6,702)	2,000	(500)	1,500	(5,202)	(5,952)	3.25%	(16)	(5,218)

Winter Season Sales Percentage		81.23%
Summer Season Sales Percentage		18.77%
Reconciliation Allocated to Winter Season	$	(4,239)
Reconciliation Allocated to Summer Season	$	(979)

Attachment C

Northern Utilities, Inc. - New Hampshire Division
Environmental Response Costs
May 2019 - October 2020

		Beginning Balance		Firm Sales and Transportation (therms)	ERC Rate Recoveries /Passback		Current ERC Recoveries/ Passbacks	Ending Balance
May 2019	(act)	$ 106,529		5,216,064	$ 0.0058		$ 30,252	$ 76,277
June 2019	(act)	$ 76,277		3,277,028	$ 0.0058		$ 19,019	$ 57,259
July 2019	(act)	$ 57,259		2,885,459	$ 0.0058		$ 16,750	$ 40,509
August 2019	(act)	$ 40,509		2,759,133	$ 0.0058		$ 16,016	$ 24,493
September 2019	(act)	$ 24,493		2,702,350	$ 0.0058		$ 15,689	$ 8,804
October 2019	(act)	$ 8,804		3,792,595	$ 0.0058		$ 22,002	$ (13,198)
November 2019	(act)	$ 422,377	(1)	5,944,629	$ 0.0058	(2)	$ 34,075	$ 388,302
December 2019	(act)	$ 388,302		9,152,839	$ 0.0057		$ 52,173	$ 336,129
January 2020	(act)	$ 336,129		10,261,299	$ 0.0057		$ 58,492	$ 277,637
February 2020	(act)	$ 277,637		10,340,850	$ 0.0057		$ 58,945	$ 218,692
March 2020	(act)	$ 218,692		8,965,512	$ 0.0057		$ 51,106	$ 167,586
April 2020	(act)	$ 167,586		6,420,106	$ 0.0057		$ 36,598	$ 130,988
May 2020	(act)	$ 130,988		4,861,662	$ 0.0057		$ 27,710	$ 103,278
June 2020	(act)	$ 103,278		3,038,865	$ 0.0057		$ 17,331	$ 85,947
July 2020	(act)	$ 85,947		2,540,626	$ 0.0057		$ 14,489	$ 71,458
August 2020	(est)	$ 71,458		2,430,337	$ 0.0057		$ 13,853	$ 57,605
September 2020	(est)	$ 57,605		2,523,248	$ 0.0057		$ 14,383	$ 43,223
October 2020	(est)	$ 43,223		3,175,456	$ 0.0057		$ 18,100	$ 25,122

(1) November Beginning Balance includes $433,575 amortization from all prior years at 1/7 of annual costs. (See Section 4.7 of Tariff.)

(2) November Current ERC Recoveries/Passbacks reflect an Average ERC Rate based on actual Firm Sales and Transportation (therms) at $0.0057 and actual Firm Sales and Transportation (therms) at $0.0058.

Attachment D

NORTHERN UTILITIES
NEW HAMPSHIRE DIVISION
RLIARA Reconciliation
May 2019 - October 2020

		Beginning Balance	Program Costs	Regulatory Assessments	RLIARA Recoveries	Ending Balance	Average Monthly Balance	Interest Rate	Interest		Ending Balance w/Interest
		A	B	C	D	E = A+B+C-D	F = (A+E)/2	G	H = F*(G/12)		I = E+H
May 2019	Actual	$ (161,136)	$ 27,022	$ 11,421	$ 22,952	$ (145,645)	$ (153,391)	5.50%	$ (703)		$ (146,348)
June 2019	Actual	$ (146,348)	$ 13,809	$ 11,421	$ 14,418	$ (135,537)	$ (140,943)	5.50%	$ (646)		$ (136,183)
July 2019	Actual	$ (136,183)	$ 11,937	$ 11,421	$ 12,693	$ (125,519)	$ (130,851)	5.50%	$ (600)		$ (126,119)
August 2019	Actual	$ (126,119)	$ 10,812	$ (5,008)	$ 12,139	$ (132,454)	$ (129,286)	5.50%	$ (593)	(1)	$ (133,046)
September 2019	Actual	$ (133,046)	$ 10,740	$ (21,436)	$ 11,890	$ (155,632)	$ (144,339)	5.50%	$ (662)	(1)	$ (156,294)
October 2019	Actual	$ (156,294)	$ 13,398	$ (5,008)	$ 16,641	$ (164,544)	$ (160,419)	5.25%	$ (702)		$ (165,246)
November 2019	Actual	$ (165,246)	$ 18,112	$ 8,613	$ 22,876	$ (161,396)	$ (163,321)	5.25%	$ (715)		$ (162,111)
December 2019	Actual	$ (162,111)	$ 37,740	$ 14,434	$ 32,952	$ (142,889)	$ (152,500)	5.25%	$ (667)		$ (143,556)
January 2020	Actual	$ (143,556)	$ 39,013	$ 11,421	$ 36,944	$ (130,066)	$ (136,811)	4.75%	$ (542)		$ (130,608)
February 2020	Actual	$ (130,608)	$ 50,483	$ 605	$ 37,230	$ (116,749)	$ (123,678)	4.75%	$ (477)		$ (117,225)
March 2020	Actual	$ (117,225)	$ 39,628	$ 6,013	$ 32,276	$ (103,861)	$ (110,543)	4.75%	$ (438)		$ (104,298)
April 2020	Actual	$ (104,298)	$ 35,052	$ 6,013	$ 23,113	$ (86,346)	$ (95,322)	4.75%	$ (377)		$ (86,723)
May 2020	Actual	$ (86,723)	$ 24,284	$ 6,013	$ 17,501	$ (73,928)	$ (80,326)	4.75%	$ (318)		$ (74,246)
June 2020	Actual	$ (74,246)	$ 18,438	$ 6,013	$ 10,934	$ (60,729)	$ (67,487)	4.75%	$ (267)		$ (60,996)
July 2020	Actual	$ (60,996)	$ 12,176	$ 6,013	$ 9,142	$ (51,948)	$ (56,472)	3.25%	$ (153)		$ (52,101)
August 2020	Est.	$ (52,101)	$ 10,190	$ 5,292	$ 8,749	$ (45,368)	$ (48,735)	3.25%	$ (132)		$ (45,500)
September 2020	Est.	$ (45,500)	$ 10,411	$ 5,292	$ 9,084	$ (38,881)	$ (42,191)	3.25%	$ (114)		$ (38,995)
October 2020	Est.	$ (38,995)	$ 11,673	$ 5,292	$ 11,432	$ (33,462)	$ (36,228)	3.25%	$ (98)		$ (33,560)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
SALES VARIANCE ANALYSIS

	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	TOTAL
Forecast Bill Month Sales	98,427	85,662	94,155	327,603	495,793	828,714	784,335	668,075	501,681	243,489	164,263	118,678	4,410,875
Actual Sales	97,431	91,774	160,439	314,112	591,865	666,199	668,771	568,670	378,541	259,863	127,565	89,196	4,014,428
Difference	(996)	6,112	66,283	(13,491)	96,072	(162,515)	(115,564)	(99,405)	(123,140)	16,374	(36,697)	(29,481)	(396,448)
Normal Bill Month Actual Sales	97,431	91,774	160,439	313,426	552,740	701,587	753,971	592,361	401,888	259,863	127,565	89,196	4,142,242
Actual Sales	97,431	91,774	160,439	314,112	591,865	666,199	668,771	568,670	378,541	259,863	127,565	89,196	4,014,428
Weather Variance	-	-	-	(686)	(39,125)	35,388	85,200	23,691	23,347	-	-	-	127,814
Total Variance Excluding Weather (excl weather effect)	(996)	6,112	66,283	(14,177)	56,947	(127,127)	(30,364)	(75,714)	(99,793)	16,374	(36,697)	(29,481)	(268,634)
Variance-difference due to meter count													1,237
-difference in load pattern													(397,685)
Total Sales Variance													(396,448)

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
SALES VARIANCE ANALYSIS
August 2019 - July 2020

	NORMAL MMBtu			METERS		
	2019-20 Forecast	2019-20 Actual	Difference	2019-20 Forecast	2019-20 Actual	Difference
Res Heat	1,995,194	1,824,968	(170,225)	312,798	311,110	(1,688)
Res General	23,534	23,185	(349)	15,037	15,558	521
Total Res	2,018,728	1,848,153	(170,575)	327,835	326,668	(1,167)
G-40	960,465	841,864	(118,601)	55,722	54,275	(1,447)
G-50	170,442	126,569	(43,873)	8,860	9,023	163
G-41	721,741	749,768	28,027	4,687	5,210	523
G-51	239,930	225,480	(14,450)	1,908	1,831	(77)
G-42	106,561	165,678	59,117	144	153	9
G-52	193,009	56,915	(136,094)	39	30	(9)
Total C & I	2,392,148	2,166,275	(225,873)	71,360	70,522	(838)
Total Company	4,410,875	4,014,428	(396,448)	399,195	397,190	(2,005)

	NORMAL AVERAGE USE			Change in Sales Due to Change In:			
	2019-20 Forecast	2019-20 Actual	Difference	Meter Count	Load Pattern	Total Chg MMBtu	% Difference
Res Heat	6.38	5.87	(0.51)	(10,765)	(159,460)	(170,225)	-8.53%
Res General	1.57	1.49	(0.07)	815	(1,164)	(349)	-1.48%
Total Res	7.94	7.36	(0.59)	(9,950)	(160,624)	(170,575)	-8.45%
G-40	17.24	15.51	(1.73)	(24,938)	(93,663)	(118,601)	-12.35%
G-50	19.24	14.03	(5.21)	3,136	(47,008)	(43,873)	-25.74%
G-41	154.00	143.91	(10.09)	80,604	(52,577)	28,027	3.88%
G-51	125.72	123.15	(2.58)	(9,734)	(4,716)	(14,450)	-6.02%
G-42	740.00	1,082.86	342.86	6,660	52,457	59,117	55.48%
G-52	4,948.96	1,897.18	(3,051.78)	(44,541)	(91,553)	(136,094)	-70.51%
Total C & I	33.52	30.72	(2.80)	11,187	(237,061)	(225,873)	-9.44%
Total Company	11.05	10.11	(0.94)	1,237	(397,685)	(396,448)	-8.99%

Northern Utilities, Inc.
Grant-Thornton Expense for Fuel Tax Recovery

		PR Allocator		Cost Allocation	
Invoice Date	Amount	Maine	New Hampshire	Maine	New Hampshire
4/9/2019	$10,977.28	55.89%	44.11%	$6,135.20	$4,842.08
6/10/2019	$1,654.81	58.16%	41.84%	$962.44	$692.37
7/25/2019	$1,933.64	58.16%	41.84%	$1,124.61	$809.03
7/25/2019	$2,923.31	58.16%	41.84%	$1,700.20	$1,223.11
11/25/2019	$3,913.44	58.16%	41.84%	$2,276.06	$1,637.38
1/16/2020	$2,020.64	58.16%	41.84%	$1,175.20	$845.44
2/10/2020	$1,174.72	58.16%	41.84%	$683.22	$491.50
Total	$24,597.84			$14,056.92	$10,540.92

Northern Utilities Inc.
Calculation of Bad Debt Expense

1	**Actual Bad Debt Expense 12 Months Ended July 31, 2020**					
2						
3	Total		$	458,671	Company Analysis	
4	Distribution		$	284,549	Company Analysis	
5	Distribution (%)			62.04%	LN 4 / LN 3	
6	Non-Distribution		$	174,123	Company Analysis	
7	Non-Distribution(%)			37.96%	LN 6 / LN 3	
8						
9	Winter Demand Cost %			91.72%	Schedule 7-CAK, LN 79	
10	Summer Demand Cost %			8.28%	Schedule 7-CAK, LN 79	
11						
12	**Forecast Bad Debt Expense 12 Months Ended December 31, 2021**					*
13						
14	Annual Total		$	450,000	Company Forecast	
15	Annual Non-Distribution		$	170,831	LN 14 * LN 7	
16	Winter Non-Distribution		**$**	**156,687**	LN 15 * LN 9	
17	Summer Non-Distribution		**$**	**14,144**	LN 15 * LN 10	

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

			Winter						Summer					
	Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
1	Volumes	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
2	Residential Heat & Non Heat		2,176,725	3,165,337	3,770,878	3,205,911	2,774,319	1,593,044	730,922	489,258	412,466	418,643	455,783	939,948
3	Sales HLF Classes		297,129	432,077	514,735	437,615	378,702	217,455	405,473	271,412	228,812	232,239	252,842	521,430
4	Sales LLF Classes		2,078,532	3,022,546	3,600,771	3,061,290	2,649,167	1,521,181	572,940	383,510	323,315	328,157	357,270	736,788
5	Total		4,552,386	6,619,959	7,886,383	6,704,817	5,802,188	3,331,679	1,709,335	1,144,180	964,593	979,040	1,065,895	2,198,166
6	Rates													
7	Residential Heat & Non Heat CGA		$0.7315	$0.7315	$0.7315	$0.7315	$0.7315	$0.7315	$0.4412	$0.4412	$0.4412	$0.4412	$0.4412	$0.4412
8	Sales HLF Classes CGA		$0.6465	$0.6465	$0.6465	$0.6465	$0.6465	$0.6465	$0.3943	$0.3943	$0.3943	$0.3943	$0.3943	$0.3943
9	Sales LLF Classes CGA		$0.7437	$0.7437	$0.7437	$0.7437	$0.7437	$0.7437	$0.4733	$0.4733	$0.4733	$0.4733	$0.4733	$0.4733
10	Revenues													
11	Residential Heat & Non Heat		$ (1,592,275)	$ (2,315,444)	$ (2,758,397)	$ (2,345,124)	$ (2,029,414)	$ (1,165,312)	$ (322,483)	$ (215,861)	$ (181,980)	$ (184,705)	$ (201,091)	$ (414,705)
12	Sales HLF Classes		$ (192,094)	$ (279,338)	$ (332,776)	$ (282,918)	$ (244,831)	$ (140,584)	$ (159,878)	$ (107,018)	$ (90,221)	$ (91,572)	$ (99,696)	$ (205,600)
13	Sales LLF Classes		$ (1,545,804)	$ (2,247,867)	$ (2,677,893)	$ (2,276,681)	$ (1,970,186)	$ (1,131,302)	$ (271,173)	$ (181,515)	$ (153,025)	$ (155,317)	$ (169,096)	$ (348,722)
14	Total Sales		$ (3,330,172)	$ (4,842,649)	$ (5,769,066)	$ (4,904,724)	$ (4,244,431)	$ (2,437,198)	$ (753,533)	$ (504,394)	$ (425,226)	$ (431,594)	$ (469,883)	$ (969,027)

16			Winter						Summer					
17	**Gas Costs and Credits**									(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
18		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
19	Demand Costs (net of Capacity Assignment)													
20	Pipeline		$ 433,901	$ 433,901	$ 445,176	$ 445,176	$ 445,176	$ 445,176	$ 445,176	$ 445,176	$ 445,176	$ 445,176	$ 445,176	$ 445,176
21	Storage		$ 565,543	$ 565,543	$ 611,144	$ 611,144	$ 611,144	$ 611,144	$ 611,144	$ 611,144	$ 611,144	$ 611,144	$ 611,144	$ 611,144
22	On-system Peaking		$ 166,282	$ 166,282	$ 166,282	$ 166,282	$ 166,282	$ 73,458	$ 12,761	$ 12,761	$ 12,761	$ 12,761	$ 12,761	$ 12,761
23	Off-System Peaking		$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658
24	Total Demand Costs		$ 1,483,385	$ 1,483,385	$ 1,540,260	$ 1,540,260	$ 1,540,260	$ 1,447,437	$ 1,386,740	$ 1,386,740	$ 1,386,740	$ 1,386,740	$ 1,386,740	$ 1,386,740
25														
26	Asset Management and Capacity Release													
27	NUI AMA Revenue		$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)	$ (672,867)
28	NUI Capacity Release								$ -	$ -	$ -	$ -	$ -	$ -
29	NUI AMA Rev & Cap. Release Subtotal													
30	NH AMA Revenue		$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)
31	NH Capacity Release													
32	NH Total Asset Management and Capacity Release		$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)	$ (272,739)
33														
34	CNG Expenses		$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972
35														
36	Re-entry Rate & Conversion Rate Revenue		$ (1,000)	$ (1,000)	$ (1,000)	$ (1,000)	$ (1,000)		$ -	$ -	$ -	$ -	$ -	$ -
37														
38	Net Demand Costs		$ 1,219,618	$ 1,219,618	$ 1,276,493	$ 1,276,493	$ 1,276,493	$ 1,184,670	$ 1,123,973	$ 1,123,973	$ 1,123,973	$ 1,123,973	$ 1,123,973	$ 1,123,973
39														
40	NUI Commodity Costs													
41	NUI Total Pipeline Volumes		930,912	987,962	987,962	893,407	1,057,807	918,117	499,328	337,173	291,023	294,102	320,183	619,360
42	Pipeline Costs Modeled in Sendout™		$ 2,810,541	$ 3,690,647	$ 4,304,570	$ 3,827,533	$ 3,717,010	$ 2,576,253	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126
43	NYMEX Price Used for Forecast		$ 2.3240	$ 2.4850	$ 2.5880	$ 2.5560	$ 2.4730	$ 2.2770	$ 2.2610	$ 2.2970	$ 2.3360	$ 2.3450	$ 2.3290	$ 2.3540
44	NYMEX Price Used for Update		$ 2.3240	$ 2.4850	$ 2.5880	$ 2.5560	$ 2.4730	$ 2.2770	$ 2.2610	$ 2.2970	$ 2.3360	$ 2.3450	$ 2.3290	$ 2.3540
45	Increase/(Decrease) NYMEX Price		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
46	Increase/(Decrease) in Pipeline Costs		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
47	Updated Pipeline Costs		$ 2,810,541	$ 3,690,647	$ 4,304,570	$ 3,827,533	$ 3,717,010	$ 2,576,253	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126
48	New Hampshire Allocated Percentage		39.54%	39.84%	40.15%	39.76%	39.18%	36.70%	34.56%	34.20%	33.37%	33.52%	33.54%	35.85%
49	NH Updated Pipeline Costs		$ 1,111,190	$ 1,470,310	$ 1,728,289	$ 1,521,827	$ 1,456,256	$ 945,358	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479
50														
51	NH Peaking Volumes													
52	NH Peaking Costs Modeled in Sendout													
53	Change in NYMEX Price													
54	Change in Peaking Costs													
55	NH Updated Peaking Costs													
56														
57	NH Commodity Costs													
58	Pipeline		$ 1,111,190	$ 1,470,310	$ 1,728,289	$ 1,521,827	$ 1,456,256	$ 945,358	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479
59	Storage		$ 169,346	$ 483,784	$ 553,959	$ 562,914	$ 315,143	$ -	$ -	$ -	$ -	$ -	$ -	$ -
60	Peaking		$ 2,882	$ 51,770	$ 383,015	$ 85,954	$ 5,035	$ 4,516	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
61	Total Commodity Costs		$ 1,283,418	$ 2,005,863	$ 2,665,263	$ 2,170,696	$ 1,776,435	$ 949,874	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875
62	Inventory Finance Charge								$ -	$ -	$ -	$ -	$ -	$ -
63														
64	**Total Anticipated Direct Cost of Gas**		$ 2,503,036	$ 3,225,481	$ 3,941,756	$ 3,447,189	$ 3,052,928	$ 2,134,543	$ 1,585,224	$ 1,431,337	$ 1,386,657	$ 1,390,248	$ 1,407,182	$ 1,708,848

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Anal

Line		Winter	Summer	Prior Period	Total
	Sales Revenues				
1	Volumes				
2	Residential Heat & Non Heat				20,133,234
3	Sales HLF Classes				4,189,921
4	Sales LLF Classes				18,635,467
5	Total		8,061,210		42,958,621
6	Rates				
7	Residential Heat & Non Heat CGA				
8	Sales HLF Classes CGA				
9	Sales LLF Classes CGA				
10	Revenues				
11	Residential Heat & Non Heat				$ (13,726,791)
12	Sales HLF Classes				$ (2,226,524)
13	Sales LLF Classes				$ (13,128,581)
14	Total Sales	$ (25,528,240)	$ (3,553,657)		$ (29,081,896)
15					
16					
17	**Gas Costs and Credits**				
18					Total
19	Demand Costs (net of Capacity Assignment)				
20	Pipeline	$ 2,648,505	$ 2,671,054		$ 5,319,558
21	Storage	$ 3,575,664	$ 3,666,867		$ 7,242,531
22	On-system Peaking	$ 904,867	$ 76,569		$ 981,436
23	Off-System Peaking	$ 1,905,950	$ 1,905,950		$ 3,811,900
24	Total Demand Costs	$ 9,034,986	$ 8,320,439		$ 17,355,426
25					
26	Asset Management and Capacity Release				
27	NUI AMA Revenue				$ (8,074,404)
28	NUI Capacity Release				$ -
29	NUI AMA Rev & Cap. Release Subtotal				$ -
30	NH AMA Revenue				$ (3,272,870)
31	NH Capacity Release				$ -
32	NH Total Asset Management and Capacity Release		$ -	$ -	$ (3,272,870)
33					
34	CNG Expenses	$ 59,833	$ 59,833		$ 119,666
35					
36	Re-entry Rate & Conversion Rate Revenue	$ (5,000)	$ -		$ (5,000)
37					
38	Net Demand Costs	$ 7,453,384	$ 6,743,837		$ 14,197,222
39					
40	NUI Commodity Costs				
41	NUI Total Pipeline Volumes				8,137,336
42	Pipeline Costs Modeled in Sendout™				$ 27,143,945
43	NYMEX Price Used for Forecast				
44	NYMEX Price Used for Update				
45	Increase/(Decrease) NYMEX Price				
46	Increase/(Decrease) in Pipeline Costs				
47	Updated Pipeline Costs				
48	New Hampshire Allocated Percentage				
49	NH Updated Pipeline Costs				$ 10,373,736
50					
51	NH Peaking Volumes				
52	NH Peaking Costs Modeled in Sendout				
53	Change in NYMEX Price				
54	Change in Peaking Costs				
55	NH Updated Peaking Costs				$ -
56					
57	NH Commodity Costs				
58	Pipeline				$ 10,373,736
59	Storage				$ 2,085,147
60	Peaking				$ 558,325
61	Total Commodity Costs	$ 10,851,549	$ 2,165,659		$ 13,017,208
62	Inventory Finance Charge				$ -
63					
64	**Total Anticipated Direct Cost of Gas**	$ 18,304,934	$ 8,909,496		$ 27,214,430

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

		Winter						Summer					
		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
Working Capital													
Total Anticipated Direct Cost of Gas		$ 2,660,976	$ 3,383,421	$ 4,099,696	$ 3,605,129	$ 3,210,868	$ 2,292,483	$ 1,603,378	$ 1,449,490	$ 1,404,811	$ 1,408,402	$ 1,425,336	$ 1,727,002
Working Capital Percentage		0.0892%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%
Working Capital Allowance		$ 2,374	$ 3,018	$ 3,657	$ 3,216	$ 2,864	$ 2,045	$ 1,430	$ 1,293	$ 1,253	$ 1,256	$ 1,271	$ 1,540
Beginning Period Working Capital Balance		$ (44,205)	$ (41,948)	$ (39,039)	$ (35,483)	$ (32,359)	$ (29,579)	$ (27,611)	$ (26,254)	$ (25,030)	$ (23,843)	$ (22,650)	$ (21,438)
End of Period Working Capital Allowance		$ (41,831)	$ (38,930)	$ (35,383)	$ (32,268)	$ (29,495)	$ (27,534)	$ (26,181)	$ (24,961)	$ (23,777)	$ (22,587)	$ (21,379)	$ (19,898)
Interest		$ (117)	$ (110)	$ (101)	$ (92)	$ (84)	$ (77)	$ (73)	$ (69)	$ (66)	$ (63)	$ (60)	$ (56)
End of period with Interest	$ (44,205)	$ (41,948)	$ (39,039)	$ (35,483)	$ (32,359)	$ (29,579)	$ (27,611)	$ (26,254)	$ (25,030)	$ (23,843)	$ (22,650)	$ (21,438)	$ (19,954)
Bad Debt													
Projected Bad Debt	$ -	$ 26,114.49	$ 26,114.49	$ 26,114.49	$ 26,114.49	$ 26,114.49	$ 26,114.49	$ 2,357.33	$ 2,357.33	$ 2,357.33	$ 2,357.33	$ 2,357.33	$ 2,357.33
Beginning Period Bad Debt Balance		$ (5,218)	$ 20,918	$ 47,125	$ 73,402	$ 99,751	$ 126,171	$ 152,662	$ 155,436	$ 158,218	$ 161,007	$ 163,803	$ 166,608
End of Period Bad Debt Balance		*$ 20,897*	*$ 47,033*	*$ 73,239*	*$ 99,517*	*$ 125,865*	*$ 152,285*	*$ 155,020*	*$ 157,794*	*$ 160,575*	*$ 163,364*	*$ 166,161*	*$ 168,965*
Interest		$ 21	$ 92	$ 163	$ 234	$ 306	$ 377	$ 417	$ 424	$ 432	$ 439	$ 447	$ 454
End of Period Bad Debt Balance with Interest	$ (5,218)	$ 20,918	$ 47,125	$ 73,402	$ 99,751	$ 126,171	$ 152,662	$ 155,436	$ 158,218	$ 161,007	$ 163,803	$ 166,608	$ 169,419
Local Production and Storage Capacity		$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -									
Miscellaneous Overhead		$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
Beginning Balance Over/Under Collection	$ 755,934	$ 755,934	$ 87,879	$ (1,373,087)	$ (3,048,437)	$ (4,358,048)	$ (5,404,814)	$ (5,564,363)	$ (4,728,437)	$ (3,794,867)	$ (2,824,234)	$ (1,853,752)	$ (902,026)
Net Costs - Revenues		$ (669,196)	$ (1,459,228)	$ (1,669,371)	$ (1,299,595)	$ (1,033,563)	$ (144,715)	$ 849,845	$ 945,097	$ 979,585	$ 976,808	$ 955,453	$ 757,975
Ending Balance before Interest		$ 86,738	$ (1,371,349)	$ (3,042,458)	$ (4,348,032)	$ (5,391,611)	$ (5,549,529)	$ (4,714,518)	$ (3,783,341)	$ (2,815,282)	$ (1,847,426)	$ (898,299)	$ (144,051)
Average Balance		$ 421,336	$ (641,735)	$ (2,207,773)	$ (3,698,235)	$ (4,874,830)	$ (5,477,171)	$ (5,139,441)	$ (4,255,889)	$ (3,305,075)	$ (2,335,830)	$ (1,376,026)	$ (523,038)
Interest Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Interest Expense		$ 1,141	$ (1,738)	$ (5,979)	$ (10,016)	$ (13,203)	$ (14,834)	$ (13,919)	$ (11,526)	$ (8,951)	$ (6,326)	$ (3,727)	$ (1,417)
Ending Balance Incl Interest Expense	$ 755,934	$ 87,879	$ (1,373,087)	$ (3,048,437)	$ (4,358,048)	$ (5,404,814)	$ (5,564,363)	$ (4,728,437)	$ (3,794,867)	$ (2,824,234)	$ (1,853,752)	$ (902,026)	$ (145,467)
Total Over/Under Collection Ending Balance	$ 706,511	$ 66,849	$ (1,365,002)	$ (3,010,519)	$ (4,290,657)	$ (5,308,222)	**$ (5,439,312)**	$ (4,599,255)	$ (3,661,680)	$ (2,687,070)	$ (1,712,599)	$ (756,857)	$ 3,998
Total Indirect Cost of Gas	$ 706,511	$ 187,474	$ 185,317	$ 181,794	$ 177,396	$ 173,937	$ 171,565	$ 8,366	$ 10,633	$ 13,179	$ 15,818	$ 18,443	$ 21,033
Total Cost of Gas	$ 706,511	$ 2,690,510	$ 3,410,798	$ 4,123,550	$ 3,624,585	$ 3,226,866	$ 2,306,108	$ 1,593,590	$ 1,441,969	$ 1,399,835	$ 1,406,066	$ 1,425,625	$ 1,729,881
Total Interest	$ -	$ 1,046	$ (1,756)	$ (5,917)	$ (9,874)	$ (12,981)	$ (14,534)	$ (13,576)	$ (11,172)	$ (8,586)	$ (5,950)	$ (3,340)	$ (1,018)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Anal

Line		Winter	Summer	Prior Period	Total
65					
68	Working Capital				
69	Total Anticipated Direct Cost of Gas				$ 28,270,991
70	Working Capital Percentage				
71	Working Capital Allowance	$ 17,173	$ 8,044	$ (44,205)	$ (18,987)
72	Beginning Period Working Capital Balance				
73	End of Period Working Capital Allowance				
74	Interest	$ (580)	$ (387)		$ (966)
75	End of period with Interest				
76	Bad Debt				
77	Projected Bad Debt	$ 156,687	$ 14,144	$ (5,218)	$ 165,613
78	Beginning Period Bad Debt Balance				
79	End of Period Bad Debt Balance				
80	Interest	$ 1,193	$ 2,613		$ 3,806
81	End of Period Bad Debt Balance with Interest				
82	Local Production and Storage Capacity				$ 476,106
83					$ -
84	Miscellaneous Overhead				$ 580,455
85					
86	Gas Cost Other than Bad Debt and Working Capital Over/U				
87	Beginning Balance Over/Under Collection				$ (33,008,253)
88	Net Costs - Revenues				$ (810,906)
89	Ending Balance before Interest				$ (33,819,159)
90	Average Balance				$ (33,413,706)
91	Interest Rate				
92	Interest Expense				$ (90,495)
93	Ending Balance Incl Interest Expense			$ 755,934	
94	**Total Over/Under Collection Ending Balance**				
95					
96	**Total Indirect Cost of Gas**	$ 1,077,483	$ 87,471	$ 706,511	$ 1,871,465
97					
98	**Total Cost of Gas**	$ 19,382,416	$ 8,996,967	$ 706,511	$ 29,085,895
99					
100	**Total Interest**	$ (44,016)	$ (43,640)		$ (87,656)

Northern Utilities, Inc.
New Hampshire Division
Billed Distribution Service Volumes and Meter Counts

	Total Division Metered Deliveries (Dth)										
	2020-2021	2020-2021 Compared to 2019-2020					2020-2021 Compared to 2018-2019				
	Forecast	2019-2020 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern	2018-2019 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
Column	1	2	3	4	5	6	7	8	9	10	11
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
Nov	659,578	696,660	-37,082	-5.3%	5,142	-42,223	711,579	-52,001	-7.3%	17,204	-69,205
Dec	946,024	949,247	-3,224	-0.3%	6,488	-9,712	947,842	-1,819	-0.2%	21,197	-23,016
Jan	1,139,404	1,190,037	-50,633	-4.3%	8,240	-58,873	1,248,735	-109,331	-8.8%	27,733	-137,064
Feb	1,223,700	1,278,231	-54,531	-4.3%	8,763	-63,294	1,327,296	-103,596	-7.8%	28,756	-132,351
Mar	1,100,828	1,047,338	53,490	5.1%	7,213	46,277	1,086,718	14,110	1.3%	23,190	-9,080
Apr	774,735	750,676	24,059	3.2%	5,099	18,960	845,541	-70,806	-8.4%	19,989	-90,796
May	570,317	519,041	51,276	9.9%	6,984	44,292	632,151	-61,834	-9.8%	12,702	-74,536
Jun	397,160	382,043	15,118	4.0%	5,288	9,830	430,401	-33,241	-7.7%	8,978	-42,219
Jul	346,583	333,729	12,854	3.9%	4,619	8,235	391,025	-44,442	-11.4%	8,162	-52,604
Aug	347,374	324,955	22,419	6.9%	4,528	17,890	380,773	-33,399	-8.8%	8,021	-41,420
Sep	356,180	335,134	21,046	6.3%	4,706	16,340	375,181	-19,002	-5.1%	7,976	-26,978
Oct	425,676	402,137	23,539	5.9%	5,655	17,884	485,413	-59,737	-12.3%	10,349	-70,086
Winter	5,844,268	5,912,189	-67,920	-1.1%	40,944	-108,864	6,167,711	-323,442	-5.2%	139,164	-462,606
Summer	2,443,290	2,297,039	146,251	6.4%	31,780	114,471	2,694,945	-251,655	-9.3%	56,354	-308,009
Annual	8,287,558	8,209,228	78,331	1.0%	72,724	5,606	8,862,656	-575,097	-6.5%	192,682	-767,779

Note 1 Company Forecast
Note 2 Pages 2 - 4; Sum of Column 2 of Billed Deliveries table. Actual Data through April is weather normalized.
Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table.
Note 4 Pages 2 - 4; Sum of Column 7 of Billed Deliveries Table. Actual Data provided is weather normalized.
Note 5 Column 6 of Meter Counts table times Column 5 of Use Per Meter table.

	Total Division Meter Counts						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	34,397	34,145	252	0.7%	33,585	812	2.4%
Dec	34,469	34,235	234	0.7%	33,715	754	2.2%
Jan	34,612	34,374	238	0.7%	33,860	752	2.2%
Feb	34,661	34,425	236	0.7%	33,926	735	2.2%
Mar	34,652	34,415	237	0.7%	33,928	724	2.1%
Apr	34,683	34,449	234	0.7%	33,882	801	2.4%
May	34,421	33,964	457	1.3%	33,743	678	2.0%
Jun	34,208	33,741	467	1.4%	33,509	699	2.1%
Jul	33,991	33,527	464	1.4%	33,296	695	2.1%
Aug	33,978	33,511	467	1.4%	33,277	701	2.1%
Sep	34,156	33,683	473	1.4%	33,445	711	2.1%
Oct	34,540	34,061	479	1.4%	33,819	721	2.1%
Winter	34,579	34,341	239	0.7%	33,816	763	2.3%
Summer	34,216	33,748	468	1.4%	33,515	701	2.1%
Annual	34,397	34,044	353	1.0%	33,665	732	2.2%

Note 1 Company Forecast
Note 2 Actual data through April. Forecast data beginning June. Page 2 - 4; Sum of Column 2 of Meter Counts table.
Note 3 Actual Data. Page 2 - 4; Sum of Column 5 of Meter Counts table.

	Total Division Use Per Meter						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	19.18	20.40	-1.23	-6.0%	21.19	-2.01	-9.5%
Dec	27.45	27.73	-0.28	-1.0%	28.11	-0.67	-2.4%
Jan	32.92	34.62	-1.70	-4.9%	36.88	-3.96	-10.7%
Feb	35.30	37.13	-1.83	-4.9%	39.12	-3.82	-9.8%
Mar	31.77	30.43	1.34	4.4%	32.03	-0.26	-0.8%
Apr	22.34	21.79	0.55	2.5%	24.96	-2.62	-10.5%
May	16.57	15.28	1.29	8.4%	18.73	-2.17	-11.6%
Jun	11.61	11.32	0.29	2.5%	12.84	-1.23	-9.6%
Jul	10.20	9.95	0.24	2.4%	11.74	-1.55	-13.2%
Aug	10.22	9.70	0.53	5.4%	11.44	-1.22	-10.7%
Sep	10.43	9.95	0.48	4.8%	11.22	-0.79	-7.0%
Oct	12.32	11.81	0.52	4.4%	14.35	-2.03	-14.1%
Winter	169.01	172.16	-3.15	-1.8%	182.39	-13.34	-7.3%
Summer	71.41	68.06	3.34	4.9%	80.41	-8.99	-11.2%
Annual	240.94	241.13	-0.20	-0.1%	263.26	-22.32	-8.5%

Note 1 Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table.
Note 2 Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table.
Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

Northern Utilities, Inc.
New Hampshire Division
Billed Distribution Service Volumes and Meter Counts

	Residential Non-Heat Metered Deliveries (Dth)										
	2020-2021	2020-2021 Compared to 2019-2020					2020-2021 Compared to 2018-2019				
	Forecast	2019-2020 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern	2018-2019 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
Column	1	2	3	4	5	6	7	8	9	10	11
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
Nov	1,818	1,715	103	6.0%	-33	136	1,877	-59	-3.1%	-68	9
Dec	2,774	2,553	221	8.7%	-50	271	2,640	134	5.1%	-117	251
Jan	3,284	3,044	240	7.9%	-59	299	3,160	124	3.9%	7	117
Feb	3,378	3,150	228	7.2%	-61	289	3,434	-56	-1.6%	38	-95
Mar	2,725	2,677	48	1.8%	-52	100	2,592	133	5.1%	37	96
Apr	2,104	2,217	-114	-5.1%	-42	-71	2,110	-6	-0.3%	7	-12
May	1,657	1,577	80	5.1%	-31	111	1,702	-44	-2.6%	-65	21
Jun	1,379	1,503	-124	-8.2%	-29	-95	1,393	-14	-1.0%	-54	40
Jul	1,212	1,326	-114	-8.6%	-26	-88	1,331	-120	-9.0%	-51	-69
Aug	1,167	1,187	-20	-1.7%	-23	3	1,200	-33	-2.7%	-46	13
Sep	1,199	1,268	-70	-5.5%	-25	-45	1,150	49	4.2%	-45	93
Oct	1,169	1,199	-31	-2.6%	-23	-8	1,393	-224	-16.1%	-53	-171
Winter	16,084	15,356	728	4.7%	-297	1,025	15,813	271	1.7%	-132	403
Summer	7,783	8,061	-278	-3.5%	-157	-121	8,169	-386	-4.7%	-313	-73
Annual	23,867	23,417	449	1.9%	-454	903	23,982	-115	-0.5%	-565	450

Note 1 Company Forecast
Note 2 Actual, weather normalized data through April. Forecast data beginning June.
Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table.
Note 4 Actual, weather normalized data through May. Forecast data beginning June.
Note 5 Column 6 of Meter Counts table times Column 5 of Use Per Meter table.

	Total Division Meter Counts						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	1,220	1,244	-24	-1.9%	1,266	-46	-3.6%
Dec	1,210	1,234	-24	-1.9%	1,266	-56	-4.4%
Jan	1,268	1,293	-25	-1.9%	1,265	3	0.2%
Feb	1,266	1,291	-25	-1.9%	1,252	14	1.1%
Mar	1,267	1,292	-25	-1.9%	1,249	18	1.4%
Apr	1,280	1,305	-25	-1.9%	1,276	4	0.3%
May	1,261	1,286	-25	-1.9%	1,311	-50	-3.8%
Jun	1,265	1,290	-25	-1.9%	1,316	-51	-3.9%
Jul	1,261	1,286	-25	-1.9%	1,311	-50	-3.8%
Aug	1,261	1,286	-25	-1.9%	1,311	-50	-3.8%
Sep	1,242	1,267	-25	-2.0%	1,292	-50	-3.9%
Oct	1,213	1,237	-24	-1.9%	1,261	-48	-3.8%
Winter	1,252	1,277	-25	-1.9%	1,262	-11	-0.8%
Summer	1,251	1,275	-25	-1.9%	1,300	-50	-3.8%
Annual	1,251	1,276	-25	-1.9%	1,281	-30	-2.4%

Note 1 Company Forecast
Note 2 Actual data through April. Forecast data beginning June.
Note 3 Actual Data.

	Total Division Use Per Meter						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	1.49	1.38	0.11	8.1%	1.48	0.01	0.5%
Dec	2.29	2.07	0.22	10.8%	2.09	0.21	10.0%
Jan	2.59	2.35	0.24	10.0%	2.50	0.09	3.7%
Feb	2.67	2.44	0.23	9.4%	2.74	-0.07	-2.7%
Mar	2.15	2.07	0.08	3.8%	2.08	0.08	3.6%
Apr	1.64	1.70	-0.06	-3.3%	1.65	-0.01	-0.6%
May	1.31	1.23	0.09	7.2%	1.30	0.02	1.3%
Jun	1.09	1.17	-0.07	-6.4%	1.06	0.03	3.0%
Jul	0.96	1.03	-0.07	-6.8%	1.02	-0.05	-5.4%
Aug	0.93	0.92	0.00	0.2%	0.92	0.01	1.1%
Sep	0.97	1.00	-0.04	-3.6%	0.89	0.08	8.4%
Oct	0.96	0.97	-0.01	-0.6%	1.10	-0.14	-12.8%
Winter	12.85	12.03	0.82	6.8%	12.53	0.30	2.4%
Summer	6.22	6.32	-0.10	-1.5%	6.28	-0.06	-1.0%
Annual	19.08	18.35	0.72	3.9%	18.72	0.24	1.3%

Note 1 Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table.
Note 2 Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table.
Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

Northern Utilities, Inc.
New Hampshire Division
Billed Distribution Service Volumes and Meter Counts

	Residential Heat Metered Deliveries (Dth)										
	2020-2021	2020-2021 Compared to 2019-2020					2020-2021 Compared to 2018-2019				
	Forecast	2019-2020 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern	2018-2019 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
Column	1	2	3	4	5	6	7	8	9	10	11
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
Nov	146,991	142,577	4,413	3.1%	1,705	2,708	146,507	484	0.3%	5,218	-4,734
Dec	272,352	249,937	22,415	9.0%	2,810	19,605	250,171	22,181	8.9%	8,174	14,007
Jan	334,200	327,636	6,564	2.0%	3,735	2,829	342,961	-8,761	-2.6%	10,545	-19,306
Feb	373,575	363,125	10,450	2.9%	4,105	6,345	386,780	-13,205	-3.4%	11,391	-24,596
Mar	314,037	277,483	36,554	13.2%	3,147	33,408	281,420	32,617	11.6%	8,252	24,365
Apr	211,382	199,902	11,480	5.7%	2,240	9,240	199,888	11,495	5.8%	6,325	5,170
May	119,526	109,072	10,454	9.6%	2,035	8,420	117,979	1,547	1.3%	3,517	-1,970
Jun	60,791	66,064	-5,273	-8.0%	1,263	-6,537	56,303	4,487	8.0%	1,733	2,754
Jul	38,534	40,546	-2,012	-5.0%	776	-2,787	37,841	693	1.8%	1,165	-472
Aug	32,477	31,932	545	1.7%	614	-70	32,343	134	0.4%	1,003	-869
Sep	36,047	36,499	-452	-1.2%	705	-1,157	32,410	3,638	11.2%	1,010	2,627
Oct	49,544	49,329	215	0.4%	953	-738	59,630	-10,086	-16.9%	1,859	-11,946
Winter	1,652,538	1,560,661	91,877	5.9%	17,742	74,135	1,607,727	44,811	2.8%	50,749	-5,938
Summer	336,919	333,442	3,477	1.0%	6,346	-2,869	336,506	413	0.1%	10,361	-9,948
Annual	1,989,457	1,894,102	95,354	5.0%	24,088	71,267	1,944,233	45,224	2.3%	60,619	-15,395

Note 1 Company Forecast
Note 2 Actual, weather normalized data through April. Forecast data beginning June.
Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table.
Note 4 Actual, weather normalized data through May. Forecast data beginning June.
Note 5 Column 6 of Meter Counts table times Column 5 of Use Per Meter table.

	Total Division Meter Counts						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	26,228	25,918	310	1.2%	25,326	902	3.6%
Dec	26,264	25,972	292	1.1%	25,433	831	3.3%
Jan	26,349	26,052	297	1.1%	25,563	786	3.1%
Feb	26,391	26,096	295	1.1%	25,636	755	2.9%
Mar	26,399	26,103	296	1.1%	25,647	752	2.9%
Apr	26,442	26,149	293	1.1%	25,631	811	3.2%
May	26,321	25,839	482	1.9%	25,559	762	3.0%
Jun	26,219	25,727	492	1.9%	25,436	783	3.1%
Jul	26,054	25,565	489	1.9%	25,276	778	3.1%
Aug	26,062	25,570	492	1.9%	25,278	784	3.1%
Sep	26,232	25,735	497	1.9%	25,439	793	3.1%
Oct	26,489	25,987	502	1.9%	25,688	801	3.1%
Winter	26,346	26,048	297	1.1%	25,539	806	3.2%
Summer	26,230	25,737	492	1.9%	25,446	784	3.1%
Annual	26,288	25,893	395	1.5%	25,493	795	3.1%

Note 1 Company Forecast
Note 2 Actual data through April. Forecast data beginning June.
Note 3 Actual Data.

	Total Division Use Per Meter						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	5.60	5.50	0.10	1.9%	5.78	-0.18	-3.1%
Dec	10.37	9.62	0.75	7.8%	9.84	0.53	5.4%
Jan	12.68	12.58	0.11	0.9%	13.42	-0.73	-5.5%
Feb	14.16	13.91	0.24	1.7%	15.09	-0.93	-6.2%
Mar	11.90	10.63	1.27	11.9%	10.97	0.92	8.4%
Apr	7.99	7.64	0.35	4.6%	7.80	0.20	2.5%
May	4.54	4.22	0.32	7.6%	4.62	-0.07	-1.6%
Jun	2.32	2.57	-0.25	-9.7%	2.21	0.11	4.7%
Jul	1.48	1.59	-0.11	-6.7%	1.50	-0.02	-1.2%
Aug	1.25	1.25	0.00	-0.2%	1.28	-0.03	-2.6%
Sep	1.37	1.42	-0.04	-3.1%	1.27	0.10	7.9%
Oct	1.87	1.90	-0.03	-1.5%	2.32	-0.45	-19.4%
Winter	62.73	59.91	2.81	4.7%	62.95	-0.19	-0.3%
Summer	12.85	12.96	-0.11	-0.9%	13.22	-0.37	-2.8%
Annual	75.68	73.15	2.53	3.5%	76.27	-0.57	-0.7%

Note 1 Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table.
Note 2 Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table.
Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

Northern Utilities, Inc.
New Hampshire Division
Billed Distribution Service Volumes and Meter Counts

	Total Division C&I Metered Deliveries (Dth)										
	2020-2021	2020-2021 Compared to 2019-2020					2020-2021 Compared to 2018-2019				
	Forecast	2019-2020 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern	2018-2019 Normal	Change	Percent Change	Change Due to Meter Count	Change Due to Load Pattern
Column	1	2	3	4	5	6	7	8	9	10	11
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(3-5)	Note 4.	(1-5)	(6/5)	Note 5.	(8-10)
Nov	510,769	552,367	-41,598	-7.5%	-2,689	-38,909	563,195	-52,426	-9.3%	-3,544	-48,882
Dec	670,898	696,758	-25,860	-3.7%	-3,370	-22,490	695,032	-24,134	-3.5%	-2,080	-22,054
Jan	801,919	859,357	-57,437	-6.7%	-4,157	-53,281	902,614	-100,694	-11.2%	-4,749	-95,945
Feb	846,747	911,956	-65,209	-7.2%	-4,406	-60,804	937,081	-90,334	-9.6%	-4,527	-85,807
Mar	784,065	767,178	16,887	2.2%	-3,716	20,603	802,705	-18,640	-2.3%	-5,251	-13,389
Apr	561,249	548,556	12,692	2.3%	-2,666	15,359	643,544	-82,295	-12.8%	-1,292	-81,004
May	449,134	408,392	40,741	10.0%	0	40,741	512,471	-63,337	-12.4%	-2,535	-60,802
Jun	334,990	314,475	20,515	6.5%	0	20,515	372,705	-37,715	-10.1%	-1,820	-35,894
Jul	306,837	291,858	14,980	5.1%	0	14,980	351,853	-45,016	-12.8%	-1,731	-43,285
Aug	313,730	291,836	21,894	7.5%	0	21,894	347,230	-33,500	-9.6%	-1,713	-31,787
Sep	318,934	297,366	21,567	7.3%	45	21,523	341,622	-22,688	-6.6%	-1,628	-21,060
Oct	374,963	351,608	23,355	6.6%	51	23,304	424,390	-49,427	-11.6%	-1,977	-47,450
Winter	4,175,647	4,336,172	-160,525	-3.7%	-21,004	-139,521	4,544,171	-368,524	-8.1%	-21,163	-347,361
Summer	2,098,588	1,955,536	143,052	7.3%	96	142,956	2,350,270	-251,682	-10.7%	-11,401	-240,281
Annual	6,274,235	6,291,708	-17,473	-0.3%	-20,908	3,435	6,894,441	-620,206	-9.0%	-32,764	-587,442

Note 1 Company Forecast
Note 2 Actual, weather normalized data through April. Forecast data beginning June.
Note 3 Column 3 of Meter Counts table times Column 2 of Use Per Meter table.
Note 4 Actual, weather normalized data through May. Forecast data beginning June.
Note 5 Column 6 of Meter Counts table times Column 5 of Use Per Meter table.

	Total Division Meter Counts						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	6,949	6,983	-34	-0.5%	6,993	-44	-0.6%
Dec	6,995	7,029	-34	-0.5%	7,016	-21	-0.3%
Jan	6,995	7,029	-34	-0.5%	7,032	-37	-0.5%
Feb	7,004	7,038	-34	-0.5%	7,038	-34	-0.5%
Mar	6,986	7,020	-34	-0.5%	7,032	-46	-0.7%
Apr	6,961	6,995	-34	-0.5%	6,975	-14	-0.2%
May	6,839	6,839	0	0.0%	6,873	-34	-0.5%
Jun	6,724	6,724	0	0.0%	6,757	-33	-0.5%
Jul	6,676	6,676	0	0.0%	6,709	-33	-0.5%
Aug	6,655	6,655	0	0.0%	6,688	-33	-0.5%
Sep	6,682	6,681	1	0.0%	6,714	-32	-0.5%
Oct	6,838	6,837	1	0.0%	6,870	-32	-0.5%
Winter	6,982	7,016	-34	-0.5%	7,014	-33	-0.5%
Summer	6,736	6,735	0	0.0%	6,769	-33	-0.5%
Annual	6,859	6,876	-17	-0.2%	6,891	-33	-0.5%

Note 1 Company Forecast
Note 2 Actual data through April. Forecast data beginning June.
Note 3 Actual Data.

	Total Division Use Per Meter						
	2020-2021	Compared to 2019-2020			Compared to 2018-2019		
	Forecast	Actual	Change	Percent Change	Actual	Change	Percent Change
Column	1	2	3	4	5	6	7
Reference	Note 1.	Note 2.	(1-2)	(3/2)	Note 3.	(1-5)	(6/5)
Nov	73.50	79.10	-5.60	-7.1%	80.54	-7.03	-8.7%
Dec	95.91	99.13	-3.22	-3.2%	99.06	-3.15	-3.2%
Jan	114.64	122.26	-7.62	-6.2%	128.36	-13.72	-10.7%
Feb	120.89	129.58	-8.68	-6.7%	133.15	-12.25	-9.2%
Mar	112.23	109.28	2.95	2.7%	114.15	-1.92	-1.7%
Apr	80.63	78.42	2.21	2.8%	92.26	-11.64	-12.6%
May	65.67	59.72	5.96	10.0%	74.56	-8.89	-11.9%
Jun	49.82	46.77	3.05	6.5%	55.16	-5.34	-9.7%
Jul	45.96	43.72	2.24	5.1%	52.44	-6.48	-12.4%
Aug	47.14	43.85	3.29	7.5%	51.92	-4.78	-9.2%
Sep	47.73	44.51	3.22	7.2%	50.88	-3.15	-6.2%
Oct	54.84	51.43	3.41	6.6%	61.77	-6.94	-11.2%
Winter	598.09	618.07	-19.98	-3.2%	647.84	-49.71	-7.7%
Summer	311.56	290.34	21.22	7.3%	347.24	-35.58	-10.2%
Annual	914.79	915.09	-0.30	0.0%	1,000.44	-85.29	-8.5%

Note 1 Column 1 of Billed Deliveries table divided by Column 1 of Meter Counts table.
Note 2 Column 2 of Billed Deliveries table divided by Column 2 of Meter Counts table.
Note 3 Column 7 of Billed Deliveries table divided by Column 5 of Meter Counts table.

Northern Utilities, Inc.
New Hampshire Division
Sales Service Deliveries Forecast by Rate Class

Forecast Calendar Month Sales Service Deliveries (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-20	2,098	215,574	99,843	8,783	89,906	14,206	18,104	6,724	0	455,239
Dec-20	3,051	313,483	145,189	12,772	130,739	20,659	26,327	9,778	0	661,996
Jan-21	3,635	373,453	172,964	15,215	155,749	24,611	31,363	11,648	0	788,638
Feb-21	3,090	317,501	147,050	12,935	132,414	20,923	26,664	9,903	0	670,482
Mar-21	2,674	274,758	127,254	11,194	114,588	18,107	23,075	8,570	0	580,219
Apr-21	1,536	157,769	73,070	6,428	65,798	10,397	13,250	4,921	0	333,168
May-21	1,650	71,442	26,979	10,900	26,144	19,227	4,171	10,420	0	170,934
Jun-21	1,105	47,821	18,059	7,296	17,500	12,870	2,792	6,975	0	114,418
Jul-21	931	40,315	15,225	6,151	14,753	10,850	2,354	5,880	0	96,459
Aug-21	945	40,919	15,453	6,243	14,974	11,012	2,389	5,968	0	97,904
Sep-21	1,029	44,549	16,823	6,797	16,302	11,989	2,601	6,498	0	106,590
Oct-21	2,122	91,873	34,695	14,018	33,620	24,725	5,364	13,400	0	219,817
Winter	16,084	1,652,538	765,371	67,326	689,194	108,903	138,784	51,543	0	3,489,741
Summer	7,783	336,919	127,233	51,406	123,293	90,674	19,672	49,141	0	806,121
Total	23,867	1,989,457	892,604	118,732	812,488	199,577	158,455	100,683	0	4,295,862

Forecast Calendar Month Distribution Service Deliveries (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-20	2,098	215,574	113,485	10,471	158,166	31,709	61,225	144,103	83,464	820,296
Dec-20	3,051	313,483	167,388	14,907	230,291	42,988	83,594	128,194	82,189	1,066,085
Jan-21	3,635	373,453	197,294	17,365	263,260	46,514	99,779	139,118	85,215	1,225,633
Feb-21	3,090	317,501	168,206	14,864	226,359	40,712	86,319	137,096	82,567	1,076,714
Mar-21	2,674	274,758	149,203	13,419	210,207	39,178	79,952	139,901	91,033	1,000,325
Apr-21	1,536	157,769	85,432	8,912	123,004	34,793	59,223	129,656	54,891	655,216
May-21	1,650	71,442	32,738	12,350	57,049	34,028	30,398	142,207	94,136	475,998
Jun-21	1,105	47,821	20,376	8,710	32,240	26,674	21,487	115,968	88,256	362,639
Jul-21	931	40,315	16,505	7,487	24,006	22,623	18,475	121,550	88,869	340,761
Aug-21	945	40,919	16,768	7,671	24,994	24,120	18,155	128,967	91,752	354,292
Sep-21	1,029	44,549	19,390	8,366	32,507	27,155	22,475	123,875	92,648	371,993
Oct-21	2,122	91,873	41,122	15,620	68,266	39,244	37,442	147,375	94,543	537,608
Winter	16,084	1,652,538	881,008	79,937	1,211,287	235,893	470,093	818,068	479,360	5,844,268
Summer	7,783	336,919	146,899	60,205	239,062	173,844	148,433	779,942	550,204	2,443,290
Total	23,867	1,989,457	1,027,907	140,142	1,450,349	409,738	618,526	1,598,010	1,029,564	8,287,558

Forecast Sales Service Percentage

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-20	100%	100%	88%	84%	57%	45%	30%	5%	0%	55%
Dec-20	100%	100%	87%	86%	57%	48%	31%	8%	0%	62%
Jan-21	100%	100%	88%	88%	59%	53%	31%	8%	0%	64%
Feb-21	100%	100%	87%	87%	58%	51%	31%	7%	0%	62%
Mar-21	100%	100%	85%	83%	55%	46%	29%	6%	0%	58%
Apr-21	100%	100%	86%	72%	53%	30%	22%	4%	0%	51%
May-21	100%	100%	82%	88%	46%	57%	14%	7%	0%	36%
Jun-21	100%	100%	89%	84%	54%	48%	13%	6%	0%	32%
Jul-21	100%	100%	92%	82%	61%	48%	13%	5%	0%	28%
Aug-21	100%	100%	92%	81%	60%	46%	13%	5%	0%	28%
Sep-21	100%	100%	87%	81%	50%	44%	12%	5%	0%	29%
Oct-21	100%	100%	84%	90%	49%	63%	14%	9%	0%	41%
Winter	100%	100%	87%	84%	57%	46%	30%	6%	0%	60%
Summer	100%	100%	87%	85%	52%	52%	13%	6%	0%	33%
Total	100%	100%	87%	85%	56%	49%	26%	6%	0%	52%

Northern Utilities, Inc.
New Hampshire Division
Sales Service Deliveries Forecast by Rate Class

Forecast Bill Month Sales Service Deliveries (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-20	1,818	146,991	57,269	8,139	49,844	13,605	7,617	9,238	0	294,521
Dec-20	2,774	272,352	120,501	10,500	95,809	17,362	14,674	7,963	0	541,934
Jan-21	3,284	334,200	159,639	12,038	139,608	20,603	24,466	8,571	0	702,409
Feb-21	3,378	373,575	179,543	13,209	173,381	24,686	41,142	8,553	0	817,468
Mar-21	2,725	314,037	153,484	13,169	139,716	21,707	27,053	8,831	0	680,722
Apr-21	2,104	211,382	94,935	10,270	90,836	10,940	23,832	8,387	0	452,687
May-21	1,657	119,526	52,451	8,889	50,406	17,021	6,442	8,862	0	265,253
Jun-21	1,379	60,791	24,454	8,419	27,214	15,708	3,646	7,329	0	148,939
Jul-21	1,212	38,534	12,659	8,423	15,251	15,685	2,739	7,778	0	102,281
Aug-21	1,167	32,477	11,292	8,506	12,609	14,262	2,402	8,271	0	90,987
Sep-21	1,199	36,047	12,004	8,647	11,452	12,819	715	7,893	0	90,776
Oct-21	1,169	49,544	14,372	8,522	6,361	15,180	3,728	9,009	0	107,884
Nov-21	1,779	152,170	61,326	10,678	54,062	20,318	8,012	4,426	0	312,771
Dec-21	2,612	273,972	122,160	13,141	98,644	24,075	16,487	3,762	0	554,853
Jan-22	2,977	333,174	160,896	15,213	142,586	27,679	24,507	4,139	0	711,170
Feb-22	3,171	376,765	184,127	16,645	177,070	32,282	40,833	4,184	0	835,077
Mar-22	2,728	318,416	159,673	17,576	144,257	30,500	27,383	4,313	0	704,847
Apr-22	2,037	210,394	98,791	12,738	93,880	17,683	23,447	4,127	0	463,099
Winter	16,084	1,652,538	765,371	67,326	689,194	108,903	138,784	51,543	0	3,489,741
Summer	7,783	336,919	127,233	51,406	123,293	90,674	19,672	49,141	0	806,121
Total	23,867	1,989,457	892,604	118,732	812,488	199,577	158,455	100,683	0	4,295,862
Year 2 Winter	15,303	1,664,893	786,972	85,991	710,500	152,538	140,669	24,951	0	3,581,817

Forecast Bill Month Distribution Service Deliveries (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-20	1,818	146,991	70,911	9,828	118,104	31,107	50,738	146,617	83,464	659,578
Dec-20	2,774	272,352	142,700	12,636	195,362	39,691	71,941	126,379	82,189	946,024
Jan-21	3,284	334,200	183,968	14,188	247,118	42,506	92,882	136,042	85,215	1,139,404
Feb-21	3,378	373,575	200,699	15,137	267,326	44,475	100,798	135,745	82,567	1,223,700
Mar-21	2,725	314,037	175,433	15,393	235,335	42,778	83,930	140,162	91,033	1,100,828
Apr-21	2,104	211,382	107,297	12,755	148,042	35,336	69,805	133,122	54,891	774,735
May-21	1,657	119,526	58,209	10,339	81,311	31,821	32,669	140,649	94,136	570,317
Jun-21	1,379	60,791	26,771	9,833	41,954	29,512	22,341	116,322	88,256	397,160
Jul-21	1,212	38,534	13,940	9,759	24,505	27,457	18,860	123,447	88,869	346,583
Aug-21	1,167	32,477	12,608	9,934	22,629	27,370	18,168	131,270	91,752	347,374
Sep-21	1,199	36,047	14,571	10,215	27,656	27,985	20,589	125,270	92,648	356,180
Oct-21	1,169	49,544	20,800	10,125	41,007	29,699	35,806	142,984	94,543	425,676
Nov-21	1,779	152,170	74,968	12,366	122,322	37,820	51,133	147,535	93,188	693,283
Dec-21	2,612	273,972	144,359	15,277	198,197	46,404	73,754	125,384	91,672	971,632
Jan-22	2,977	333,174	185,225	17,363	250,096	49,583	92,923	137,961	94,954	1,164,256
Feb-22	3,171	376,765	205,282	18,573	271,015	52,071	100,488	139,459	91,914	1,258,738
Mar-22	2,728	318,416	181,622	19,800	239,876	51,571	84,261	143,770	101,243	1,143,287
Apr-22	2,037	210,394	111,153	15,223	151,087	42,079	69,421	137,581	60,990	799,965
Winter	16,084	1,652,538	881,008	79,937	1,211,287	235,893	470,093	818,068	479,360	5,844,268
Summer	7,783	336,919	146,899	60,205	239,062	173,844	148,433	779,942	550,204	2,443,290
Total	23,867	1,989,457	1,027,907	140,142	1,450,349	409,738	618,526	1,598,010	1,029,564	8,287,558
Year 2 Winter	15,303	1,664,893	902,610	98,602	1,232,593	279,528	471,979	831,690	533,962	6,031,160

Forecast Sales Service Percentage

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Total Division
Nov-20	100%	100%	81%	83%	42%	44%	15%	6%	0%	45%
Dec-20	100%	100%	84%	83%	49%	44%	20%	6%	0%	57%
Jan-21	100%	100%	87%	85%	56%	48%	26%	6%	0%	62%
Feb-21	100%	100%	89%	87%	65%	56%	41%	6%	0%	67%
Mar-21	100%	100%	87%	86%	59%	51%	32%	6%	0%	62%
Apr-21	100%	100%	88%	81%	61%	31%	34%	6%	0%	58%
May-21	100%	100%	90%	86%	62%	53%	20%	6%	0%	47%
Jun-21	100%	100%	91%	86%	65%	53%	16%	6%	0%	38%
Jul-21	100%	100%	91%	86%	62%	57%	15%	6%	0%	30%
Aug-21	100%	100%	90%	86%	56%	52%	13%	6%	0%	26%
Sep-21	100%	100%	82%	85%	41%	46%	3%	6%	0%	25%
Oct-21	100%	100%	69%	84%	16%	51%	10%	6%	0%	25%
Nov-21	100%	100%	82%	86%	44%	54%	16%	3%	0%	45%
Dec-21	100%	100%	85%	86%	50%	52%	22%	3%	0%	57%
Jan-22	100%	100%	87%	88%	57%	56%	26%	3%	0%	61%
Feb-22	100%	100%	90%	90%	65%	62%	41%	3%	0%	66%
Mar-22	100%	100%	88%	89%	60%	59%	32%	3%	0%	62%
Apr-22	100%	100%	89%	84%	62%	42%	34%	3%	0%	58%
Winter	100%	100%	87%	84%	57%	46%	30%	6%	0%	60%
Summer	100%	100%	87%	85%	52%	52%	13%	6%	0%	33%
Total	100%	100%	87%	85%	56%	49%	26%	6%	0%	52%

Northern Utilities, Inc.
New Hampshire Division
Forecast Total Billed Meters

Month	Res Non-Heat	Res Heat	G/T40	G/T50	G/T41	G/T51	G/T42	G/T52	Special Contracts	Total Division
Nov-20	1,220	26,228	5,059	815	727	278	34	33	3	34,397
Dec-20	1,210	26,264	5,097	819	732	278	34	32	3	34,469
Jan-21	1,268	26,349	5,097	818	733	278	34	32	3	34,612
Feb-21	1,266	26,391	5,104	820	732	278	35	32	3	34,661
Mar-21	1,267	26,399	5,085	822	731	278	35	32	3	34,652
Apr-21	1,280	26,442	5,055	829	729	278	35	32	3	34,683
May-21	1,261	26,321	4,989	835	668	281	30	33	3	34,421
Jun-21	1,265	26,219	4,880	830	667	281	30	33	3	34,208
Jul-21	1,261	26,054	4,834	828	666	282	30	33	3	33,991
Aug-21	1,261	26,062	4,817	826	664	282	30	33	3	33,978
Sep-21	1,242	26,232	4,822	826	678	290	30	33	3	34,156
Oct-21	1,213	26,489	4,938	822	728	281	33	33	3	34,540

Forecast Delivery Service Billed Meters

Month	Res Non-Heat	Res Heat	40	50	41	51	42	52	Special Contracts	Total Division
Nov-20			491	81	266	120	23	30	3	1,014
Dec-20			491	81	266	120	23	30	3	1,014
Jan-21			491	81	266	120	23	30	3	1,014
Feb-21			491	81	266	120	23	30	3	1,014
Mar-21			491	81	266	120	23	30	3	1,014
Apr-21			491	81	266	120	23	30	3	1,014
May-21			491	81	266	120	23	30	3	1,014
Jun-21			491	81	266	120	23	30	3	1,014
Jul-21			491	81	266	120	23	30	3	1,014
Aug-21			491	81	266	120	23	30	3	1,014
Sep-21			491	81	266	120	23	30	3	1,014
Oct-21			491	81	266	120	23	30	3	1,014

Forecast Sales Service Billed Meters

Month	Res Non-Heat	Res Heat	40	50	41	51	42	52	Special Contracts	Total Division
Nov-20	1,220	26,228	4,568	734	461	158	11	3	-	33,383
Dec-20	1,210	26,264	4,606	738	466	158	11	2	-	33,455
Jan-21	1,268	26,349	4,606	737	467	158	11	2	-	33,598
Feb-21	1,266	26,391	4,613	739	466	158	12	2	-	33,647
Mar-21	1,267	26,399	4,594	741	465	158	12	2	-	33,638
Apr-21	1,280	26,442	4,564	748	463	158	12	2	-	33,669
May-21	1,261	26,321	4,498	754	402	161	7	3	-	33,407
Jun-21	1,265	26,219	4,389	749	401	161	7	3	-	33,194
Jul-21	1,261	26,054	4,343	747	400	162	7	3	-	32,977
Aug-21	1,261	26,062	4,326	745	398	162	7	3	-	32,964
Sep-21	1,242	26,232	4,331	745	412	170	7	3	-	33,142
Oct-21	1,213	26,489	4,447	741	462	161	10	3	-	33,526

Northern Utilities, Inc.
New Hampshire Division
Estimation of Northern - New Hampshire City-Gate Sendout Requirement

Month	Sales Service Deliveries (Dth)	Company Gas Allowance (Percent)	Company Gas Allowance (LAUF and Company Use) (Dth)	Estimated Division Sales Service Sendout (Dth)	Estimated Company-Managed Sales	Total Estimated City-Gate Sendout Requirement
Nov-20	455,239	1.30%	5,996	461,235	22,380	483,615
Dec-20	661,996	1.30%	8,719	670,715	25,562	696,277
Jan-21	788,638	1.30%	10,388	799,026	29,216	828,242
Feb-21	670,482	1.30%	8,831	679,313	23,933	703,246
Mar-21	580,219	1.30%	7,642	587,861	23,126	610,987
Apr-21	333,168	1.30%	4,388	337,556	0	337,556
May-21	170,934	1.30%	2,251	173,185	0	173,185
Jun-21	114,418	1.30%	1,507	115,925	0	115,925
Jul-21	96,459	1.30%	1,271	97,730	0	97,730
Aug-21	97,904	1.30%	1,289	99,193	0	99,193
Sep-21	106,590	1.30%	1,403	107,993	0	107,993
Oct-21	219,817	1.30%	2,895	222,712	0	222,712
Winter	3,489,741	1.30%	45,965	3,535,706	124,217	3,659,923
Summer	806,121	1.30%	10,617	816,738	0	816,738
Annual	4,295,862	1.30%	56,582	4,352,444	124,217	4,476,661

Northern Utilities, Inc.
New Hampshire Division
Lost and Unaccounted For, Company Use and Therm Factor Data

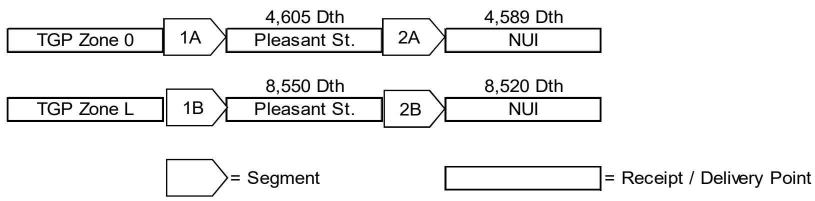
Month	GSGT - NH City-Gates (MCF)	Therm Factor	Total - NH City-Gate (Dth)	Total System Billed Sales (Dth)	Company Use (Dth)	Lost and Unaccounted For (Dth)	Company Gas Allowance (Dth)
Jun-16	357,643	1.0279	367,636	388,601	46	(21,011)	(20,965)
Jul-16	333,740	1.0234	341,546	330,290	48	11,208	11,256
Aug-16	351,745	1.0268	361,183	362,108	77	(1,002)	(925)
Sep-16	344,260	1.0275	353,710	362,480	85	(8,855)	(8,770)
Oct-16	534,187	1.0277	548,995	450,915	76	98,004	98,080
Nov-16	727,721	1.0255	746,307	632,412	109	113,786	113,895
Dec-16	1,070,154	1.0296	1,101,863	914,020	180	187,663	187,843
Jan-17	1,072,453	1.0310	1,105,656	1,096,068	219	9,369	9,588
Feb-17	933,805	1.0393	970,504	1,031,216	218	(60,930)	(60,712)
Mar-17	1,096,739	1.0314	1,131,198	1,031,817	211	99,170	99,381
Apr-17	608,829	1.0277	625,669	834,527	162	(209,020)	(208,858)
May-17	505,254	1.0276	519,184	568,537	74	(49,427)	(49,353)
Jun-17	367,334	1.0280	377,630	385,480	56	(7,906)	(7,850)
Jul-17	339,837	1.0256	348,547	387,505	59	(39,017)	(38,958)
Aug-17	361,673	1.0280	371,789	366,063	62	5,664	5,726
Sep-17	357,543	1.0278	367,472	356,843	56	10,573	10,629
Oct-17	446,927	1.0284	459,625	427,725	32	31,868	31,900
Nov-17	794,934	1.0307	819,307	581,079	71	238,157	238,228
Dec-17	1,205,148	1.0339	1,245,942	1,003,583	209	242,150	242,359
Jan-18	1,274,596	1.0394	1,324,764	1,403,452	373	(79,061)	(78,688)
Feb-18	936,704	1.0340	968,580	1,110,066	270	(141,756)	(141,486)
Mar-18	999,035	1.0334	1,032,433	998,242	239	33,952	34,191
Apr-18	766,729	1.0318	791,111	889,668	211	(98,768)	(98,557)
May-18	443,025	1.0283	455,580	574,552	108	(119,080)	(118,972)
Jun-18	369,548	1.0292	380,339	409,352	40	(29,053)	(29,013)
Jul-18	351,086	1.0289	361,236	352,762	92	8,382	8,474
Aug-18	363,051	1.0284	373,373	369,837	131	3,405	3,536
Sep-18	378,195	1.0276	388,633	370,269	131	18,233	18,364
Oct-18	628,317	1.0303	647,361	485,554	100	161,707	161,807
Nov-18	923,290	1.0336	954,321	765,985	142	188,194	188,336
Dec-18	1,057,440	1.0382	1,097,877	1,067,650	207	30,020	30,227
Jan-19	1,259,492	1.0431	1,313,764	1,200,221	254	113,289	113,543
Feb-19	1,109,150	1.0375	1,150,732	1,229,927	257	(79,452)	(79,195)
Mar-19	1,008,861	1.0347	1,043,849	1,147,817	251	(104,219)	(103,968)
Apr-19	681,738	1.0309	702,824	843,446	173	(140,795)	(140,622)
May-19	545,305	1.0288	560,999	632,151	100	(71,252)	(71,152)
Jun-19	388,772	1.0290	400,027	430,401	58	(30,432)	(30,374)
Jul-19	365,810	1.0287	376,320	391,025	83	(14,788)	(14,705)
Aug-19	374,614	1.0280	385,103	380,773	140	4,190	4,330
Sep-19	394,298	1.0283	405,449	375,182	100	30,167	30,267
Oct-19	534,087	1.0295	549,837	485,412	89	64,336	64,425
Nov-19	930,426	1.0352	963,214	698,187	84	264,943	265,027
Dec-19	1,075,165	1.0460	1,124,591	1,016,439	240	107,912	108,152
Jan-20	1,077,141	1.0437	1,124,212	1,130,011	294	(6,093)	(5,799)
Feb-20	1,041,031	1.0434	1,086,254	1,133,789	289	(47,824)	(47,535)
Mar-20	839,434	1.0376	871,030	1,005,451	257	(134,678)	(134,421)
Apr-20	651,269	1.0343	673,594	707,068	180	(33,654)	(33,474)
May-20	441,527	1.0303	454,923	565,494	141	(110,712)	(110,571)
Total	33,019,063	1.0335	34,126,093	33,681,452	7,084	437,557	444,641
48-Month Average					0.02%	1.28%	1.30%

Northern Capacity Summary (Dth/Day)

Pipeline Capacity Paths	
Tennessee Zone 0 and Zone L Pools	13,109
Tennessee Niagara	2,327
Iroquois Receipts	6,434
Leidy Hub Supply (Texas Eastern, Algonquin)	965
Transco Zone 6, non-NY Supply (Algonquin)	286
PXP Dawn Hub	9,965
Atlantic Bridge Ramapo	7,500
Total Pipeline Capacity	40,586
Storage Capacity Paths	
Tennessee Firm Storage	2,644
Union Dawn Storage	39,863
Total Storage Capacity	42,507
Peaking Capacity Paths	
LNG - On-System	6,500
Peaking Contract 1	39,860
Additional Granite Capacity	13,391
Total Peaking Capacity	59,751
Total Design Day Capacity	142,844

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Tennessee Zone 0 100 Leg, Zone L 500 and 800 Leg Pools

Capacity Path Diagram



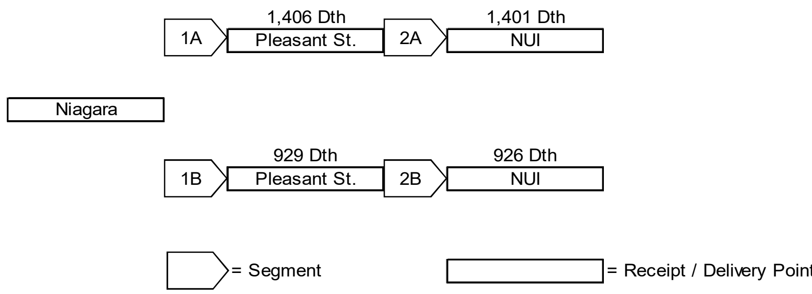
Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1A[1]	Transportation	Tennessee	5083	FT-A	10/31/2023	4,605	Dth	Year-Round	Zone 0, 100 Leg	Pleasant St.	Granite
2A	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	4,589	Dth	Year-Round	Granite	Northern City Gates	
1B[1]	Transportation	Tennessee	5083	FT-A	10/31/2023	8,550	Dth	Year-Round	Zone L, 500 & 800 Legs	Pleasant St.	Granite
2B	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	8,520	Dth	Year-Round	Granite	Northern City Gates	
Total Path Deliverable						13,109	Dth				

Note 1: Tennessee Contract No. 5083 also allows for firm delivery rights to Bay State Gas city gates. As such, Tennessee Production could also be delivered to Northern City Gates via the Bay State Exchange.

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Niagara (Interconnection of TransCanada and Tennessee Pipelines)

Capacity Path Diagram

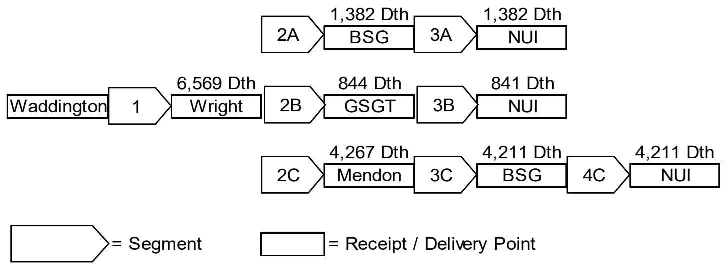


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1A	Transportation	Tennessee	5292	FT-A	3/31/2025	1,406	Dth	Year-Round	Niagara	Pleasant St.	Granite
2A	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	1,401	Dth	Year-Round	Granite	Northern City Gates	
1B	Transportation	Tennessee	39735	FT-A	3/31/2025	929	Dth	Year-Round	Niagara	Pleasant St.	Granite
2B	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	926	Dth	Year-Round	Granite	Northern City Gates	
Total Path Deliverable						2,327	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Iroquois Receipts

Capacity Path Diagram

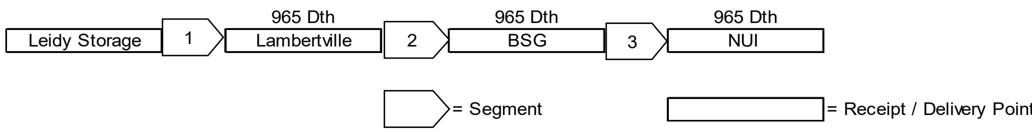


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	Iroquois	R181001	RTS-1	10/31/2023	6,569	Dth	Year-Round	Waddington	Wright	Tennessee
2A	Transportation	Tennessee	95196	FT-A	10/31/2022	1,382	Dth	Year-Round	Wright	Bay State City Gate	
3A	Exchange	Bay State Gas	NA	NA	Renewal Clause	1,382	Dth	Year-Round	Bay State City Gate	Northern City Gates	
2B	Transportation	Tennessee	95196	FT-A	10/31/2022	844	Dth	Year-Round	Wright	Pleasant St.	Granite
3B	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	841	Dth	Year-Round	Granite	Northern City Gates	
2C	Transportation	Tennessee	41099	FT-A	10/31/2022	4,267	Dth	Year-Round	Wright	Mendon	Algonquin
3C	Transportation	Algonquin	93200F	AFT-1	10/31/2021	4,211	Dth	Year-Round	Mendon	Bay State City Gate	
4C	Exchange	Bay State Gas	NA	NA	Renewal Clause	4,211	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Path Deliverable						6,434	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Algonquin Receipt Points

Capacity Path Diagram

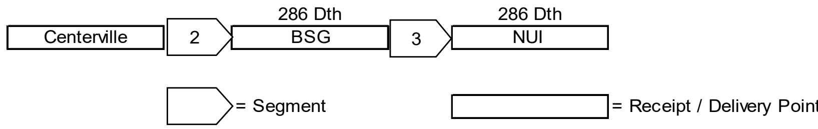


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	Texas Eastern	800384	FT-1	10/31/2021	965	Dth	Year-Round	Leidy Storage	Lambertville, NJ	Algonquin
2	Transportation	Algonquin	93201A1C	AFT-1 (F-2/F-3)	10/31/2021	965	Dth	Year-Round	Lambertville, NJ	Bay State City Gate	
3	Exchange	Bay State Gas	NA	NA	Renewal Clause	965	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Path Deliverable						965	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Algonquin Receipt Points

Capacity Path Diagram

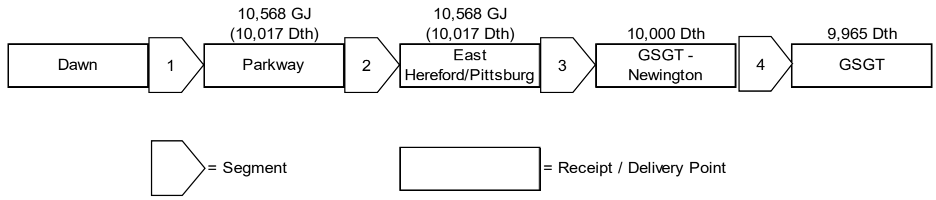


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	Algonquin	93201A1C	AFT-1 (F-2/F-3)	10/31/2021	286	Dth	Year-Round	Centerville, NJ	Bay State City Gate	
2	Exchange	Bay State Gas	NA	NA	Renewal Clause	286	Dth	Year-Round	Bay State City Gate	Northern City Gates	
Total Path Deliverable						286	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: PXP Dawn Hub

Capacity Path Diagram

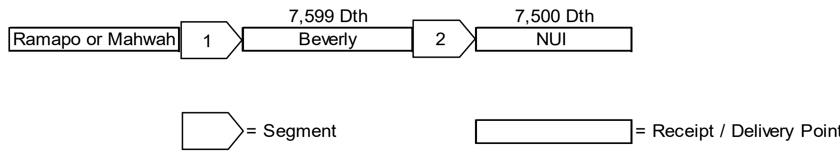


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	Union	TBD	M12	10/31/2040	10,568	GJ	Year-Round	Dawn	Parkway	TransCanada
2	Transportation	TransCanada	TBD	FT	10/31/2040	10,568	GJ	Year-Round	Parkway	East Hereford	PNGTS
3	Transportation	PNGTS	TBD	FT	10/31/2040	10,000	Dth	Year-Round	Pittsburg, NH	Newington, NH	Granite
4	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	9,965	Dth	Year-Round	Newington, NH	Northern City Gates	
Total Path Deliverable						9,965	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Atlantic Bridge Ramapo

Capacity Path Diagram

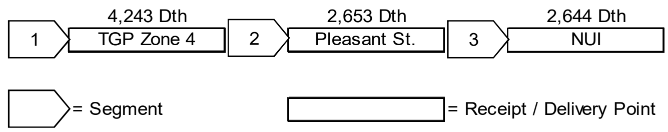


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Transportation	Algonquin	TBD	FT	10/31/2035	7,599	Dth	Year-Round	Ramapo or Mawhah	Beverly, MA	Maritimes
2	Transportation	Maritimes	TBD	FT	10/31/2025	7,500	Dth	Year-Round	Beverly, MA	Northern City Gates	
Total Path Deliverable						7,500	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Tennessee Firm Storage - Market Area

Capacity Path Diagram



Capacity Path Detail

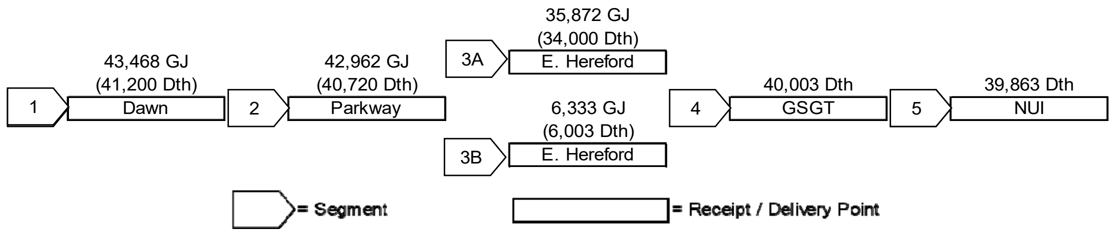
Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1[1]	Storage	Tennessee	5195	FS-MA	3/31/2025	4,243	Dth	Year-Round	NA	TGP Zone 4	Tennessee
2[2]	Transportation	Tennessee	5265	FT-A	3/31/2025	2,653	Dth	Year-Round	TGP Zone 4	Pleasant St.	Granite
3	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	2,644	Dth	Year-Round	Pleasant St.	Northern City Gates	
Total Path Deliverable						2,644	Dth				

Note 1: Tennessee Contract No. 5195 has a maximum storage quantity of 259,337 Dth.

Note 2: Tennessee Contract No. 5265 also allows for firm delivery rights to Bay State Gas city gates. As such, Tennessee Firm Storage could also be delivered to Northern City Gates via the Bay State Exchange.

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Union Dawn Storage

Capacity Path Diagram

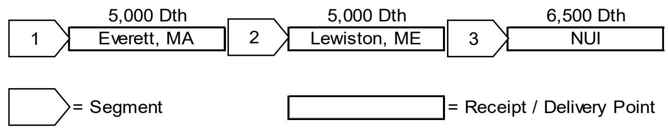


Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1	Storage	Union	LST086	Firm Storage (MDWD)	3/31/2023	43,468	GJ	Year-Round	NA	Dawn	Union
1	Storage	Union	LST086	Firm Storage (MSB)	3/31/2023	4,220,224	GJ	Year-Round	NA	Dawn	
1	Storage	Union	LST086	Firm Storage (MDID)	3/31/2023	31,652	GJ	Year-Round	NA	Dawn	
2	Transportation	Union	M12256	M12	10/31/2033	42,962	GJ	Year-Round	Dawn	Parkway	TransCanada
3A	Transportation	TransCanada	57901	FT	3/31/2033	35,872	GJ	Year-Round	Parkway	East Hereford	PNGTS
3B	Transportation	TransCanada	57055	FT	10/31/2032	6,333	GJ	Year-Round	Parkway	East Hereford	PNGTS
4	Transportation	PNGTS	FTN-NUI-0001	FT	10/31/2033	40,003	Dth	Year-Round	Pittsburg, NH	Newington, NH	Granite
5	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	39,863	Dth	Year-Round	Newington, NH	Northern City Gates	
Total Path Deliverable						39,863	Dth				

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Lewiston LNG Plant

Capacity Path Diagram



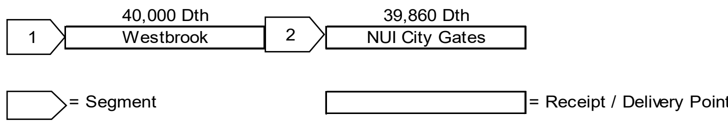
Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1[1]	LNG Contract	Confidential	NA	NA	10/31/2021	5,000	Dth	Year-Round	NA		NA
2	LNG Trucking Contract	Confidential			10/31/2021	5,000	Dth	Year-Round		Lewiston, ME	NA
3	Lewiston LNG Plant	N/A	NA	NA	N/A	6,500	Dth	Year-Round	Lewiston, ME	Northern Distribution System	
Total Path Deliverable						6,500	Dth				

Note 1: The LNG Contract allows Northern to nominate up to 5,000 Dth per day (5 trucks) with an annual maximum take equal to 125,000 Dth.

Northern Utilities, Inc.
Capacity Path Diagram and Detail
Source of Supply: Peaking Contract 1

Capacity Path Diagram



Capacity Path Detail

Segment	Product	Vendor	Contract ID	Rate Schedule	Contract Termination Date	Northern MDQ	Dth / GJ	Availability	Receipt Point	Delivery Point	Interconnecting Pipeline
1[1]	Peaking Supply	Confidential	NA	NA	3/31/2024	40,000	Dth	Winter Only (Nov - Mar)	NA	Westbrook or Lewiston	Granite or Northern City Gates
2	Transportation	Granite	19-100-FT-NN	FT-NN	10/31/2021	39,860	Dth	Year-Round	Westbrook or Lewiston	Northern City Gates	
Total Path Deliverable						39,860	Dth				

Note 1: Peaking Contract 1 allows Northern to nominate up to 40,000 Dth per Day and up to 600,000 Dth from November through March with takes above 30,000 Dth per Day capped at 50,000 Dth. Contract volumes may also be delivered to NUI - Lewiston in which case no Granite capacity is utilized.

Northern Utilities, Inc.
Estimated Gas Supply Demand Costs
November 1, 2020 through October 31, 2021

Line	Description	Estimate	Reference
1.	Pipeline Demand Costs	$ 17,304,236	Page 3 - Pipeline Allocated Cost
2.	Storage Allocated Pipeline Demand Costs	$ 20,299,374	Page 3 - Storage Allocated Cost
3.	Storage Demand Costs	$ 2,962,375	Page 4 - Annual Fixed Charges
4.	Peaking Allocated Pipeline Demand Costs	$ 1,658,003	Page 3 - Peaking Allocated Cost
5.	Peaking Contract Costs	$ 11,109,167	Page 5, Annual Fixed Charges
6.	Asset Management and Capacity Release Revenue	$ (8,074,404)	Page 6 - Total Asset Management and Capacity Release Revenue
7.	Total Demand Costs	$ 45,258,751	Sum Lines 1 through 6.

Northern Utilities, Inc.
Pipeline Contract Demand Cost Estimates
November 1, 2020 through October 31, 2021

Capacity Path	Segment	Pipeline	Contract ID	Rate	Negotiated Rate	Maximum Daily Quantity (Dth)	Monthly Demand Rate ($/MDQ)	Months Per Year	Reference (Sch 27-FXW, Page 2)	Monthly Demand	Annual Demand
Tennessee Zone 0/L Pools	1A	Tennessee	5083	FT-A	No	4,605	$ 20.3504	12	Line 8	$ 93,714	$ 1,124,563
Tennessee Zone 0/L Pools	2A	Granite	19-100-FT-NN	FT-NN	No	4,589	$ 4.4212	12	Line 3	$ 20,289	$ 243,467
Tennessee Zone 0/L Pools	1B	Tennessee	5083	FT-A	No	8,550	$ 18.0643	12	Line 9	$ 154,450	$ 1,853,397
Tennessee Zone 0/L Pools	2B	Granite	19-100-FT-NN	FT-NN	No	8,520	$ 4.4212	12	Line 3	$ 37,669	$ 452,023
Tennessee Niagara	1A	Tennessee	5292	FT-A	No	1,406	$ 6.2725	12	Line 11	$ 8,819	$ 105,830
Tennessee Niagara	2A	Granite	19-100-FT-NN	FT-NN	No	1,401	$ 4.4212	12	Line 3	$ 6,194	$ 74,329
Tennessee Niagara	1B	Tennessee	39735	FT-A	No	929	$ 6.2725	12	Line 11	$ 5,827	$ 69,926
Tennessee Niagara	2B	Granite	19-100-FT-NN	FT-NN	No	926	$ 4.4212	12	Line 3	$ 4,094	$ 49,128
Iroquois Receipts	1	Iroquois	181003	RTS-1	No	5,715	$ 5.2357	12	Line 4	$ 29,922	$ 359,064
Iroquois Receipts	1	Iroquois	181003	RTS-1	No	854	$ 5.2357	12	Line 4	$ 4,471	$ 53,655
Iroquois Receipts	2A	Tennessee	95196	FT-A	No	1,382	$ 6.2725	12	Line 11	$ 8,669	$ 104,023
Iroquois Receipts	2B	Tennessee	95196	FT-A	No	844	$ 6.2725	12	Line 11	$ 5,294	$ 63,528
Iroquois Receipts	3B	Granite	19-100-FT-NN	FT-NN	No	841	$ 4.4212	12	Line 3	$ 3,718	$ 44,619
Iroquois Receipts	2C	Tennessee	41099	FT-A	No	4,267	$ 6.2725	12	Line 11	$ 26,765	$ 321,177
Iroquois Receipts	3C	Algonquin	93002F	AFT-1	No	4,211	$ 8.5927	12	Line 1	$ 36,184	$ 434,206
Leidy Hub	1	Texas Eastern	800384	FT-1	No	965	$ 7.0960	12	Line 12	$ 6,848	$ 82,172
Leidy Hub	2	Algonquin	93201A1C	AFT-1	No	965	$ 8.5927	12	Line 1	$ 8,292	$ 99,503
Transco Zone 6, non-NY	1	Algonquin	93201A1C	AFT-1	No	286	$ 8.5927	12	Line 1	$ 2,458	$ 29,490
PXP Dawn Hub	1	Union		M12	No	10,017	$ 2.8203	12	Line 14	$ 28,251	$ 339,011
PXP Dawn Hub	2	TransCanada		FT	No	10,017	$ 12.9437	2	Line 13	$ 129,657	$ 259,314
PXP Dawn Hub	2	TransCanada		FT	No	10,017	$ 16.6050	10	Line 13	$ 166,332	$ 1,663,323
PXP Dawn Hub	3	PNGTS		FT (PXP)	Yes	10,000	$ 22.8125	12	Line 7	$ 228,125	$ 2,737,500
PXP Dawn Hub	4	Granite	19-100-FT-NN	FT-NN	No	9,965	$ 4.4212	12	Line 3	$ 44,057	$ 528,687
Atlantic Bridge	1	Algonquin		AFT	Yes	7,599	$ 54.9173	12	Line 2	$ 417,317	$ 5,007,799
Atlantic Bridge	2	Maritimes		MN365	Yes	7,500	$ 13.3833	12	Line 5	$ 100,375	$ 1,204,500
Tennessee Firm Storage	2	Tennessee	5265	FT-A	No	2,653	$ 7.1413	12	Line 10	$ 18,946	$ 227,350
Tennessee Firm Storage	3	Granite	19-100-FT-NN	FT-NN	No	2,644	$ 4.4212	12	Line 3	$ 11,690	$ 140,276
Union Dawn Storage	2	Union	M12256	M12	No	40,720	$ 2.8203	12	Line 14	$ 114,843	$ 1,378,111
Union Dawn Storage	3A	TransCanada	57901	FT	No	34,000	$ 12.9437	2	Line 13	$ 440,086	$ 880,172
Union Dawn Storage	3A	TransCanada	57901	FT	No	34,000	$ 16.6050	10	Line 13	$ 564,570	$ 5,645,700
Union Dawn Storage	3B	TransCanada	57055	FT	No	6,003	$ 12.9437	2	Line 13	$ 77,701	$ 155,402
Union Dawn Storage	3B	TransCanada	57055	FT	No	6,003	$ 16.6050	10	Line 13	$ 99,680	$ 996,798
Union Dawn Storage	4	PNGTS	208543	FT (C2C)	Yes	40,003	$ 18.2500	12	Line 6	$ 730,055	$ 8,760,657
Union Dawn Storage	5	Granite	19-100-FT-NN	FT-NN	No	39,863	$ 4.4212	12	Line 3	$ 176,242	$ 2,114,908
Peaking Capacity (Nov-Oct)	N/A	Granite	19-100-FT-NN	FT-NN	No	9,251	$ 4.4212	12	Line 3	$ 40,901	$ 490,806
Peaking Capacity (Nov-Apr)	N/A	Granite	19-100-FT-NN	FT-NN	No	44,000	$ 4.4212	6	Line 3	$ 194,533	$ 1,167,197
Total Annual Demand Costs											$ 39,261,613

Northern Utilities, Inc.
PIpeline Contract Demand Cost Allocations
November 1, 2020 through October 31, 2021

Capacity Path	Segment	Pipeline	Contract ID	MDQ	Pipeline MDQ	Storage MDQ	Peaking MDQ	Annual Demand	Annual Pipeline Allocated Cost	Annual Storage Allocated Cost	Annual Peaking Allocated Cost
Tennessee Zone 0/L Pools	1A	Tennessee	5083	4,605	4,605	-	-	$ 1,124,563	$ 1,124,563	$ -	$ -
Tennessee Zone 0/L Pools	2A	Granite	19-100-FT-NN	4,589	4,589	-	-	$ 243,467	$ 243,467	$ -	$ -
Tennessee Zone 0/L Pools	1B	Tennessee	5083	8,550	8,550	-	-	$ 1,853,397	$ 1,853,397	$ -	$ -
Tennessee Zone 0/L Pools	2B	Granite	19-100-FT-NN	8,520	8,520	-	-	$ 452,023	$ 452,023	$ -	$ -
Tennessee Niagara	1A	Tennessee	5292	1,406	1,406	-	-	$ 105,830	$ 105,830	$ -	$ -
Tennessee Niagara	2A	Granite	19-100-FT-NN	1,401	1,401	-	-	$ 74,329	$ 74,329	$ -	$ -
Tennessee Niagara	1B	Tennessee	39735	929	929	-	-	$ 69,926	$ 69,926	$ -	$ -
Tennessee Niagara	2B	Granite	19-100-FT-NN	926	926	-	-	$ 49,128	$ 49,128	$ -	$ -
Iroquois Receipts	1	Iroquois	181003	5,715	5,715	-	-	$ 359,064	$ 359,064	$ -	$ -
Iroquois Receipts	1	Iroquois	181003	854	854	-	-	$ 53,655	$ 53,655	$ -	$ -
Iroquois Receipts	2A	Tennessee	95196	1,382	1,382	-	-	$ 104,023	$ 104,023	$ -	$ -
Iroquois Receipts	2B	Tennessee	95196	844	844	-	-	$ 63,528	$ 63,528	$ -	$ -
Iroquois Receipts	3B	Granite	19-100-FT-NN	841	841	-	-	$ 44,619	$ 44,619	$ -	$ -
Iroquois Receipts	2C	Tennessee	41099	4,267	4,267	-	-	$ 321,177	$ 321,177	$ -	$ -
Iroquois Receipts	3C	Algonquin	93002F	4,211	4,211	-	-	$ 434,206	$ 434,206	$ -	$ -
Leidy Hub	1	Texas Eastern	800384	965	965	-	-	$ 82,172	$ 82,172	$ -	$ -
Leidy Hub	2	Algonquin	93201A1C	965	965	-	-	$ 99,503	$ 99,503	$ -	$ -
Transco Zone 6, non-NY	1	Algonquin	93201A1C	286	286	-	-	$ 29,490	$ 29,490	$ -	$ -
PXP Dawn Hub	1	Union	0	10,017	10,017	-	-	$ 339,011	$ 339,011	$ -	$ -
PXP Dawn Hub	2	TransCanada	0	10,017	10,017	-	-	$ 259,314	$ 259,314	$ -	$ -
PXP Dawn Hub	2	TransCanada	0	10,017	10,017	-	-	$ 1,663,323	$ 1,663,323	$ -	$ -
PXP Dawn Hub	3	PNGTS	0	10,000	10,000	-	-	$ 2,737,500	$ 2,737,500	$ -	$ -
PXP Dawn Hub	4	Granite	19-100-FT-NN	9,965	9,965	-	-	$ 528,687	$ 528,687	$ -	$ -
Atlantic Bridge	1	Algonquin	0	7,599	7,599	-	-	$ 5,007,799	$ 5,007,799	$ -	$ -
Atlantic Bridge	2	Maritimes	0	7,500	7,500	-	-	$ 1,204,500	$ 1,204,500	$ -	$ -
Tennessee Firm Storage	2	Tennessee	5265	2,653	-	2,653	-	$ 227,350	$ -	$ 227,350	$ -
Tennessee Firm Storage	3	Granite	19-100-FT-NN	2,644	-	2,644	-	$ 140,276	$ -	$ 140,276	$ -
Union Dawn Storage	2	Union	M12256	40,720	-	40,720	-	$ 1,378,111	$ -	$ 1,378,111	$ -
Union Dawn Storage	3A	TransCanada	57901	34,000	-	34,000	-	$ 880,172	$ -	$ 880,172	$ -
Union Dawn Storage	3A	TransCanada	57901	34,000	-	34,000	-	$ 5,645,700	$ -	$ 5,645,700	$ -
Union Dawn Storage	3B	TransCanada	57055	6,003	-	6,003	-	$ 155,402	$ -	$ 155,402	$ -
Union Dawn Storage	3B	TransCanada	57055	6,003	-	6,003	-	$ 996,798	$ -	$ 996,798	$ -
Union Dawn Storage	4	PNGTS	208543	40,003	-	40,003	-	$ 8,760,657	$ -	$ 8,760,657	$ -
Union Dawn Storage	5	Granite	19-100-FT-NN	39,863	-	39,863	-	$ 2,114,908	$ -	$ 2,114,908	$ -
Peaking Capacity (Nov-Oct)	N/A	Granite	19-100-FT-NN	9,251	-	-	26,216	$ 490,806	$ -	$ -	$ 490,806
Peaking Capacity (Nov-Apr)	N/A	Granite	19-100-FT-NN	44,000	-	-	30,000	$ 1,167,197	$ -	$ -	$ 1,167,197
Total Annual Demand Costs								$ 39,261,613	$ 17,304,236	$ 20,299,374	$ 1,658,003

Northern Utilities, Inc.
Storage Contract Demand Cost Estimates
November 1, 2020 through October 31, 2021

Vendor	Contract ID	Rate	Negotiated	MSQ (Dth)	MDWQ	Space Rate	Demand Rate	Months Per Year	Reference (Sch 27-FXW, Page 2)	Annual Space Charge	Annual Demand Charge	Annual Fixed Charges
Tennessee	5195	FS-MA	No	259,337	4,243	$ 0.0179	$ 1.3094	12	Line 1	$ 55,706	$ 66,669	$ 122,375
Union	LST086	Storage	Yes	4,000,000	41,200	$ 0.0592		12	Line 2	$ 2,840,000		$ 2,840,000

Total Annual Fixed Charges $ 2,962,375

MSQ = Maximum Space Quantity
MDWQ = Maximum Daily Withdrawal Quantity

REDACTED

Northern Utilities, Inc.
Peaking Contract Demand Cost Estimates
November 1, 2020 through October 31, 2021

Denotes Confidential Information

Resource	Supplier	Contract Quantity	Maximum Daily Quantity	Months per Year	Annual Fixed Charges
LNG Contract	[redacted]	125,000	5,000	5	[redacted]
Peaking Contract 1		600,000	40,000	5	
Total Peaking Supply Contract Demand Costs					$ 11,109,167

REDACTED

Northern Utilities, Inc.
Asset Management and Capacity Release Revenue Projections
November 1, 2020 through October 31, 2021

Denotes Confidential Information

Capacity Path	Projected Revenue
Tennessee Zone 0/L Pools	[redacted]
Tennessee Niagara	
Iroquois Receipts	
Leidy Hub & Transco Zone 6, non-NY	
Union Dawn Storage	
Total Asset Management	$ (8,074,404)

Northern Utilities, Inc.
New Hampshire Division
Retail Marketer Capacity Assignment Revenue Projections
November 2020 through October 2021

Item	Revenue	Reference
Pipeline Contract Capacity Assignment	$ (3,942,611)	Page 2
Storage Contract Capacity Assignment	$ (277,372)	Page 3
On-System Peaking Service Demand	$ (235,657)	Page 4
Asset Management Revenue Assigned to Retail Suppliers	$ 35,696	Page 5
Total Division Capacity Assignment Demand Revenue	$ (4,419,945)	Sum of Items Above

Northern Utilities, Inc.
New Hampshire Division Pipeline Capacity Assignment Estimates
November 2020 through October 2021

Capacity Path	Segment	Pipeline	Contract ID	Pipeline Allocated Cost	Storage Allocated Cost	Peaking Allocated Cost	Capacity Assigned? (Y/N)	Assigned Pipeline MDQ	Assigned Storage MDQ	Assigned Peaking MDQ	Assigned Pipeline Credits	Assigned Storage Credits	Assigned Peaking Credits	ME Annual Cap Assign Credit
Tennessee Zone 0/L Pools	1A	Tennessee	5083	$ 1,124,563	$ -	$ -	Y	(502)	-	-	$ (122,591)	$ -	$ -	$ (122,591)
Tennessee Zone 0/L Pools	2A	Granite	19-100-FT-NN	$ 243,467	$ -	$ -	Y	(500)	-	-	$ (26,527)	$ -	$ -	$ (26,527)
Tennessee Zone 0/L Pools	1B	Tennessee	5083	$ 1,853,397	$ -	$ -	Y	(932)	-	-	$ (202,031)	$ -	$ -	$ (202,031)
Tennessee Zone 0/L Pools	2B	Granite	19-100-FT-NN	$ 452,023	$ -	$ -	Y	(929)	-	-	$ (49,288)	$ -	$ -	$ (49,288)
Tennessee Niagara	1A	Tennessee	5292	$ 105,830	$ -	$ -	Y	(153)	-	-	$ (11,516)	$ -	$ -	$ (11,516)
Tennessee Niagara	2A	Granite	19-100-FT-NN	$ 74,329	$ -	$ -	Y	(153)	-	-	$ (8,117)	$ -	$ -	$ (8,117)
Tennessee Niagara	1B	Tennessee	39735	$ 69,926	$ -	$ -	Y	(101)	-	-	$ (7,602)	$ -	$ -	$ (7,602)
Tennessee Niagara	2B	Granite	19-100-FT-NN	$ 49,128	$ -	$ -	Y	(101)	-	-	$ (5,358)	$ -	$ -	$ (5,358)
Iroquois Receipts	1	Iroquois	181003	$ 359,064	$ -	$ -	Y	(623)	-	-	$ (39,142)	$ -	$ -	$ (39,142)
Iroquois Receipts	1	Iroquois	181003	$ 53,655	$ -	$ -	Y	(93)	-	-	$ (5,843)	$ -	$ -	$ (5,843)
Iroquois Receipts	2A	Tennessee	95196	$ 104,023	$ -	$ -	Y	(151)	-	-	$ (11,366)	$ -	$ -	$ (11,366)
Iroquois Receipts	2B	Tennessee	95196	$ 63,528	$ -	$ -	Y	(92)	-	-	$ (6,925)	$ -	$ -	$ (6,925)
Iroquois Receipts	3B	Granite	19-100-FT-NN	$ 44,619	$ -	$ -	Y	(92)	-	-	$ (4,881)	$ -	$ -	$ (4,881)
Iroquois Receipts	2C	Tennessee	41099	$ 321,177	$ -	$ -	Y	(465)	-	-	$ (35,001)	$ -	$ -	$ (35,001)
Iroquois Receipts	3C	Algonquin	93002F	$ 434,206	$ -	$ -	Y	(459)	-	-	$ (47,329)	$ -	$ -	$ (47,329)
Leidy Hub	1	Texas Eastern	800384	$ 82,172	$ -	$ -	Y	(105)	-	-	$ (8,941)	$ -	$ -	$ (8,941)
Leidy Hub	2	Algonquin	93201A1C	$ 99,503	$ -	$ -	Y	(105)	-	-	$ (10,827)	$ -	$ -	$ (10,827)
Transco Zone 6, non-NY	1	Algonquin	93201A1C	$ 29,490	$ -	$ -	Y	(31)	-	-	$ (3,196)	$ -	$ -	$ (3,196)
PXP Dawn Hub	1	Union	0	$ 339,011	$ -	$ -	Y	(1,092)	-	-	$ (36,957)	$ -	$ -	$ (36,957)
PXP Dawn Hub	2	TransCanada	0	$ 259,314	$ -	$ -	Y	(1,092)	-	-	$ (28,269)	$ -	$ -	$ (28,269)
PXP Dawn Hub	2	TransCanada	0	$ 1,663,323	$ -	$ -	Y	(1,092)	-	-	$ (181,327)	$ -	$ -	$ (181,327)
PXP Dawn Hub	3	PNGTS	0	$ 2,737,500	$ -	$ -	Y	(1,090)	-	-	$ (298,388)	$ -	$ -	$ (298,388)
PXP Dawn Hub	4	Granite	19-100-FT-NN	$ 528,687	$ -	$ -	Y	(1,086)	-	-	$ (57,617)	$ -	$ -	$ (57,617)
Atlantic Bridge	1	Algonquin	0	$ 5,007,799	$ -	$ -	Y	(829)	-	-	$ (546,317)	$ -	$ -	$ (546,317)
Atlantic Bridge	2	Maritimes	0	$ 1,204,500	$ -	$ -	Y	(818)	-	-	$ (131,371)	$ -	$ -	$ (131,371)
Tennessee Firm Storage	2	Tennessee	5265	$ -	$ 227,350	$ -	Y	-	(248)	-	$ -	$ (21,253)	$ -	$ (21,253)
Tennessee Firm Storage	3	Granite	19-100-FT-NN	$ -	$ 140,276	$ -	Y	-	(248)	-	$ -	$ (13,157)	$ -	$ (13,157)
Union Dawn Storage	2	Union	M12256	$ -	$ 1,378,111	$ -	Y	-	(3,813)	-	$ -	$ (129,046)	$ -	$ (129,046)
Union Dawn Storage	3A	TransCanada	57901	$ -	$ 880,172	$ -	Y	-	(3,183)	-	$ -	$ (82,400)	$ -	$ (82,400)
Union Dawn Storage	3A	TransCanada	57901	$ -	$ 5,645,700	$ -	Y	-	(3,183)	-	$ -	$ (528,537)	$ -	$ (528,537)
Union Dawn Storage	3B	TransCanada	57055	$ -	$ 155,402	$ -	Y	-	(562)	-	$ -	$ (14,549)	$ -	$ (14,549)
Union Dawn Storage	3B	TransCanada	57055	$ -	$ 996,798	$ -	Y	-	(562)	-	$ -	$ (93,320)	$ -	$ (93,320)
Union Dawn Storage	4	PNGTS	208543	$ -	$ 8,760,657	$ -	Y	-	(3,746)	-	$ -	$ (820,374)	$ -	$ (820,374)
Union Dawn Storage	5	Granite	19-100-FT-NN	$ -	$ 2,114,908	$ -	Y	-	(3,732)	-	$ -	$ (197,999)	$ -	$ (197,999)
Peaking Capacity (Nov-Oct)	N/A	Granite	19-100-FT-NN	$ -	$ -	$ 490,806	Y	-	-	(2,455)	$ -	$ -	$ (45,962)	$ (45,962)
Peaking Capacity (Nov-Apr)	N/A	Granite	19-100-FT-NN	$ -	$ -	$ 1,167,197	Y	-	-	(2,809)	$ -	$ -	$ (109,289)	$ (109,289)
Total Capacity Assignment Credits											$ (1,886,727)	$ (1,900,634)	$ (155,250)	$ (3,942,611)

Northern Utilities, Inc.
New Hampshire Division Storage Contract Capacity Assignment Estimates
November 2020 through October 2021

Vendor	Contract ID	Annual Fixed Charges	Capacity Assigned (Y/N)	Company Managed (Y/N)	Storage Assigned ME	Assigned MSQ	Assigned MDWQ	Annual Cap Assign Credit
Tennessee	5195	$ 122,375	Y	N	9.36%	(24,282)	(397)	$ (11,458)
Union	LST068	$ 2,840,000	Y	N	9.36%	(374,527)	(3,858)	$ (265,914)

Total Division Storage Capacity Assignment $ (277,372)

MSQ = Maximum Space Quantity
MDWQ = Maximum Daily Withdrawal Quantity

Northern Utilities, Inc.
New Hampshire Division
On-System Peaking Demand Capacity Assignment Revenues
November 2020 through October 2021

Month	On-System Peaking Demand TCQ	Rate	Demand Revenue
Nov-20	609	$ 64.53	$ (39,276)
Dec-20	609	$ 64.53	$ (39,276)
Jan-21	609	$ 64.53	$ (39,276)
Feb-21	609	$ 64.53	$ (39,276)
Mar-21	609	$ 64.53	$ (39,276)
Apr-21	609	$ 64.53	$ (39,276)

Total Division Peaking Demand Revenue $ (235,657)

Northern Utilities, Inc. - New Hampshire Division
Asset Management and Capacity Release Revenue Assigned to Retail Suppliers
November 2020 through October 2021

Indicates Confidential Information

Resources	Projected Value	Company-Managed Resources	Resource Type	Percentage Capacity Assigned	Annual Value to Retail Marketers
Tennessee Zone 0/L Pools	[redacted]	No	Pipeline	10.90%	[redacted]
Tennessee Niagara		No	Pipeline	10.90%	
Iroquois Receipts		Yes	Pipeline	10.90%	
Leidy Hub & Transco Zone 6, non-NY		Yes	Pipeline	10.90%	
PXP Dawn Hub		No	Pipeline	10.90%	
Atlantic Bridge		No	Pipeline	10.90%	
Union Dawn Storage		No	Storage	9.36%	
Total Asset Management	$ (8,074,404)				$ 35,696

Northern Utilities, Inc. New Hampshire Division Peaking Capacity Assignment Demand Rate November 2020 through October 2021 Indicates Confidential Information			
Line	Description	Northern	NH Division
2	Capacity Allocation Factor		40.88%
3	Peaking Plants	6,500	2,657
4	Total	6,500	2,657
5	LNG Demand Costs	[redacted]	[redacted]
6	Peaking Plants Fixed Costs		$ 420,658
7	Total On-System Peaking Fixed Costs		$ 1,028,748
8	NH Division Peaking Service Demand Rate		$ 64.53

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Northern Utilities
New Hampshire Division
Retail Supplier Capacity Assignment Estimates
November 2020 through October 2021

	Pipeline MDQ	Storage MDQ	Peaking MDQ	Total MDQ
HLF Allocation	57.23%	17.78%	24.99%	100.00%
LLF Allocation	23.23%	31.91%	44.86%	100.00%
HLF TCQ	1,974	613	862	3,450
LLF TCQ	2,450	3,366	4,731	10,547
Retail Supplier Total	4,425	3,980	5,595	14,000
Northern MDQ	40,586	42,507	59,751	142,844
Cap Assign/ Total MDQ	10.90%	9.36%	9.36%	9.80%
On System Peaking			6,500	
On System Peaking Allocation			10.88%	

Northern Utilities - New Hampshire Division
Capacity Assignment Calculations 2020-2021
Derivation of Class Assignments and Weightings

Basic assumptions:

1 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

2 Base demand is composed solely of pipeline supplies

3 Remaining demand consists of a portion of pipeline and all storage and peaking supplies

		Design Day Demand, Dt	Adjusted Design Day Demand, Dt	Percent of Total	Avg Daily Base Use Load, Dt	Remaining Design Day Demand
1	RATE A-Resi Non-Htg	229	241	0.4%	31	211
2	RATE B-Resi Htg	23,486	24,806	38.9%	1,327	23,478
3	RATE G-40	10,113	10,682	16.7%	501	10,180
4	RATE G-50	659	696	1.1%	203	494
5	RATE G-41	9,205	9,723	15.2%	486	9,237
6	RATE G-51	1,108	1,170	1.8%	357	813
7	RATE G-42	1,795	1,896	3.0%	78	1,819
8	RATE G-52	559	590	0.9%	194	397
9	Special Contract	1,600	1,690	2.6%	1,270	420
10	RATE T-40	1,580	1,669	2.6%	42	1,627
11	RATE T-50	95	100	0.2%	-	100
12	RATE T-41	6,884	7,271	11.4%	283	6,988
13	RATE T-51	1,202	1,270	2.0%	377	893
14	RATE T-42	1,522	1,608	2.5%	78	1,530
15	RATE T-52	369	390	0.6%	363	26
16	Total	60,406	63,801	100.0%	5,588	58,213
17						-
18	Residential Total	23,714	25,047	39.3%	1,358	23,689
19	LLF Total	31,099	32,848	51.5%	1,467	31,381
20	HLF Total	5,592	5,906	9.3%	2,763	3,143
21	Total	60,406	63,801	100.0%	5,588	58,213
22						
23						
24		Resdential	Total C&I	LLF C&I	HLF C&I	Total
25	Residential Allocation	MDQ, Dt	MDQ, Dt	MDQ, Dt	MDQ, Dt	MDQ, Dt
26	Pipeline - Base	1,358	4,230	1,467	2,763	5,588
27	Pipeline - Remaining	5,758	6,781	6,164	617	12,540
28	Storage	7,453	11,532	10,482	1,050	18,986
29	Peaking	10,477	16,211	14,735	1,476	26,688
30	Total	25,047	38,754	32,848	5,906	63,801
31	Check - Should be 0	-	-	-	-	-
32						

		LLF C&I	HLF C&I
33	Caapcity Allocations %		
34			
35	Pipeline	**23.23%**	**57.23%**
36	Storage	**31.91%**	**17.78%**
37	Peaking	**44.86%**	**24.99%**
38	Total	**100.00%**	**100.00%**

Northern Utilities

New Hampshire Division Capacity Assignment Calculations

	HLF	LLF	Total TCQ	Capacity Assignment	Pipeline MDQ	Storage MDQ	Peaking MDQ	Total MDQ
Retail Supplier Total	3,450	10,547	13,997	14,000	4,425	3,980	5,595	14,000
Northern -Total MDQ					18,128	18,986	26,688	63,801
NH Cap Assign/ Total MDQ		CHECK S/B 0 ->	0		24.41%	20.96%	20.96%	21.94%

HLF Capacity Allocator	57.23%	17.78%	24.99%	100.00%
LLF Capacity Allocator	23.23%	31.91%	44.86%	100.00%

Capacity Assignment Plan

Percentage Design Day	44.66%

Pipeline Capacity Paths	Northern MDQ	NH Division MDQ	Pipeline Assigned %	Capacity Assigned
Tennessee Long-Haul	13,109	5,855	24.41%	1,429
Tennessee Niagara	2,327	1,039	24.45%	254
Iroquois Receipts	6,434	2,874	24.43%	702
Leidy Supply (Texas Eastern, Algonquin)	965	431	24.36%	105
Transco Zone 6, non-NY Supply (Algonquin)	286	128	24.22%	31
PXP Dawn Hub	9,965	4,451	24.40%	1,086
Atlantic Bridge Ramapo	7,500	3,350	24.42%	818
Total Pipeline Capacity	**40,586**	**18,128**	**24.41%**	**4,425**

Storage Capacity Paths	Northern MDQ	NH Division MDQ	Storage Assigned %	Capacity Assigned
Tennessee Firm Storage	2,644	1,181	20.96%	248
Dawn Hub Storage	39,863	17,805	20.96%	3,732
Total Storage Capacity	**42,507**	**18,986**	**20.96%**	**3,980**

Peaking Capacity Paths	Northern MDQ	NH Division MDQ	Peaking Assigned %	Capacity Assigned
LNG - On-System	6,500	2,903	20.96%	609
Granite - Not assigned as Storage or Pipeline Capacity	53,251	23,785	20.96%	4,986
Total Peaking Capacity	**59,751**	**26,688**	**20.96%**	**5,595**
Total Capacity	**142,844**	**63,802**	**21.94%**	**14,000**

Northern Utilities, Inc.
New Hampshire Division
Design Day Forecast by Rate Class

2020-2021 Forecast Annual Sales (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division
Sales Service	23,867	1,989,457	892,604	118,732	812,488	199,577	158,455	100,683	0	2,013,323	1,863,547	418,992	4,295,862
Capacity Assigned Delivery Service			133,740	19,071	602,619	194,589	150,019	142,453	436,449		886,378	792,562	1,678,941
Capacity Exempt Delivery Service			1,564	2,339	35,242	15,571	310,052	1,354,873	593,115		346,857	1,965,899	2,312,756
Total System	23,867	1,989,457	1,027,907	140,142	1,450,349	409,738	618,526	1,598,010	1,029,564	2,013,323	3,096,782	3,177,453	8,287,558

2020-2021 Forecast Annual Sendout (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division	Prior Year WN Act Total Division	Percent Change
Sales Service	24,181	2,015,660	904,360	120,295	823,189	202,206	160,542	102,009		2,039,841	1,888,092	424,511	4,352,444	4,234,790	2.8%
Capacity Assigned Delivery Service			135,501	19,322	610,556	197,152	151,995	144,329	442,197		898,052	803,001	1,701,053	1,794,339	-5.2%
Capacity Exempt Delivery Service			1,584	2,370	35,706	15,776	314,136	1,372,719	600,927		351,426	1,991,792	2,343,218	2,543,188	-7.9%
Total System	24,181	2,015,660	1,041,446	141,988	1,469,451	415,134	626,673	1,619,057	1,043,124	2,039,841	3,137,570	3,219,304	8,396,715	8,572,316	-2.0%

2020-2021 Forecast Load Factor (%)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division	Prior Year Actual Total Division	Percent Change
Sales Service	29.0%	23.5%	24.5%	50.0%	24.5%	50.0%	24.5%	50.0%		23.6%	24.5%	50.0%	25.3%	24.7%	2.5%
Capacity Assigned Delivery Service			23.5%	55.8%	24.3%	44.9%	27.4%	107.2%	75.7%		24.6%	67.4%	35.2%	37.3%	-5.7%
Capacity Exempt Delivery Service			20.0%	100.0%	29.0%	45.0%	34.3%	82.9%	79.4%		33.5%	81.3%	67.0%	71.0%	-5.7%
Total System	29.0%	23.5%	24.4%	51.2%	24.5%	47.3%	29.4%	81.2%	77.8%	23.6%	25.3%	71.7%	32.9%	33.6%	-2.0%

2020-2021 Design Day Sendout (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division	Prior Year Design Day Actual Total Division	Percent Change
Sales Service	229	23,486	10,113	659	9,205	1,108	1,795	559		23,714	21,114	2,326	47,154	47,006	0.3%
Capacity Assigned Delivery Service			1,580	95	6,884	1,202	1,522	369	1,600		9,986	3,266	13,252	13,175	0.6%
Capacity Exempt Delivery Service			22	6	337	96	2,512	4,538	2,074		2,871	6,715	9,586	9,811	-2.3%
Total System	229	23,486	11,714	760	16,426	2,406	5,830	5,466	3,675	23,714	33,971	12,307	69,992	69,992	0.0%

2020-2021 Baseload Sendout (Dth)
(Average Daily July and August Sendout)

	Res Non-Heat	Res Heat	G40	63689.86	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division
Sales Service	31	1,327	501	203	486	357	78	194		1,358	1,065	753	3,176
Capacity Assigned Delivery Service			42	0	283	377	78	363	1,270		402	2,010	2,412
Capacity Exempt Delivery Service			1	0	32	30	443	3,537	1,682		476	5,249	5,725
Total System	31	1,327	544	203	801	764	599	4,094	2,952	1,358	1,943	8,012	11,313

2020-2021 Planning Load Design Day Sendout (Dth)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division
Sales Service	229	23,486	10,113	659	9,205	1,108	1,795	559		23,714	21,114	2,326	47,154
Capacity Assigned Delivery Service			1,580	95	6,884	1,202	1,522	369	1,600		9,986	3,266	13,252
Capacity Exempt Delivery Service			0	0	0	0	0	0	0		0	0	0
Total System	229	23,486	11,693	754	16,089	2,310	3,318	928	1,600	23,714	31,099	5,592	60,406

2020-2021 Planning Load Baseload Sendout (Dth)
(Average Daily July and August Sendout)

	Res Non-Heat	Res Heat	G40	G50	G41	G51	G42	G52	Special Contracts	Res	LLF	HLF	Total Division
Sales Service	31	1,327	501	203	486	357	78	194		1,358	1,065	753	3,176
Capacity Assigned Delivery Service			42	0	283	377	78	363	1,270		402	2,010	2,412
Capacity Exempt Delivery Service			0	0	0	0	0	0	0		0	0	0
Total System	31	1,327	543	203	768	734	155	557	1,270	1,358	1,467	2,763	5,588

REDACTED

Denotes Confidential Information

Northern Utilities, Inc.
Commodity Cost by Supply Source ($)
November 2020 through October 2021

Description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Winter	Summer	Year
Pipeline Supplies															
TGP Zone 4 300 Leg Supply	[redacted]														
Tennessee FS-MA Storage Path															
Dawn Supply															
Union Dawn Storage Path															
Leidy Hub															
Texas Eastern Zone M-3															
Transco Zone 6, non-NY															
Algonquin Receipts Pipeline Path															
Tennessee Niagara Pipeline Path															
PXP Dawn Pipeline Path															
Total Base Pipeline															
NH CM Pipeline (Leidy/M-3)															
ME CM Pipeline (Leidy/M-3)															
NH CM Pipeline (Transco)															
ME CM Pipeline (Transco)															
Net Base Pipeline	**$ 1,083,860**	**$ 1,099,844**	**$ 1,146,675**	**$ 1,033,098**	**$ 1,329,637**	**$ 2,564,932**	**$ 1,322,251**	**$ 886,662**	**$ 774,801**	**$ 782,079**	**$ 832,473**	**$ 1,619,126**	**$ 8,258,046**	**$ 6,217,391**	**$ 14,475,437**
Tennessee Zone 0	[redacted]														
Tennessee Zone L															
Tennessee Long-Haul Pipeline Path															
Iroquois Receipts Pipeline Path															
Atlantic Bridge Ramapo Pipeline Path															
Total Remaining Pipeline															
NH CM Pipeline (Iroq Rec)															
ME CM Pipeline (Iroq Rec)															
Net Remaining Pipeline	**$ 1,726,682**	**$ 2,590,803**	**$ 3,157,895**	**$ 2,794,434**	**$ 2,387,373**	**$ 11,321**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 12,668,508**	**$ -**	**$ 12,668,508**
Underground Storage															
Tennessee Storage	$ -	$ 108,407	$ 108,407	$ 97,344	$ 23,395	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 337,554	$ -	$ 337,554
Tennessee FS-MA Storage Path	$ -	$ 108,407	$ 108,407	$ 97,344	$ 23,395	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 337,554	$ -	$ 337,554
Union Dawn Storage	$ 428,329	$ 1,105,945	$ 1,271,314	$ 1,318,437	$ 780,990	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,905,015	$ -	$ 4,905,015
Union Dawn Storage Path	$ 428,329	$ 1,105,945	$ 1,271,314	$ 1,318,437	$ 780,990	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,905,015	$ -	$ 4,905,015
Net Storage	**$ 428,329**	**$ 1,214,353**	**$ 1,379,721**	**$ 1,415,781**	**$ 804,385**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,242,569**	**$ -**	**$ 5,242,569**
Peaking Supplies															
Lewiston LNG	[redacted]														
Peaking Contract 1															
Off-System Peaking / Incremental Supply															
Total Peaking															
NH Peaking Service - (On System)															
ME Peaking Service - (On-System)															
Net Peaking	**$ 7,289**	**$ 129,949**	**$ 953,958**	**$ 216,183**	**$ 12,852**	**$ 12,307**	**$ 12,561**	**$ 12,075**	**$ 12,411**	**$ 12,390**	**$ 11,902**	**$ 12,263**	**$ 1,332,538**	**$ 73,602**	**$ 1,406,140**
Total NUI Commodity	$ 3,373,616	$ 5,240,327	$ 6,961,810	$ 5,711,470	$ 4,688,432	$ 2,588,560	$ 1,334,812	$ 898,737	$ 787,212	$ 794,469	$ 844,375	$ 1,631,389	$ 28,564,215	$ 6,290,994	$ 34,855,209
Company Managed Sales	$ (127,456)	$ (205,378)	$ (323,561)	$ (251,973)	$ (154,185)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,062,553)	$ -	
Net Commodity Costs	**$ 3,246,160**	**$ 5,034,949**	**$ 6,638,249**	**$ 5,459,497**	**$ 4,534,247**	**$ 2,588,560**	**$ 1,334,812**	**$ 898,737**	**$ 787,212**	**$ 794,469**	**$ 844,375**	**$ 1,631,389**	**$ 27,501,662**	**$ 6,290,994**	**$ 33,792,655**

Northern Utilities, Inc.
Commodity Volumes by Supply Source (Dth)
November 2020 through October 2021

Description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Winter	Summer	Year
Pipeline Supplies															
TGP Zone 4 300 Leg Supply	64,274	0	0	351	52,083	64,274	66,417	64,274	66,417	66,417	64,274	66,417	180,982	394,215	575,198
Tennessee FS-MA Storage Path	64,274	0	0	351	52,083	64,274	66,417	64,274	66,417	66,417	64,274	66,417	180,982	394,215	575,198
Dawn Supply	0	0	0	704	17,762	754,936	394,130	235,369	185,825	188,904	218,379	514,162	773,402	1,736,770	2,510,172
Union Dawn Storage Path	0	0	0	704	17,762	754,936	394,130	235,369	185,825	188,904	218,379	514,162	773,402	1,736,770	2,510,172
Leidy Hub	28,687	29,631	29,631	26,763	29,631	28,687	29,643	28,687	29,643	29,643	28,687	29,643	173,029	175,944	348,973
Texas Eastern Zone M-3	263	284	284	257	284	263	272	263	272	272	263	272	1,636	1,616	3,252
Transco Zone 6, non-NY	8,580	8,866	8,866	8,008	8,866	8,580	8,866	8,580	8,866	8,866	8,580	8,866	51,766	52,624	104,390
Algonquin Receipts Pipeline Path	37,530	38,781	38,781	35,028	38,781	37,530	38,781	37,530	38,781	38,781	37,530	38,781	226,431	230,184	456,615
Tennessee Niagara Pipeline Path	55,067	56,902	56,902	51,395	56,902	6,740	0	0	0	0	0	0	283,909	0	283,909
PXP Dawn Pipeline Path	224,840	239,438	239,438	216,267	239,438	51,041	0	0	0	0	0	0	1,210,463	0	1,210,463
Total Base Pipeline	381,710	335,122	335,122	303,745	404,967	914,522	499,328	337,173	291,023	294,102	320,183	619,360	2,675,187	2,361,169	5,036,356
NH CM Pipeline (Leidy/M-3)	-3,150	-3,255	-3,255	-2,940	-3,255	0	0	0	0	0	0	0	-15,855	0	-15,855
ME CM Pipeline (Leidy/M-3)	-2,970	-3,069	-3,069	-2,772	-3,069	0	0	0	0	0	0	0	-14,949	0	-14,949
NH CM Pipeline (Transco)	-930	-961	-961	-868	-961	0	0	0	0	0	0	0	-4,681	0	-4,681
ME CM Pipeline (Transco)	-870	-899	-899	-812	-899	0	0	0	0	0	0	0	-4,379	0	-4,379
Net Base Pipeline	**373,790**	**326,938**	**326,938**	**296,353**	**396,783**	**914,522**	**499,328**	**337,173**	**291,023**	**294,102**	**320,183**	**619,360**	**2,635,323**	**2,361,169**	**4,996,492**
Tennessee Zone 0	74,802	112,167	112,167	101,312	112,167	0	0	0	0	0	0	0	512,615	0	512,615
Tennessee Zone L	160,407	208,270	208,270	188,115	208,270	3,595	0	0	0	0	0	0	976,929	0	976,929
Tennessee Long-Haul Pipeline Path	235,209	320,438	320,438	289,427	320,438	3,595	0	0	0	0	0	0	1,489,544	0	1,489,544
Iroquois Receipts Pipeline Path	187,700	193,957	193,957	175,187	193,957	0	0	0	0	0	0	0	944,757	0	944,757
Atlantic Bridge Ramapo Pipeline Path	169,702	183,303	183,303	165,564	183,303	0	0	0	0	0	0	0	885,175	0	885,175
Total Remaining Pipeline	592,611	697,697	697,697	630,178	697,697	3,595	0	0	0	0	0	0	3,319,476	0	3,319,476
NH CM Pipeline (Iroq Rec)	-18,300	-18,910	-18,910	-17,080	-18,910	0	0	0	0	0	0	0	-92,110	0	-92,110
ME CM Pipeline (Iroq Rec)	-17,190	-17,763	-17,763	-16,044	-17,763	0	0	0	0	0	0	0	-86,523	0	-86,523
Net Remaining Pipeline	**557,121**	**661,024**	**661,024**	**597,054**	**661,024**	**3,595**	**0**	**0**	**0**	**0**	**0**	**0**	**3,140,843**	**0**	**3,140,843**
Underground Storage															
Tennessee Storage	0	66,417	66,417	59,639	14,333	0	0	0	0	0	0	0	206,805	0	206,805
Tennessee FS-MA Storage Path	0	66,417	66,417	59,639	14,333	0	0	0	0	0	0	0	206,805	0	206,805
Union Dawn Storage	233,918	603,977	694,287	720,022	426,513	0	0	0	0	0	0	0	2,678,717	0	2,678,717
Union Dawn Storage Path	233,918	603,977	694,287	720,022	426,513	0	0	0	0	0	0	0	2,678,717	0	2,678,717
Net Storage	**233,918**	**670,393**	**760,704**	**779,661**	**440,846**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,885,522**	**0**	**2,885,522**
Peaking Supplies															
Lewiston LNG	1,794	22,761	52,503	33,254	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040	125,000
Peaking Contract 1	0	7,425	201,313	8,415	0	0	0	0	0	0	0	0	217,152	0	217,152
Off-System Peaking / Incremental Sup	0	7,425	201,313	8,415	0	0	0	0	0	0	0	0	217,152	0	217,152
Total Peaking	1,794	30,186	253,815	41,669	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	331,112	11,040	342,152
NH Peaking Service - (On System)	0	-2,436	-6,090	-3,045	0	0	0	0	0	0	0	0	-11,571	0	-11,571
ME Peaking Service - (On-System)	0	-2,504	-6,260	-3,130	0	0	0	0	0	0	0	0	-11,894	0	-11,894
Net Peaking	**1,794**	**25,246**	**241,465**	**35,494**	**1,854**	**1,794**	**1,860**	**1,800**	**1,860**	**1,860**	**1,800**	**1,860**	**307,647**	**11,040**	**318,687**
Total NUI Commodity	1,210,034	1,733,398	2,047,338	1,755,253	1,545,364	919,911	501,188	338,973	292,883	295,962	321,983	621,220	9,211,298	2,372,209	11,583,507
Company Managed Sales	-43,410	-49,797	-57,207	-46,691	-44,857	0	0	0	0	0	0	0	-241,962	0	-241,962
Net Commodity Costs	**1,166,624**	**1,683,601**	**1,990,131**	**1,708,562**	**1,500,507**	**919,911**	**501,188**	**338,973**	**292,883**	**295,962**	**321,983**	**621,220**	**8,969,336**	**2,372,209**	**11,341,545**

REDACTED

Denotes Confidential Information

Northern Utilities, Inc.
Average Delivered Commodity Cost by Supply Source ($/Dth)
November 2020 through October 2021

Description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Winter	Summer	Year
Pipeline Supplies															
TGP Zone 4 300 Leg Supply	[redacted]														
Tennessee FS-MA Storage Path															
Dawn Supply															
Union Dawn Storage Path															
Leidy Hub															
Texas Eastern Zone M-3															
Transco Zone 6, non-NY															
Algonquin Receipts Pipeline Path															
Tennessee Niagara Pipeline Path															
PXP Dawn Pipeline Path															
Total Base Pipeline															
NH CM Pipeline (Leidy/M-3)															
ME CM Pipeline (Leidy/M-3)															
NH CM Pipeline (Transco)															
ME CM Pipeline (Transco)															
Net Base Pipeline	**$ 2.900**	**$ 3.364**	**$ 3.507**	**$ 3.486**	**$ 3.351**	**$ 2.805**	**$ 2.648**	**$ 2.630**	**$ 2.662**	**$ 2.659**	**$ 2.600**	**$ 2.614**	**$ 3.134**	**$ 2.633**	**$ 2.897**
Tennessee Zone 0	[redacted]														
Tennessee Zone L															
Tennessee Long-Haul Pipeline Path															
Iroquois Receipts Pipeline Path															
Atlantic Bridge Ramapo Pipeline Path															
Total Remaining Pipeline															
NH CM Pipeline (Iroq Rec)															
ME CM Pipeline (Iroq Rec)															
Net Remaining Pipeline	**$ 3.099**	**$ 3.919**	**$ 4.777**	**$ 4.680**	**$ 3.612**	**$ 3.149**							**$ 4.033**		**$ 4.033**
Underground Storage															
Tennessee Storage		$ 1.632	$ 1.632	$ 1.632	$ 1.632								$ 1.632		$ 1.632
Tennessee FS-MA Storage Path		$ 1.632	$ 1.632	$ 1.632	$ 1.632								$ 1.632		$ 1.632
Union Dawn Storage	$ 1.831	$ 1.831	$ 1.831	$ 1.831	$ 1.831								$ 1.831		$ 1.831
Union Dawn Storage Path	$ 1.831	$ 1.831	$ 1.831	$ 1.831	$ 1.831								$ 1.831		$ 1.831
Net Storage	**$ 1.831**	**$ 1.811**	**$ 1.814**	**$ 1.816**	**$ 1.825**								**$ 1.817**		**$ 1.817**
Peaking Supplies															
Lewiston LNG	[redacted]														
Peaking Contract 1															
Off-System Peaking / Incremental Su															
Total Peaking															
NH Peaking Service - (On System)															
ME Peaking Service - (On-System)															
Net Peaking	**$ 4.063**	**$ 5.147**	**$ 3.951**	**$ 6.091**	**$ 6.933**	**$ 6.860**	**$ 6.753**	**$ 6.708**	**$ 6.673**	**$ 6.661**	**$ 6.612**	**$ 6.593**	**$ 4.331**	**$ 6.667**	**$ 4.412**
Total NUI Commodity	$ 2.788	$ 3.023	$ 3.400	$ 3.254	$ 3.034	$ 2.814	$ 2.663	$ 2.651	$ 2.688	$ 2.684	$ 2.622	$ 2.626	$ 3.101	$ 2.652	$ 3.009
Company Managed Sales	$ 2.936	$ 4.124	$ 5.656	$ 5.397	$ 3.437								$ 4.391		$ -
Net Commodity Costs	**$ 2.783**	**$ 2.991**	**$ 3.336**	**$ 3.195**	**$ 3.022**	**$ 2.814**	**$ 2.663**	**$ 2.651**	**$ 2.688**	**$ 2.684**	**$ 2.622**	**$ 2.626**	**$ 3.066**	**$ 2.652**	**$ 2.980**

REDACTED

Estimated Delivered City-Gate Commodity Costs and Volumes
November 2020 through April 2021

Denotes Confidential Information

Supply Source	Delivered City-Gate Costs	Delivered City-Gate Volumes	Delivered Cost per Dth
Union Dawn Storage Path	[redacted]	3,452,119	[redacted]
Tennessee FS-MA Storage Path	[redacted]	387,788	[redacted]
Algonquin Receipts Pipeline Path	[redacted]	226,431	[redacted]
Tennessee Niagara Pipeline Path	[redacted]	283,909	[redacted]
PXP Dawn Pipeline Path	[redacted]	1,210,463	[redacted]
Peaking Contract 1	[redacted]	217,152	[redacted]
Tennessee Long-Haul Pipeline Path	[redacted]	1,489,544	[redacted]
Iroquois Receipts Pipeline Path	[redacted]	944,757	[redacted]
Atlantic Bridge Ramapo Pipeline Path	[redacted]	885,175	[redacted]
Lewiston LNG	[redacted]	113,960	[redacted]
Total Delivered Commodity Cost	$28,564,215	9,211,298	$3.101

REDACTED

Estimated Delivered City-Gate Commodity Costs and Volumes May 2021 through October 2021 Denotes Confidential Information			
Supply Source	Delivered City-Gate Costs	Delivered City-Gate Volumes	Delivered Cost per Dth
Algonquin Receipts Pipeline Path	[redacted]	230,184	[redacted]
Tennessee FS-MA Storage Path	[redacted]	394,215	[redacted]
Union Dawn Storage Path	[redacted]	1,736,770	[redacted]
Lewiston LNG	[redacted]	11,040	[redacted]
Total Delivered Commodity Cost	$6,290,994	2,372,209	$2.652

REDACTED

Source of Supply: Tennessee Zone 0
Delivered to Northern via Tennessee and Granite Pipelines

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 24	78,883	118,286	118,286	106,839	118,286	-	-	-	-	-	-	-	540,580	-
4	City Gate Delivered Volume	Line 36	74,802	112,167	112,167	101,312	112,167	-	-	-	-	-	-	-	512,615	-
5	Total Purchase Cost	Line 2 times Line 3	[redacted]													
6	Variable Transportation Costs	Sum Lines 28 and 38	$ 21,994	$ 32,980	$ 32,980	$ 29,788	$ 32,980	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 150,722	$ -
7	Total City Gate Delivered Costs	Sum Lines 4 and 5	[redacted]													
8	Average Delivered Price	Line 6 divided by Line 2														
9																
10	Tennessee Zone 0 Supply Costs															
11	Purchased Volumes	Sendout Optimization	78,883	118,286	118,286	106,839	118,286	-	-	-	-	-	-	-	540,580	-
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.231	
13	NYMEX Cost	Line 9 times Line 10	$ 228,839	$ 386,322	$ 399,215	$ 355,453	$ 376,741	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,746,571	$ -
14	NYMEX Basis Price	Sch 27-FXW, Line 1 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1A															
21	Tennessee Gas Pipeline (Contract 5083)															
22	Receipt Point: Tennessee Zone 0															
23	Delivery Point: Pleasant St. (Interconnection with Granite)															
24	Received Volume	Line 11	78,883	118,286	118,286	106,839	118,286	-	-	-	-	-	-	-	540,580	-
25	Fuel Loss Rate	Sch 27-FXW, Line 36 of Page 2	4.84%	4.84%	4.84%	4.84%	4.84%								4.84%	
26	Delivered Volume	Line 24 times (1 - Line 25)	75,065	112,561	112,561	101,668	112,561	-	-	-	-	-	-	-	514,416	-
27	Variable Transportation Rate	Sch 27-FXW, Line 22 of Page 2	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919								$ 0.2919	
28	Variable Transportation Costs	Line 26 times Line 27	$ 21,911	$ 32,857	$ 32,857	$ 29,677	$ 32,857	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 150,158	$ -
29																
30	Transportation Segment 2A															
31	Granite State Gas Transmission (Contract 19-100-FT-NN)															
32	Receipt Point: Pleasant St.															
33	Delivery Point: Northern City Gates															
34	Received Volume	Line 26	75,065	112,561	112,561	101,668	112,561	-	-	-	-	-	-	-	514,416	-
35	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
36	City Gate Delivered Volume	Line 34 times (1 - Line 35)	74,802	112,167	112,167	101,312	112,167	-	-	-	-	-	-	-	512,615	-
37	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
38	Variable Transportation Costs	Line 36 times Line 37	$ 82	$ 123	$ 123	$ 111	$ 123	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 564	$ -

REDACTED

Source of Supply: Tennessee Zone L
Delivered to Northern via Tennessee and Granite Pipelines

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 24	168,045	218,188	218,188	197,073	218,188	3,766	-	-	-	-	-	-	1,023,447	-
4	City Gate Delivered Volume	Line 36	160,407	208,270	208,270	188,115	208,270	3,595	-	-	-	-	-	-	976,929	-
5	Total Purchase Cost	Line 2 times Line 3	[redacted]													
6	Variable Transportation Costs	Sum Lines 28 and 38	$ 41,143	$ 53,420	$ 53,420	$ 48,250	$ 53,420	$ 922	$ -	$ -	$ -	$ -	$ -	$ -	$ 250,576	$ -
7	Total City Gate Delivered Costs	Sum Lines 4 and 5	[redacted]													
8	Average Delivered Price	Line 6 divided by Line 2														
9																
10	Tennessee Zone L Supply Costs															
11	Purchased Volumes	Sendout Optimization	168,045	218,188	218,188	197,073	218,188	3,766	-	-	-	-	-	-	1,023,447	-
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.222	
13	NYMEX Cost	Line 9 times Line 10	$ 487,499	$ 712,601	$ 736,383	$ 655,661	$ 694,928	$ 10,632	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,297,705	$ -
14	NYMEX Basis Price	Sch 27-FXW, Line 2 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1B															
21	Tennessee Gas Pipeline (Contract 5083)															
22	Receipt Point: Tennessee Zone L															
23	Delivery Point: Pleasant St. (Interconnection with Granite)															
24	Received Volume	Line 11	168,045	218,188	218,188	197,073	218,188	3,766	-	-	-	-	-	-	1,023,447	-
25	Fuel Loss Rate	Sch 27-FXW, Line 37 of Page 2	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%							4.21%	
26	Delivered Volume	Line 24 times (1 - Line 25)	160,971	209,002	209,002	188,776	209,002	3,608	-	-	-	-	-	-	980,360	-
27	Variable Transportation Rate	Sch 27-FXW, Line 23 of Page 2	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545							$ 0.2545	
28	Variable Transportation Costs	Line 26 times Line 27	$ 40,967	$ 53,191	$ 53,191	$ 48,043	$ 53,191	$ 918	$ -	$ -	$ -	$ -	$ -	$ -	$ 249,502	$ -
29																
30	Transportation Segment 2B															
31	Granite State Gas Transmission (Contract 19-100-FT-NN)															
32	Receipt Point: Pleasant St.															
33	Delivery Point: Northern City Gates															
34	Received Volume	Line 26	160,971	209,002	209,002	188,776	209,002	3,608	-	-	-	-	-	-	980,360	-
35	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
36	City Gate Delivered Volume	Line 34 times (1 - Line 35)	160,407	208,270	208,270	188,115	208,270	3,595	-	-	-	-	-	-	976,929	-
37	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
38	Variable Transportation Costs	Line 36 times Line 37	$ 176	$ 229	$ 229	$ 207	$ 229	$ 4	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,075	$ -

REDACTED

Source of Supply: Niagara (Interconnect of TransCanada and Tennessee Pipelines)
Delivered to Northern via Tennessee and Granite Pipelines
Delivered to Northern via Tennessee and Bay State Exhange Agreement

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
4	Purchased Volumes	Line 9	55,728	57,586	57,586	52,013	57,586	6,821	-	-	-	-	-	-	287,319	-
5	City Gate Delivered Volume	Line 47	55,067	56,902	56,902	51,395	56,902	6,740	-	-	-	-	-	-	283,909	-
6	Total Purchase Cost	Line 15	[redacted]													
7	Variable Transportation Costs	Sum Lines 29, 39 and 49	$ 4,200	$ 4,340	$ 4,340	$ 3,920	$ 4,340	$ 514	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,652	$ -
8	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
9	Average Delivered Price	Line 5 divided by Line 2														
10																
11	Niagara Supply Costs															
12	Purchased Volumes	Sendout Optimization	55,728	57,586	57,586	52,013	57,586	6,821	-	-	-	-	-	-	287,319	-
13	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.201	-
14	NYMEX Cost	Line 9 times Line 10	$ 161,667	$ 188,075	$ 194,352	$ 173,047	$ 183,411	$ 19,256	$ -	$ -	$ -	$ -	$ -	$ -	$ 919,807	$ -
15	NYMEX Basis Price	Sch 27-FXW, Line 3 of Page 1	[redacted]													
16	NYMEX Basis Costs	Line 9 times Line 12														
17	Total Purchase Price	Line 10 plus Line 12														
18	Total Purchase Cost	Line 11 plus Line 13														
19																
20	Transportation Fuel Losses and Variable Charges															
21	Transportation Segment 1A															
22	Tennessee Gas Pipeline (Contract 5292)															
23	Receipt Point: Niagara															
24	Delivery Point: Pleasant St. (Interconnection with Granite)															
25	Received Volume	Line 9	33,552	34,670	34,670	31,315	34,670	4,474	-	-	-	-	-	-	173,351	-
26	Fuel Loss Rate	Sch 27-FXW, Line 39 of Page 2	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%							0.84%	
27	Delivered Volume	Line 25 times (1 - Line 26)	33,270	34,379	34,379	31,052	34,379	4,436	-	-	-	-	-	-	171,895	-
28	Variable Transportation Rate	Sch 27-FXW, Line 25 of Page 2	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749							$ 0.0749	
29	Variable Transportation Costs	Line 27 times Line 28	$ 2,492	$ 2,575	$ 2,575	$ 2,326	$ 2,575	$ 332	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,875	$ -
30																
31	Transportation Segment 1B															
32	Tennessee Gas Pipeline (Contract 39375)															
33	Receipt Point: Niagara															
34	Delivery Point: Pleasant St. (Interconnection with Granite)															
35	Received Volume	Line 9	22,176	22,915	22,915	20,698	22,915	2,347	-	-	-	-	-	-	113,968	-
36	Fuel Loss Rate	Sch 27-FXW, Line 39 of Page 2	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%							0.84%	
37	Delivered Volume	Line 35 times (1 - Line 36)	21,990	22,723	22,723	20,524	22,723	2,328	-	-	-	-	-	-	113,011	-
38	Variable Transportation Rate	Sch 27-FXW, Line 25 of Page 2	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749							$ 0.0749	
39	Variable Transportation Costs	Line 37 times Line 38	$ 1,647	$ 1,702	$ 1,702	$ 1,537	$ 1,702	$ 174	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,465	$ -
40																
41	Transportation Segment 2B															
42	Granite State Gas Transmission (Contract 19-100-FT-NN)															
43	Receipt Point: Pleasant St.															
44	Delivery Point: Northern City Gates															
45	Received Volume	Line 37	55,260	57,102	57,102	51,576	57,102	6,764	-	-	-	-	-	-	284,906	-
46	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
47	City Gate Delivered Volume	Line 45 times (1 - Line 46)	55,067	56,902	56,902	51,395	56,902	6,740	-	-	-	-	-	-	283,909	-
48	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
49	Variable Transportation Costs	Line 47 times Line 48	$ 61	$ 63	$ 63	$ 57	$ 63	$ 7	$ -	$ -	$ -	$ -	$ -	$ -	$ 312	$ -

REDACTED

Source of Supply: Iroquois Receipts (Interconnect of TransCanada and Iroquioos Pipelines)
Delivered to Northern via Iroquois, Tennessee and Granite Pipelines
Delivered to Northern via Iroquois, Tennessee, Algonquin Pipelines and Bay State Exchange Agreement

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
4	Purchased Volumes	Line 9	190,531	196,935	196,935	177,877	196,935	-	-	-	-	-	-	-	959,214	-
5	City Gate Delivered Volume	Line 40	187,700	193,957	193,957	175,187	193,957	-	-	-	-	-	-	-	944,757	-
6	Total Purchase Cost	Line 15	[redacted]													
7	Variable Transportation Costs	Sum Lines 32, 42, 52, 62, 72 and 82	$ 21,890	$ 22,624	$ 22,624	$ 20,434	$ 22,624	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 110,196	$ -
8	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
9	Average Delivered Price	Line 5 divided by Line 2														
10																
11	Irqoquois Receipts Supply Costs															
12	Purchased Volumes	Sendout Optimization	190,531	196,935	196,935	177,877	196,935	-	-	-	-	-	-	-	959,214	-
13	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.211	
14	NYMEX Cost	Line 9 times Line 10	$ 552,729	$ 643,191	$ 664,657	$ 591,797	$ 627,239	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,079,612	$ -
15	NYMEX Basis Price	Sch 27-FXW, Line 4 of Page 1	[redacted]													
16	NYMEX Basis Costs	Line 9 times Line 12														
17	Total Purchase Price	Line 10 plus Line 12														
18	Total Purchase Cost	Line 11 plus Line 13														
19																
20	Transportation Fuel Losses and Variable Charges															
21	Transportation Segment 5															
22	Iroquois Pipeline (Contract R181001)															
23	Receipt Point: Waddington															
24	Delivery Point: Wright (Interconnection with Tennessee)															
25	Total Contract Recevied Volume	Sendout Optimization	190,531	196,935	196,935	177,877	196,935	-	-	-	-	-	-	-	959,214	-
26	Received Volume	Line 12	190,531	196,935	196,935	177,877	196,935	-	-	-	-	-	-	-	959,214	-
27	Percentage Allocated	Line 26 divided by Line 25	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%	
28	Received Volume	Line 17	190,531	196,935	196,935	177,877	196,935	-	-	-	-	-	-	-	959,214	-
29	Fuel Loss Rate	Sch 27-FXW, Line 33 of Page 2	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%	
30	Delivered Volume	Line 28 times (1 - Line 29)	190,531	196,935	196,935	177,877	196,935	-	-	-	-	-	-	-	959,214	-
31	Variable Transportation Rate	Sch 27-FXW, Line 18 of Page 2	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045								$ -	
32	Variable Transportation Costs	Line 30 times Line 31	$ 857	$ 886	$ 886	$ 800	$ 886	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33																
34	Transporation Segment 6A															
35	Tennessee Gas Pipeline (Contract 95196)															
36	Receipt Point: Wright															
37	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
38	Received Volume	Line 30	41,811	43,205	43,205	39,024	43,205	-	-	-	-	-	-	-	210,450	-
39	Fuel Loss Rate	Sch 27-FXW, Line 39 of Page 2	0.84%	0.84%	0.84%	0.84%	0.84%								0.84%	
40	City Gate Delivered Volume	Line 38 times (1 - Line 39)	41,460	42,842	42,842	38,696	42,842	-	-	-	-	-	-	-	208,682	-
41	Variable Transportation Rate	Sch 27-FXW, Line 25 of Page 2	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749								$ 0.0749	
42	Variable Transportation Costs	Line 40 times Line 41	$ 3,105	$ 3,209	$ 3,209	$ 2,898	$ 3,209	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,630	$ -
43																
44	Transportation Segment 6B															
45	Tennessee Gas Pipeline (Contract 95196)															
46	Receipt Point: Wright															
47	Delivery Point: Pleasant St. (Interconnection with Granite)															
48	Received Volume	Line 40	20,149	20,821	20,821	18,806	20,821	-	-	-	-	-	-	-	101,418	-
49	Fuel Loss Rate	Sch 27-FXW, Line 39 of Page 2	0.84%	0.84%	0.84%	0.84%	0.84%								0.84%	
50	Delivered Volume	Line 48 times (1 - Line 49)	19,980	20,646	20,646	18,648	20,646	-	-	-	-	-	-	-	100,566	-
51	Variable Transportation Rate	Sch 27-FXW, Line 25 of Page 2	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749								$ 0.0749	
52	Variable Transportation Costs	Line 50 times Line 51	$ 1,497	$ 1,546	$ 1,546	$ 1,397	$ 1,546	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,532	$ -
53																
54	Transportation Segment 7B															
55	Granite State Gas Transmission (Contract 19-100-FT-NN)															
56	Receipt Point: Pleasant St.															
57	Delivery Point: Northern City Gates															
58	Received Volume	Line 50	19,980	20,646	20,646	18,648	20,646	-	-	-	-	-	-	-	100,566	-
59	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
60	City Gate Delivered Volume	Line 58 times (1 - Line 59)	19,910	20,574	20,574	18,583	20,574	-	-	-	-	-	-	-	100,214	-
61	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
62	Variable Transportation Costs	Line 60 times Line 61	$ 22	$ 23	$ 23	$ 20	$ 23	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 110	$ -
63																
64	Transportation Segment 6C															
65	Tennessee Gas Pipeline (Contract 41099)															
66	Receipt Point: Wright															
67	Delivery Point: Mendon (Interconnection with Algonquin)															
68	Received Volume	Line 30	128,570	132,909	132,909	120,047	132,909	-	-	-	-	-	-	-	647,346	-
69	Fuel Loss Rate	Sch 27-FXW, Line 39 of Page 2	0.84%	0.84%	0.84%	0.84%	0.84%								0.84%	
70	Delivered Volume	Line 68 times (1 - Line 69)	127,490	131,793	131,793	119,039	131,793	-	-	-	-	-	-	-	641,908	-
71	Variable Transportation Rate	Sch 27-FXW, Line 25 of Page 2	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749								$ 0.0749	
72	Variable Transportation Costs	Line 70 times Line 71	$ 9,549	$ 9,871	$ 9,871	$ 8,916	$ 9,871	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 48,079	$ -
73																
74	Transportation Segment 7C															
75	Algonquin Gas Transmission (Contract 93200F)															
76	Receipt Point: Mendon															
77	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
78	Received Volume	Line 70	127,490	131,793	131,793	119,039	131,793	-	-	-	-	-	-	-	641,908	-
79	Fuel Loss Rate	Sch 27-FXW, Line 30 of Page 2	0.91%	0.95%	0.95%	0.95%	0.95%								0.94%	
80	City Gate Delivered Volume	Line 78 times (1 - Line 79)	126,330	130,541	130,541	117,908	130,541	-	-	-	-	-	-	-	635,861	-
81	Variable Transportation Rate	Sch 27-FXW, Line 15 of Page 2	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543								$ 0.0543	
82	Variable Transportation Costs	Line 80 times Line 81	$ 6,860	$ 7,088	$ 7,088	$ 6,402	$ 7,088	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 34,527	$ -

REDACTED

Source of Supply: Leidy Hub
Delivered to Northern via Algonquin Pipeline and Bay State Exchange

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	29,394	30,482	30,482	27,532	30,482	29,394	30,374	29,394	30,374	30,374	29,394	30,374	177,766	180,282
4	City Gate Delivered Volume	Sum Lines 39	28,687	29,631	29,631	26,763	29,631	28,687	29,643	28,687	29,643	29,643	28,687	29,643	173,029	175,944
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Sum Lines 41	$ 2,858	$ 2,952	$ 2,952	$ 2,666	$ 2,952	$ 2,858	$ 2,953	$ 2,858	$ 2,953	$ 2,953	$ 2,858	$ 2,953	$ 17,238	$ 17,526
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Leidy Hub Purchases															
11	Purchased Volumes	Sendout Optimization	29,394	30,482	30,482	27,532	30,482	29,394	30,374	29,394	30,374	30,374	29,394	30,374	177,766	180,282
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.147	$ 2.820
13	NYMEX Cost	Line 9 times Line 10	$ 85,272	$ 99,554	$ 102,877	$ 91,599	$ 97,085	$ 82,979	$ 84,317	$ 82,303	$ 85,988	$ 86,200	$ 83,067	$ 86,504	$ 559,365	$ 508,379
14	NYMEX Basis Price	Sch 27-FXW, Line 7 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1															
21	Algonquin Pipeline (Contract 93201A1C)															
22	Receipt Point: Algonquin Receipt Points															
23	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
24	Received Volume	Line 17	29,394	30,482	30,482	27,532	30,482	29,394	30,374	29,394	30,374	30,374	29,394	30,374	177,766	180,282
25	Fuel Loss Rate	Sch 27-FXW, Line 40 of Page 2	1.51%	1.86%	1.86%	1.86%	1.86%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.20%	1.20%
26	Delivered Volume	Line 24 times (1 - Line 25)	28,950	29,915	29,915	27,020	29,915	28,950	29,915	28,950	29,915	29,915	28,950	29,915	174,665	177,560
27	Variable Transportation Rate	Sch 27-FXW, Line 26 of Page 2	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	
28	Variable Transportation Costs	Line 26 times Line 27	$ 1,300	$ 1,343	$ 1,343	$ 1,213	$ 1,343	$ 1,300	$ 1,343	$ 1,300	$ 1,343	$ 1,343	$ 1,300	$ 1,343	$ 7,842	$ 7,972
29																
30	Transportation Segment 1															
31	Algonquin Pipeline (Contract 93201A1C)															
32	Receipt Point: Algonquin Receipt Points															
33	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
34	Total Contract Recevied Volume	Sendout Optimization	29,216	30,202	30,202	27,279	30,202	29,216	30,190	29,216	30,190	30,190	29,216	30,190	176,317	179,191
35	Received Volume	Line 16	28,950	29,915	29,915	27,020	29,915	28,950	29,915	28,950	29,915	29,915	28,950	29,915	174,665	177,560
36	Percentage Allocated	Line 35 divided by Line 34	99.09%	99.05%	99.05%	99.05%	99.05%	99.09%	99.09%	99.09%	99.09%	99.09%	99.09%	99.09%	99.06%	99.09%
37	Received Volume	Line 17	28,950	29,915	29,915	27,020	29,915	28,950	29,915	28,950	29,915	29,915	28,950	29,915	174,665	177,560
38	Fuel Loss Rate	Sch 27-FXW, Line 30 of Page 2	0.91%	0.95%	0.95%	0.95%	0.95%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	1.20%	1.20%
39	City Gate Delivered Volume	Line 37 times (1 - Line 38)	28,687	29,631	29,631	26,763	29,631	28,687	29,643	28,687	29,643	29,643	28,687	29,643	173,029	175,944
40	Variable Transportation Rate	Sch 27-FXW, Line 15 of Page 2	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543
41	Variable Transportation Costs	Line 39 times Line 40	$ 1,558	$ 1,609	$ 1,609	$ 1,453	$ 1,609	$ 1,558	$ 1,610	$ 1,558	$ 1,610	$ 1,610	$ 1,558	$ 1,610	$ 9,395	$ 9,554

REDACTED

Source of Supply: Texas Eastern Zone M-3
Delivered to Northern via Algonquin Pipeline and Bay State Exchange

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	266	287	287	259	287	266	275	266	275	275	266	275	1,652	1,631
4	City Gate Delivered Volume	Sum Lines 29	263	284	284	257	284	263	272	263	272	272	263	272	1,636	1,616
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Sum Lines 31	$ 14	$ 15	$ 15	$ 14	$ 15	$ 14	$ 15	$ 14	$ 15	$ 15	$ 14	$ 15	$ 89	$ 88
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Texas Eastern Zone M-3 Purchases															
11	Purchased Volumes	Sendout Optimization	266	287	287	259	287	266	275	266	275	275	266	275	1,652	1,631
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.150	$ 2.820
13	NYMEX Cost	Line 9 times Line 10	$ 771	$ 937	$ 968	$ 862	$ 914	$ 751	$ 763	$ 744	$ 778	$ 780	$ 751	$ 782	$ 5,203	$ 4,598
14	NYMEX Basis Price	Sch 27-FXW, Line 6 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1															
21	Algonquin Pipeline (Contract 93201A1C)															
22	Receipt Point: Algonquin Receipt Points															
23	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
24	Total Contract Recevied Volume	Sendout Optimization	29,216	30,202	30,202	27,279	30,202	29,216	30,190	29,216	30,190	30,190	29,216	30,190	176,317	179,191
25	Received Volume	Line 16	266	287	287	259	287	266	275	266	275	275	266	275	1,652	1,631
26	Percentage Allocated	Line 25 divided by Line 24	0.91%	0.95%	0.95%	0.95%	0.95%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.94%	0.91%
27	Received Volume	Line 17	266	287	287	259	287	266	275	266	275	275	266	275	1,652	1,631
28	Fuel Loss Rate	Sch 27-FXW, Line 30 of Page 2	0.91%	0.95%	0.95%	0.95%	0.95%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	1.20%	1.20%
29	City Gate Delivered Volume	Line 27 times (1 - Line 28)	263	284	284	257	284	263	272	263	272	272	263	272	1,636	1,616
30	Variable Transportation Rate	Sch 27-FXW, Line 15 of Page 2	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543
31	Variable Transportation Costs	Line 29 times Line 30	$ 14	$ 15	$ 15	$ 14	$ 15	$ 14	$ 15	$ 14	$ 15	$ 15	$ 14	$ 15	$ 89	$ 88

REDACTED

Source of Supply: Transco Zone 6 non-NY
Delivered to Northern via Algonquin Pipeline and Bay State Exchange

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	8,659	8,951	8,951	8,085	8,951	8,659	8,947	8,659	8,947	8,947	8,659	8,947	52,255	53,107
4	City Gate Delivered Volume	Sum Lines 26	8,580	8,866	8,866	8,008	8,866	8,580	8,866	8,580	8,866	8,866	8,580	8,866	51,766	52,624
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Sum Lines 28	$ 466	$ 481	$ 481	$ 435	$ 481	$ 466	$ 481	$ 466	$ 481	$ 481	$ 466	$ 481	$ 2,811	$ 2,857
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Tranco Zone 6, non-NY Purchases															
11	Purchased Volumes	Sendout Optimization	8,659	8,951	8,951	8,085	8,951	8,659	8,947	8,659	8,947	8,947	8,659	8,947	52,255	53,107
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.146	$ 2.820
13	NYMEX Cost	Line 9 times Line 10	$ 25,119	$ 29,234	$ 30,210	$ 26,898	$ 28,509	$ 24,444	$ 24,838	$ 24,245	$ 25,330	$ 25,393	$ 24,470	$ 25,482	$ 164,414	$ 149,758
14	NYMEX Basis Price	Sch 27-FXW, Line 5 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1															
21	Algonquin Pipeline (Contract 93201A1C)															
22	Receipt Point: Algonquin Receipt Points															
23	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
24	Received Volume	Line 17	8,659	8,951	8,951	8,085	8,951	8,659	8,947	8,659	8,947	8,947	8,659	8,947	52,255	53,107
25	Fuel Loss Rate	Sch 27-FXW, Line 30 of Page 2	0.91%	0.95%	0.95%	0.95%	0.95%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	1.20%	1.20%
26	City Gate Delivered Volume	Line 24 times (1 - Line 25)	8,580	8,866	8,866	8,008	8,866	8,580	8,866	8,580	8,866	8,866	8,580	8,866	51,766	52,624
27	Variable Transportation Rate	Sch 27-FXW, Line 15 of Page 2	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543
28	Variable Transportation Costs	Line 26 times Line 27	$ 466	$ 481	$ 481	$ 435	$ 481	$ 466	$ 481	$ 466	$ 481	$ 481	$ 466	$ 481	$ 2,811	$ 2,857

REDACTED

Source of Supply: Tennessee Zone 4
Delivered to Northern via Tennessee and Granite Pipelines

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	65,297	-	-	356	52,912	65,297	67,473	65,297	67,473	67,473	65,297	67,473	183,861	400,486
4	City Gate Delivered Volume	Line 39	64,274	-	-	351	52,083	64,274	66,417	64,274	66,417	66,417	64,274	66,417	180,982	394,215
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Sum Lines 31 and 41	$ 6,463	$ -	$ -	$ 35	$ 5,237	$ 6,463	$ 6,678	$ 6,463	$ 6,678	$ 6,678	$ 6,463	$ 6,678	$ 18,197	$ 39,638
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Tennessee Zone 4 Supply Costs															
11	Purchased Volumes	Sendout Optimization	65,297	-	-	356	52,912	65,297	67,473	65,297	67,473	67,473	65,297	67,473	183,861	400,486
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 2.956	$ 2.820
13	NYMEX Cost	Line 9 times Line 10	$ 189,425	$ -	$ -	$ 1,185	$ 168,524	$ 184,332	$ 187,306	$ 182,831	$ 191,017	$ 191,489	$ 184,528	$ 192,164	$ 543,467	$ 1,129,333
14	NYMEX Basis Price	Sch 27-FXW, Line 8 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 2															
21	Tennessee Gas Pipeline (Contract 5265)															
22	Receipt Point: Tennessee FS-MA 300 Leg															
23	Delivery Point: Pleasant St. (Interconnection with Granite)															
24	Total Contract Recevied Volume	Sendout Optimization	65,297	67,473	67,473	60,944	67,473	65,297	67,473	65,297	67,473	67,473	65,297	67,473	393,956	
25	Received Volume	Line 16	65,297	-	-	356	52,912	65,297	67,473	65,297	67,473	67,473	65,297	67,473	183,861	
26	Percentage Allocated	Line 25 divided by Line 24	100.00%	0.00%	0.00%	0.58%	78.42%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	46.67%	100.00%
27	Received Volume	Line 11	65,297	-	-	356	52,912	65,297	67,473	65,297	67,473	67,473	65,297	67,473	183,861	400,486
28	Fuel Loss Rate	Sch 27-FXW, Line 38 of Page 2	1.22%			1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%
29	Delivered Volume	Line 27 times (1 - Line 28)	64,500	-	-	352	52,266	64,500	66,650	64,500	66,650	66,650	64,500	66,650	181,618	395,600
30	Variable Transportation Rate	Sch 27-FXW, Line 24 of Page 2	$ 0.0991			$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991
31	Variable Transportation Costs	Line 29 times Line 30	$ 6,392	$ -	$ -	$ 35	$ 5,180	$ 6,392	$ 6,605	$ 6,392	$ 6,605	$ 6,605	$ 6,392	$ 6,605	$ 17,998	$ 39,204
32																
33	Transportation Segment 3															
34	Granite State Gas Transmission (Contract 19-100-FT-NN)															
35	Receipt Point: Pleasant St.															
36	Delivery Point: Northern City Gates															
37	Received Volume	Line 29	64,500	-	-	352	52,266	64,500	66,650	64,500	66,650	66,650	64,500	66,650	181,618	395,600
38	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%
39	City Gate Delivered Volume	Line 37 times (1 - Line 38)	64,274	-	-	351	52,083	64,274	66,417	64,274	66,417	66,417	64,274	66,417	180,982	394,215
40	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011
41	Variable Transportation Costs	Line 39 times Line 40	$ 71	$ -	$ -	$ 0	$ 57	$ 71	$ 73	$ 71	$ 73	$ 73	$ 71	$ 73	$ 199	$ 434

Source of Supply: Tennessee FS-MA Inventory
Delivered to Northern via Tennessee and Granite Pipelines

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
1	Gross Withdrawn Volume	Line 9	-	67,473	67,473	60,587	14,561	-	-	-	-	-	-	-	210,095	-
2	City Gate Delivered Volume	Line 38	-	66,417	66,417	59,639	14,333	-	-	-	-	-	-	-	206,805	-
3	Total Withdrawal Costs	Line 16	$ -	$ 101,729	$ 101,729	$ 91,348	$ 21,954	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 316,760	$ -
4	Variable Transportation Costs	Sum Lines 30 and 40	$ -	$ 6,678	$ 6,678	$ 5,997	$ 1,441	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 20,794	$ -
5	Total City Gate Delivered Costs	Line 3 plus Line 4	$ -	$ 108,407	$ 108,407	$ 97,344	$ 23,395	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 337,554	$ -
6	Average Delivered Price	Line 5 divided by Line 2		$ 1.632	$ 1.632	$ 1.632	$ 1.632								$ 1.632	
7																
8	Tennessee FS-MA Withdrawn Inventory (Segment 1)															
9	Gross Withdrawn Volume	Sendout Optimization	-	67,473	67,473	60,587	14,561	-	-	-	-	-	-	-	210,095	-
10	Withdrawal Rate	Sch 27-FXW, Line 1 of Page 3		$ 0.0087	$ 0.0087	$ 0.0087	$ 0.0087								$ 0.0087	
11	Withdrawal Charges	Line 9 times Line 10	$ -	$ 587	$ 587	$ 527	$ 127	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,828	$ -
12	Inventory Rate	FXW-8		$ 1.4990	$ 1.4990	$ 1.4990	$ 1.4990								$ 1.4990	
13	Withdrawn Inventory Value	Line 9 times Line 12	$ -	$ 101,142	$ 101,142	$ 90,820	$ 21,827	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 314,932	$ -
14	Withdrawal Fuel Losses	Sch 27-FXW, Line 1 of Page 3 times Line 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Net Withdrawn Volume	Line 9 minus Line 14	-	67,473	67,473	60,587	14,561	-	-	-	-	-	-	-	210,095	-
16	Total Withdrawal Costs	Line 11 plus Line 13	$ -	$ 101,729	$ 101,729	$ 91,348	$ 21,954	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 316,760	$ -
17																
18	Transportation Fuel Losses and Variable Charges															
19	Transportation Segment 2															
20	Tennessee Gas Pipeline (Contract 5265)															
21	Receipt Point: Tennessee FS-MA Withdrawal Meter															
22	Delivery Point: Pleasant St. (Interconnection with Granite)															
23	Total Contract Recevied Volume	Sendout Optimization	65,297	67,473	67,473	60,944	67,473	65,297	67,473	65,297	67,473	67,473	65,297	67,473	393,956	400,486
24	Received Volume	Line 15	-	67,473	67,473	60,587	14,561	-	-	-	-	-	-	-	210,095	-
25	Percentage Allocated	Line 24 divided by Line 23	0.00%	100.00%	100.00%	99.42%	21.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	53.33%	0.00%
26	Received Volume	Line 24	-	67,473	67,473	60,587	14,561	-	-	-	-	-	-	-	210,095	-
27	Fuel Loss Rate	Sch 27-FXW, Line 38 of Page 2		1.22%	1.22%	1.22%	1.22%								1.22%	
28	Delivered Volume	Line 26 times (1 - Line 27)	-	66,650	66,650	59,848	14,384	-	-	-	-	-	-	-	207,532	-
29	Variable Transportation Rate	Sch 27-FXW, Line 24 of Page 2		$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991								$ 0.0991	
30	Variable Transportation Costs	Line 28 times Line 29	$ -	$ 6,605	$ 6,605	$ 5,931	$ 1,425	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 20,566	$ -
31																
32	Transportation Segment 3															
33	Granite State Gas Transmission (Contract 19-100-FT-NN)															
34	Receipt Point: Pleasant St.															
35	Delivery Point: Northern City Gates															
36	Received Volume	Line 28	-	66,650	66,650	59,848	14,384	-	-	-	-	-	-	-	207,532	-
37	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
38	City Gate Delivered Volume	Line 36 times (1 - Line 37)	-	66,417	66,417	59,639	14,333	-	-	-	-	-	-	-	206,805	-
39	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
40	Variable Transportation Costs	Line 38 times Line 39	$ -	$ 73	$ 73	$ 66	$ 16	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 227	$ -

Source of Supply: Union Dawn Storage Inventory
Delivered to Northern via TransCanada, PNGTS and Granite Pipelines

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
1	Gross Withdrawn Volume	Line 9	242,662	626,554	720,240	746,937	442,456	-	-	-	-	-	-	-	2,778,850	-
2	City Gate Delivered Volume	Line 64	233,918	603,977	694,287	720,022	426,513	-	-	-	-	-	-	-	2,678,717	-
3	Total Withdrawal Costs	Line 16	$ 427,814	$ 1,104,614	$ 1,269,784	$ 1,316,850	$ 780,050	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,899,112	$ -
4	Variable Transportation Costs	Sum Lines 30, 43, 56 and 66	$ 516	$ 1,331	$ 1,530	$ 1,587	$ 940	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,904	$ -
5	Total City Gate Delivered Costs	Line 3 plus Line 4	$ 428,329	$ 1,105,945	$ 1,271,314	$ 1,318,437	$ 780,990	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,905,015	$ -
6	Average Delivered Price	Line 5 divided by Line 2	$ 1.831	$ 1.831	$ 1.831	$ 1.831	$ 1.831								$ 1.831	
7																
8	<u>Union Dawn Storage Withdrawn Inventory (Segment 1)</u>															
9	Gross Withdrawn Volume	Sendout Optimization	242,662	626,554	720,240	746,937	442,456	-	-	-	-	-	-	-	2,778,850	-
10	Withdrawal Rate	Sch 27-FXW, Line 3 of Page 3	$ 0.005	$ 0.005	$ 0.005	$ 0.005	$ 0.005								$ 0.005	
11	Withdrawal Charges	Line 9 times Line 10	$ 1,213	$ 3,133	$ 3,601	$ 3,735	$ 2,212	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,894	$ -
12	Inventory Rate	FXW-8	$ 1.758	$ 1.758	$ 1.758	$ 1.758	$ 1.758								$ 1.758	
13	Withdrawn Inventory Value	Line 9 times Line 12	$ 426,600	$ 1,101,482	$ 1,266,183	$ 1,313,115	$ 777,838	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,885,218	$ -
14	Withdrawal Fuel Losses	Sch 27-FXW, Line 3 of Page 3 times Line !	$ 1,455.963	$ 3,759.338	$ 4,321.411	$ 4,481.628	$ 2,654.724	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,673.065	$ -
15	Net Withdrawn Volume	Line 9 minus Line 14	241,206	622,794	715,919	742,455	439,801	-	-	-	-	-	-	-	2,762,177	-
16	Total Withdrawal Costs	Line 11 plus Line 13	$ 427,814	$ 1,104,614	$ 1,269,784	$ 1,316,850	$ 780,050	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,899,112	$ -
17																
18	Transportation Fuel Losses and Variable Charges															
19	Transportation Segment 3															
20	TransCanada Pipeline (Contract 33322)															
21	Receipt Point: Union Dawn															
22	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)															
23	Total Contract Recevied Volume	Sendout Optimization	241,206	622,794	715,919	743,181	458,117	774,542	404,366	241,481	190,651	193,810	224,050	527,515	3,555,760	1,781,873
24	Received Volume	Line 15	241,206	622,794	715,919	742,455	439,801	-	-	-	-	-	-	-	2,762,177	-
25	Percentage Allocated	Line 24 divided by Line 23	100.00%	100.00%	100.00%	99.90%	96.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	77.68%	0.00%
26	Received Volume	Line 24	241,206	622,794	715,919	742,455	439,801	-	-	-	-	-	-	-	2,762,177	-
27	Fuel Loss Rate	Sch 27-FXW, Line 42 of Page 2	1.10%	1.10%	1.10%	1.10%	1.10%								1.10%	
28	Delivered Volume	Line 26 times (1 - Line 27)	238,553	615,944	708,044	734,288	434,963	-	-	-	-	-	-	-	2,731,793	-
29	Variable Transportation Rate	Sch 27-FXW, Line 28 of Page 2	$ -	$ -	$ -	$ -	$ -								$ -	
30	Variable Transportation Costs	Line 28 times Line 29	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
31																
32	Transportation Segment 3															
33	TransCanada Pipeline (Contract 33322)															
34	Receipt Point: Union Dawn															
35	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)															
36	Total Contract Recevied Volume	Sendout Optimization	238,553	615,944	708,044	735,006	453,077	769,894	401,940	240,032	189,507	192,647	222,706	524,350	3,520,519	1,771,182
37	Received Volume	Line 28	238,553	615,944	708,044	734,288	434,963	-	-	-	-	-	-	-	2,731,793	-
38	Percentage Allocated	Line 37 divided by Line 36	100.00%	100.00%	100.00%	99.90%	96.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	77.60%	0.00%
39	Received Volume	Line 37	238,553	615,944	708,044	734,288	434,963	-	-	-	-	-	-	-	2,731,793	-
40	Fuel Loss Rate	Sch 27-FXW, Line 41 of Page 2	1.50%	1.50%	1.50%	1.50%	1.50%									
41	Delivered Volume	Line 39 times (1 - Line 40)	234,975	606,705	697,423	723,274	428,439	-	-	-	-	-	-	-	2,690,816	-
42	Variable Transportation Rate	Sch 27-FXW, Line 27 of Page 2	$ -	$ -	$ -	$ -	$ -								$ -	
43	Variable Transportation Costs	Line 41 times Line 42	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
44																
45	Transportation Segment 4															
46	PNGTS (Contract 1997-004)															
47	Receipt Point: Pittsburgh, NH (Interconnects with TransCanada at E. Hereford)															
48	Delivery Point: Granite (Westbrook, Newington, Eliot)															
49	Total Contract Recevied Volume	Sendout Optimization	234,975	606,705	697,423	723,981	446,281	758,346	395,910	236,432	186,665	189,758	219,365	516,485	3,467,711	1,744,614
50	Received Volume	Line 41	234,975	606,705	697,423	723,274	428,439	-	-	-	-	-	-	-	2,690,816	-
51	Percentage Allocated	Line 50 divided by Line 49	100.00%	100.00%	100.00%	99.90%	96.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	77.60%	0.00%
52	Total Contract Recevied Volume	Sendout Optimization	234,975	606,705	697,423	723,274	428,439	-	-	-	-	-	-	-	2,690,816	-
53	Fuel Loss Rate	Sch 27-FXW, Line 34 of Page 2	0.10%	0.10%	0.10%	0.10%	0.10%								0.10%	
54	Delivered Volume	Line 52 times (1 - Line 53)	234,740	606,098	696,726	722,551	428,011	-	-	-	-	-	-	-	2,688,125	-
55	Variable Transportation Rate	Sch 27-FXW, Line 21 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011								$ 0.0011	
56	Variable Transportation Costs	Line 54 times Line 55	$ 258	$ 667	$ 766	$ 795	$ 471	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,957	$ -
57																
58	Transportation Segment 5															
59	Granite State Gas Transmission (Contract 19-100-FT-NN)															
60	Receipt Point: Westbrook, Newington, Eliot															
61	Delivery Point: Northern City Gates															
62	Received Volume	Line 54	234,740	606,098	696,726	722,551	428,011	-	-	-	-	-	-	-	2,688,125	-
63	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
64	City Gate Delivered Volume	Line 62 times (1 - Line 63)	233,918	603,977	694,287	720,022	426,513	-	-	-	-	-	-	-	2,678,717	-
65	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
66	Variable Transportation Costs	Line 64 times Line 65	$ 257	$ 664	$ 764	$ 792	$ 469	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,947	$ -

Source of Supply: PNGTS (Westbrook, ME)
Delivered to Northern via Granite Pipeline

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter
3	Purchased Volumes	Line 9	-	-	-	726	18,316	774,542	404,366	241,481	190,651	193,810	224,050	527,515	793,583
4	City Gate Delivered Volume	Line 67	-	-	-	704	17,762	754,936	394,130	235,369	185,825	188,904	218,379	514,162	773,402
5	Total Purchase Cost	Line 15	[redacted]												
6	Variable Transportation Costs	Sum Lines 32, 46, 60 and 69	$ -	$ -	$ -	$ 2	$ 39	$ 1,664	$ 869	$ 519	$ 410	$ 416	$ 481	$ 1,133	$ 1,704
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]												
8	Average Delivered Price	Line 5 divided by Line 2													
9															
10	Portland Supply Costs														
11	Purchased Volumes	Sendout Optimization	-	-	-	726	18,316	774,542	404,366	241,481	190,651	193,810	224,050	527,515	793,583
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 2.832
13	NYMEX Cost	Line 9 times Line 10	$ -	$ -	$ -	$ 2,415	$ 58,335	$ 2,186,531	$ 1,122,519	$ 676,147	$ 539,733	$ 550,033	$ 633,165	$ 1,502,363	$ 2,247,281
14	NYMEX Basis Price	Sch 27-FXW, Line 10 of Page 1	[redacted]												
15	NYMEX Basis Costs	Line 9 times Line 12													
16	Total Purchase Price	Line 10 plus Line 12													
17	Total Purchase Cost	Line 11 plus Line 13													
18															
19	Transportation Fuel Losses and Variable Charges														
20	Transportation Segment 2B														
21	Transportation Segment 3														
22	TransCanada Pipeline (Contract 33322)														
23	Receipt Point: Union Dawn														
24	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)														
25	Total Contract Recevied Volume	Sendout Optimization	241,206	622,794	715,919	743,181	458,117	774,542	404,366	241,481	190,651	193,810	224,050	527,515	3,555,760
26	Received Volume	Line 11	-	-	-	726	18,316	774,542	404,366	241,481	190,651	193,810	224,050	527,515	793,583
27	Percentage Allocated	Line 26 divided by Line 25	0.00%	0.00%	0.00%	0.10%	4.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	22.32%
28	Received Volume	Line 11	-	-	-	726	18,316	774,542	404,366	241,481	190,651	193,810	224,050	527,515	793,583
29	Fuel Loss Rate	Sch 27-FXW, Line 42 of Page 2				1.10%	1.10%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.61%
30	Delivered Volume	Line 28 times (1 - Line 29)	-	-	-	718	18,114	769,894	401,940	240,032	189,507	192,647	222,706	524,350	788,726
31	Variable Transportation Rate	Sch 27-FXW, Line 28 of Page 2				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
32	Variable Transportation Costs	Line 30 times Line 31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33															
34	Transportation Segment 2B														
35	Transportation Segment 3														
36	TransCanada Pipeline (Contract 33322)														
37	Receipt Point: Union Dawn														
38	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)														
39	Total Contract Recevied Volume	Sendout Optimization	238,553	615,944	708,044	735,006	453,077	769,894	401,940	240,032	189,507	192,647	222,706	524,350	3,520,519
40	Received Volume	Line 30	-	-	-	718	18,114	769,894	401,940	240,032	189,507	192,647	222,706	524,350	788,726
41	Percentage Allocated	Line 40 divided by Line 39	0.00%	0.00%	0.00%	0.10%	4.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	22.40%
42	Received Volume	Line 30	-	-	-	718	18,114	769,894	401,940	240,032	189,507	192,647	222,706	524,350	788,726
43	Fuel Loss Rate	Sch 27-FXW, Line 41 of Page 2				1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
44	Delivered Volume	Line 42 times (1 - Line 43)	-	-	-	707	17,842	758,346	395,910	236,432	186,665	189,758	219,365	516,485	776,895
45	Variable Transportation Rate	Sch 27-FXW, Line 27 of Page 2				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
46	Variable Transportation Costs	Line 44 times Line 45	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
47															
48	Transportation Segment 2B														
49	Transportation Segment 3														
50	TransCanada Pipeline (Contract 33322)														
51	Receipt Point: Union Dawn														
52	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)														
53	Total Contract Recevied Volume	Sendout Optimization	234,975	606,705	697,423	723,981	446,281	758,346	395,910	236,432	186,665	189,758	219,365	516,485	3,467,711
54	Received Volume	Line 44	-	-	-	707	17,842	758,346	395,910	236,432	186,665	189,758	219,365	516,485	776,895
55	Percentage Allocated	Line 54 divided by Line 53	0.00%	0.00%	0.00%	0.10%	4.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	22.40%
56	Received Volume	Line 44	-	-	-	707	17,842	758,346	395,910	236,432	186,665	189,758	219,365	516,485	776,895
57	Fuel Loss Rate	Sch 27-FXW, Line 34 of Page 2				0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
58	Delivered Volume	Line 56 times (1 - Line 57)	-	-	-	706	17,825	757,588	395,515	236,195	186,478	189,568	219,146	515,968	776,119
59	Variable Transportation Rate	Sch 27-FXW, Line 21 of Page 2				$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011
60	Variable Transportation Costs	Line 58 times Line 59	$ -	$ -	$ -	$ 1	$ 20	$ 833	$ 435	$ 260	$ 205	$ 209	$ 241	$ 568	$ 854
61															
62	Granite State Gas Transmission (Contract 19-100-FT-NN)														
63	Receipt Point: Westbrook, Newington, Eliot														
64	Delivery Point: Northern City Gates														
65	Received Volume	Line 58	-	-	-	706	17,825	757,588	395,515	236,195	186,478	189,568	219,146	515,968	776,119
66	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%
67	City Gate Delivered Volume	Line 65 times (1 - Line 66)	-	-	-	704	17,762	754,936	394,130	235,369	185,825	188,904	218,379	514,162	773,402
68	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011
69	Variable Transportation Costs	Line 67 times Line 68	$ -	$ -	$ -	$ 1	$ 20	$ 830	$ 434	$ 259	$ 204	$ 208	$ [illegible]	$ [illegible]	851

REDACTED

Source of Supply: Atlantic Bridge Ramapo
Delivered to Northern via Algonquin Pipeline and Bay State Exchange

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	171,105	187,462	187,462	169,320	187,462	-	-	-	-	-	-	-	902,810	-
4	City Gate Delivered Volume	Sum Lines 39	169,702	183,303	183,303	165,564	183,303	-	-	-	-	-	-	-	885,175	-
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Sum Lines 41	$ 35,547	$ 42,722	$ 42,722	$ 38,588	$ 42,722	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 202,301	$ -
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Texas Eastern Zone M-3 Purchases															
11	Purchased Volumes	Sendout Optimization	171,105	187,462	187,462	169,320	187,462	-	-	-	-	-	-	-	902,810	-
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.214	
13	NYMEX Cost	Line 9 times Line 10	$ 496,376	$ 612,250	$ 632,683	$ 563,329	$ 597,066	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,901,703	$ -
14	NYMEX Basis Price	Sch 27-FXW, Line 13 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1															
21	Algonquin Pipeline (Contract 93201A1C)															
22	Receipt Point: Algonquin Receipt Points															
23	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
24	Received Volume	Line 17	171,105	187,462	187,462	169,320	187,462	-	-	-	-	-	-	-	902,810	-
25	Fuel Loss Rate	#N/A	0.00%	1.41%	1.41%	1.41%	1.41%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.20%	1.20%
26	Delivered Volume	Line 24 times (1 - Line 25)	171,105	184,819	184,819	166,933	184,819	-	-	-	-	-	-	-	892,493	-
27	Variable Transportation Rate	#N/A	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	$ 0.2017	
28	Variable Transportation Costs	Line 26 times Line 27	$ 34,512	$ 37,278	$ 37,278	$ 33,670	$ 37,278	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 180,016	$ -
29																
30	Transportation Segment 1															
31	Algonquin Pipeline (Contract 93201A1C)															
32	Receipt Point: Algonquin Receipt Points															
33	Delivery Point: Bay State City Gate (Delivered to Northern via Exchange Agreement)															
34	Total Contract Recevied Volume	Sendout Optimization	171,105	184,819	184,819	166,933	184,819	-	-	-	-	-	-	-	892,493	-
35	Received Volume	Line 16	171,105	184,819	184,819	166,933	184,819	-	-	-	-	-	-	-	892,493	-
36	Percentage Allocated	Line 35 divided by Line 34	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	
37	Received Volume	Line 17	171,105	184,819	184,819	166,933	184,819	-	-	-	-	-	-	-	892,493	-
38	Fuel Loss Rate	#N/A	0.82%	0.82%	0.82%	0.82%	0.82%								1.20%	1.20%
39	City Gate Delivered Volume	Line 37 times (1 - Line 38)	169,702	183,303	183,303	165,564	183,303	-	-	-	-	-	-	-	885,175	-
40	Variable Transportation Rate	#N/A	$ 0.0061	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297								$ 0.0252	
41	Variable Transportation Costs	Line 39 times Line 40	$ 1,035	$ 5,444	$ 5,444	$ 4,917	$ 5,444	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 22,285	$ -

REDACTED

Source of Supply: PXP Dawn Hub
Delivered to Northern via Granite Pipeline

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	232,496	247,593	247,593	223,632	247,593	52,514	-	-	-	-	-	-	1,251,420	-
4	City Gate Delivered Volume	Line 67	224,840	239,438	239,438	216,267	239,438	51,041	-	-	-	-	-	-	1,210,463	-
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Sum Lines 32, 46, 60 and 69	$ 496	$ 528	$ 528	$ 477	$ 528	$ 112	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,668	$ -
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Supply Costs															
11	Purchased Volumes	Sendout Optimization	232,496	247,593	247,593	223,632	247,593	52,514	-	-	-	-	-	-	1,251,420	-
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.196	
13	NYMEX Cost	Line 9 times Line 10	$ 674,472	$ 808,637	$ 835,625	$ 744,024	$ 788,582	$ 148,247	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,999,587	$ -
14	NYMEX Basis Price	Sch 27-FXW, Line 14 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 2B															
21	Transportation Segment 3															
22	TransCanada Pipeline (Contract 33322)															
23	Receipt Point: Union Dawn															
24	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)															
25	Total Contract Recevied Volume	Sendout Optimization	232,496	247,593	247,593	223,632	247,593	52,514	-	-	-	-	-	-	1,251,420	-
26	Received Volume	Line 11	232,496	247,593	247,593	223,632	247,593	52,514	-	-	-	-	-	-	1,251,420	-
27	Percentage Allocated	Line 26 divided by Line 25	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
28	Received Volume	Line 11	232,496	247,593	247,593	223,632	247,593	52,514	-	-	-	-	-	-	1,251,420	-
29	Fuel Loss Rate	#N/A	1.10%	1.10%	1.10%	1.10%	1.10%	0.60%							1.08%	
30	Delivered Volume	Line 28 times (1 - Line 29)	229,939	244,869	244,869	221,172	244,869	52,199	-	-	-	-	-	-	1,237,917	-
31	Variable Transportation Rate	#N/A	$ -	$ -	$ -	$ -	$ -	$ -							$ -	
32	Variable Transportation Costs	Line 30 times Line 31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33																
34	Transportation Segment 2B															
35	Transportation Segment 3															
36	TransCanada Pipeline (Contract 33322)															
37	Receipt Point: Union Dawn															
38	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)															
39	Total Contract Recevied Volume	Sendout Optimization	229,939	244,869	244,869	221,172	244,869	52,199	-	-	-	-	-	-	1,237,917	-
40	Received Volume	Line 30	229,939	244,869	244,869	221,172	244,869	52,199	-	-	-	-	-	-	1,237,917	-
41	Percentage Allocated	Line 40 divided by Line 39	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	
42	Received Volume	Line 30	229,939	244,869	244,869	221,172	244,869	52,199	-	-	-	-	-	-	1,237,917	-
43	Fuel Loss Rate	#N/A	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%							1.50%	
44	Delivered Volume	Line 42 times (1 - Line 43)	226,490	241,196	241,196	217,854	241,196	51,416	-	-	-	-	-	-	1,219,348	-
45	Variable Transportation Rate	#N/A	$ -	$ -	$ -	$ -	$ -	$ -							$ -	
46	Variable Transportation Costs	Line 44 times Line 45	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
47																
48	Transportation Segment 2B															
49	Transportation Segment 3															
50	TransCanada Pipeline (Contract 33322)															
51	Receipt Point: Union Dawn															
52	Delivery Point: E. Hereford (Interconnects with PNGTS at Pittsburgh)															
53	Total Contract Recevied Volume	Sendout Optimization	226,490	241,196	241,196	217,854	241,196	51,416	-	-	-	-	-	-	1,219,348	-
54	Received Volume	Line 44	226,490	241,196	241,196	217,854	241,196	51,416	-	-	-	-	-	-	1,219,348	-
55	Percentage Allocated	Line 54 divided by Line 53	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	
56	Received Volume	Line 44	226,490	241,196	241,196	217,854	241,196	51,416	-	-	-	-	-	-	1,219,348	-
57	Fuel Loss Rate	#N/A	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%							0.38%	
58	Delivered Volume	Line 56 times (1 - Line 57)	225,629	240,279	240,279	217,027	240,279	51,221	-	-	-	-	-	-	1,214,715	-
59	Variable Transportation Rate	#N/A	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011							$ 0.0011	
60	Variable Transportation Costs	Line 58 times Line 59	$ 248	$ 264	$ 264	$ 239	$ 264	$ 56	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,336	$ -
61																
62	Granite State Gas Transmission (Contract 19-100-FT-NN)															
63	Receipt Point: Westbrook, Newington, Eliot															
64	Delivery Point: Northern City Gates															
65	Received Volume	Line 58	225,629	240,279	240,279	217,027	240,279	51,221	-	-	-	-	-	-	1,214,715	-
66	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
67	City Gate Delivered Volume	Line 65 times (1 - Line 66)	224,840	239,438	239,438	216,267	239,438	51,041	-	-	-	-	-	-	1,210,463	-
68	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
69	Variable Transportation Costs	Line 67 times Line 68	$ 247	$ 263	$ 263	$ 238	$ 263	$ 56	$ -	$ -	$ -	$ -	$ -	$ -	$ [illegible]332	$ -

REDACTED

Source of Supply: Northern LNG Inventory
On-System Storage

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	2020-2021 Winter	2021 Summer
1	Gross Withdrawn Volume	Line 9	1,794	22,761	52,503	33,254	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040
2	City Gate Delivered Volume	Line 15	1,794	22,761	52,503	33,254	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040
3	Total Withdrawal Costs	Line 16	[redacted]													
4	Variable Transportation Costs	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5	Total City Gate Delivered Costs	Line 3 plus Line 4	[redacted]													
6	Average Delivered Price	Line 5 divided by Line 2														
7																
8	Northern LNG Withdrawn Inventory															
9	Gross Withdrawn Volume	Sendout Optimization	1,794	22,761	52,503	33,254	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040
10	Withdrawal Rate	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Withdrawal Charges	Line 9 times Line 10	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Inventory Rate	FXW-8	[redacted]													
13	Withdrawn Inventory Value	Line 9 times Line 12														
14	Withdrawal Fuel Losses	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Net Withdrawn Volume	Line 9 minus Line 14	1,794	22,761	52,503	33,254	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040
16	Total Withdrawal Costs	Line 11 plus Line 13	[redacted]													

REDACTED

Source of Supply: Peaking Contract 1
Delivered to Northern via Granite Pipeline

Denotes Confidential Information

Line	City Gate Delivered Costs	Reference	2020-2021 Winter Nov-20	2020-2021 Winter Dec-20	2020-2021 Winter Jan-21	2020-2021 Winter Feb-21	2020-2021 Winter Mar-21	2020-2021 Winter Apr-21	2021 Summer May-21	2021 Summer Jun-21	2021 Summer Jul-21	2021 Summer Aug-21	2021 Summer Sep-21	2021 Summer Oct-21	2020-2021 Winter	2021 Summer
3	Purchased Volumes	Line 9	-	7,425	201,348	8,415	-	-	-	-	-	-	-	-	217,188	-
4	City Gate Delivered Volume	Line 27	-	7,425	201,313	8,415	-	-	-	-	-	-	-	-	217,152	-
5	Total Purchase Cost	Line 15	[redacted]													
6	Variable Transportation Costs	Line 29	$ -	$ -	$ 11	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11	$ -
7	Total City Gate Delivered Costs	Sum Lines 3 and 4	[redacted]													
8	Average Delivered Price	Line 5 divided by Line 2														
9																
10	Peaking Contract 1 Costs															
11	Purchased Volumes	Sendout Optimization	-	7,425	201,348	8,415	-	-	-	-	-	-	-	-	217,188	-
12	Monthly NYMEX Price	Sch 27-FXW, Line 18 of Page 1	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848	$ 3.369	
13	NYMEX Cost	Line 9 times Line 10	$ -	$ 24,248	$ 679,551	$ 27,997	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 731,796	$ -
14	NYMEX Basis Price	Sch 27-FXW, Line 16 of Page 1	[redacted]													
15	NYMEX Basis Costs	Line 9 times Line 12														
16	Total Purchase Price	Line 10 plus Line 12														
17	Total Purchase Cost	Line 11 plus Line 13														
18																
19	Transportation Fuel Losses and Variable Charges															
20	Transportation Segment 1															
21	Granite State Gas Transmission (Contract 19-100-FT-NN)															
22	Receipt Point: Pleasant St.															
23	Delivery Point: Northern City Gates															
24	City Gate Delivered Volume	Lewiston City-Gate - Non-GSGT	-	7,425	191,136	8,415	-	-	-	-	-	-	-	-	-	-
25	Received Volume	Line 11	-	-	10,212	-	-	-	-	-	-	-	-	-	10,212	-
26	Fuel Loss Rate	Sch 27-FXW, Line 32 of Page 2	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	
27	City Gate Delivered Volume	Line 25 times (1 - Line 26)	-	-	10,177	-	-	-	-	-	-	-	-	-	10,177	-
28	Variable Transportation Rate	Sch 27-FXW, Line 17 of Page 2	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	
29	Variable Transportation Costs	Line 27 times Line 28	$ -	$ -	$ 11	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11	$ -
	Purchased Volumes	Sendout Optimization	-	7,425	201,348	8,415	-	-	-	-	-	-	-	-	217,188	-
	Purchased Volumes	Sendout Optimization	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	7,425	201,348	8,415	-	-	-	-	-	-	-	-		
			0%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%		

Formula for Supplier Balancing Charge

Balancing Resources

Line	NU Storage Capacity Costs (Fixed)		NU Storage Space (Dth)		Reference
1	$ 122,375	TGP		259,337	Schedule 20-FXW, Page 4
2	$ 2,840,000	Union		4,000,000	Schedule 20-FXW, Page 4
3	$ 2,962,375	TOTAL		4,259,337	LN 1 + LN 2
4	Weighted Average Capacity Cost		$ 0.6955 per Dth		LN 3 Cost / LN3 Space
	NU Storage Commodity Costs (Variable)				
5	TGP FS-MA	Withdraw/Inject		$ 0.0174	Schedule 25-FXW, PG 9, LN 10 * 2
6	Union	Withdraw/Inject		$ 0.0100	Schedule 25-FXW, PG 10, LN 10 * 2
7	Weighted Average Commodity Cost		$ 0.0105 per Dth		LN 5, LN 6 (weighted)
8	Supplier Balancing Charge		$ 0.71 per Dth		LN 4 + LN 7

Re-entry Rate & Conversion Rate
Volumes and Revenues

Month	Re-entry Surcharage		Conversion Surcharge	
	Volumes	Revenues	Volumes	Revenues
May-19	0	$0	0	$0
Jun-19	0	$0	0	$0
Jul-19	0	$0	0	$0
Aug-19	0	$0	0	$0
Sep-19	0	$0	0	$0
Oct-19	0	$0	0	$0
Nov-19	3,048	$125	0	$0
Dec-19	17,478	$715	0	$0
Jan-20	7,646	$313	0	$0
Feb-20	12,152	$497	0	$0
Mar-20	11,464	$469	0	$0
Apr-20	6,890	$282	0	$0
May-20	0	$0	0	$0
Jun-20	2,230	$91	0	$0
Total	60,908	$2,490	0	$0

Northern Utilities, Inc.
Short-Term Debt Limit
($ in thousands)

NU Short-Term Debt Limit Calculation (11/1/20 - 10/31/2021)			
Fuel Financing Purposes			
NU ME winter gas costs		34,992	
NU NH winter gas costs		25,530	
	Total	60,522	
30% of total winter gas costs		18,157	(a)
Non-Fuel Financing Purposes			
Estimated net utility plant @ 12/31/20		529,790	
15% of Net Utility Plant		79,468	(b)
Short-Term Debt Limit			
Short Term Debt Limit		**97,625**	(a) + (b)

REDACTED

Northern Utilities, Inc.
Natural Gas Commodity Price Forecast
Based upon NYMEX Settlement for September 1, 2020

Denotes Confidential Information

Estimated Adders to NYMEX Last Day Settlement

Line	Supply Source	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
1	Tennesee Zone 0	[redacted]											
2	Tennesee Zone L												
3	Tennesee Niagara												
4	Iroquois Receipts												
5	Transco Zone 6, non-NY												
6	Texas Eastern Zone M-3												
7	Leidy Hub												
8	Tennesee Zone 4 Station 313 Pool												
9	Tennesee Zone 4 Storage Injection												
10	Union Dawn Storage - Dawn Supply												
11	Union Dawn Storage Injection												
12	LNG Contract												
13	Atlantic Bridge - Ramapo												
14	PXP - Dawn Supply												
15	Incremental Supply												
16	Peaking Contract 1												
17	WXP - Dawn Supply												
18	NYMEX	$ 2.901	$ 3.266	$ 3.375	$ 3.327	$ 3.185	$ 2.823	$ 2.776	$ 2.800	$ 2.831	$ 2.838	$ 2.826	$ 2.848

Northern Utilities, Inc.
Transportation Contract Rates
November 2020 through October 2021
Fixed Demand Rates

Line	Pipeline	Rate Schedule	Receipt	Delivery	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
1	Algonquin	AFT-1	N/A	N/A	Page 4	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927	$ 8.5927
2	Algonquin	AFT-1 (AB)	N/A	N/A	Negotiated	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173	$ 54.9173
3	Granite	FT-NN	N/A	N/A	Page 7	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212	$ 4.4212
4	Iroquois	RTS-1	Zone 1	Zone 1	Page 8	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357	$ 5.2357
5	Maritimes	MN365	N/A	N/A	Negotiated	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833	$ 13.3833
6	PNGTS	FT (C2C)	N/A	N/A	Page 9	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500	$ 18.2500
7	PNGTS	FT (PXP)	N/A	N/A	Negotiated	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125	$ 22.8125
8	Tennessee	FT-A	Zone 0	Zone 6	Page 10,13	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504	$ 20.3504
9	Tennessee	FT-A	Zone L	Zone 6	Page 10,13	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643	$ 18.0643
10	Tennessee	FT-A	Zone 4	Zone 6	Page 10,13	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413	$ 7.1413
11	Tennessee	FT-A	Zone 5	Zone 6	Page 10,13	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725	$ 6.2725
12	Texas Eastern	FT-1/FTS	M3	M3	Page 14	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960	$ 7.0960
13	TransCanada	FT	Parkway	E. Hereford	Page 18	$ 12.9437	$ 12.9437	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050	$ 16.6050
14	Union	M12	Dawn	Parkway	Page 18	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203	$ 2.8203

Variable Transportation Commodity Rates

Line	Pipeline	Rate Schedule	Receipt	Delivery	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
15	Algonquin	AFT-1	N/A	N/A	Page 4, 26	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543	$ 0.0543
16	Algonquin	AFT-1 (AB)	N/A	N/A	Page 5, 26	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017	$ 0.2017
17	Granite	FT-NN	N/A	N/A	Page 26	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011
18	Iroquois	RTS-1	Zone 1	Zone 1	Pages 8, 26	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045
19	Iroquois	RTS-1	Zone 1	Zone 1	Pages 8, 26	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045	$ 0.0045
20	Maritimes	MN365	N/A	N/A	Page 30, 26	$ 0.0061	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297	$ 0.0297
21	PNGTS	FT	N/A	N/A	Page 26	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011	$ 0.0011
22	Tennessee	FT-A	Zone 0	Zone 6	Page 10, 12, 26	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919	$ 0.2919
23	Tennessee	FT-A	Zone L	Zone 6	Page 10, 12, 26	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545	$ 0.2545
24	Tennessee	FT-A	Zone 4	Zone 6	Page 10, 12, 26	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991	$ 0.0991
25	Tennessee	FT-A	Zone 5	Zone 6	Page 10, 12, 26	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749	$ 0.0749
26	Texas Eastern	FT-1/FTS	M3	M3	Page 10, 12, 26	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449	$ 0.0449
27	TransCanada	FT	Parkway	E. Hereford	Page 18	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
28	Union	M12	Dawn	Parkway	Page 18	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
29	LNG Trucking		Everett, MA	LNG Plant	Negotiated	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300	$ 1.2300

Transportation Fuel Rates

Line	Pipeline	Rate Schedule	Receipt	Delivery	Reference	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
30	Algonquin	AFT-1	N/A	N/A	Page 6	0.91%	0.95%	0.95%	0.95%	0.95%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%
31	Algonquin	AFT-1 (AB)	N/A	N/A	Page 6	0.00%	1.41%	1.41%	1.41%	1.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
32	Granite	FT-NN	N/A	N/A	Page 7	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%
33	Iroquois	RTS-1	Zone 1	Zone 1	12 Month Avg.	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
34	PNGTS	FT (C2C)	N/A	N/A	12 Month Avg.	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
35	PNGTS	FT (PXP)	N/A	N/A	12 Month Avg.	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
36	Tennessee	FT-A	Zone 0	Zone 6	Page 12	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%	4.84%
37	Tennessee	FT-A	Zone L	Zone 6	Page 12	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%	4.21%
38	Tennessee	FT-A	Zone 4	Zone 6	Page 12	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%
39	Tennessee	FT-A	Zone 5	Zone 6	Page 12	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%
40	Texas Eastern	FT-1/FTS	M3	M3	Page 16	1.51%	1.86%	1.86%	1.86%	1.86%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%
41	TransCanada	FT	Parkway	E. Hereford	12 Month Avg.	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
42	Union	M12	Dawn	Parkway	Page 24	1.10%	1.10%	1.10%	1.10%	1.10%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%

Northern Utilities, Inc. Underground Storage Contract Rates November 2020 through October 2021										
Line	Storage	Rate Schedule	Notes	Reference	Space Rate	Demand Rate	Withdrawal Rate	Withdrawal Fuel Loss	Injection Rate	Injection Fuel Loss
1	Tennessee	FS-MA		Page 11	$ 0.0179	$ 1.3094	$ 0.0087	0.00%	$ 0.0087	1.51%
2	Union	Storage	1	Page 28	$ 0.0592	$ -	$ 0.005	0.60%	$ 0.005	0.60%

Note 1 The demand charge for Union Storage shall be $236,666.67 per month divided by Maximum Storage Balance of 4,000,000 Dth.
The Withdrawal Rate and Injection Rate are equal to $0.007 CDN/GJ divided by 1.055056 (GJ/Dth conversion) times exchange rate.

Rate Schedule AFT-1
Firm Transportation Service

Maximum Reservation Charge:	Base-------$/Dth ---------- Tariff Rate 1/	Total Rate
AFT-1	$8.5927	$8.5927
AFT-1 (PSS-T)	$8.5626	$8.5626
AFT-1 (AFT-3)	$8.7363	$8.7363
Minimum Reservation Charge:	$0.0000	$0.0000

Maximum Commodity Charge:	Base $/Dth Tariff Rate 1/ 2/
AFT-1	$0.0042
AFT-1 (PSS-T)	$0.0000
AFT-1 (AFT-3)	$0.0000
Minimum Commodity Charge:	
AFT-1	$0.0042
AFT-1 (PSS-T)	$0.0000
AFT-1 (AFT-3)	$0.0000

Maximum Reservation Charge Adjustment:	Base-------$/Dth ---------- Tariff Rate 1/	Total Rate
AFT-1	$0.2825	$0.2825
AFT-1 (PSS-T)	$0.2815	$0.2815
AFT-1 (AFT-3)	$0.2872	$0.2872
Minimum Reservation Charge Adjustment:	$0.0000	$0.0000

Maximum Authorized Overrun Commodity Charge:	Base $/Dth Tariff Rate 1/ 2/
AFT-1	$0.2867
AFT-1 (PSS-T)	$0.2815
AFT-1 (AFT-3)	$0.2872
Minimum Authorized Overrun Commodity Charge:	
AFT-1	$0.0042
AFT-1 (PSS-T)	$0.0000
AFT-1 (AFT-3)	$0.0000

1/ The Base Tariff is the effective rate on file with the Commission, excluding adjustments approved by the Commission.

2/ Rate excludes the Annual Charge Adjustment (ACA) Surcharge. The ACA Commodity Surcharge to applicable customers, pursuant to Section 34 of the General Terms and Conditions.

ALGONQUIN GAS TRANSMISSION, LLC

SUMMARY OF RATES

Currently Effective Rates 12/01/2019

RATE SCHEDULE AFT-1

		Commodity		Authorized Overrun		Capacity Release	FRQ Deferral Surcharge Rate	
	Reservation	Max	Min	Max	Min	Vol Res	Non Beverly	Beverly
(F-1/WS-1)	$ 6.5734	$0.0112	$0.0112	$0.2273	$0.0112	$0.2161	$0.0582	$0.0407
(F-2/F-3)	$ 6.5734	$0.0112	$0.0112	$0.2273	$0.0112	$0.2161	$0.0582	$0.0407
(F-4)	$ 6.5734	$0.0112	$0.0112	$0.2273	$0.0112	$0.2161	$0.0582	$0.0407
(STB/SS-3)	$ 6.5734	$0.0112	$0.0112	$0.2273	$0.0112	$0.2161	$0.0582	$0.0407
(FTP)	$11.8368	$0.0000	$0.0000	$0.3892	$0.0000	$0.3892	$0.0582	$0.0407
(PSS-T)	$ 9.7854	$0.0000	$0.0000	$0.3217	$0.0000	$0.3217	$0.0582	$0.0407
(AFT-2)	$ 6.1138	$0.0000	$0.0000	$0.2010	$0.0000	$0.2010	$0.0582	$0.0407
(AFT-3)	$10.7554	$0.0000	$0.0000	$0.3536	$0.0000	$0.3536	$0.0582	$0.0407
(AFT-5)	$12.6265	$0.0000	$0.0000	$0.4151	$0.0000	$0.4151	$0.0582	$0.0407
(ITP)	$13.0110	$0.0000	$0.0000	$0.4278	$0.0000	$0.4278	$0.0582	$0.0407
(X-35)	$10.2027	$0.0000	$0.0000	$0.3354	$0.0000	$0.3354	$0.0582	$0.0407
(X-39)	$13.2089	$0.0000	$0.0000	$0.4343	$0.0000	$0.4343	$0.0582	$0.0407
Incremental Surcharges								
Hubline	**$ 1.8607**	**$0.0000**	**$0.0000**	**$0.0000**	**$0.0000**	**$0.0612**	**$0.0582**	**$0.0407***
Secondary 1/		**$0.0612**	**$0.0000**				**$0.0582**	**$0.0407**
Tiverton	**$ 1.6424**	**$0.0000**	**$0.0000**	**$0.0000**	**$0.0000**	**$0.0540**	**$0.0582**	**$0.0407**
Ramapo	**$ 7.5608**	**$0.0000**	**$0.0000**	**$0.2486**	**$0.0000**	**$0.2486**	**$0.1124**	**$0.0787**
AIM	**$48.5073**	**$0.0069**	**$0.0069**	**$1.6017**	**$0.0069**	**$1.5948**	**$0.0996**	**$0.0697**
Atlantic Br.	**$55.6932**	**$0.0115**	**$0.0115**	**$1.8425**	**$0.0115**	**$1.8310**	**$0.2006**	**$0.1404**

***For Deliveries off of Hubline Facilities**

RATE SCHEDULE AFT-1S

		Commodity		Authorized Overrun		Capacity Release	FRQ Deferral Surcharge Rate	
	Reservation	Max	Min	Max	Min	Vol Res	Non Beverly	Beverly
(F-1/WS-1)	$ 2.6294	$0.2273	$0.0000	$0.2273	$0.0000	$0.0864	$0.0582	$0.0407
(F-2/F-3)	$ 2.6294	$0.2273	$0.0000	$0.2273	$0.0000	$0.0864	$0.0582	$0.0407
(F-4)	$ 2.6294	$0.2273	$0.0000	$0.2273	$0.0000	$0.0864	$0.0582	$0.0407
(STB/SS-3)	$ 2.6294	$0.2273	$0.0000	$0.2273	$0.0000	$0.0864	$0.0582	$0.0407
(Hubline) 2/		$0.0612	$0.0000				$0.0582	$0.0407*

*For Deliveries off of Hubline Facilities

OTHER FIRM RATE SCHEDULES

		Commodity		Authorized Overrun		Capacity Release	FRQ Deferral Surcharge Rate	
	Reservation	Max	Min	Max	Min	Vol Res	Non Beverly	Beverly
AFT-E	$ 6.5734	$0.0112	$0.0112	$0.2273	$0.0112	$0.2161	$0.0582	$0.0407
(Hubline) 2/		$0.0612	$0.0000				$0.0582	$0.0407*
AFT-ES	$ 2.6294	$0.2273	$0.0112	$0.2273	$0.0112	$0.0864	$0.0582	$0.0407
(Hubline) 2/		$0.0612	$0.0000				$0.0582	$0.0407*
T-1	$ 1.6480	$0.0039		$0.0581			$0.0582	$0.0407
AFT-4	$ 3.5211	$0.0013		$0.1171			$0.0582	$0.0407
AFT-CL:								
Canal	$ 2.0858	$0.0000	$0.0000	$0.0686	$0.0000	$0.0686		
Middletown	$ 3.2764	$0.0000	$0.0000	$0.1077	$0.0000	$0.1077		
Cleary	$ 1.4529	$0.0000	$0.0000	$0.0478	$0.0000	$0.0478		
Lake Road	$ 0.6476	$0.0000	$0.0000	$0.0213	$0.0000	$0.0213		
Brayton Pt.	$ 1.2700	$0.0000	$0.0000	$0.0418	$0.0000	$0.0418		
Manchester	$ 2.4500	$0.0000	$0.0000	$0.0805	$0.0000	$0.0805		
Bellingham	$ 0.9714	$0.0000	$0.0000	$0.0319	$0.0000	$0.0319		
Phelps Dodge	$ 0.0000	$0.0166	$0.0000	$0.0166	$0.0000	$0.0000		
Cape Cod	$ 9.0501	$0.0000	$0.0000	$0.2975	$0.0000	$0.2975		
Northeast Gateway	$ 4.3449	$0.0000	$0.0000	$0.1428	$0.0000	$0.1428		
J-2 Facility	$ 4.6346	$0.0000	$0.0000	$0.1524	$0.0000	$0.1524		

Kleen Energy	$ 1.2247	$0.0000	$0.0000	$0.0403	$0.0000	$0.0403		
X-33	$ 3.0873	$0.0395		$0.1410			$0.0582	$0.0407

*For Deliveries off of Hubline Facilities

INTERRUPTIBLE SERVICE

	Commodity		Authorized Overrun		FRQ Deferral Surcharge Rate	
	Max	Min	Max	Min	Non Beverly	Beverly
AIT-1	$0.2421	$0.0076	$0.2421	$0.0076	$0.0582	$0.0407
(Hubline 2/)	$0.0612	$0.0000			$0.0582	$0.0407*
AIT-2						
Brayton Pt.	$0.0418	$0.0000	$0.0418	$0.0000		
Manchester	$0.0805	$0.0000	$0.0805	$0.0000		
Canal	$0.0686	$0.0000	$0.0686	$0.0000		
Cape Cod	$0.2975	$0.0000	$0.2975	$0.0000		
Northeast Gateway	$0.1428	$0.0000	$0.1428	$0.0000		
J-2 Facility	$0.1524	$0.0000	$0.1524	$0.0000		
Kleen Energy	$0.0403	$0.0000	$0.0403	$0.0000		
PAL	$0.2421	$0.0000	$0.0000	$0.0000	$0.0582	$0.0407

TITLE TRANSFER TRACKING SERVICE

	Max	Min
TTT	$5.3900	$0.0000

Rates are per MMBTU. Rate excludes the Annual Charge Adjustment (ACA) Surcharge. The ACA Commodity Surcharge to applicable customers, pursuant to Section 34 of the General Terms and Conditions.

FUEL REIMBURSEMENT PERCENTAGES

Period	Duration	FRP
<u>System Services 1/</u>		
Winter	Dec 1 - Mar 31	0.95%
Spring, Summer and Fall	Apr 1 - Nov 30	0.91%
<u>Incremental Ramapo Service 1/</u>		
Winter	Dec 1 - Mar 31	2.01%
Spring, Summer and Fall	Apr 1 - Nov 30	1.55%
<u>Incremental AIM Service 1/</u>		
Winter	Dec 1 - Mar 31	3.94%
Spring, Summer and Fall	Apr 1 - Nov 30	2.29%
<u>Incremental Atlantic Bridge Service 1/</u>		
Winter	Dec 1 - Mar 31	1.41%
Spring, Summer and Fall	Apr 1 - Nov 30	0.00%

1/ For all receipt points other than Beverly, Meter No. 00215

Period	Duration	FRP
<u>System Services - Beverly Receipts/Non-Hubline Deliveries</u>		
Winter	Dec 1 - Mar 31	0.69%
Spring, Summer and Fall	Apr 1 - Nov 30	0.65%

4.2 Rate Schedule FT-NN
Firm Transportation Service
Currently Effective Rates

	$/Dth Base Tariff Rate	ACA Adj.
Reservation Charge:		
Maximum	$4.4212	N/A
Minimum	$0.0000	N/A
Commodity Charge:		
Maximum	$0.0000	a/
Minimum	$0.0000	a/
Authorized Overrun Commodity Charge:		
Maximum	$0.1453	a/
Minimum	$0.0000	a/
Fuel and Losses		
Percentage	0.35%	N/A
Volumetric Reservation Charge		
Maximum	$0.1453	a/
Minimum	$0.0000	a/

a/ The ACA Adj. Surcharge is revised annually and posted on the FERC website at the web address http://www.ferc.gov on the Annual Charges page of the Natural Gas Section. The ACA Adj. Surcharge is incorporated by reference in the Transporter’s Tariff and shall apply to all transportation under this Rate Schedule as provided in Section 6.17 of the General Terms and Conditions.

Iroquois Gas Transmission System, L.P.
FERC Gas Tariff
Second Revised Volume No. 1

Fourth Revised Sheet No. 4
Superseding
Third Revised Sheet No. 4

---------- NON-EASTCHESTER RATES (All in $ Per Dth) 1/ ----------

	Minimum	RP16-301 Rates 2/ Maximum			RP19-445 Rates Maximum	
		Effective 9/1/2016	Effective 9/1/2017	Effective 9/1/2018	Effective 3/1/2019	Effective 4/1/2020
RTS DEMAND (Monthly):						
Zone 1	$0.0000	$ 6.1928	$ 5.9982	$ 5.5997	$5.4177	$5.2357
Zone 2	$0.0000	$ 5.3381	$ 5.1678	$ 4.7998	$4.6438	$4.4878
Inter-Zone	$0.0000	$10.4755	$ 9.8672	$ 8.8026	$8.5165	$8.2304
RTS COMMODITY (Daily):						
Zone 1	$0.0034	$ 0.0034	$ 0.0034	$ 0.0034	$0.0034	$0.0034
Zone 2	$0.0022	$ 0.0022	$ 0.0022	$ 0.0022	$0.0022	$0.0022
Inter-Zone	$0.0056	$ 0.0056	$ 0.0056	$ 0.0056	$0.0056	$0.0056
ITS COMMODITY (Daily):						
Zone 1	$0.0034	$ 0.2070	$ 0.2006	$ 0.1875	$0.1815	$0.1755
Zone 2	$0.0022	$ 0.1777	$ 0.1721	$ 0.1600	$0.1549	$0.1497
Inter-Zone	$0.0056	$ 0.3500	$ 0.3300	$ 0.2950	$0.2856	$0.2762
VOLUMETRIC CAPACITY RELEASE (Daily) 3/:						
Zone 1	$0.0000	$ 0.2036	$ 0.1972	$ 0.1841	$0.1781	$0.1721
Zone 2	$0.0000	$ 0.1755	$ 0.1699	$ 0.1578	$0.1527	$0.1475
Inter-Zone	$0.0000	$ 0.3444	$ 0.3244	$ 0.2894	$0.2800	$0.2706

**SEE SHEET NOS. 4A, 4B, AND 4C FOR ADJUSTMENTS TO RATES WHICH MAY BE APPLICABLE

(Footnotes continued on Sheet 4.01)

Issued On: June 12, 2019

Effective On: July 1, 2019

Exhibit B
to Precedent Agreement

NEGOTIATED RATES

Negotiated Rate: $0.60/Dth/Day

Additional Terms: Shipper shall have the right to deliver, on a secondary basis, to the following meters, at the Negotiated Rate of $0.60/Dth/day. Delivery to all other secondary delivery points on this Negotiated Rate contract shall be priced at the Maximum Recourse Rate.

Meter #	Name	Operator
05-0525	Westbrook	M&NE
05-0600	Westbrook	Granite State
02-0650	Gorham	Maine Natural Gas
05-0725	Eliot	Granite State
05-0750	Eliot CNG	XPress Natural Gas
02-0775	Newington	Essential Power
02-0900	Newington	Eversource
05-0850	Newington	Granite State
05-1000	Haverhill	Tennessee Gas Pipeline
05-1025	Haverhill	National Grid
05-1050	Methuen	M&NE
05-1150	Dracut	Tennessee Gas Pipeline

NEGOTIATED RATE SURCHARGE MECHANISM:

PNGTS may file a limited Section 4 rate proceeding to add a surcharge to Shipper's negotiated rate, taking into account Shipper's contractual obligation(s) relative to the total contractual obligations of all classes of transportation agreements, to reflect a cost of service impact of certain "Eligible Costs," defined as costs resulting from mandated compliance with new or revised requirements, regulations or legislation, that becomes effective on or after November 1, 2014, addressing (a) government-mandated environmental compliance obligations, e.g., climate change and greenhouse gas emissions, (b) compliance with the required use of best available control technology for emissions as mandated by the Environmental Protection Agency (or successor thereto), (c) Commission-mandated generic pipeline initiatives implemented on an industry-wide basis, including but not limited to the Commission's proposed policy regarding the modernization of natural gas facilities in Docket No. PL15-1-000 and (d) additional pipeline safety requirements issued by the United States Department of Transportation Pipeline and Hazardous Materials Safety Administration (or successor thereto) as a result of either new

Docket No. RP19-____
Appendix A-2
Page 1 of 2

Tennessee Gas Pipeline Company, L.L.C.
Settlement Rates effective November 1, 2020 - Base Reservation and Commodity
10.5 % Rate Reduction from the Appendix A-0 Rates

General System Transportation Services

Rate Schedule FT-A, FT-G, NET, NET-284

Line No.	Reservation	Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
1	Zone 0	$4.8571		$10.1498	$13.6529	$13.8945	$15.2673	$16.2055	$20.3323
2	Zone L		$4.3119						
3	Zone 1	$7.3119		$7.0090	$9.3276	$13.2135	$13.0132	$14.6759	$18.0462
4	Zone 2	$13.6530		$9.2716	$4.8222	$4.5078	$5.7679	$7.9331	$10.2407
5	Zone 3	$13.8945		$7.3440	$4.8611	$3.5070	$5.3870	$9.7428	$11.2581
6	Zone 4	$17.6413		$16.2638	$6.1979	$9.4190	$4.6105	$4.9861	$7.1232
7	Zone 5	$21.0347		$14.7807	$6.5015	$7.8669	$5.1218	$4.8044	$6.2544
8	Zone 6	$24.3333		$16.9768	$11.6840	$12.8717	$9.0920	$4.7831	$4.1405

Line No.	Commodity	Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
9	Zone 0	$0.0032		$0.0115	$0.0177	$0.0219	$0.2339	$0.2232	$0.2656
10	Zone L		$0.0012						
11	Zone 1	$0.0042		$0.0081	$0.0147	$0.0179	$0.1989	$0.2028	$0.2315
12	Zone 2	$0.0167		$0.0087	$0.0012	$0.0028	$0.0644	$0.1032	$0.1144
13	Zone 3	$0.0207		$0.0169	$0.0026	$0.0002	$0.0860	$0.1190	$0.1300
14	Zone 4	$0.0250		$0.0205	$0.0087	$0.0105	$0.0398	$0.0563	$0.0912
15	Zone 5	$0.0284		$0.0256	$0.0100	$0.0118	$0.0560	$0.0555	$0.0689
16	Zone 6	$0.0346		$0.0300	$0.0143	$0.0163	$0.0862	$0.0467	$0.0284

Line No.	Min. Commodity				Delivery Zone				
		Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
17	Zone 0	$0.0032		$0.0115	$0.0177	$0.0219	$0.0250	$0.0284	$0.0346
18	Zone L		$0.0012						
19	Zone 1	$0.0042		$0.0081	$0.0147	$0.0179	$0.0210	$0.0256	$0.0300
20	Zone 2	$0.0167		$0.0087	$0.0012	$0.0028	$0.0056	$0.0100	$0.0143
21	Zone 3	$0.0207		$0.0169	$0.0026	$0.0002	$0.0081	$0.0118	$0.0163
22	Zone 4	$0.0250		$0.0205	$0.0087	$0.0105	$0.0028	$0.0046	$0.0092
23	Zone 5	$0.0284		$0.0256	$0.0100	$0.0118	$0.0046	$0.0046	$0.0066
24	Zone 6	$0.0346		$0.0300	$0.0143	$0.0163	$0.0086	$0.0041	$0.0020

Rate Schedule FT-GS

Line No.		Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
25	Zone 0	$0.2689		$0.5659	$0.7632	$0.7799	$1.0705	$1.1111	$1.3797
26	Zone L		$0.2373						
27	Zone 1	$0.4042		$0.3909	$0.5236	$0.7393	$0.9119	$1.0070	$1.2203
28	Zone 2	$0.7624		$0.5154	$0.2653	$0.2494	$0.3804	$0.5380	$0.6755
29	Zone 3	$0.7789		$0.4168	$0.2686	$0.1923	$0.3813	$0.6529	$0.7468
30	Zone 4	$0.9879		$0.9086	$0.3471	$0.5250	$0.2924	$0.3294	$0.4816
31	Zone 5	$1.1767		$0.8317	$0.3648	$0.4411	$0.3367	$0.3189	$0.4116
32	Zone 6	$1.3628		$0.9557	$0.6524	$0.7191	$0.5844	$0.3087	$0.2553

Rate Schedule IT, PTR and FT Overrun

Line No.		Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
33	Zone 0	$0.1624		$0.3435	$0.4639	$0.4754	$0.7358	$0.7559	$0.9341
34	Zone L		$0.1428						
35	Zone 1	$0.2440		$0.2373	$0.3192	$0.4496	$0.6267	$0.6853	$0.8247
36	Zone 2	$0.4631		$0.3122	$0.1596	$0.1505	$0.2540	$0.3641	$0.4511
37	Zone 3	$0.4744		$0.2559	$0.1621	$0.1155	$0.2631	$0.4394	$0.5000
38	Zone 4	$0.6012		$0.5521	$0.2111	$0.3186	$0.1914	$0.2203	$0.3254
39	Zone 5	$0.7156		$0.5077	$0.2221	$0.2687	$0.2245	$0.2135	$0.2747
40	Zone 6	$0.8294		$0.5836	$0.3963	$0.4370	$0.3851	$0.2039	$0.1645

Tennessee Gas Pipeline Company, L.L.C.
Settlement Rates effective November 1, 2020 - Base Reservation and Commodity
10.5 % Rate Reduction from the Appendix A-0 Rates

Rate Schedule FT-BH

Reservation

Line No.		Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
1	Zone 0	$2.4285							
2	Zone L		$2.1560						
3	Zone 1	$3.6559		$3.5045					
4	Zone 2	$6.8265		$4.6357	$2.4110				
5	Zone 3	$6.9473		$3.6721	$2.4306	$1.7535			
6	Zone 4	$8.8207		$8.1319	$3.0989	$4.7096	$2.3052		
7	Zone 5	$10.5173		$7.3904	$3.2507	$3.9334	$2.5609	$2.4022	
8	Zone 6	$12.1665		$8.4884	$5.8421	$6.4358	$4.5461	$2.3916	$2.0703

Commodity

Line No.		Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
9	Zone 0	$0.0427							
10	Zone L		$0.0365						
11	Zone 1	$0.0637		$0.0645					
12	Zone 2	$0.1265		$0.0836	$0.0406				
13	Zone 3	$0.1318		$0.0747	$0.0422	$0.0290			
14	Zone 4	$0.1663		$0.1511	$0.0584	$0.0863	$0.0777		
15	Zone 5	$0.1971		$0.1433	$0.0619	$0.0746	$0.0981	$0.0950	
16	Zone 6	$0.2295		$0.1650	$0.1081	$0.1198	$0.1609	$0.0859	$0.0624

Rate Schedule FT-A EDS/ERS (Extended Delivery/Receipt)

Reservation

Line No.		Zone 0	Zone L	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
17	Zone 0			$0.3337	$0.4488	$0.4568	$0.5019	$0.5328	$0.6685
18	Zone L								
19	Zone 1	$0.2404			$0.3067	$0.4344	$0.4278	$0.4825	$0.5932
20	Zone 2	$0.4488		$0.3048		$0.1482	$0.1897	$0.2609	$0.3367
21	Zone 3	$0.4568		$0.2415	$0.1598		$0.1771	$0.3204	$0.3701
22	Zone 4	$0.5800		$0.5348	$0.2037	$0.3097		$0.1640	$0.2341
23	Zone 5	$0.6915		$0.4860	$0.2136	$0.2587	$0.1684		$0.2057
24	Zone 6	$0.8000		$0.5581	$0.3841	$0.4232	$0.2988	$0.1573	

Line No.	**Rate Schedule PAL**	Commodity	Overrun
25	PAL (Daily)	$0.3478	$0.3478
26	PAL (Term)	$0.3478	$0.3478

Line No.	**Incremental Transportation Services**		Reservation	Commodity	Overrun	Min. Comm.
27	Stagecoach - CP00-65	FT-A	$3.2691	$0.0000	$0.1075	$0.0000
28	ConneXion NY/NJ - CP05-355	FT-A	$9.1876	$0.0000	$0.3021	$0.0000
29	Concord - CP08-65	FT-A	$10.8352	$0.0000	$0.3562	$0.0000
30	Tewksbury - CP04-60	FT-IL	$5.4734	$0.0000	$0.1800	$0.0000
31	300 Line Market - CP09-444	FT-A	$22.9057	$0.0000	$0.7531	$0.0000
32	NSD - CP11-30	FT-A	$5.5453	$0.0000	$0.1823	$0.0000
33	Northampton - CP11-36	FT-A	$24.7109	$0.0000	$0.8124	$0.0000
34	NEUP - CP11-161	FT-A	$7.9158	$0.0000	$0.2603	$0.0000
35	Niagara Expansion - CP14-88	FT-A	$8.9155	$0.0000	$0.2931	$0.0000
36	Connecticut Expansion - CP14-529	FT-A	$17.3352	$0.0689	$0.6389	$0.0066
37	Broad Run Expansion Project - CP15-77	FT-A	$26.7737	$0.0336	$0.9103	$0.0336
38	Susquehanna West Project - CP15-148	FT-A	$15.3219	$0.0398	$0.5435	$0.0028
39	Triad Expansion Project - CP 15-520	FT-A	$6.7386	$0.0398	$0.2613	$0.0028
40	Orion Project - CP 16-4	FT-A	$14.7861	$0.0398	$0.5259	$0.0028

Line No.	**Storage Services**	Deliverability	Space	Inj/With	Overrun
41	FS - PA [1]	$1.7824	$0.0181	$0.0073	$0.2139
42	FS - MA	$1.3094	$0.0179	$0.0087	$0.1572
43	IS - PA		$0.0893	$0.0073	
44	IS - MA		$0.0720	$0.0087	

Notes:
[1] The Rate Schedule FS-PA Rates set forth herein do not include the impact of the Bear Creek Proceeding, if any.

RATES PER DEKATHERM

COMMODITY RATES
RATE SCHEDULE FOR FT-A

Base Commodity Rates

RECEIPT ZONE	DELIVERY ZONE 0	L	1	2	3	4	5	6
0	$0.0032		$0.0115	$0.0177	$0.0219	$0.2391	$0.2282	$0.2716
L		$0.0012						
1	$0.0042		$0.0081	$0.0147	$0.0179	$0.2033	$0.2073	$0.2367
2	$0.0167		$0.0087	$0.0012	$0.0028	$0.0658	$0.1055	$0.1169
3	$0.0207		$0.0169	$0.0026	$0.0002	$0.0879	$0.1217	$0.1329
4	$0.0250		$0.0205	$0.0087	$0.0105	$0.0407	$0.0576	$0.0932
5	$0.0284		$0.0256	$0.0100	$0.0118	$0.0573	$0.0567	$0.0705
6	$0.0346		$0.0300	$0.0143	$0.0163	$0.0881	$0.0478	$0.0290

Minimum Commodity Rates 1/, 2/

RECEIPT ZONE	DELIVERY ZONE 0	L	1	2	3	4	5	6
0	$0.0032		$0.0115	$0.0177	$0.0219	$0.0250	$0.0284	$0.0346
L		$0.0012						
1	$0.0042		$0.0081	$0.0147	$0.0179	$0.0210	$0.0256	$0.0300
2	$0.0167		$0.0087	$0.0012	$0.0028	$0.0056	$0.0100	$0.0143
3	$0.0207		$0.0169	$0.0026	$0.0002	$0.0081	$0.0118	$0.0163
4	$0.0250		$0.0205	$0.0087	$0.0105	$0.0028	$0.0046	$0.0092
5	$0.0284		$0.0256	$0.0100	$0.0118	$0.0046	$0.0046	$0.0066
6	$0.0346		$0.0300	$0.0143	$0.0163	$0.0086	$0.0041	$0.0020

Maximum Commodity Rates 1/, 2/, 3/

RECEIPT ZONE	DELIVERY ZONE 0	L	1	2	3	4	5	6
0	$0.0039		$0.0122	$0.0184	$0.0226	$0.2398	$0.2289	$0.2723
L		$0.0019						
1	$0.0049		$0.0088	$0.0154	$0.0186	$0.2040	$0.2080	$0.2374
2	$0.0174		$0.0094	$0.0019	$0.0035	$0.0665	$0.1062	$0.1176
3	$0.0214		$0.0176	$0.0033	$0.0009	$0.0886	$0.1224	$0.1336
4	$0.0257		$0.0212	$0.0094	$0.0112	$0.0414	$0.0583	$0.0939
5	$0.0291		$0.0263	$0.0107	$0.0125	$0.0580	$0.0574	$0.0712
6	$0.0353		$0.0307	$0.0150	$0.0170	$0.0888	$0.0485	$0.0297

Notes:

1/ Rates stated above exclude the ACA Surcharge as revised annually and posted on the FERC website at http://www.ferc.gov on the Annual Charges page of the Natural Gas section. The ACA Surcharge is incorporated by reference into Transporter's Tariff and shall apply to all transportation under this Rate Schedule as provided in Article XXIV of the General Terms and Conditions.
2/ The applicable F&LR's and EPCR's, determined pursuant to Article XXXVII of the General Terms and Conditions, are listed on Sheet No. 32.
3/ Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of $0.0007.

Tennessee Gas Pipeline Company, L.L.C.
FERC NGA Gas Tariff
Sixth Revised Volume No. 1

Fifteenth Revised Sheet No. 14
Superseding
Fourteenth Revised Sheet No. 14

RATES PER DEKATHERM

FIRM TRANSPORTATION RATES
RATE SCHEDULE FOR FT-A

Base Reservation Rates

RECEIPT ZONE	DELIVERY ZONE 0	L	1	2	3	4	5	6
0	$4.9656		$10.3766	$13.9580	$14.2050	$15.6084	$16.5676	$20.7866
L		$4.4083						
1	$7.4753		$7.1656	$9.5360	$13.5088	$13.3040	$15.0039	$18.4494
2	$13.9581		$9.4788	$4.9299	$4.6086	$5.8968	$8.1104	$10.4695
3	$14.2050		$7.5081	$4.9697	$3.5853	$5.5074	$9.9605	$11.5097
4	$18.0356		$16.6272	$6.3364	$9.6295	$4.7135	$5.0976	$7.2824
5	$21.5048		$15.1110	$6.6468	$8.0427	$5.2363	$4.9117	$6.3942
6	$24.8770		$17.3562	$11.9451	$13.1593	$9.2952	$4.8900	$4.2331

Daily Base Reservation Rate 1/

RECEIPT ZONE	DELIVERY ZONE 0	L	1	2	3	4	5	6
0	$0.1633		$0.3411	$0.4589	$0.4670	$0.5132	$0.5447	$0.6834
L		$0.1449						
1	$0.2458		$0.2356	$0.3135	$0.4441	$0.4374	$0.4933	$0.6066
2	$0.4589		$0.3116	$0.1621	$0.1515	$0.1939	$0.2666	$0.3442
3	$0.4670		$0.2468	$0.1634	$0.1179	$0.1811	$0.3275	$0.3784
4	$0.5930		$0.5466	$0.2083	$0.3166	$0.1550	$0.1676	$0.2394
5	$0.7070		$0.4968	$0.2185	$0.2644	$0.1722	$0.1615	$0.2102
6	$0.8179		$0.5706	$0.3927	$0.4326	$0.3056	$0.1608	$0.1392

Maximum Reservation Rates 2 /, 3 /

RECEIPT ZONE	DELIVERY ZONE 0	L	1	2	3	4	5	6
0	$4.9837		$10.3947	$13.9761	$14.2231	$15.6265	$16.5857	$20.8047
L		$4.4264						
1	$7.4934		$7.1837	$9.5541	$13.5269	$13.3221	$15.0220	$18.4675
2	$13.9762		$9.4969	$4.9480	$4.6267	$5.9149	$8.1285	$10.4876
3	$14.2231		$7.5262	$4.9878	$3.6034	$5.5255	$9.9786	$11.5278
4	$18.0537		$16.6453	$6.3545	$9.6476	$4.7316	$5.1157	$7.3005
5	$21.5229		$15.1291	$6.6649	$8.0608	$5.2544	$4.9298	$6.4123
6	$24.8951		$17.3743	$11.9632	$13.1774	$9.3133	$4.9081	$4.2512

Notes:

1/ Applicable to demand charge credits and secondary points under discounted rate agreements.
2/ Includes a per Dth charge for the PCB Surcharge Adjustment per Article XXXII of the General Terms and Conditions of $0.0000.
3/ Includes a per Dth charge for the PS/GHG Surcharge Adjustment per Article XXXVIII of the General Terms and Conditions of $0.0181.

TEXAS EASTERN TRANSMISSION, LP

SUMMARY OF RATES

PROPOSED INTERIM ASA RATES 06/01/2020

RESERVATION CHARGES 1/

Path	CDS	FT-1	SCT
STX-AAB	7.3830	7.1600	2.9530
WLA-AAB	4.0630	3.8400	1.6250
ELA-AAB	2.8650	2.6420	1.1460
ETX-AAB	2.9470	2.7240	1.1780
STX-STX	5.2410	5.0180	2.0870
STX-WLA	6.4390	6.2160	2.5670
STX-ELA	7.4050	7.1820	2.9530
STX-ETX	7.4050	7.1820	2.9530
WLA-WLA	3.1190	2.8960	1.2390
WLA-ELA	4.0850	3.8620	1.6250
WLA-ETX	4.0820	3.8590	1.6240
ELA-ELA	2.8870	2.6640	1.1460
ETX-ETX	2.9690	2.7460	1.1780
ETX-ELA	2.8870	2.6640	1.1460
M1-M1	3.4740	3.2510	1.3790
M1-M2	7.2090	6.9860	2.8680
M1-M3	12.6080	12.3850	5.0200
M2-M2	5.6560	5.4330	2.2480
M2-M3	11.0530	10.8300	4.4000
M3-M3	7.3190	7.0960	2.9110

Other Rate Schedules 1/	
FTS (M3 - M3)	5.9370
FTS-2 (M2 - M2)	8.6870
FTS-2 (M2 - M3)	8.9610
FTS-2 (M3 - M3)	8.7600
FTS-4 (M3 - M3)	7.6980
FTS-5 (M2 - M2)	6.2060
FTS-5 (M2 - M3)	6.4800
FTS-5 (M3 - M3)	6.2790
FTS-7 (M2 - M2)	7.6490
FTS-7 (M2 - M3)	7.9230
FTS-7 (M3 - M3)	7.7220
FTS-8 (M2 - M2)	7.5050
FTS-8 (M2 - M3)	7.7790
FTS-8 (M3 - M3)	7.5780
X-127 (M2 - M3)	8.7700
X-127 (M3 - M3)	8.5690
X-129 (M3 - M3)	7.5820
X-130 (M3 - M3)	7.5820
X-135 (M2 - M2)	3.9190
X-135 (M2 - M3)	4.1930
X-135 (M3 - M3)	3.9920
X-137 (M2 - M2)	5.7240
X-137 (M2 - M3)	5.9980
X-137 (M3 - M3)	5.7970

SCT Demand Charges	
Access Area	0.0270
M1-M1	0.0330
M1-M2	0.0490
M1-M3	0.0730

1/ The Total Adjusted Rate includes the applicable base rate and tracked system rate adjustments. The currently effective system rate adjustments are illustrated on the translation table on page 5 of 5.

USAGE CHARGES

CDS & FT-1 Usage-1

Forward Haul Path		STX	WLA	ELA	ETX	M1	M2	M3
from	STX	0.0124	0.0140	0.0204	0.0204	0.0360	0.0641	0.1050
from	WLA	0.0140	0.0070	0.0142	0.0142	0.0298	0.0579	0.0988
from	ELA	0.0204	0.0142	0.0121	0.0121	0.0277	0.0558	0.0967
from	ETX	0.0204	0.0142	0.0121	0.0121	0.0277	0.0558	0.0967
from	M1	0.0360	0.0298	0.0277	0.0277	0.0156	0.0437	0.0846
from	M2	0.0641	0.0579	0.0558	0.0558	0.0437	0.0320	0.0718
from	M3	0.1050	0.0988	0.0967	0.0967	0.0846	0.0718	0.0438

Back Haul Path		STX	WLA	ELA	ETX	M1	M2	M3
from	STX	0.0083						
from	WLA		0.0042					
from	ELA			0.0081				
from	ETX				0.0081			
from	M1				0.0244	0.0123		
from	M2				0.0496	0.0375	0.0270	
from	M3						0.0624	0.0373

SCT Usage-1

Forward Haul Path		STX	WLA	ELA	ETX	M1	M2	M3
from	STX	0.1767	0.2176	0.2558	0.2558	0.3775	0.5279	0.7456
from	WLA	0.2176	0.1015	0.1405	0.1404	0.2621	0.4125	0.6303
from	ELA	0.2558	0.1405	0.0990	0.0990	0.2207	0.3709	0.5887
from	ETX	0.2558	0.1404	0.0990	0.1017	0.2234	0.3736	0.5914
from	M1	0.3775	0.2621	0.2207	0.2234	0.1217	0.2721	0.4898
from	M2	0.5279	0.4125	0.3709	0.3736	0.2721	0.2094	0.4261
from	M3	0.7456	0.6303	0.5887	0.5914	0.4898	0.4261	0.2757

Back Haul Path		STX	WLA	ELA	ETX	M1	M2	M3
from	STX	0.1726						
from	WLA		0.0987					
from	ELA			0.0950				
from	ETX				0.0977			
from	M1				0.2201	0.1184		
from	M2				0.3674	0.2659	0.2044	
from	M3						0.4167	0.2692

IT-1 Usage-1

Forward Haul Path		STX	WLA	ELA	ETX	M1	M2	M3
from	STX	0.1774	0.2183	0.2565	0.2565	0.3791	0.5298	0.7482
from	WLA	0.2183	0.1022	0.1412	0.1411	0.2638	0.4145	0.6329
from	ELA	0.2565	0.1412	0.0996	0.0996	0.2222	0.3729	0.5913
from	ETX	0.2565	0.1411	0.0996	0.1023	0.2249	0.3756	0.5940
from	M1	0.3791	0.2638	0.2222	0.2249	0.1226	0.2733	0.4918
from	M2	0.5298	0.4145	0.3729	0.3756	0.2733	0.2106	0.4280
from	M3	0.7482	0.6329	0.5913	0.5940	0.4918	0.4280	0.2771

Back Haul Path		STX	WLA	ELA	ETX	M1	M2	M3
from	STX	0.1733						
from	WLA		0.0994					
from	ELA			0.0956				
from	ETX				0.0983			
from	M1				0.2216	0.1193		
from	M2				0.3694	0.2671	0.2056	
from	M3						0.4186	0.2706

APPLICABLE SHRINKAGE PERCENTAGES - RATES EFFECTIVE 6/1/2020

ASA Transportation Rate Schedules

December 1 through March 31 (Winter Rate) for Transportation Service

	STX	WLA	ELA	ETX	M1	M2	M3
from STX	0.91%	0.98%	1.38%	1.38%	2.39%	3.21%	4.38%
from WLA	0.98%	0.68%	1.10%	1.10%	2.11%	2.93%	4.10%
from ELA	1.38%	1.10%	1.19%	1.19%	2.20%	3.02%	4.19%
from ETX	1.38%	1.10%	1.19%	1.19%	2.20%	3.02%	4.19%
from M1	2.39%	2.11%	2.20%	2.20%	1.01%	1.83%	3.01%
from M2	3.21%	2.93%	3.02%	3.02%	1.83%	1.49%	2.67%
from M3	4.38%	4.10%	4.19%	4.19%	3.01%	2.67%	1.86%

December 1 through March 31 (Winter Rate) for Transportation Service with Partial Backhaul Paths

	STX	WLA	ELA	ETX	M1	M2	M3
from STX	0.00%						
from WLA		0.00%					
from ELA			0.00%				
from ETX				1.19%			
from M1				1.19%	0.00%		
from M2				1.19%	0.00%	0.00%	
from M3						0.00%	0.00%

April 1 through November 30 (Non-Winter Rate) for Transportation Service

	STX	WLA	ELA	ETX	M1	M2	M3
from STX	0.89%	0.94%	1.22%	1.22%	2.18%	2.71%	3.47%
from WLA	0.94%	0.73%	1.03%	1.03%	1.99%	2.52%	3.28%
from ELA	1.22%	1.03%	1.07%	1.07%	2.03%	2.56%	3.32%
from ETX	1.22%	1.03%	1.07%	1.07%	2.03%	2.56%	3.32%
from M1	2.18%	1.99%	2.03%	2.03%	0.96%	1.49%	2.25%
from M2	2.71%	2.52%	2.56%	2.56%	1.49%	1.27%	2.04%
from M3	3.47%	3.28%	3.32%	3.32%	2.25%	2.04%	1.51%

April 1 through November 30 (Non-Winter Rate) for Transportation Service

	STX	WLA	ELA	ETX	M1	M2	M3
from STX	0.00%						
from WLA		0.00%					
from ELA			0.00%				
from ETX				1.07%			
from M1				1.07%	0.00%		
from M2				1.07%	0.00%	0.00%	
from M3						0.00%	0.00%

Non-ASA Rate Schedules

FTS	1.29%	FTS-7 (M3)	2.00%
FTS-2	0.00%	FTS-8 (M1,M2)	0.00%
FTS-4 Leidy		FTS-8 (M3)	1.50%
(11/15 - 3/31)	4.89%	X-127	0.00%
(4/1 - 11/14)	1.00%	X-129	0.00%
FTS-4 Chambersburg	0.00%	X-130	0.00%
FTS-5	0.00%	X-135	0.00%
FTS-7 (M1,M2)	0.00%	X-137	1.30%

ASA Storage Rate Schedules	12/01-3/31	4/01-11/30
Withdrawl (SS,SS-1,X-28)	1.81%	1.67%
Withdrawl (FSS,ISS-1)	0.54%	0.54%
Injections	0.54%	0.54%
Inventory Level	0.04%	0.04%

SURCHARGES

ACA Commodity Surcharge to applicable customers, pursuant to section15.5 of the General Terms and Conditions

The Summary of Rates serves as a handy reference and does not replace Texas Eastern's Tariff. **P 4 of 5**

Canadian Transportation Rates

Line	Item	Units	Currently Approved Tolls	Reference
1	Union Parkway Belt to East Hereford on TCPL			
2	Demand Toll	$CAD / GJ	$ 20.86766	Page 18
3	Delivery Pressure Demand Toll	$CAD / GJ	$ 0.67038	Page 17
4	Abandonment Surcharge	$CAD / GJ	$ 1.62212	Page 17
5	Total Demand Toll	$CAD / GJ	$ 23.16016	Line 2 plus Line 3
6	$CAD to $US	Ratio	0.7690	Page 20
7	Total Demand Toll	$US / GJ	$ 17.8102	Line 4 times Line 5
8	GJ per Dth	Ratio	1.055056	
9	Total Demand Toll	$US / Dth	$ 18.7908	Line 6 divided by Line 7
10				
11	Dawn to Parkway on Union Pipeline			
12	Total Demand Toll	$CAD / GJ	$ 3.7160	Page 19
13	$CAD to $US	Ratio	0.7690	Page 20
14	Total Demand Toll	$US / GJ	$ 2.8576	Line 13 times Line 14
15	GJ per Dth	Ratio	1.055056	
16	Total Demand Toll	$US / Dth	$ 3.0149	Line 15 divided by Line 16
17	Dawn to Parkway on Union Pipeline - Commodity			
18				
19	Total Demand Toll	$CAD / GJ	$ 0.0060	Page 19
20	$CAD to $US	Ratio	0.7690	Page 20
21	Total Demand Toll	$US / GJ	$ 0.0046	Line 19 times Line 20
22	GJ per Dth	Ratio	1.055056	
23	Total Demand Toll	$US / Dth	$ 0.0049	Line 21 divided by Line 22

Enhanced Market Balancing Service

Line No.	Particulars	Monthly Toll ($/GJ/Month)	Daily Equivalent ($/GJ)	Abandonment Surcharge ($/GJ/Month)	Daily Equivalent Abandonment Surcharge ($/GJ)
	(a)	(b)	(c)	(d)	(e)
1	Union Parkway Belt to Union EDA	11.32565	0.3724	0.65092	0.0214

Delivery Pressure

Line No.	Particulars	Monthly Toll ($/GJ/Month)	Daily Equivalent ($/GJ)
	(a)	(b)	(c)
2	Average Delivery Pressure Toll	0.67038	0.0220

Note: Delivery Pressure toll applies to the following locations: Emerson 1 , Emerson 2, Union SWDA, Enbridge SWDA, Dawn Export, Niagara Falls, Iroquois, Chippawa and East Hereford.
The Daily Equivalent Toll is only applicable to STS Injections, IT, Diversions, STFT and SSS.

Union Dawn Receipt Point Surcharge

Line No.	Particulars	Monthly Toll ($/GJ/Month)	Daily Equivalent ($/GJ)
	(a)	(b)	(c)
3	Union Dawn Receipt Point Surcharge	0.14587	0.0048

Short Notice Balancing (SNB) Service

Line No.	Particulars	Monthly Toll ($/GJ/Month)	Daily Equivalent ($/GJ)
	(a)	(b)	(c)
4	SNB Toll	3.43648	0.1130

Note: This SNB Toll is a representative toll for the Eastern Region.

Energy Deficient Gas Allowance (EDGA) Service

Line No.	Particulars	Capacity Charge ($/GJ/D)
	(a)	(b)
5	Western Section	1.4886
6	Eastern Section	0.3640

Note: The EDGA Service capacity charge for the Western Section is the effective Empress to North Bay Junction FT Toll and the capacity charge for the Eastern Section is the effective Parkway to North Bay Junction FT Toll.
The EDGA Service fuel charge for the Western Section includes the effective Empress to North Bay Junction monthly fuel ratio and the fuel charge for the Eastern Section includes the effective Parkway to North Bay Junction monthly fuel ratio.

Line No.	Receipt Point	Delivery Point	FT Toll ($/GJ/Month)	Daily Equivalent FT for IT / STFT ($/GJ)	Abandonment Surcharge ($/GJ/Month)	Daily Equivalent Abandonment Surcharge ($/GJ)
1	Union NDA	Enbridge CDA	-	0.3109	-	0.0265
2	Union NDA	Enbridge Parkway CDA	-	0.3140	-	0.0268
3	Union NDA	Enbridge EDA	-	0.3374	-	0.0294
4	Union NDA	KPUC EDA	-	0.3974	-	0.0359
5	Union NDA	Energir EDA	-	0.4369	-	0.0401
6	Union NDA	Enbridge SWDA	-	0.4158	-	0.0379
7	Union NDA	Union SWDA	-	0.4174	-	0.0380
8	Union NDA	Chippawa	-	0.3746	-	0.0334
9	Union NDA	Cornwall	-	0.3613	-	0.0319
10	Union NDA	East Hereford	-	0.5211	-	0.0493
11	Union NDA	Emerson 1	-	0.7626	-	0.0762
12	Union NDA	Emerson 2	-	0.7626	-	0.0762
13	Union NDA	Iroquois	-	0.3464	-	0.0303
14	Union NDA	Kirkwall	-	0.3312	-	0.0287
15	Union NDA	Napierville	-	0.4302	-	0.0394
16	Union NDA	Niagara Falls	-	0.3736	-	0.0333
17	Union NDA	North Bay Junction	-	0.1518	-	0.0094
18	Union NDA	Philipsburg	-	0.4380	-	0.0403
19	Union NDA	Spruce	-	0.6995	-	0.0693
20	Union NDA	St. Clair	-	0.4228	-	0.0390
21	Union NDA	Welwyn	-	0.8732	-	0.0883
22	Union NDA	Dawn Export	-	0.4158	-	0.0379
23	Union Parkway Belt	Empress	44.68817	1.4692	4.22944	0.1391
24	Union Parkway Belt	TransGas SSDA	38.24166	1.2573	3.58765	0.1180
25	Union Parkway Belt	Centram SSDA	35.60058	1.1704	3.32454	0.1093
26	Union Parkway Belt	Centram MDA	31.60535	1.0391	2.92669	0.0962
27	Union Parkway Belt	Centrat MDA	31.29480	1.0289	2.89567	0.0952
28	Union Parkway Belt	Union WDA	24.40938	0.8025	2.21008	0.0727
29	Union Parkway Belt	Nipigon WDA	21.58275	0.7096	1.92872	0.0634
30	Union Parkway Belt	Union NDA	10.40311	0.3420	0.81547	0.0268
31	Union Parkway Belt	Calstock NDA	16.66773	0.5480	1.43932	0.0473
32	Union Parkway Belt	Tunis NDA	12.79873	0.4208	1.05424	0.0347
33	Union Parkway Belt	Energir NDA	9.92283	0.3262	0.76772	0.0252
34	Union Parkway Belt	Union SSMDA	14.89778	0.4898	1.26320	0.0415
35	Union Parkway Belt	Union NCDA	5.21920	0.1716	0.29930	0.0098
36	Union Parkway Belt	Union CDA	3.39085	0.1115	0.11741	0.0039
37	Union Parkway Belt	Union ECDA	2.65538	0.0873	0.04410	0.0015
38	Union Parkway Belt	Union EDA	7.27780	0.2393	0.50431	0.0166
39	Union Parkway Belt	Union Parkway Belt	2.48413	0.0817	0.02707	0.0009
40	Union Parkway Belt	Enbridge CDA	3.72330	0.1224	0.15056	0.0050
41	Union Parkway Belt	Enbridge Parkway CDA	2.48413	0.0817	0.02707	0.0009
42	Union Parkway Belt	Enbridge EDA	9.31997	0.3064	0.70780	0.0233
43	Union Parkway Belt	KPUC EDA	7.00009	0.2301	0.47663	0.0157
44	Union Parkway Belt	Energir EDA	11.96865	0.3935	0.97151	0.0319
45	Union Parkway Belt	Enbridge SWDA	5.85551	0.1925	0.36287	0.0119
46	Union Parkway Belt	Union SWDA	5.90905	0.1943	0.36804	0.0121
47	Union Parkway Belt	Chippawa	4.49163	0.1477	0.22691	0.0075
48	Union Parkway Belt	Cornwall	9.45715	0.3109	0.72148	0.0237
49	Union Parkway Belt	East Hereford	14.75026	0.4849	1.24830	0.0410
50	Union Parkway Belt	Emerson 1	29.48227	0.9693	2.71530	0.0893
51	Union Parkway Belt	Emerson 2	29.48227	0.9693	2.71530	0.0893
52	Union Parkway Belt	Iroquois	8.82783	0.2902	0.65883	0.0217
53	Union Parkway Belt	Kirkwall	3.05201	0.1003	0.08365	0.0028
54	Union Parkway Belt	Napierville	11.74023	0.3860	0.94870	0.0312
55	Union Parkway Belt	Niagara Falls	4.45604	0.1465	0.22356	0.0074
56	Union Parkway Belt	North Bay Junction	7.82590	0.2573	0.55906	0.0184
57	Union Parkway Belt	Philipsburg	11.99968	0.3945	0.97455	0.0320
58	Union Parkway Belt	Spruce	31.29480	1.0289	2.89567	0.0952
59	Union Parkway Belt	St. Clair	6.20956	0.2042	0.39815	0.0131
60	Union Parkway Belt	Welwyn	35.60058	1.1704	3.32454	0.1093
61	Union Parkway Belt	Dawn Export	5.85551	0.1925	0.36287	0.0119
62	Union SSMDA	Empress	-	1.0386	-	0.1064
63	Union SSMDA	TransGas SSDA	-	0.8457	-	0.0853
64	Union SSMDA	Centram SSDA	-	0.7667	-	0.0766
65	Union SSMDA	Centram MDA	-	0.6471	-	0.0636
66	Union SSMDA	Centrat MDA	-	0.6467	-	0.0635
67	Union SSMDA	Union WDA	-	0.8702	-	0.0880
68	Union SSMDA	Nipigon WDA	-	0.9373	-	0.0953
69	Union SSMDA	Union NDA	-	0.6827	-	0.0675
70	Union SSMDA	Calstock NDA	-	0.8702	-	0.0880
71	Union SSMDA	Tunis NDA	-	0.7544	-	0.0753
72	Union SSMDA	Energir NDA	-	0.6684	-	0.0659
73	Union SSMDA	Union SSMDA	-	0.0743	-	0.0009
74	Union SSMDA	Union NCDA	-	0.5323	-	0.0505
75	Union SSMDA	Union CDA	-	0.4473	-	0.0413
76	Union SSMDA	Union ECDA	-	0.4549	-	0.0421
77	Union SSMDA	Union EDA	-	0.5944	-	0.0572
78	Union SSMDA	Union Parkway Belt	-	0.4497	-	0.0415
79	Union SSMDA	Enbridge CDA	-	0.4823	-	0.0451
80	Union SSMDA	Enbridge Parkway CDA	-	0.4497	-	0.0415
81	Union SSMDA	Enbridge EDA	-	0.6561	-	0.0639

North Bay Junction Long Term Fixed Price (NBJ LTFP) Service

Line No.	Particulars	Monthly Toll ($/GJ/MO)	Daily Equivalent ($/GJ)
	(a)	(b)	(c)
1	NBJ LTFP	28.28750	0.9300
2	NBJ LTFP Differential Surcharge	0.00000	0.0000

Note: The toll for NBJ LTFP is inclusive of the applicable Abandonment Surcharge for FT service from Empress to North Bay Junction. The NBJ LTFP Differential Surcharge is zero provided the Abandonment Surcharge for FT service from Empress to North Bay Junction is equal or less than $6.69167/GJ/Month.

Enhanced Market Balancing Service

Line No	Particulars	Monthly Toll (2021) ($/GJ/MO)	Daily Equivalent (2021) ($/GJ)	Monthly Toll (2022-2026) ($/GJ/MO)	Daily Equivalent (2022-2026) ($/GJ)
	(a)	(b)	(c)	(d)	(e)
3	Union Parkway Belt to Union EDA	10.03081	0.3297	10.03081	0.3297

Delivery Pressure

Line No	Particulars	Monthly Toll ($/GJ/MO)	Daily Equivalent ($/GJ)
	(a)	(b)	(c)
4	Average Delivery Pressure Toll	0.60833	0.0200

Note: Delivery Pressure toll applies to the following locations: Emerson 1 , Emerson 2, Union SWDA, Enbridge SWDA, Dawn Export, Niagara Falls, Iroquois, Chippawa and East Hereford. The Daily Equivalent Toll is only applicable to STS Injections, IT, Diversions, STFT and SSS.

Union Dawn Receipt Point Surcharge

Line No	Particulars	Monthly Toll (2021) ($/GJ/MO)	Daily Equivalent (2021) ($/GJ)	Monthly Toll (2022-2026) ($/GJ/MO)	Daily Equivalent (2022-2026) ($/GJ)
	(a)	(b)	(c)	(d)	(e)
5	Union Dawn Receipt Point Surcharge	0.13140	0.0043	0.13140	0.0043

Short Notice Balancing (SNB) Service

Line No.	Particulars	Monthly Toll ($/GJ/MO)	Daily Equivalent ($/GJ)
	(a)	(b)	(c)
6	SNB Toll	2.97627	0.0979

Note: This SNB Toll is a representative toll for the Eastern Region.

Energy Deficient Gas Allowance (EDGA) Service

Line No	Particulars	Capacity Charge (2021) ($/GJ/D)	Capacity Charge (2022-2026) ($/GJ/D)
	(a)	(b)	(b)
7	Western Section	0.9917	0.9333
8	Eastern Section	0.3339	0.3339

Note: The EDGA Service capacity charge for the Western Section is the effective Empress to North Bay Junction FT Toll and the capacity charge for the Eastern Section is the effective Parkway to North Bay Junction FT Toll. The EDGA Service fuel charge for the Western Section includes the effective Empress to North Bay Junction monthly fuel ratio and the fuel charge for the Eastern Section includes the effective Parkway to North Bay Junction monthly fuel ratio.

Line No.	Receipt Point	Delivery Point	FT Toll (2021) ($/GJ/Month)	Daily Equivalent FT for IT / STFT (2021) ($/GJ)	FT Toll (2022-2026) ($/GJ/Month)	Daily Equivalent FT for IT / STFT (2022-2026) ($/GJ)
1	Union NDA	Enbridge CDA	-	0.4518	-	0.4512
2	Union NDA	Enbridge Parkway CDA	-	0.4574	-	0.4568
3	Union NDA	Enbridge EDA	-	0.4810	-	0.4804
4	Union NDA	KPUC EDA	-	0.5804	-	0.5798
5	Union NDA	Energir EDA	-	0.6413	-	0.6407
6	Union NDA	Enbridge SWDA	-	0.6074	-	0.6068
7	Union NDA	Union SWDA	-	0.6089	-	0.6082
8	Union NDA	Chippawa	-	0.5467	-	0.5461
9	Union NDA	Cornwall	-	0.5272	-	0.5266
10	Union NDA	East Hereford	-	0.7628	-	0.7621
11	Union NDA	Emerson 1	-	0.6452	-	0.6099
12	Union NDA	Emerson 2	-	0.6452	-	0.6099
13	Union NDA	Iroquois	-	0.5052	-	0.5046
14	Union NDA	Kirkwall	-	0.4827	-	0.4820
15	Union NDA	Napierville	-	0.6288	-	0.6282
16	Union NDA	Niagara Falls	-	0.5452	-	0.5445
17	Union NDA	North Bay Junction	-	0.1242	-	0.1235
18	Union NDA	Philipsburg	-	0.6404	-	0.6397
19	Union NDA	Spruce	-	0.5952	-	0.5632
20	Union NDA	St. Clair	-	0.6232	-	0.6225
21	Union NDA	Welwyn	-	0.7330	-	0.6918
22	Union NDA	Dawn Export	-	0.6074	-	0.6068
23	Union Parkway Belt	Empress	38.21619	1.2564	36.43469	1.1979
24	Union Parkway Belt	TransGas SSDA	34.39845	1.1309	32.87105	1.0807
25	Union Parkway Belt	Centram SSDA	31.65348	1.0407	30.30878	0.9965
26	Union Parkway Belt	Centram MDA	28.94698	0.9517	27.78241	0.9134
27	Union Parkway Belt	Centrat MDA	29.56448	0.9720	28.50444	0.9371
28	Union Parkway Belt	Union WDA	24.65995	0.8107	23.92633	0.7866
29	Union Parkway Belt	Nipigon WDA	22.55057	0.7414	21.95735	0.7219
30	Union Parkway Belt	Union NDA	13.92193	0.4577	13.90302	0.4571
31	Union Parkway Belt	Calstock NDA	19.00133	0.6247	18.64434	0.6130
32	Union Parkway Belt	Tunis NDA	16.20700	0.5328	16.03600	0.5272
33	Union Parkway Belt	Energir NDA	13.83905	0.4550	13.82565	0.4545
34	Union Parkway Belt	Union SSMDA	16.70252	0.5491	16.35293	0.5376
35	Union Parkway Belt	Union NCDA	6.70746	0.2205	6.70746	0.2205
36	Union Parkway Belt	Union CDA	4.18307	0.1375	4.18307	0.1375
37	Union Parkway Belt	Union ECDA	3.48667	0.1146	3.48667	0.1146
38	Union Parkway Belt	Union EDA	9.11800	0.2998	9.11800	0.2998
39	Union Parkway Belt	Union Parkway Belt	2.92516	0.0962	2.92516	0.0962
40	Union Parkway Belt	Enbridge CDA	4.59012	0.1509	4.59012	0.1509
41	Union Parkway Belt	Enbridge Parkway CDA	2.92516	0.0962	2.92516	0.0962
42	Union Parkway Belt	Enbridge EDA	12.16398	0.3999	12.16398	0.3999
43	Union Parkway Belt	KPUC EDA	9.03743	0.2971	9.03743	0.2971
44	Union Parkway Belt	Energir EDA	15.83498	0.5206	15.83498	0.5206
45	Union Parkway Belt	Enbridge SWDA	7.48820	0.2462	7.48820	0.2462
46	Union Parkway Belt	Union SWDA	7.53210	0.2476	7.53210	0.2476
47	Union Parkway Belt	Chippawa	5.64231	0.1855	5.64231	0.1855
48	Union Parkway Belt	Cornwall	12.36317	0.4065	12.36317	0.4065
49	Union Parkway Belt	East Hereford	19.52731	0.6420	19.52731	0.6420
50	Union Parkway Belt	Emerson 1	27.23504	0.8954	26.18442	0.8609
51	Union Parkway Belt	Emerson 2	27.23504	0.8954	26.18442	0.8609
52	Union Parkway Belt	Iroquois	11.51122	0.3785	11.51122	0.3785
53	Union Parkway Belt	Kirkwall	3.69364	0.1214	3.69364	0.1214
54	Union Parkway Belt	Napierville	15.45320	0.5081	15.45320	0.5081
55	Union Parkway Belt	Niagara Falls	5.59424	0.1839	5.59424	0.1839
56	Union Parkway Belt	North Bay Junction	10.15506	0.3339	10.15506	0.3339
57	Union Parkway Belt	Philipsburg	15.80435	0.5196	15.80435	0.5196
58	Union Parkway Belt	Spruce	29.56448	0.9720	28.50444	0.9371
59	Union Parkway Belt	St. Clair	7.96747	0.2619	7.96747	0.2619
60	Union Parkway Belt	Welwyn	31.65348	1.0407	30.30878	0.9965
61	Union Parkway Belt	Dawn Export	7.48820	0.2462	7.48820	0.2462
62	Union SSMDA	Empress	-	0.8460	-	0.7973
63	Union SSMDA	TransGas SSDA	-	0.7205	-	0.6802
64	Union SSMDA	Centram SSDA	-	0.6303	-	0.5959
65	Union SSMDA	Centram MDA	-	0.5413	-	0.5129
66	Union SSMDA	Centrat MDA	-	0.5351	-	0.5071
67	Union SSMDA	Union WDA	-	0.7105	-	0.6708
68	Union SSMDA	Nipigon WDA	-	0.9946	-	0.9613
69	Union SSMDA	Union NDA	-	0.8295	-	0.8151
70	Union SSMDA	Calstock NDA	-	0.9968	-	0.9713
71	Union SSMDA	Tunis NDA	-	0.9049	-	0.8855
72	Union SSMDA	Energir NDA	-	0.8270	-	0.8129
73	Union SSMDA	Union SSMDA	-	0.0962	-	0.0962
74	Union SSMDA	Union NCDA	-	0.6768	-	0.6656
75	Union SSMDA	Union CDA	-	0.5453	-	0.5341
76	Union SSMDA	Union ECDA	-	0.5703	-	0.5591
77	Union SSMDA	Union EDA	-	0.7561	-	0.7448
78	Union SSMDA	Union Parkway Belt	-	0.5525	-	0.5412
79	Union SSMDA	Enbridge CDA	-	0.6004	-	0.5891
80	Union SSMDA	Enbridge Parkway CDA	-	0.5525	-	0.5412
81	Union SSMDA	Enbridge EDA	-	0.8562	-	0.8450

Effective
2020-04-01
Rate M12
Page 1 of 4

ENBRIDGE GAS INC.
UNION SOUTH
TRANSPORTATION RATES

(A) Applicability

The charges under this schedule shall be applicable to a Shipper who enters into a Transportation Service Contract with Union.

Applicable Points
Dawn as a receipt point: Dawn (TCPL), Dawn (Facilities), Dawn (Tecumseh), Dawn (Vector) and Dawn (TSLE).
Dawn as a delivery point: Dawn (Facilities).

(B) Services

Transportation Service under this rate schedule shall be for transportation on Union's Dawn - Parkway facilities.

(C) Rates

The identified rates represent maximum prices for service. These rates may change periodically.
Multi-year prices may also be negotiated, which may be higher than the identified rates.

	Monthly Demand Charges (applied to daily contract demand)	Fuel and Commodity Charges		
		Union Supplied Fuel	Shipper Supplied Fuel	
	Rate/GJ	Fuel and Commodity Charge Rate/GJ	Fuel Ratio % AND	Commodity Charge Rate/GJ
Firm Transportation (1), (5)				
Dawn to Parkway	$3.632	Monthly fuel and commodity rates shall be in accordance with schedule "C".	Monthly fuel ratios shall be in accordance with schedule "C".	
Dawn to Kirkwall	$3.083			
Kirkwall to Parkway	$0.550			
M12-X Firm Transportation				
Between Dawn, Kirkwall and Parkway	$4.488	Monthly fuel and commodity rates shall be in accordance with schedule "C".	Monthly fuel ratios shall be in accordance with schedule "C".	
Limited Firm/Interruptible Transportation (1)				
Dawn to Parkway – Maximum	$8.717	Monthly fuel and commodity rates shall be in accordance with schedule "C".	Monthly fuel ratios shall be in accordance with schedule "C".	
Dawn to Kirkwall – Maximum	$8.717			
Parkway (TCPL / EGT) to Parkway (Cons) / Lisgar (2)	n/a	n/a	0.162%	
Carbon Charge (applied to all quantities transported)				
Facility Carbon Charge		$0.002		$0.002

SCHEDULE "C"

ENBRIDGE GAS INC.
Union South
M12 Monthly Transportation Fuel Ratios and Fuel Rates
Firm or Interruptible Transportation Commodity
Effective April 1, 2020

Month	VT1 Easterly Dawn to Parkway (TCPL), Parkway (EGT) With Dawn Compression		VT1 Easterly Dawn to Kirkwall, Lisgar, Parkway (Consumers) With Dawn Compression		M12-X Westerly Kirkwall to Dawn	
	Fuel Ratio (%)	Fuel Rate ($/GJ)	Fuel Ratio (%)	Fuel Rate ($/GJ)	Fuel Ratio (%)	Fuel Rate ($/GJ)
April	0.899	0.023	0.559	0.015	0.162	0.004
May	0.640	0.017	0.382	0.009	0.162	0.004
June	0.535	0.015	0.282	0.007	0.162	0.004
July	0.519	0.014	0.269	0.007	0.162	0.004
August	0.414	0.010	0.163	0.004	0.162	0.004
September	0.410	0.010	0.163	0.004	0.162	0.004
October	0.768	0.020	0.472	0.013	0.162	0.004
November	0.915	0.024	0.639	0.017	0.162	0.004
December	1.036	0.027	0.760	0.020	0.162	0.004
January	1.193	0.031	0.902	0.023	0.162	0.004
February	1.133	0.029	0.850	0.023	0.162	0.004
March	1.057	0.028	0.760	0.020	0.162	0.004

Month	M12-X Easterly Kirkwall to Parkway (TCPL), Parkway (EGT)		M12-X Easterly Kirkwall to Lisgar, Parkway (Consumers)		M12-X Westerly Parkway to Kirkwall, Dawn	
	Fuel Ratio (%)	Fuel Rate ($/GJ)	Fuel Ratio (%)	Fuel Rate ($/GJ)	Fuel Ratio (%)	Fuel Rate ($/GJ)
April	0.501	0.014	0.162	0.004	0.307	0.008
May	0.420	0.010	0.162	0.004	0.307	0.008
June	0.415	0.010	0.162	0.004	0.307	0.008
July	0.413	0.010	0.162	0.004	0.307	0.008
August	0.413	0.010	0.162	0.004	0.307	0.008
September	0.409	0.010	0.162	0.004	0.307	0.008
October	0.457	0.012	0.162	0.004	0.307	0.008
November	0.437	0.011	0.162	0.004	0.162	0.004
December	0.437	0.011	0.162	0.004	0.162	0.004
January	0.452	0.011	0.162	0.004	0.162	0.004
February	0.444	0.011	0.162	0.004	0.162	0.004
March	0.459	0.012	0.162	0.004	0.162	0.004

BANK OF CANADA
BANQUE DU CANADA

Daily Exchange Rates Lookup

All Bank of Canada exchange rates are indicative rates only, obtained from averages of aggregated price quotes from financial institutions. For details, please read our full **Terms and Conditions**.

US dollar (USD)

Date	USD → CAD	CAD → USD
2020-06-19	1.3587	0.7360

Effective January 1, 2020, we are no longer publishing exchange rates for the following currencies: Malaysian ringgit, Thai baht, and Vietnamese dong. These currencies no longer satisfy the inclusion criteria that are documented in our **Methodology for Foreign Exchange Rates**.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

FY 2020 GAS ANNUAL CHARGES
CORRECTION FOR ANNUAL CHARGES UNIT CHARGE
June 15, 2020

The annual charges unit charge (ACA) to be applied to in fiscal year 2021 for recovery of FY 2020 Current year and 2019 True-Up is **$0.0011** per Dekatherm (Dth). The new ACA surcharge will become effective October 1, 2020.

The following calculations were used to determine the FY 2020 unit charge:

2020 CURRENT:

Estimated Program Cost $67,023,000 divided by 60,657,793,693 Dth	=	0.0011049363

2019 TRUE-UP:

Debit/Credit Cost ($2,266,032) divided by 56,276,625,816 Dth	=	(0.0000402660)
TOTAL UNIT CHARGE	=	0.0010646704

If you have any questions, please contact Raven A. Rodriguez at (202)502-6276 or e-mail at Raven.Rodriguez@ferc.gov.

PUBLIC

Historic Fuel Retention Ratios

Pipeline	Receipt	Delivery	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Nov - Mar	May - Oct, Apr	Average
Iroquois	Zone 1	Zone 1	-1.00%	-0.30%	0.00%	0.10%	-0.30%	-0.30%	-0.30%	0.10%	0.30%	0.30%	-0.20%	-0.50%	0.04%	-0.33%	-0.18%
PNGTS	N/A	N/A	-0.80%	-0.80%	-0.80%	-0.80%	-0.80%	-0.80%	-0.80%	-0.80%	-0.60%	-0.60%	-0.60%	-0.40%	-0.68%	-0.74%	-0.72%
TransCanada	Parkway	E. Hereford	0.90%	1.28%	0.78%	0.48%	1.07%	0.85%	1.68%	1.63%	1.55%	1.74%	1.33%	1.34%	1.59%	0.96%	1.22%

PRICING PROVISIONS

Shipper agrees to pay Union the following for the Storage Services:

(a) **Monthly Demand Charge:** For the period of April, 2018 to March, 2023 inclusive, a monthly demand charge of $236,666.67 US if the Maximum Storage Balance is 4,220,224 GJ (4,000,000 MMBtu); or a monthly demand charge of $201,666.67 US if Shipper elects a lower Maximum Storage Balance of 3,587,190 GJ (3,400,000 MMBtu).

(b) **Demand Charge Escalation:** *Intentionally blank*

(c) **Variable Storage Charges:**

(i) Firm: For each GJ of gas withdrawn from or injected into the Storage Account on a firm basis, a charge equal to $0.007 CDN/GJ;

(ii) Interruptible: For each GJ of gas withdrawn from or injected into the Storage Account on an interruptible basis, a charge equal to the price set out under the heading 'If Shipper supplies fuel Commodity Charge Price/GJ' in the 'Storage Services' section under '(C) Pricing' in the MPSS (currently $0.041CDN/GJ);

(iii) Authorized Overrun: For each GJ of gas withdrawn from or injected into the Storage Account on an authorized overrun basis, a charge equal to the price set out under the heading 'If Shipper supplies fuel Commodity Charge Price/GJ' in the 'Authorized Overrun' section under '(C) Pricing' in the MPSS (currently $0.041CDN/GJ);

(iv) Dehydration Charge: Not Applicable.

(d) **Fuel:**

(i) Firm and Interruptible: For each GJ of gas withdrawn from or injected into the Storage Account on a firm or interruptible basis, an amount of fuel in kind equal to the fuel ratio set out under the heading of 'If Shipper supplies fuel' in the 'Storage Services' section under '(C) Pricing' in the MPSS (currently 0.600%).

(ii) Authorized Overrun: For each GJ of gas withdrawn from or injected into the Storage Account on an authorized overrun basis, an amount of fuel in kind equal to the fuel ratio set out under the heading of 'If Shipper supplies fuel' in the 'Authorized Overrun' section under '(C) Pricing' in the MPSS (currently 1.03%).

(e) **Late Season Balance Charge and Early Season Balance Charge:** *Intentionally blank*

(f) **Shortfall Charge:** *Intentionally blank*

(g) **Other Charges:** Any and all other charges as may be set out in this Contract, and any charges relating to Unauthorized Overrun, Drafted Storage Balance and Overrun of Maximum Storage Balance as set out in the MPSS.

MARITIMES & NORTHEAST PIPELINE, LLC

SUMMARY OF RATES

CURRENTLY EFFECTIVE RATES 11/01/2019

FUEL REIMBURSEMENT PERCENTAGES:

Period	FRP
Winter (November 1 - March 31)	0.82%
Non-Winter (April 1 - October 31)	1.01%

The Summary of Rates serves as a handy reference and does not replace Maritimes & Northeast Tariff. The rates are subject to Commission approval.

FORWARD HAUL RATES
(All rates in $/Dth)

Rate Schedule	MN365	MNIT
	MAXIMUM	
Reservation	$14.9042	
MES Reservation Charge	$0.4900	
Usage Charge Within Tolerances	$0.0050	$0.4950*
Usage Charge Outside Tolerances	$0.4950	$0.4950*
	MINIMUM	
Reservation	$0.0000	
MES Reservation Charge	$0.0000	
Usage Charge Within Tolerances	$0.0050	$0.0050
Usage Charge Outside Tolerances	$0.0050	$0.0050

The following adjustment(s) apply to all Rate Schedules:

ACA SURCHARGE TO APPLICABLE CUSTOMERS: PURSUANT TO SECTION 21 OF THE GT&C.

FUEL RETAINAGE PERCENTAGE: PURSUANT TO SECTION 20 OF THE GT&C.

* The Usage Charge within Tolerances or outside Tolerances, as applicable, for MNIT service on a portion of Pipeline's system designated as an Incremental Lateral shall be the 100 percent load factor equivalent of the applicable rate specified for the applicable Incremental Lateral on the currently effective Statement of Rates for Rate Schedule MNLFT.

Northern Utilities, Inc.
Normal Year Weather - Sales Service Load and Company Managed Sales
Commodity Volumes by Supply Source (Dth)
November 2020 through October 2021

Description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Winter	Summer
Pipeline Supplies														
Tennessee Long-Haul Pipeline Path	235,209	320,438	320,438	289,427	320,438	3,595	0	0	0	0	0	0	1,489,544	0
Algonquin Receipts Pipeline Path	37,530	38,781	38,781	35,028	38,781	37,530	38,781	37,530	38,781	38,781	37,530	38,781	226,431	230,184
Iroquois Receipts Pipeline Path	187,700	193,957	193,957	175,187	193,957	0	0	0	0	0	0	0	944,757	0
Tennessee Niagara Pipeline Path	55,067	56,902	56,902	51,395	56,902	6,740	0	0	0	0	0	0	283,909	0
Atlantic Bridge Ramapo Pipeline Path	169,702	183,303	183,303	165,564	183,303	0	0	0	0	0	0	0	885,175	0
PXP Dawn Pipeline Path	224,840	239,438	239,438	216,267	239,438	51,041	0	0	0	0	0	0	1,210,463	0
WXP Dawn Pipeline Path	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Pipeline	910,047	1,032,819	1,032,819	932,869	1,032,819	98,907	38,781	37,530	38,781	38,781	37,530	38,781	5,040,279	230,184
Underground Storage														
Tennessee Storage	0	66,417	66,417	59,639	14,333	0	0	0	0	0	0	0	206,805	0
TGP Zone 4 300 Leg Supply	64,274	0	0	351	52,083	64,274	66,417	64,274	66,417	66,417	64,274	66,417	180,982	394,215
Tennessee FS-MA Storage Path	64,274	66,417	66,417	59,989	66,417	64,274	66,417	64,274	66,417	66,417	64,274	66,417	387,788	394,215
Union Dawn Storage	233,918	603,977	694,287	720,022	426,513	0	0	0	0	0	0	0	2,678,717	0
Dawn Supply	0	0	0	704	17,762	754,936	394,130	235,369	185,825	188,904	218,379	514,162	773,402	1,736,770
Union Dawn Storage Path	233,918	603,977	694,287	720,726	444,275	754,936	394,130	235,369	185,825	188,904	218,379	514,162	3,452,119	1,736,770
Subtotal Storage	298,192	670,393	760,704	780,715	510,691	819,210	460,547	299,643	252,242	255,321	282,653	580,579	3,839,907	2,130,985
Peaking Supplies														
Lewiston LNG	1,794	22,761	52,503	33,254	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040
Peaking Contract 1	0	7,425	201,313	8,415	0	0	0	0	0	0	0	0	217,152	0
Incremental Delivered Supplies	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Peaking	1,794	30,186	253,815	41,669	1,854	1,794	1,860	1,800	1,860	1,860	1,800	1,860	331,112	11,040
Total Delivered (Dth)	1,210,034	1,733,398	2,047,338	1,755,253	1,545,364	919,911	501,188	338,973	292,883	295,962	321,983	621,220	9,211,298	2,372,209

Northern Utilities, Inc.
Design Year Weather - Planning Load
Commodity Volumes by Supply Source (Dth)
November 2020 through October 2021

Description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Winter	Summer
Pipeline Supplies														
Tennessee Long-Haul Pipeline Path	338,763	406,378	406,378	367,051	406,378	0	0	0	0	0	0	0	1,924,946	0
Algonquin Receipts Pipeline Path	37,530	38,781	38,781	35,028	38,781	37,530	38,781	37,530	38,781	38,781	37,530	38,781	226,431	230,184
Iroquois Receipts Pipeline Path	193,021	199,455	199,455	180,153	199,455	0	0	0	0	0	0	0	971,541	0
Tennessee Niagara Pipeline Path	69,805	72,132	72,132	65,151	72,132	1,479	0	0	0	0	0	0	352,830	0
Atlantic Bridge Ramapo Pipeline Path	217,500	232,500	232,500	210,000	232,500	0	0	0	0	0	0	0	1,125,000	0
PXP Dawn Pipeline Path	288,839	303,640	303,640	274,256	303,640	56,260	3,793	0	0	0	0	0	1,530,276	3,793
WXP Dawn Pipeline Path	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Pipeline	1,145,458	1,252,886	1,252,886	1,131,639	1,252,886	95,269	42,574	37,530	38,781	38,781	37,530	38,781	6,131,024	233,977
Underground Storage														
Tennessee Storage	0	81,955	81,955	73,607	17,760	0	0	0	0	0	0	0	255,276	0
TGP Zone 4 300 Leg Supply	79,311	0	0	417	64,196	79,311	81,955	79,311	81,955	81,955	79,311	81,955	223,236	486,443
Tennessee FS-MA Storage Path	79,311	81,955	81,955	74,024	81,955	79,311	81,955	79,311	81,955	81,955	79,311	81,955	478,512	486,443
Union Dawn Storage	417,268	987,008	1,063,885	908,758	478,946	0	0	0	0	0	0	0	3,855,864	0
Dawn Supply	0	0	0	114,802	180,025	941,783	605,665	372,477	302,352	321,937	392,128	746,042	1,236,610	2,740,602
Union Dawn Storage Path	417,268	987,008	1,063,885	1,023,560	658,970	941,783	605,665	372,477	302,352	321,937	392,128	746,042	5,092,473	2,740,602
Subtotal Storage	496,579	1,068,963	1,145,840	1,097,584	740,925	1,021,094	687,621	451,789	384,307	403,892	471,440	827,997	5,570,986	3,227,045
Peaking Supplies														
Lewiston LNG	1,794	50,051	41,215	9,030	10,076	1,794	1,860	1,800	1,860	1,860	1,800	1,860	113,960	11,040
Peaking Contract 1	0	71,125	338,579	149,734	0	0	0	0	0	0	0	0	559,438	0
Incremental Delivered Supplies	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Peaking	1,794	121,177	379,793	158,764	10,076	1,794	1,860	1,800	1,860	1,860	1,800	1,860	673,398	11,040
Total Delivered (Dth)	1,643,831	2,443,026	2,778,519	2,387,987	2,003,887	1,118,157	732,055	491,119	424,948	444,533	510,770	868,638	12,375,407	3,472,062

Northern Utilities, Inc.
Normal Year Weather - Sales Service Load and Company Managed Sales
Capacity Utilization by Supply Source
November 2020 through October 2021

Description	Winter Projected Volume (Dth)	Winter Maximum Volume (Dth)	Winter Capacity Utilization	Summer Projected Volume (Dth)	Summer Maximum Volume (Dth)	Summer Capacity Utilization	Annual Projected Volume (Dth)	Annual Maximum Volume (Dth)	Annual Capacity Utilization
Pipeline Supplies									
Tennessee Long-Haul Pipeline Path	1,489,544	1,870,942	80%	0	1,901,952	0%	1,489,544	3,772,894	39%
Algonquin Receipts Pipeline Path	226,431	226,431	100%	230,184	230,184	100%	456,615	456,615	100%
Iroquois Receipts Pipeline Path	944,757	1,125,317	84%	0	1,144,176	0%	944,757	2,269,494	42%
Tennessee Niagara Pipeline Path	283,909	332,235	85%	0	337,742	0%	283,909	669,977	42%
Atlantic Bridge Ramapo Pipeline Path	885,175	1,070,253	83%	0	1,087,992	0%	885,175	2,158,245	41%
PXP Dawn Pipeline Path	1,210,463	1,422,190	85%	0	1,445,762	0%	1,210,463	2,867,952	42%
Subtotal Pipeline	5,040,279	6,047,368	83%	230,184	6,147,808	4%	5,270,463	12,195,176	43%
Underground Storage									
Tennessee Storage	206,805			0			206,805		
TGP Zone 4 300 Leg Supply	180,982			394,215			575,198		
Tennessee FS-MA Storage Path	387,788	387,788	100%	394,215	394,215	100%	782,003	782,003	100%
Union Dawn Storage	2,678,717			0			2,678,717		
Dawn Supply	773,402			1,736,770			2,510,172		
Union Dawn Storage Path	3,452,119	5,845,137	59%	1,736,770	5,942,018	29%	5,188,888	11,787,156	44%
Subtotal Storage	3,839,907	6,232,925	62%	2,130,985	6,336,234	34%	5,970,892	12,569,159	48%
Peaking Supplies									
Lewiston LNG	113,960	113,960	100%	11,040	11,040	100%	125,000	125,000	100%
Peaking Contract 1	217,152	597,900	36%	0	0		217,152	597,900	
Subtotal Peaking	331,112	711,860	47%	11,040	11,040	100%	342,152	722,900	47%
Portfolio Utilization	9,211,298	12,992,153	71%	2,372,209	12,495,081	19%	11,583,507	25,487,235	45%
Incremental Delivered Supplies	0	N/A		0	N/A		0	N/A	
Total Delivered	9,211,298	N/A		2,372,209	N/A		11,583,507	N/A	

Northern Utilities, Inc.
Design Year Weather - Planning Load
Capacity Utilization by Supply Source
November 2020 through October 2021

Description	Winter Projected Volume (Dth)	Winter Maximum Volume (Dth)	Winter Capacity Utilization	Summer Projected Volume (Dth)	Summer Maximum Volume (Dth)	Summer Capacity Utilization	Annual Projected Volume (Dth)	Annual Maximum Volume (Dth)	Annual Capacity Utilization
Pipeline Supplies									
Tennessee Long-Haul Pipeline Path	1,924,946	2,372,721	81%	0	2,412,048	0%	1,924,946	4,784,770	40%
Algonquin Receipts Pipeline Path	226,431	226,431	100%	230,184	230,184	100%	456,615	456,615	100%
Iroquois Receipts Pipeline Path	971,541	1,157,423	84%	0	1,176,814	0%	971,541	2,334,236	42%
Tennessee Niagara Pipeline Path	352,830	421,156	84%	0	428,136	0%	352,830	849,292	42%
Atlantic Bridge Ramapo Pipeline Path	1,125,000	1,357,500	83%	0	1,380,000	0%	1,125,000	2,737,500	41%
PXP Dawn Pipeline Path	1,530,276	1,803,665	85%	3,793	1,833,560	0%	1,534,069	3,637,225	42%
Subtotal Pipeline	6,131,024	7,338,896	84%	233,977	7,460,742	3%	6,365,001	14,799,638	43%
Underground Storage									
Tennessee Storage	255,276			0			255,276		
TGP Zone 4 300 Leg Supply	223,236			486,443			709,679		
Tennessee FS-MA Storage Path	478,512	478,512	100%	486,443	486,443	100%	964,956	964,956	100%
Union Dawn Storage	3,855,864			0			3,855,864		
Dawn Supply	1,236,610			2,740,602			3,977,211		
Union Dawn Storage Path	5,092,473	7,215,201	71%	2,740,602	7,334,790	37%	7,833,075	14,549,991	54%
Subtotal Storage	5,570,986	7,693,713	72%	3,227,045	7,821,233	41%	8,798,031	15,514,946	57%
Peaking Supplies									
Lewiston LNG	113,960	113,960	100%	11,040	11,040	100%	125,000	125,000	100%
Peaking Contract 1	559,438	597,900	94%	0	0		559,438	597,900	
Subtotal Peaking	673,398	711,860	95%	11,040	11,040	100%	684,438	722,900	95%
Portfolio Utilization	12,375,407	15,744,469	79%	3,472,062	15,293,015	23%	15,847,470	31,037,484	51%
Incremental Delivered Supplies	0	N/A		0	N/A		0	N/A	
Total Delivered	12,375,407	N/A		3,472,062	N/A		15,847,470	N/A	

Northern Utilities Inc.
Forecast of Upcoming Winter Period Design Day Report
2020 / 2021 Winter Period
(Therms)

Demand	
NH Firm Sales	471,540
NH Non-Capacity Exempt Transportation	132,520
NH Capacity Exempt Transportation	95,860
NH Interruptible Sales	0
NH Interruptible Transportation	0
NH Design Day Demand	699,920
ME Firm Sales	615,670
ME Non-Capacity Exempt Transportation	132,690
ME Capacity Exempt Transportation	120,940
ME Interruptible Sales	0
ME Interruptible Transportation	0
ME Design Day Demand	869,300
Total Firm Sales	1,087,210
Total Non-Capacity Exempt Transportation	265,210
Total Capacity Exempt Transportation	216,800
Total Interruptible Sales	0
Total Interruptible Transportation	0
Total Design Day Demand	1,569,220
Supplies	
Capacity Exempt Transportation	216,800
Pipeline	405,860
Storage	425,070
On-System LNG	65,000
Off-System Peaking Contracts & Delivered Baseload	398,600
Additional Granite Capacity	133,910
Total	1,645,240

Effective Degree Day	
New Hampshire	80.2
Maine	78.6
Probability	1 in 30

Report Prepared By	Francis X. Wells
Title	Manager, Energy Planning
Signature	Fran X Wells

Northern Utilities, Inc.
New Hampshire Division
Migration to Transportation Only Service by Rate Class
November 2020 through October 2021

C&I Rate Class	Annual Sales Service Deliveries (Dth)	Percentage of Sales Service Total by Rate Class	Sales Service Percentage by Rate Class
G40	892,604	39%	87%
G50	118,732	5%	85%
G41	812,488	36%	56%
G51	199,577	9%	49%
G42	158,455	7%	26%
G52	100,683	4%	6%
Special Contracts	-	0%	0%
Total C&I	2,282,539	100%	36%

C&I Rate Class	Annual Transport-Only Deliveries (Dth)	Percentage of Transport Only Total by Rate Class	Transportation Service Percentage by Rate Class
G40	135,304	3%	13%
G50	21,410	1%	15%
G41	637,861	16%	44%
G51	210,160	5%	51%
G42	460,071	12%	74%
G52	1,497,326	38%	94%
Special Contracts	1,029,564	26%	100%
Total C&I	3,991,696	100%	64%

C&I Rate Class	Annual Total Deliveries (Dth)	Percentage of Total by Rate Class
G40	1,027,907	16%
G50	140,142	2%
G41	1,450,349	23%
G51	409,738	7%
G42	618,526	10%
G52	1,598,010	25%
Special Contracts	1,029,564	16%
Total C&I	6,274,235	100%

Northern Utilities Inc.
New Hampshire 7 Day Cold Snap Analysis
Winter 2019-2020

Coldest 7 Consecutive Days
Based on historic Portsmouth weather data

Date	EDD
February 11, 1979	68
February 12, 1979	60
February 13, 1979	73
February 14, 1979	73
February 15, 1979	64
February 16, 1979	69
February 17, 1979	72
Total	479

Maximum Projected Design Week Demand (Dth)

Daily Baseload	5,742
Weekly Baseload	40,197
Heating Increment*	651
Effective Degree Days	479
Total Heat Load	311,839
Projected Cold Snap Demand	352,036

New Hampshire Allocation **40.88%**
Based on the latest demand cost allocator in the Winter COG filing.

Maximum Supply Capability (Dth)

Amount to be Supplied by Natural Gas Pipelines	
Tennessee Zone 0 and Zone L Pools	13,109
Tennessee Niagara	2,327
Iroquois Receipts	6,434
Leidy Hub Supply (Texas Eastern, Algonquin)	965
Transco Zone 6, non-NY Supply (Algonquin)	286
PXP Dawn Hub	9,965
Atlantic Bridge Ramapo	7,500
Tennessee Firm Storage	2,644
Union Dawn Storage	39,863
Peaking Contract 1	39,860
Total Daily Pipeline	122,953
Pipeline for 7 days	860,671
New Hampshire Allocation	351,842

Available LNG Storage

Facility	Gallons	Dth
Lewiston LNG	145,134	12,140
Total	145,134	12,140
New Hampshire Allocation - 7 Days		4,963

LNG Delivery Contract

Northern Utilities plans to secure a contract for LNG Delivery for up to three loads of LNG per day.

The storage credit for LNG is calculated as follows:

Number of Days	7
Number of Loads	5
Delivery Reliability	70%
Assumed Number of LNG Deliveries	25
Dth Per Load	900
Total Storage Credit	22,050
NH Storage Credit - 7 Days	9,014

Summary	
Maximum projected design week demand	352,036
Amount to be furnished by natural gas pipeline	351,842
Remaining Balance	194
Storage available	4,963
Credit from LNG delivery supply contract	9,014
Total available storage and LNG deliveries	13,977
Net Surplus/(Deficiency)	**13,783**

Report Prepared By	Francis X. Wells
Title	Manager, Energy Planning
Signature	Fran X Wells

Winter Period Re-Entry Surcharge Calculation
(Applicable to Capacity Assigned Customers Returning to Sales Service)

Line	Item	HLF (50, 51, 52)	LLF (40, 41, 42)	**Weighted Average**	Reference
1	Winter Demand Cost of Gas Rate	$0.2777	$0.3868	$0.3533	Page 3 of Summary
2	Winter Commodity Cost of Gas Rate	$0.3214	$0.3095	$0.3132	Page 3 of Summary
3	Winter Indirect Cost of Gas	$0.0486	$0.0486	$0.0486	Page 3 of Summary, Removing any Prior Period Over-Collection or Supplier Refunds
4	Winter Cost of Gas Rate (Exclusive of Credits)	$0.6477	$0.7449	$0.7151	Sum Lines 1 through 3
5	Winter Cost of Gas Rate for Incumbent Sales Customers	$0.6465	$0.7437	$0.7139	Page 3 of Summary
6	**Winter Re-Entry Surcharge**	$0.0012	$0.0012	**$0.0012**	**Positive Difference between Line 4 and Line 5**
7	Projected Sales (therms)	11,338,982	25,623,890	36,962,872	Schedule 17-FXW - Distribution Service Delilveries, excluding Special Contracts

Summer Period Re-Entry Surcharge & Conversion Surcharge Calculation
(Applicable to Capacity Assigned & Capacity Exempt Customers Returning to Sales Service)

Line	Item	HLF (50, 51, 52)	LLF (40, 41, 42)	**Weighted Average**	Reference
8	Summer Demand Cost of Gas Rate	$0.0990	$0.1780	$0.1538	Page 7 of Summary
9	Summer Commodity Cost of Gas Rate	$0.2686	$0.2686	$0.2686	Page 7 of Summary
10	Summer Indirect Cost of Gas	$0.0278	$0.0278	$0.0278	Page 7 of Summary, Removing any Prior Period Over-Collection or Supplier Refunds
11	Summer Cost of Gas Rate (Exclusive of Credits)	$0.3954	$0.4744	$0.4502	Sum Lines 8 through 10
12	Summer Cost of Gas Rate for Incumbent Sales Customers	$0.3943	$0.4733	$0.4491	Page 7 of Summary
13	**Summer Re-Entry Surcharge**	$0.0011	$0.0011	**$0.0011**	**Positive Difference between Line 11 and Line 12**
14	Projected Sales (therms)	10,139,908	5,343,930	15,483,838	Schedule 17-FXW - Distribution Service Delilveries, excluding Special Contracts

Winter Period Conversion Surcharge Calculation
(Applicable to Capacity Exempt Customers Returning to Sales Service)

Line	Item	HLF (50, 51, 52)	LLF (40, 41, 42)	Reference
1	LLF Winter Demand Cost of Gas Rate	$0.3868	$0.3868	Page 3 of Summary
2	LLF Winter Commodity Cost of Gas Rate	$0.3095	$0.3095	Page 3 of Summary
3	LLF Winter Indirect Cost of Gas	$0.0486	$0.0486	Page 3 of Summary, Removing any Prior Period Over-Collection or Supplier Refunds
4	Floor Price (LLF Winter Cost of Gas Rate, Exclusive of Credits)	$0.7449	$0.7449	Sum Lines 1 through 3.
5	Total Incremental Cost	$0.6567	$0.6567	See Line 15 of Incremental Commodity Price Worksheet
6	Total Conversion Rate	$0.7449	$0.7449	Maximum of Line 4 and Line 5
7	Winter Gas Adjustment Factor for Incumbent Sales Customers	$0.6465	$0.7437	Page 3 of Summary
8	**Conversion Surcharge**	**$0.0984**	**$0.0012**	**Positive Difference between Line 6 and Line 7**

Incremental Commodity Price Worksheet

Line	Month	NYMEX	Projected PNGTS Delivered Basis	Projected FOM Index	Projected Non-Capacity Assigned Delivery Service Loads	Comments
1	Nov-20	$ 2.901	$ 1.823	$ 4.724	208,617	
2	Dec-20	$ 3.266	$ 3.413	$ 6.679	200,336	
3	Jan-21	$ 3.375	$ 4.393	$ 7.768	217,128	
4	Feb-21	$ 3.327	$ 4.438	$ 7.765	209,159	
5	Mar-21	$ 3.185	$ 2.360	$ 5.545	217,322	
6	Apr-21	$ 2.823	$ 1.308	$ 4.131	183,124	
7	Winter Period Weigthed Average Baseload Price ($/Dth)			$ 6.147	1,235,686	Average, Weighted by Loads, Lines 1 through 6
8	Load Shape Price Factor			1.027		See Load Shape Price Factor Worksheet
9	Winter Period Incremental Load Shape Price ($/Dth)			$ 6.313		Line 7 times Line 8
10	Granite Fuel			0.35%		Granite Tariff
11	Granite Variable Transport ($/Dth)			$ 0.1464		Granite Tariff (IT Daily Rate plus ACA)
12	Northern City-Gate Price ($/Dth)			$ 6.482		Line 9 times (1 plus Line 10) plus Line 11
13	New Hampshire Division City-Gate Sendout to Sales Ratio			1.0132		See Att 2 to Sch 10B
14	Northern Retail Meter Price ($/Dth)			$ 6.567		Line 12 times Line 13
15	Northern Retail Meter Price ($/therm)			$ 0.6567		Line 14 divided by 10

Load Shape Price Factor Worksheet

Month	Date	Historic Delivery Service Loads			Delivery Service Loads Not Subject to Capacity Assignment			2019-2020 Cost Analysis	
		Capacity Exempt	Capacity Assigned	Total	Capacity Exempt	Capacity Assigned	Total	AGT City-Gate Price	AGT City-Gate Cost
Nov-19	11/1/2019	6,855	5,080	11,935	6,855	-	6,855	$ 1.955	$ 13,402
Nov-19	11/2/2019	6,599	5,242	11,841	6,599	-	6,599	$ 2.295	$ 15,145
Nov-19	11/3/2019	7,233	5,149	12,382	7,233	-	7,233	$ 2.295	$ 16,600
Nov-19	11/4/2019	8,097	5,144	13,241	8,097	-	8,097	$ 2.295	$ 18,583
Nov-19	11/5/2019	8,218	4,920	13,138	8,218	-	8,218	$ 2.335	$ 19,189
Nov-19	11/6/2019	8,262	5,639	13,901	8,262	-	8,262	$ 2.845	$ 23,505
Nov-19	11/7/2019	7,849	5,996	13,845	7,849	-	7,849	$ 3.080	$ 24,175
Nov-19	11/8/2019	8,529	7,307	15,836	8,529	-	8,529	$ 5.210	$ 44,436
Nov-19	11/9/2019	7,217	6,136	13,353	7,217	-	7,217	$ 3.045	$ 21,976
Nov-19	11/10/2019	7,464	5,187	12,651	7,464	-	7,464	$ 3.045	$ 22,728
Nov-19	11/11/2019	8,637	6,626	15,263	8,637	-	8,637	$ 3.045	$ 26,300
Nov-19	11/12/2019	9,452	8,565	18,017	9,452	-	9,452	$ 5.865	$ 55,436
Nov-19	11/13/2019	9,850	8,494	18,344	9,850	-	9,850	$ 6.385	$ 62,892
Nov-19	11/14/2019	8,998	7,208	16,206	8,998	-	8,998	$ 3.935	$ 35,407
Nov-19	11/15/2019	8,316	6,250	14,566	8,316	-	8,316	$ 2.920	$ 24,283
Nov-19	11/16/2019	8,386	7,399	15,785	8,386	-	8,386	$ 3.480	$ 29,183
Nov-19	11/17/2019	8,394	6,684	15,078	8,394	-	8,394	$ 3.480	$ 29,211
Nov-19	11/18/2019	8,929	6,510	15,439	8,929	-	8,929	$ 3.480	$ 31,073
Nov-19	11/19/2019	9,049	6,384	15,433	9,049	-	9,049	$ 3.600	$ 32,576
Nov-19	11/20/2019	9,216	6,732	15,948	9,216	-	9,216	$ 3.855	$ 35,528
Nov-19	11/21/2019	7,868	5,971	13,839	7,868	-	7,868	$ 3.465	$ 27,263
Nov-19	11/22/2019	7,935	6,310	14,245	7,935	-	7,935	$ 2.820	$ 22,377
Nov-19	11/23/2019	6,564	6,077	12,641	6,564	-	6,564	$ 2.965	$ 19,462
Nov-19	11/24/2019	7,778	6,391	14,169	7,778	-	7,778	$ 2.965	$ 23,062
Nov-19	11/25/2019	8,108	6,132	14,240	8,108	-	8,108	$ 2.965	$ 24,040
Nov-19	11/26/2019	7,619	5,527	13,146	7,619	-	7,619	$ 2.730	$ 20,800
Nov-19	11/27/2019	5,571	5,424	10,995	5,571	-	5,571	$ 3.215	$ 17,911
Nov-19	11/28/2019	4,617	6,390	11,007	4,617	-	4,617	$ 3.215	$ 14,844
Nov-19	11/29/2019	5,008	7,186	12,194	5,008	-	5,008	$ 3.215	$ 16,101

Load Shape Price Factor Worksheet

Month	Date	Historic Delivery Service Loads Capacity Exempt	Capacity Assigned	Total	Delivery Service Loads Not Subject to Capacity Assignment Capacity Exempt	Capacity Assigned	Total	2019-2020 Cost Analysis AGT City-Gate Price	AGT City-Gate Cost
Nov-19	11/30/2019	7,089	7,765	14,854	7,089	-	7,089	$ 3.215	$ 22,791
Dec-19	12/1/2019	7,531	7,649	15,180	7,531	-	7,531	$ 4.495	$ 33,852
Dec-19	12/2/2019	7,296	8,179	15,475	7,296	-	7,296	$ 4.495	$ 32,796
Dec-19	12/3/2019	8,206	8,000	16,206	8,206	-	8,206	$ 4.245	$ 34,834
Dec-19	12/4/2019	7,831	7,561	15,392	7,831	-	7,831	$ 3.750	$ 29,366
Dec-19	12/5/2019	7,613	7,384	14,997	7,613	-	7,613	$ 3.730	$ 28,396
Dec-19	12/6/2019	7,850	7,927	15,777	7,850	-	7,850	$ 4.205	$ 33,009
Dec-19	12/7/2019	6,605	8,351	14,956	6,605	-	6,605	$ 4.220	$ 27,873
Dec-19	12/8/2019	4,925	6,985	11,910	4,925	-	4,925	$ 4.220	$ 20,784
Dec-19	12/9/2019	6,523	5,531	12,054	6,523	-	6,523	$ 4.220	$ 27,527
Dec-19	12/10/2019	7,441	6,317	13,758	7,441	-	7,441	$ 2.455	$ 18,268
Dec-19	12/11/2019	8,311	7,989	16,300	8,311	-	8,311	$ 4.365	$ 36,278
Dec-19	12/12/2019	8,151	7,122	15,273	8,151	-	8,151	$ 4.495	$ 36,639
Dec-19	12/13/2019	6,596	5,319	11,915	6,596	-	6,596	$ 2.445	$ 16,127
Dec-19	12/14/2019	4,248	4,740	8,988	4,248	-	4,248	$ 3.065	$ 13,020
Dec-19	12/15/2019	7,131	7,143	14,274	7,131	-	7,131	$ 3.065	$ 21,857
Dec-19	12/16/2019	7,927	8,203	16,130	7,927	-	7,927	$ 3.065	$ 24,296
Dec-19	12/17/2019	7,661	8,030	15,691	7,661	-	7,661	$ 5.415	$ 41,484
Dec-19	12/18/2019	8,437	9,172	17,609	8,437	-	8,437	$ 11.050	$ 93,229
Dec-19	12/19/2019	8,452	10,538	18,990	8,452	-	8,452	$ 13.950	$ 117,905
Dec-19	12/20/2019	7,962	9,020	16,982	7,962	-	7,962	$ 12.030	$ 95,783
Dec-19	12/21/2019	6,956	7,766	14,722	6,956	-	6,956	$ 6.175	$ 42,953
Dec-19	12/22/2019	6,972	7,131	14,103	6,972	-	6,972	$ 6.175	$ 43,052
Dec-19	12/23/2019	6,123	5,919	12,042	6,123	-	6,123	$ 6.175	$ 37,810
Dec-19	12/24/2019	5,273	7,025	12,298	5,273	-	5,273	$ 4.450	$ 23,465
Dec-19	12/25/2019	4,598	6,862	11,460	4,598	-	4,598	$ 3.190	$ 14,668
Dec-19	12/26/2019	7,144	7,158	14,302	7,144	-	7,144	$ 3.190	$ 22,789
Dec-19	12/27/2019	6,313	5,753	12,066	6,313	-	6,313	$ 2.220	$ 14,015
Dec-19	12/28/2019	6,186	6,340	12,526	6,186	-	6,186	$ 2.010	$ 12,434

Load Shape Price Factor Worksheet

Month	Date	Historic Delivery Service Loads: Capacity Exempt	Historic Delivery Service Loads: Capacity Assigned	Historic Delivery Service Loads: Total	Delivery Service Loads Not Subject to Capacity Assignment: Capacity Exempt	Delivery Service Loads Not Subject to Capacity Assignment: Capacity Assigned	Delivery Service Loads Not Subject to Capacity Assignment: Total	2019-2020 Cost Analysis: AGT City-Gate Price	2019-2020 Cost Analysis: AGT City-Gate Cost
Dec-19	12/29/2019	6,491	6,777	13,268	6,491	-	6,491	$ 2.010	$ 13,047
Dec-19	12/30/2019	6,823	7,157	13,980	6,823	-	6,823	$ 2.010	$ 13,714
Dec-19	12/31/2019	4,896	6,955	11,851	4,896	-	4,896	$ 2.320	$ 11,359
Jan-20	1/1/2020	4,541	7,298	11,839	4,541	-	4,541	$ 2.345	$ 10,649
Jan-20	1/2/2020	6,721	6,487	13,208	6,721	-	6,721	$ 2.345	$ 15,761
Jan-20	1/3/2020	6,446	5,936	12,382	6,446	-	6,446	$ 2.210	$ 14,246
Jan-20	1/4/2020	6,175	6,424	12,599	6,175	-	6,175	$ 2.570	$ 15,870
Jan-20	1/5/2020	7,245	8,153	15,398	7,245	-	7,245	$ 2.570	$ 18,620
Jan-20	1/6/2020	7,493	7,944	15,437	7,493	-	7,493	$ 2.570	$ 19,257
Jan-20	1/7/2020	7,619	7,278	14,897	7,619	-	7,619	$ 2.985	$ 22,743
Jan-20	1/8/2020	8,067	8,569	16,636	8,067	-	8,067	$ 3.160	$ 25,492
Jan-20	1/9/2020	7,719	8,658	16,377	7,719	-	7,719	$ 2.785	$ 21,497
Jan-20	1/10/2020	6,446	5,579	12,025	6,446	-	6,446	$ 1.920	$ 12,376
Jan-20	1/11/2020	5,106	2,765	7,871	5,106	-	5,106	$ 1.865	$ 9,523
Jan-20	1/12/2020	6,648	6,138	12,786	6,648	-	6,648	$ 1.865	$ 12,399
Jan-20	1/13/2020	7,580	7,777	15,357	7,580	-	7,580	$ 1.865	$ 14,137
Jan-20	1/14/2020	7,325	6,847	14,172	7,325	-	7,325	$ 2.370	$ 17,360
Jan-20	1/15/2020	7,352	6,558	13,910	7,352	-	7,352	$ 2.470	$ 18,159
Jan-20	1/16/2020	8,698	8,938	17,636	8,698	-	8,698	$ 3.970	$ 34,531
Jan-20	1/17/2020	8,396	10,291	18,687	8,396	-	8,396	$ 7.225	$ 60,661
Jan-20	1/18/2020	7,446	8,829	16,275	7,446	-	7,446	$ 4.910	$ 36,560
Jan-20	1/19/2020	7,574	8,418	15,992	7,574	-	7,574	$ 4.910	$ 37,188
Jan-20	1/20/2020	8,446	9,857	18,303	8,446	-	8,446	$ 4.910	$ 41,470
Jan-20	1/21/2020	8,489	9,584	18,073	8,489	-	8,489	$ 4.910	$ 41,681
Jan-20	1/22/2020	8,235	8,445	16,680	8,235	-	8,235	$ 2.695	$ 22,193
Jan-20	1/23/2020	6,696	7,246	13,942	6,696	-	6,696	$ 2.095	$ 14,028
Jan-20	1/24/2020	5,211	6,317	11,528	5,211	-	5,211	$ 2.035	$ 10,604
Jan-20	1/25/2020	4,754	5,930	10,684	4,754	-	4,754	$ 1.905	$ 9,056
Jan-20	1/26/2020	5,092	6,136	11,228	5,092	-	5,092	$ 1.905	$ 9,700

Load Shape Price Factor Worksheet

Month	Date	Historic Delivery Service Loads Capacity Exempt	Historic Delivery Service Loads Capacity Assigned	Historic Delivery Service Loads Total	Delivery Service Loads Not Subject to Capacity Assignment Capacity Exempt	Delivery Service Loads Not Subject to Capacity Assignment Capacity Assigned	Delivery Service Loads Not Subject to Capacity Assignment Total	2019-2020 Cost Analysis AGT City-Gate Price	2019-2020 Cost Analysis AGT City-Gate Cost
Jan-20	1/27/2020	7,407	6,470	13,877	7,407	-	7,407	$ 1.905	$ 14,110
Jan-20	1/28/2020	8,177	7,600	15,777	8,177	-	8,177	$ 2.070	$ 16,926
Jan-20	1/29/2020	8,888	8,408	17,296	8,888	-	8,888	$ 2.355	$ 20,931
Jan-20	1/30/2020	8,804	8,291	17,095	8,804	-	8,804	$ 2.185	$ 19,237
Jan-20	1/31/2020	7,419	6,703	14,122	7,419	-	7,419	$ 1.810	$ 13,428
Feb-20	2/1/2020	7,082	6,737	13,819	7,082	-	7,082	$ 1.840	$ 13,031
Feb-20	2/2/2020	6,964	6,948	13,912	6,964	-	6,964	$ 1.840	$ 12,814
Feb-20	2/3/2020	7,541	6,660	14,201	7,541	-	7,541	$ 1.840	$ 13,875
Feb-20	2/4/2020	7,842	6,611	14,453	7,842	-	7,842	$ 1.945	$ 15,253
Feb-20	2/5/2020	8,114	7,425	15,539	8,114	-	8,114	$ 2.200	$ 17,851
Feb-20	2/6/2020	9,853	7,219	17,072	9,853	-	9,853	$ 1.980	$ 19,509
Feb-20	2/7/2020	9,822	8,065	17,887	9,822	-	9,822	$ 2.420	$ 23,769
Feb-20	2/8/2020	10,452	8,915	19,367	10,452	-	10,452	$ 2.955	$ 30,886
Feb-20	2/9/2020	10,241	7,463	17,704	10,241	-	10,241	$ 2.955	$ 30,262
Feb-20	2/10/2020	9,857	7,094	16,951	9,857	-	9,857	$ 2.955	$ 29,127
Feb-20	2/11/2020	8,506	7,262	15,768	8,506	-	8,506	$ 2.010	$ 17,097
Feb-20	2/12/2020	7,750	6,870	14,620	7,750	-	7,750	$ 1.955	$ 15,151
Feb-20	2/13/2020	8,035	7,621	15,656	8,035	-	8,035	$ 2.495	$ 20,047
Feb-20	2/14/2020	9,186	10,275	19,461	9,186	-	9,186	$ 3.760	$ 34,539
Feb-20	2/15/2020	8,123	8,158	16,281	8,123	-	8,123	$ 2.165	$ 17,586
Feb-20	2/16/2020	7,649	6,894	14,543	7,649	-	7,649	$ 2.165	$ 16,560
Feb-20	2/17/2020	7,992	8,046	16,038	7,992	-	7,992	$ 2.165	$ 17,303
Feb-20	2/18/2020	8,601	7,195	15,796	8,601	-	8,601	$ 2.165	$ 18,621
Feb-20	2/19/2020	7,485	8,091	15,576	7,485	-	7,485	$ 2.405	$ 18,001
Feb-20	2/20/2020	7,737	9,137	16,874	7,737	-	7,737	$ 2.785	$ 21,548
Feb-20	2/21/2020	6,679	7,854	14,533	6,679	-	6,679	$ 2.400	$ 16,030
Feb-20	2/22/2020	6,055	6,453	12,508	6,055	-	6,055	$ 1.990	$ 12,049
Feb-20	2/23/2020	6,532	6,364	12,896	6,532	-	6,532	$ 1.990	$ 12,999
Feb-20	2/24/2020	7,608	5,700	13,308	7,608	-	7,608	$ 1.990	$ 15,140

Load Shape Price Factor Worksheet

Month	Date	Historic Delivery Service Loads Capacity Exempt	Historic Delivery Service Loads Capacity Assigned	Historic Delivery Service Loads Total	Delivery Service Loads Not Subject to Capacity Assignment Capacity Exempt	Delivery Service Loads Not Subject to Capacity Assignment Capacity Assigned	Delivery Service Loads Not Subject to Capacity Assignment Total	2019-2020 Cost Analysis AGT City-Gate Price	2019-2020 Cost Analysis AGT City-Gate Cost
Feb-20	2/25/2020	7,471	5,935	13,406	7,471	-	7,471	$ 1.870	$ 13,971
Feb-20	2/26/2020	7,633	6,050	13,683	7,633	-	7,633	$ 1.870	$ 14,274
Feb-20	2/27/2020	8,142	7,439	15,581	8,142	-	8,142	$ 2.105	$ 17,139
Feb-20	2/28/2020	7,848	7,327	15,175	7,848	-	7,848	$ 2.240	$ 17,580
Feb-20	2/29/2020	7,888	7,920	15,808	7,888	-	7,888	$ 2.240	$ 17,669
Mar-20	3/1/2020	8,590	7,664	16,254	8,590	-	8,590	$ 1.740	$ 14,947
Mar-20	3/2/2020	7,663	5,508	13,171	7,663	-	7,663	$ 1.740	$ 13,334
Mar-20	3/3/2020	7,163	5,091	12,254	7,163	-	7,163	$ 1.600	$ 11,461
Mar-20	3/4/2020	7,922	6,004	13,926	7,922	-	7,922	$ 1.665	$ 13,190
Mar-20	3/5/2020	7,485	6,171	13,656	7,485	-	7,485	$ 1.685	$ 12,612
Mar-20	3/6/2020	7,561	6,594	14,155	7,561	-	7,561	$ 1.760	$ 13,307
Mar-20	3/7/2020	7,017	6,270	13,287	7,017	-	7,017	$ 1.575	$ 11,052
Mar-20	3/8/2020	6,864	5,159	12,023	6,864	-	6,864	$ 1.575	$ 10,811
Mar-20	3/9/2020	6,636	4,248	10,884	6,636	-	6,636	$ 1.575	$ 10,452
Mar-20	3/10/2020	6,755	5,232	11,987	6,755	-	6,755	$ 1.545	$ 10,436
Mar-20	3/11/2020	7,751	5,868	13,619	7,751	-	7,751	$ 1.690	$ 13,099
Mar-20	3/12/2020	7,291	5,933	13,224	7,291	-	7,291	$ 1.745	$ 12,723
Mar-20	3/13/2020	6,360	5,277	11,637	6,360	-	6,360	$ 1.615	$ 10,271
Mar-20	3/14/2020	6,324	5,111	11,435	6,324	-	6,324	$ 1.780	$ 11,257
Mar-20	3/15/2020	7,652	6,555	14,207	7,652	-	7,652	$ 1.780	$ 13,621
Mar-20	3/16/2020	7,907	6,873	14,780	7,907	-	7,907	$ 1.780	$ 14,074
Mar-20	3/17/2020	7,324	6,173	13,497	7,324	-	7,324	$ 1.690	$ 12,378
Mar-20	3/18/2020	7,264	5,407	12,671	7,264	-	7,264	$ 1.585	$ 11,513
Mar-20	3/19/2020	6,992	5,720	12,712	6,992	-	6,992	$ 1.415	$ 9,894
Mar-20	3/20/2020	6,238	3,995	10,233	6,238	-	6,238	$ 1.350	$ 8,421
Mar-20	3/21/2020	6,806	5,881	12,687	6,806	-	6,806	$ 1.605	$ 10,924
Mar-20	3/22/2020	7,608	6,475	14,083	7,608	-	7,608	$ 1.605	$ 12,211
Mar-20	3/23/2020	7,830	6,459	14,289	7,830	-	7,830	$ 1.605	$ 12,567
Mar-20	3/24/2020	8,067	5,733	13,800	8,067	-	8,067	$ 1.495	$ 12,060

Load Shape Price Factor Worksheet

Month	Date	Historic Delivery Service Loads			Delivery Service Loads Not Subject to Capacity Assignment			2019-2020 Cost Analysis	
		Capacity Exempt	Capacity Assigned	Total	Capacity Exempt	Capacity Assigned	Total	AGT City-Gate Price	AGT City-Gate Cost
Mar-20	3/25/2020	7,572	5,577	13,149	7,572	-	7,572	$ 1.660	$ 12,570
Mar-20	3/26/2020	6,838	4,911	11,749	6,838	-	6,838	$ 1.550	$ 10,599
Mar-20	3/27/2020	6,328	4,500	10,828	6,328	-	6,328	$ 1.385	$ 8,764
Mar-20	3/28/2020	6,198	4,311	10,509	6,198	-	6,198	$ 1.220	$ 7,562
Mar-20	3/29/2020	4,993	5,197	10,190	4,993	-	4,993	$ 1.220	$ 6,091
Mar-20	3/30/2020	7,489	5,705	13,194	7,489	-	7,489	$ 1.220	$ 9,137
Mar-20	3/31/2020	7,786	5,652	13,438	7,786	-	7,786	$ 1.525	$ 11,874
Apr-20	4/1/2020	7,663	5,373	13,036	7,663	-	7,663	$ 1.625	$ 12,452
Apr-20	4/2/2020	7,208	5,171	12,379	7,208	-	7,208	$ 1.490	$ 10,740
Apr-20	4/3/2020	6,879	5,107	11,986	6,879	-	6,879	$ 1.410	$ 9,699
Apr-20	4/4/2020	4,959	4,799	9,758	4,959	-	4,959	$ 1.395	$ 6,918
Apr-20	4/5/2020	5,103	4,634	9,737	5,103	-	5,103	$ 1.395	$ 7,119
Apr-20	4/6/2020	7,769	4,668	12,437	7,769	-	7,769	$ 1.395	$ 10,838
Apr-20	4/7/2020	7,034	4,535	11,569	7,034	-	7,034	$ 1.450	$ 10,199
Apr-20	4/8/2020	7,409	5,097	12,506	7,409	-	7,409	$ 1.620	$ 12,003
Apr-20	4/9/2020	6,913	5,697	12,610	6,913	-	6,913	$ 1.635	$ 11,303
Apr-20	4/10/2020	6,187	5,299	11,486	6,187	-	6,187	$ 1.455	$ 9,002
Apr-20	4/11/2020	4,257	5,024	9,281	4,257	-	4,257	$ 1.455	$ 6,194
Apr-20	4/12/2020	4,393	3,884	8,277	4,393	-	4,393	$ 1.455	$ 6,392
Apr-20	4/13/2020	6,628	4,016	10,644	6,628	-	6,628	$ 1.455	$ 9,644
Apr-20	4/14/2020	7,676	4,368	12,044	7,676	-	7,676	$ 1.500	$ 11,514
Apr-20	4/15/2020	8,268	5,347	13,615	8,268	-	8,268	$ 1.770	$ 14,634
Apr-20	4/16/2020	6,951	5,558	12,509	6,951	-	6,951	$ 1.725	$ 11,990
Apr-20	4/17/2020	5,439	3,830	9,269	5,439	-	5,439	$ 1.610	$ 8,757
Apr-20	4/18/2020	4,688	4,107	8,795	4,688	-	4,688	$ 1.610	$ 7,548
Apr-20	4/19/2020	5,170	2,321	7,491	5,170	-	5,170	$ 1.610	$ 8,324
Apr-20	4/20/2020	7,422	3,879	11,301	7,422	-	7,422	$ 1.610	$ 11,949
Apr-20	4/21/2020	8,011	4,318	12,329	8,011	-	8,011	$ 1.800	$ 14,420
Apr-20	4/22/2020	8,027	4,500	12,527	8,027	-	8,027	$ 2.000	$ 16,054

Load Shape Price Factor Worksheet

		Historic Delivery Service Loads			Delivery Service Loads Not Subject to Capacity Assignment			2019-2020 Cost Analysis	
Month	Date	Capacity Exempt	Capacity Assigned	Total	Capacity Exempt	Capacity Assigned	Total	AGT City-Gate Price	AGT City-Gate Cost
Apr-20	4/23/2020	7,259	3,007	10,266	7,259	-	7,259	$ 1.955	$ 14,191
Apr-20	4/24/2020	6,439	3,200	9,639	6,439	-	6,439	$ 1.920	$ 12,363
Apr-20	4/25/2020	4,285	2,913	7,198	4,285	-	4,285	$ 1.825	$ 7,820
Apr-20	4/26/2020	4,589	3,664	8,253	4,589	-	4,589	$ 1.825	$ 8,375
Apr-20	4/27/2020	7,891	4,128	12,019	7,891	-	7,891	$ 1.825	$ 14,401
Apr-20	4/28/2020	8,473	3,450	11,923	8,473	-	8,473	$ 1.775	$ 15,040
Apr-20	4/29/2020	8,118	3,604	11,722	8,118	-	8,118	$ 1.750	$ 14,207
Apr-20	4/30/2020	7,122	3,382	10,504	7,122	-	7,122	$ 1.660	$ 11,823
Winter Period		1,325,586	1,163,564	2,489,150	1,325,586	-	1,325,586	$ 2.785	$ 3,692,101

Weighted Average Daily Price	$ 2.785
Straight Average Daily Price	$ 2.711
Load Shape Price Factor	1.027

Month	Projected Delivery Service Loads			Delivery Service Loads Not Subject to Capacity Assignment		
	Capacity Exempt	Capacity Assigned	Total	Capacity Exempt	Capacity Assigned	Total
Nov-20	208,617	161,248	369,865	208,617	-	208,617
Dec-20	200,336	209,076	409,412	200,336	-	200,336
Jan-21	217,128	225,622	442,750	217,128	-	217,128
Feb-21	209,159	202,424	411,583	209,159	-	209,159
Mar-21	217,322	208,317	425,639	217,322	-	217,322
Apr-21	183,124	143,166	326,290	183,124	-	183,124
Winter	1,235,686	1,149,853	2,385,539	1,235,686	-	1,235,686

NORTHERN UTILITIES, INC.- NEW HAMPSHIRE DIVISION
Gas Assistance Program and Regulatory Assessment (GAPRA)

		Customer Charge	First Block	Last Block	Cost of Gas	Total
1	**Peak Period**					
2	R-10 Base Rates	$22.20	$0.6920	$0.6920	$0.7315	
3	R-10 Rate Discounted 45%	$12.21	$0.3806	$0.3806	$0.4023	
4	Program Subsidy	$9.99	$0.3114	$0.3114	$0.3292	
5	Average Annual Therms		266	289	555	
6						
7	Peak Period Subsidy	$59.94	$82.96	$89.87	$182.69	$415.46
8						
9						
10	Number of Estimated 2020/21 Participants					697
11						
12	Annual Subsidy times Number of Participants (Ln 7 * Ln 10)					$289,640
13	Prior Year Ending Balance 10/31/2020 - RLIARA Page 2					($33,560)
14	Estimated Annual Administrative Costs					$0
15	Estimated Non-Distribution Regulatory Assessment (Based off of NHPUC invoice dated August 19, 2020)					$63,505
16	Total Program Costs					$319,585
17						
18	Estimated weather normalized firm therms billed for					
19	the twelve months ended 10/31/21 sales and transportation					72,579,945
20	(Attachment 2 to Schedule 10B, Page 2 of 3, "Total Division"					
21	subtract "Special Contracts").					
22	**Total Gas Assistance Program and Regulatory Assessment Charge**					**$0.0044**

NORTHERN UTILITIES, INC., NEW HAMPSHIRE DIVISION
NOVEMBER 2019 THROUGH OCTOBER 2020
GAS ASSISTANCE PROGRAM AND REGIULATORY ASSESSMENT (GAPRA) RECONCILIATION

				Actual	Actual	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	
1	**FOR THE MONTH OF:**	**Nov-19**	**Dec-19**	**Jan-20**	**Feb-20**	**Mar-20**	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Total**
2	**DAYS IN MONTH**	30	31	31	29	31	30	31	30	31	31	30	31	366
3														**Average**
4	GAPRA Participant Count	521	759	718	749	728	780	761	677	668	686	666	653	697
5														**Total**
6	Beginning Balance	($165,246)	($162,111)	($143,556)	($130,607)	($117,225)	($104,298)	($86,723)	($74,246)	($60,996)	($52,101)	($45,500)	($38,995)	($165,246)
7														
8	Add: Actual Costs	$18,112	$37,740	$39,013	$50,483 (1)	$39,628	$35,052	$24,284	$18,438	$12,176	$10,190	$10,411	$11,673	$307,199
9														
10	Add: Regulatory Assessments	$8,613	$14,434	$11,421	$605	$6,013	$6,013	$6,013	$6,013	$6,013	$5,292	$5,292	$5,292	$81,014
11														
12	Less: Collected Revenue	$22,876	$32,952	$36,944	$37,230	$32,276	$23,113	$17,501	$10,934	$9,142	$8,749	$9,084	$11,432	($252,230)
13														
14	Add: Administrative and Start Up Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15														
16	Ending Balance Pre-Interest	($161,396)	($142,889)	($130,066)	($116,749)	($103,861)	($86,346)	($73,928)	($60,729)	($51,948)	($45,368)	($38,881)	($33,462)	
17														
18	Month's Average Balance	($163,321)	($152,500)	($136,811)	($123,678)	($110,543)	($95,322)	($80,326)	($67,487)	($56,472)	($48,735)	($42,191)	($36,228)	
19														
20	Interest Rate	5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	
21														
22	Interest Applied	($715)	($667)	($542)	($477)	($438)	($377)	($318)	($267)	($153)	($132)	($114)	($98)	
23														
24	Ending Balance	($162,111)	($143,556)	($130,607)	($117,225)	($104,298)	($86,723)	($74,246)	($60,996)	($52,101)	($45,500)	($38,995)	**($33,560)**	

() Over Collection

(1) Includes correction of lost revenue related to prior month and associated interest.

NORTHERN UTILITIES, INC., NEW HAMPSHIRE DIVISION
Calculation of Distribution and Non-Distribution Revenues of the NHPUC Annual Regulatory Assessment
NHPUC Assessment Invoice dated August 19, 2020

	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	Total Fiscal Year	
Distribution	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$30,747.00	$368,964.00	1
Non-Distribution	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$5,292.08	$63,505.00	2
Total		$108,117.25			$108,117.25			$108,117.25			$108,117.25		$432,469.00	

(1) The $368,964.00 for Distribution represents the amount established in Docket DG 17-070.
(2) Total Invoice amount minus Distribution amount.

Northern Utilities, Inc. -- New Hampshire Division

EEC Budget

	Residential	Low-Income	Gen Service	Total
July-20	$51,728	$9,161	$58,020	$118,909
August-20	$59,199	$33,463	$66,401	$159,063
September-20	$66,096	$37,362	$80,013	$183,471
October-20	$73,568	$41,585	$82,518	$197,671
November-20	$81,040	$45,809	$90,898	$217,747
December-20	$88,512	$50,032	$105,155	$243,699
January-21	$33,101	$16,281	$57,210	$106,592
February-21	$55,169	$27,135	$57,210	$139,514
March-21	$66,203	$32,562	$85,815	$184,580
April-21	$77,237	$37,989	$100,117	$215,343
May-21	$77,237	$37,989	$57,210	$172,436
June-21	$132,406	$65,125	$71,512	$269,043
July-21	$143,440	$70,552	$100,117	$314,108
August-21	$77,237	$37,989	$157,327	$272,553
September-21	$154,473	$75,979	$171,629	$402,082
October-21	$110,338	$54,271	$185,932	$350,541
Total	$1,346,983	$673,283	$1,527,084	$3,547,351

Budget with Low-Income Costs Allocated to Residential and General Service Classes

	Residential	Low-Income	Gen Service	Total
July-20	$56,539	0	$62,370	$118,909
August-20	$63,760	0	$95,304	$159,063
September-20	$71,689	0	$111,782	$183,471
October-20	$80,185	0	$117,486	$197,671
November-20	$92,872	0	$124,875	$217,747
December-20	$104,446	0	$139,252	$243,699
January-21	$38,314	0	$68,279	$106,592
February-21	$64,133	0	$75,381	$139,514
March-21	$76,417	0	$108,163	$184,580
April-21	$88,503	0	$126,840	$215,343
May-21	$86,905	0	$85,531	$172,436
June-21	$145,513	0	$123,530	$269,043
July-21	$154,320	0	$159,788	$314,108
August-21	$82,237	0	$190,316	$272,553
September-21	$165,211	0	$236,870	$402,082
October-21	$118,650	0	$231,891	$350,541
Total	$1,489,693	$0	$2,057,658	$3,547,351

EEC Charge Factor Calculation

EEC Charge Factors for Residential Customers	**Effective** November 1, 2020	
EEC Reconciliation Adjustment	$276,963	Schedule 38 Page 3 Nov '20 Beginning Balance
EEC Costs	$1,096,392	Schedule 38 Page 3 Nov '20 - Oct '21 Totals; Company Budget
EEC Performance Incentive	$56,430	Schedule 38 Page 3 Nov '20 - Oct '21 Totals; Company Budget
EEC Low-Income Costs	$121,129	Schedule 38 Page 3 Nov '20 - Oct '21 Totals; Company Budget
EEC Allocated Low-Income Performance Incentive	$6,532	Schedule 38 Page 3 Nov '20 - Oct '21 Totals; Company Budget
Total	$1,557,446	
Forecasted Annual Throughput Volumes for Residential Customers	20,133,234	Schedule 38 Page 3 Nov '20 - Oct '21 Totals; Company Forecast
Energy Efficiency Charge Factor for Residential Customers	**$0.0774**	

EEC Charge Factors for Commercial and Industrial Customers (C&I)		
EEC Reconciliation Adjustment	($60,459)	Schedule 38 Page 4 Nov '20 Beginning Balance
EEC Costs	$1,240,133	Schedule 38 Page 4 Nov '20 - Oct '21 Totals; Company Budget
EEC Performance Incentive	$73,557	Schedule 38 Page 4 Nov '20 - Oct '21 Totals; Company Budget
EEC Low-Income Costs	$430,584	Schedule 38 Page 4 Nov '20 - Oct '21 Totals; Company Budget
EEC Allocated Low-Income Performance Incentive	$21,181	Schedule 38 Page 4 Nov '20 - Oct '21 Totals; Company Budget
Total	$1,704,995	
Forecasted Annual Throughput Volumes for C&I Customers	52,446,711	Schedule 38 Page 4 Nov '20 - Oct '21 Totals; Company Forecast
Energy Efficiency Charge Factor for C&I Customers	**$0.0337**	

Northern Utilities, Inc.

New Hampshire Division

Calculation of the EEC Charge, a Component of the Local Distribution Adjustment Charge

To Be Effective November 1, 2020 through October 31, 2021

Residential Customers

		Beginning Balance (Over)/Under		EEC Rate per Therm	EEC Collections	EEC Costs	DSM PI	Allocated Low Income Costs	Allocated Low Income PI	Ending Balance (Over)/Under	Average Balance (Over)/Under	Interest Prime Rate	Interest @ Prime Rate	Ending Balance plus Interest (Over)/Under	Therm Sales	# of Days
August-19	Actual	$107,098		$0.0501	$16,801	$37,242	$3,633	$1,184	$69	$132,424	$119,761	5.50%	$559	$132,983	335,427	31
September-19	Actual	$132,983		$0.0501	$16,810	$21,383	$3,633	$11,591	$675	$153,455	$143,219	5.50%	$647	$154,102	335,597	30
October-19	Actual	$154,102		$0.0501	$30,568	$57,526	$3,633	$1,339	$78	$186,110	$170,106	5.25%	$758	$186,868	610,233	31
November-19	Actual	$186,868		$0.0499	$68,678	$20,599	$3,633	$20,128	$1,171	$163,721	$175,295	5.25%	$1,262	$164,984	1,373,589	30
December-19	Actual	$164,984		$0.0499	$137,485	$32,245	$3,633	$4,023	$234	$67,634	$116,309	5.25%	$519	$68,152	2,755,471	31
January-20	Actual	$68,152		$0.0499	$154,006	$19,025	$3,906	$3,272	$190	($59,461)	$4,346	4.75%	$17	($59,444)	3,086,303	31
February-20	Actual	$556	(1)	$0.0499	$156,856	$111,389	$3,906	$7,729	$450	($32,826)	($16,135)	4.75%	$3,669	($29,158)	3,143,380	29
March-20	Actual	$45,842	(1)	$0.0499	$133,675	$132,910	$15,890	$25,651	$1,493	$88,111	$66,977	4.75%	$1,675	$89,786	2,678,854	31
April-20	Actual	$89,786		$0.0499	$93,387	$84,604	$3,906	$11,124	$647	$96,680	$93,233	4.75%	$414	$97,093	1,871,517	30
May-20	Actual	$97,093		$0.0499	$66,832	$18,542	($976)	$3,996	$233	$52,056	$74,575	4.75%	$300	$52,356	1,339,252	31
June-20	Actual	$52,356		$0.0499	$28,689	$43,423	$2,929	$1,527	$89	$71,635	$61,996	4.75%	$241	$71,877	574,945	30
July-20	Forecast	$71,877		$0.0499	$20,894	$51,728	$2,929	$4,811	$234	$110,685	$91,281	3.25%	$251	$110,936	418,711	31
August-20	Forecast	$110,936		$0.0499	$16,527	$59,199	$2,929	$4,560	$193	$161,292	$136,114	3.25%	$375	$161,666	331,195	31
September-20	Forecast	$161,666		$0.0499	$18,846	$66,096	$2,929	$5,592	$212	$217,651	$189,659	3.25%	$505	$218,156	377,676	30
October-20	Forecast	$218,156		$0.0499	$25,214	$73,568	$2,929	$6,617	$226	$276,283	$247,219	3.25%	$681	$276,963	505,288	31
November-20	Forecast	$276,963		$0.0774	$115,178	$81,040	$2,929	$11,832	$367	$257,953	$267,458	3.25%	$712	$258,665	1,488,092	30
December-20	Forecast	$258,665		$0.0774	$212,948	$88,512	$2,929	$15,935	$452	$153,546	$206,105	3.25%	$567	$154,113	2,751,261	31
January-21	Forecast	$154,113		$0.0774	$261,213	$33,101	$5,057	$5,212	$796	($62,933)	$45,590	3.25%	$126	($62,807)	3,374,845	31
February-21	Forecast	($62,807)		$0.0774	$291,762	$55,169	$5,057	$8,964	$822	($284,557)	($173,682)	3.25%	($433)	($284,990)	3,769,530	28
March-21	Forecast	($284,990)		$0.0774	$245,174	$66,203	$5,057	$10,214	$780	($447,910)	($366,450)	3.25%	($1,012)	($448,921)	3,167,624	31
April-21	Forecast	($448,921)		$0.0774	$165,238	$77,237	$5,057	$11,267	$738	($519,861)	($484,391)	3.25%	($1,294)	($521,155)	2,134,862	30
May-21	Forecast	($521,155)		$0.0774	$93,796	$77,237	$5,057	$9,668	$633	($522,357)	($521,756)	3.25%	($1,440)	($523,797)	1,211,836	31
June-21	Forecast	($523,797)		$0.0774	$48,120	$132,406	$5,057	$13,107	$501	($420,846)	($472,321)	3.25%	($1,262)	($422,108)	621,702	30
July-21	Forecast	($422,108)		$0.0774	$30,763	$143,440	$5,057	$10,880	$384	($293,110)	($357,609)	3.25%	($987)	($294,097)	397,455	31
August-21	Forecast	($294,097)		$0.0774	$26,040	$77,237	$5,057	$5,000	$327	($232,516)	($263,306)	3.25%	($727)	($233,243)	336,440	31
September-21	Forecast	($233,243)		$0.0774	$28,829	$154,473	$5,057	$10,738	$352	($91,451)	($162,347)	3.25%	($434)	($91,885)	372,462	30
October-21	Forecast	($91,885)		$0.0774	$39,252	$110,338	$5,057	$8,312	$381	($7,049)	($49,467)	3.25%	($137)	($7,185)	507,126	31
Nov 20 thru Oct 21 Totals					$1,558,312	$1,096,392	$56,430	$121,129	$6,532						20,133,234	

Forecast therm Sales from Company Forecast as seen in Attachment 2 to Schedule 10 B, Page 2 of 3, filed on September 17, 2019 in the Cost of Gas Docket.
Actual Performance Incentives includes reconciliations from prior year(s).
(1) Reflects corrction and transfer to On Bill Financing plus associated interest.

Northern Utilities, Inc.

New Hampshire Division

Calculation of the EEC Charge, a Component of the Local Distribution Adjustment Charge

To Be Effective November 1, 2020 through October 31, 2021

General Service Customers

		Beginning Balance (Over)/Under		EEC Rate per Therm	EEC Collections	EEC Costs	DSM PI	Allocated Low Income Costs	Allocated Low Income PI	Ending Balance (Over)/Under	Average Balance (Over)/Under	Interest Prime Rate	Interest @ Prime Rate	Ending Balance plus Interest (Over)/Under	Therm Sales	# of Days
August-19	Actual	($704,375)		$0.0264	$63,986	$29,331	$4,684	$8,553	$498	($725,295)	($714,835)	5.50%	($3,339)	($728,634)	2,423,706	31
September-19	Actual	($728,634)		$0.0264	$62,483	$110,426	$4,684	$81,746	$4,758	($589,503)	($659,069)	5.50%	($2,979)	($592,483)	2,366,753	30
October-19	Actual	($592,483)		$0.0264	$83,920	$220,316	$4,684	$6,982	$406	($444,015)	($518,249)	5.25%	($2,311)	($446,326)	3,182,362	31
November-19	Actual	($446,326)		$0.0247	$114,869	$248,775	$4,684	$66,982	$3,898	($236,854)	($341,590)	5.25%	($1,459)	($238,312)	4,571,040	30
December-19	Actual	($238,312)		$0.0247	$158,016	$190,099	$4,684	$9,339	$544	($191,662)	($214,987)	5.25%	($959)	($192,621)	6,397,368	31
January-20	Actual	($192,621)		$0.0247	$177,242	$53,455	$5,336	$7,606	$443	($303,024)	($247,822)	4.75%	($997)	($304,021)	7,174,996	31
February-20	Actual	($198,021)	(1)	$0.0247	$177,778	$72,005	$5,336	$17,680	$1,029	($279,749)	($238,885)	4.75%	$4,654	($275,096)	7,197,470	29
March-20	Actual	($125,096)	(1)	$0.0247	$155,281	$54,638	($3,397)	$60,197	$3,504	($165,435)	($145,265)	4.75%	$564	($164,871)	6,286,658	31
April-20	Actual	($164,871)		$0.0247	$112,351	$30,445	$5,336	$27,036	$1,574	($212,832)	($188,852)	4.75%	($735)	($213,567)	4,548,589	30
May-20	Actual	($213,567)		$0.0247	$87,004	$71,762	($1,334)	$10,511	$612	($219,021)	($216,294)	4.75%	($870)	($219,891)	3,522,410	31
June-20	Actual	($219,891)		$0.0247	$60,861	$41,870	$4,002	$6,546	$381	($227,954)	($223,923)	4.75%	($872)	($228,826)	2,463,920	30
July-20	Forecast	($228,826)		$0.0247	$65,835	$58,020	$4,002	$4,350	$253	($228,035)	($228,431)	3.25%	($629)	($228,664)	2,125,963	31
August-20	Forecast	($228,664)		$0.0247	$51,849	$66,401	$4,002	$28,903	$1,226	($179,981)	($204,323)	3.25%	($562)	($180,544)	2,099,142	31
September-20	Forecast	($180,544)		$0.0247	$52,996	$80,013	$4,002	$31,769	$1,207	($116,548)	($148,546)	3.25%	($396)	($116,944)	2,145,572	30
October-20	Forecast	($116,944)		$0.0247	$65,953	$82,518	$4,002	$34,968	$1,194	($60,216)	($88,580)	3.25%	($244)	($60,459)	2,670,168	31
November-20	Forecast	($60,459)		$0.0325	$138,874	$90,898	$4,002	$33,976	$1,053	($69,404)	($64,932)	3.25%	($173)	($69,577)	4,273,046	30
December-20	Forecast	($69,577)		$0.0325	$191,330	$105,155	$4,002	$34,097	$968	($116,685)	($93,131)	3.25%	($256)	($116,941)	5,887,088	31
January-21	Forecast	($116,941)		$0.0325	$232,929	$57,210	$6,555	$11,069	$1,691	($273,345)	($195,143)	3.25%	($539)	($273,884)	7,167,043	31
February-21	Forecast	($273,884)		$0.0325	$248,358	$57,210	$6,555	$18,172	$1,666	($438,639)	($356,262)	3.25%	($888)	($439,528)	7,641,797	28
March-21	Forecast	($439,528)		$0.0325	$225,235	$85,815	$6,555	$22,348	$1,707	($548,338)	($493,933)	3.25%	($1,363)	($549,701)	6,930,321	31
April-21	Forecast	($549,701)		$0.0325	$164,566	$100,117	$6,555	$26,723	$1,750	($579,122)	($564,412)	3.25%	($1,508)	($580,630)	5,063,577	30
May-21	Forecast	($580,630)		$0.0325	$115,374	$57,210	$6,555	$28,321	$1,854	($602,063)	($591,346)	3.25%	($1,632)	($603,695)	3,549,981	31
June-21	Forecast	($603,695)		$0.0325	$80,188	$71,512	$6,555	$52,018	$1,987	($551,811)	($577,753)	3.25%	($1,543)	($553,354)	2,467,336	30
July-21	Forecast	($553,354)		$0.0325	$70,840	$100,117	$6,555	$59,671	$2,104	($455,747)	($504,551)	3.25%	($1,393)	($457,140)	2,179,685	31
August-21	Forecast	($457,140)		$0.0325	$72,143	$157,327	$6,555	$32,989	$2,160	($330,251)	($393,695)	3.25%	($1,087)	($331,338)	2,219,780	31
September-21	Forecast	($331,338)		$0.0325	$73,543	$171,629	$6,555	$65,241	$2,136	($159,320)	($245,329)	3.25%	($655)	($159,975)	2,262,857	30
October-21	Forecast	($159,975)		$0.0325	$91,136	$185,932	$6,555	$45,959	$2,106	($10,558)	($85,267)	3.25%	($235)	($10,794)	2,804,200	31
Nov 20 thru Oct 21 Totals					$1,704,516	$1,240,133	$73,557	$430,584	$21,181						52,446,710	

Forecast therm Sales from Company Forecast as seen in Attachment 2 to Schedule 10 B, Page 2 of 3, filed on September 17, 2019 in the Cost of Gas Docket. Does not include Special Contracts.
Actual Performance Incentives includes reconciliations from prior year(s).
(1) Reflects corrction and transfer to On Bill Financing plus associated interest.

Northern Utilities, Inc.
Calculation of Lost Revenue Rate (LRR)

Line	Sector		Effective November 1, 2020	Reference
	Residential Classes- R5, R6, R10, R11			
1	Sector Ending Balance-October 31	$	98,805	Page 2, Ln 2
2	Lost Distribution Revenue-November through October		344,524	Page 2, Ln 4, Total
3	Interest- November through October		(850)	Page 2, Ln 17, Total
4	**Total to be recovered**	**$**	**442,479**	Line 1 + Line 2 + Line 3
5	Sector Sales - Therms- November through October		20,133,234	Page 2, Line 7
6	**Lost Revenue Rate ($ per therm)**		**$0.0220**	Line 4 / Line 5
	Commercial & Industrial Classes-G40/T40, G50/T50, G41/T41, G51/T51, G42/T42, G-52/T52			
7	Sector Ending Balance-October 31		(5,831)	Page 2, Ln 21
8	Lost Distribution Revenue-November through October	$	162,437	Page 2, Ln 24, Total
9	Interest- November through October	$	(388)	Page 2, Ln 37, Total
10	**Total to be recovered**	**$**	**156,217**	Line 7 + Line 8 + Line 9
11	Sector Sales - Therms- November through October		52,446,710	Page 2, Line 27
12	**Lost Revenue Rate ($ per therm)**		**$0.0030**	Line 10 / Line 11

Northern Utilities, Inc.
Lost Revenue Reconciliation
2020

Line	Sector / Description	Unit	Actual Nov-19	Actual Dec-19	Estimate Jan-20	Estimate Feb-20	Estimate Mar-20	Estimate Apr-20	Estimate May-20	Estimate Jun-20	Estimate Jul-20	Estimate Aug-20	Estimate Sep-20	Estimate Oct-20	Total
1	**RESIDENTIAL**														
2	**Beginning Balance - (Over)/Under**	$'s	$ 51,276	$ 58,859	$ 47,805	$ 33,086	$ 18,072	$ 8,767	$ 9,173	$ 13,589	$ 27,557	$ 44,192	$ 62,340	$ 80,938	
3	**COSTS**														
4	Lost Distribution Revenue	**$'s**	$ 20,120	$ 20,120	$ 20,348	$ 20,726	$ 21,180	$ 21,709	$ 19,640	$ 20,442	$ 21,310	$ 21,777	$ 22,712	$ 23,380	**$ 253,465**
5															
6	**REVENUE**														
7	Sector Sales	Therms	1,373,589	2,755,471	3,086,303	3,143,380	2,678,854	1,871,517	1,339,252	574,945	418,712	331,195	377,676	505,288	18,456,181
8	Lost Revenue Rate	$/Therm	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	$0.0114	
9	Revenue	**$'s**	$ 12,774	$ 31,411	$ 35,229	$ 35,836	$ 30,539	$ 21,338	$ 15,270	$ 6,554	$ 4,773	$ 3,776	$ 4,306	$ 5,760	**$ 207,566**
10															
11	(Over)/Under-Recovery (Exc interest)		$ 58,622	$ 47,568	$ 32,924	$ 17,976	$ 8,713	$ 9,138	$ 13,543	$ 27,477	$ 44,093	$ 62,194	$ 80,747	$ 98,558	
12															
13	**INTEREST**														
14	Average Monthly Balance		$ 54,949	$ 53,213	$ 40,364	$ 25,531	$ 13,393	$ 8,952	$ 11,358	$ 20,533	$ 35,825	$ 53,193	$ 71,544	$ 89,748	
15	Interest Rate-WSJ Prime Rate	Annual %	5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	
16	Days per Month		30	31	31	29	31	30	31	30	31	31	30	31	366
17	Computed Interest	$'s	$ 237	$ 237	$ 162	$ 96	$ 54	$ 35	$ 46	$ 80	$ 99	$ 146	$ 191	$ 247	$ 1,630
18															
19	**Ending Balance**	**$'s**	$ 58,859	$ 47,805	$ 33,086	$ 18,072	$ 8,767	$ 9,173	$ 13,589	$ 27,557	$ 44,192	$ 62,340	$ 80,938	$ 98,805	
20	**COMMERCIAL & INDUSTRIAL**														
21	**Beginning Balance - (Over)/Under**	**$'s**	$ (27,418)	$ (24,343)	$ (25,195)	$ (27,303)	$ (29,281)	$ (29,268)	$ (25,626)	$ (24,861)	$ (21,939)	$ (18,150)	$ (13,999)	$ (9,598)	
22															
23	**COSTS**														
24	Lost Distribution Revenue	**$'s**	$ 11,295	$ 11,413	$ 11,624	$ 11,804	$ 12,075	$ 12,391	$ 7,558	$ 7,694	$ 7,884	$ 8,183	$ 8,509	$ 8,862	**$ 119,293**
25															
26	**REVENUE**														
27	Sector Sales	Therms	4,571,040	6,397,368	7,174,996	7,197,471	6,286,658	4,548,589	3,522,410	2,463,920	2,125,963	2,099,142	2,145,572	2,670,168	51,203,298
28	Lost Revenue Rate	$/Therm	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	$0.0019	
29	Revenue	**$'s**	$ 8,108	$ 12,155	$ 13,627	$ 13,675	$ 11,945	$ 8,643	$ 6,692	$ 4,682	$ 4,039	$ 3,988	$ 4,077	$ 5,073	**$ 96,704**
30															
31	(Over)/Under-Recovery (Exc interest)	$'s	$ (24,231)	$ (25,084)	$ (27,198)	$ (29,175)	$ (29,151)	$ (25,519)	$ (24,760)	$ (21,849)	$ (18,095)	$ (13,955)	$ (9,567)	$ (5,810)	
32															
33	**INTEREST**														
34	Average Monthly Balance		$ (25,825)	$ (24,714)	$ (26,196)	$ (28,239)	$ (29,216)	$ (27,394)	$ (25,193)	$ (23,355)	$ (20,017)	$ (16,052)	$ (11,783)	$ (7,704)	
35	Interest Rate-WSJ Prime Rate	Annual %	5.25%	5.25%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	
36	Days per Month		30	31	31	29	31	30	31	30	31	31	30	31	366
37	Computed Interest	$'s	$ (111)	$ (110)	$ (105)	$ (106)	$ (118)	$ (107)	$ (101)	$ (91)	$ (55)	$ (44)	$ (31)	$ (21)	$ (1,002)
38															
39	**Ending Balance**	**$'s**	$ (24,343)	$ (25,195)	$ (27,303)	$ (29,281)	$ (29,268)	$ (25,626)	$ (24,861)	$ (21,939)	$ (18,150)	$ (13,999)	$ (9,598)	$ (5,831)	

NOTES:
Line 1: DE 17-136 2019 Annual Report
Line 4: Page 3, Line 7
Line 21: DE 17-136 2019 Annual Report
Line 24: Page 3, Line 11

Northern Utilities, Inc.
Lost Revenue Reconciliation
2021

Line	Sector / Description	Unit	Estimate Nov-20	Estimate Dec-20	Estimate Jan-21	Estimate Feb-21	Estimate Mar-21	Estimate Apr-21	Estimate May-21	Estimate Jun-21	Estimate Jul-21	Estimate Aug-21	Estimate Sep-21	Estimate Oct-21	Total
1	**RESIDENTIAL**														
2	**Beginning Balance - (Over)/Under**	$'s	$ 98,805	$ 93,400	$ 60,767	$ 14,588	$ (39,942)	$ (80,803)	$ (98,360)	$ (98,527)	$ (84,693)	$ (64,811)	$ (42,951)	$ (20,662)	
3	**COSTS**														
4	Lost Distribution Revenue	**$'s**	$ 27,078	$ 27,683	$ 27,963	$ 28,432	$ 28,993	$ 29,649	$ 26,764	$ 27,757	$ 28,832	$ 29,410	$ 30,568	$ 31,395	$344,524
5															
6	**REVENUE**														
7	Sector Sales	Therms	1,488,092	2,751,261	3,374,845	3,769,530	3,167,624	2,134,862	1,211,836	621,702	397,455	336,440	372,462	507,126	20,133,234
8	Lost Revenue Rate	$/Therm	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	$0.0220	
9	Revenue	**$'s**	$ 32,738	$ 60,528	$ 74,247	$ 82,930	$ 69,688	$ 46,967	$ 26,660	$ 13,677	$ 8,744	$ 7,402	$ 8,194	$ 11,157	442,931
10															
11	(Over)/Under-Recovery (Exc interest)	**$**	$ 93,144	$ 60,555	$ 14,484	$ (39,910)	$ (80,636)	$ (98,121)	$ (98,256)	$ (84,448)	$ (64,605)	$ (42,802)	$ (20,577)	$ (423)	
12															
13	**INTEREST**														
14	Average Monthly Balance		$ 95,975	$ 76,978	$ 37,625	$ (12,661)	$ (60,289)	$ (89,462)	$ (98,308)	$ (91,488)	$ (74,649)	$ (53,807)	$ (31,764)	$ (10,543)	
15	Interest Rate-WSJ Prime Rate	Annual %	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
16	Days per Month		30	31	31	28	31	30	31	30	31	31	30	31	365
17	Computed Interest	$'s	$ 256	$ 212	$ 104	$ (32)	$ (166)	$ (239)	$ (271)	$ (244)	$ (206)	$ (149)	$ (85)	$ (29)	$ (850)
18															
19	**Ending Balance**	**$'s**	$ 93,400	$ 60,767	$ 14,588	$ (39,942)	$ (80,803)	$ (98,360)	$ (98,527)	$ (84,693)	$ (64,811)	$ (42,951)	$ (20,662)	$ (452)	
20	**COMMERCIAL & INDUSTRIAL**														
21	**Beginning Balance - (Over)/Under**	**$'s**	$ (5,831)	$ (3,380)	$ (5,094)	$ (10,471)	$ (17,100)	$ (21,336)	$ (19,648)	$ (20,061)	$ (17,081)	$ (13,036)	$ (8,793)	$ (4,332)	
22															
23	**COSTS**														
24	Lost Distribution Revenue	**$'s**	$ 15,282	$ 15,960	$ 16,145	$ 16,331	$ 16,609	$ 16,933	$ 10,292	$ 10,431	$ 10,626	$ 10,933	$ 11,267	$ 11,629	162,437
25															
26	**REVENUE**														
27	Sector Sales	Therms	4,273,046	5,887,088	7,167,043	7,641,797	6,930,321	5,063,577	3,549,981	2,467,336	2,179,685	2,219,780	2,262,857	2,804,200	52,446,710
28	Lost Revenue Rate	$/Therm	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	$0.0030	
29	Revenue	**$'s**	$ 12,819	$ 17,661	$ 21,501	$ 22,925	$ 20,791	$ 15,191	$ 10,650	$ 7,402	$ 6,539	$ 6,659	$ 6,789	$ 8,413	157,340
30															
31	(Over)/Under-Recovery (Exc interest)	$'s	$ (3,368)	$ (5,082)	$ (10,450)	$ (17,066)	$ (21,283)	$ (19,593)	$ (20,006)	$ (17,032)	$ (12,994)	$ (8,763)	$ (4,314)	$ (1,115)	
32															
33	**INTEREST**														
34	Average Monthly Balance		$ (4,600)	$ (4,231)	$ (7,772)	$ (13,768)	$ (19,191)	$ (20,464)	$ (19,827)	$ (18,546)	$ (15,038)	$ (10,899)	$ (6,554)	$ (2,724)	
35	Interest Rate-WSJ Prime Rate	Annual %	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
36	Days per Month		30	31	31	28	31	30	31	30	31	31	30	31	365
37	Computed Interest	$'s	$ (12)	$ (12)	$ (21)	$ (34)	$ (53)	$ (55)	$ (55)	$ (50)	$ (42)	$ (30)	$ (18)	$ (8)	$ (388)
38															
39	**Ending Balance**	**$'s**	$ (3,380)	$ (5,094)	$ (10,471)	$ (17,100)	$ (21,336)	$ (19,648)	$ (20,061)	$ (17,081)	$ (13,036)	$ (8,793)	$ (4,332)	$ (1,123)	

NOTES:

Line 1: Page 2, Line 19
Line 4: Page 3a, Line 7
Line 21: Page 2, Line 39
Line 24: Page 3a, Line 11

Northern Utilities
Monthly and Cumulative Savings (Therms) and Lost Base Revenue
November 1, 2019 to October 31, 2020

Line	Description	10/31/2019	Actual Nov-19	Actual Dec-19	Estimate Jan-20	Estimate Feb-20	Estimate Mar-20	Estimate Apr-20	Estimate May-20	Estimate Jun-20	Estimate Jul-20	Estimate Aug-20	Estimate Sep-20	Estimate Oct-20	Period Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annualized Savings	349,140	-	-	3,936	6,560	7,872	9,184	9,184	15,745	17,057	9,184	18,369	13,121	110,213
2	C&I Annualized Savings	616,273	65,423	7,159	10,876	10,876	16,314	19,033	10,876	13,595	19,033	29,910	32,629	35,348	271,073
3	Total		65,423	7,159	14,812	17,437	24,187	28,218	20,061	29,340	36,090	39,094	50,998	48,468	381,286
			Nov-19	**Dec-19**	**Jan-20**	**Feb-20**	**Mar-20**	**Apr-20**	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Sep-20**	**Oct-20**	**Period LBR**
4	Monthly Residential Savings		-	-	328	547	656	765	765	1,312	1,421	765	1,531	1,093	9,184
5	Cumulative Residential Savings	29,095	29,095	29,095	29,423	29,970	30,626	31,391	32,156	33,468	34,890	35,655	37,186	38,279	391,235
6	Average Residential Distribution Rate		0.6915	0.6915	0.6916	0.6916	0.6916	0.6916	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	
7	Lost Residential Revenue		$ 20,120	$ 20,120	$ 20,348	$ 20,726	$ 21,180	$ 21,709	$ 19,640	$ 20,442	$ 21,310	$ 21,777	$ 22,712	$ 23,380	$ 253,465
8	Monthly C&I Savings		5,452	597	906	906	1,360	1,586	906	1,133	1,586	2,492	2,719	2,946	22,589
9	Cumulative C&I Savings	51,356	56,808	57,405	58,311	59,217	60,577	62,163	63,069	64,202	65,788	68,281	71,000	73,946	760,767
10	Average C&I Distribution Rate		0.1988	0.1988	0.1993	0.1993	0.1993	0.1993	0.1198	0.1198	0.1198	0.1198	0.1198	0.1198	
11	Lost C&I Revenue		$ 11,295	$ 11,413	$ 11,624	$ 11,804	$ 12,075	$ 12,391	$ 7,558	$ 7,694	$ 7,884	$ 8,183	$ 8,509	$ 8,862	$ 119,293
12	**Total Lost Revenue**		**$ 31,414**	**$ 31,533**	**$ 31,972**	**$ 32,530**	**$ 33,255**	**$ 34,100**	**$ 27,199**	**$ 28,136**	**$ 29,194**	**$ 29,960**	**$ 31,221**	**$ 32,242**	**372,758**

Line 1: Page 4, Line 15
Line 1: Page 4, Line 21
Line 3: Line 1 + Line 2
Line 4: Line 1 / 12
Line 5: Prior Month Line 5 + Current Month Line 4
Line 6: Page 5, Line 30, Col. 3; Page 5, Line 30, Col. 3
Line 7: Line 5 x Line 6
Line 8: Line 2 / 12
Line 9: Prior Month Line 9 + Current Month Line 8
Line 10: Page 5, Line 37, Col. 3; Page 5, Line 52, Col. 3
Line 11: Line 9 x Line 10
Line 12: Line 7 + Line 11

Northern Utilities
Monthly and Cumulative Savings (Therms) and Lost Base Revenue
November 1, 2020 to October 31, 2021

Line	Description	10/31/2020	Estimate Nov-20	Estimate Dec-20	Estimate Jan-21	Estimate Feb-21	Estimate Mar-21	Estimate Apr-21	Estimate May-21	Estimate Jun-21	Estimate Jul-21	Estimate Aug-21	Estimate Sep-21	Estimate Oct-21	Period Annual Savings
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N	Col. O
1	Residential Annualized Savings	459,352	10,496	10,496	4,874	8,124	9,748	11,373	11,373	19,497	21,121	11,373	22,746	16,247	157,469
2	C&I Annualized Savings	887,347	32,629	40,786	11,161	11,161	16,742	19,532	11,161	13,952	19,532	30,693	33,484	36,274	277,107
3	Total		43,125	51,282	16,035	19,285	26,490	30,905	22,534	33,448	40,653	42,066	56,230	52,521	434,576

Line	Description		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Period LBR
4	Monthly Residential Savings		875	875	406	677	812	948	948	1,625	1,760	948	1,895	1,354	13,122
5	Cumulative Residential Savings	38,279	39,154	40,029	40,435	41,112	41,924	42,872	43,820	45,444	47,205	48,152	50,048	51,402	531,597
6	Average Residential Distribution Rate		0.6916	0.6916	0.6916	0.6916	0.6916	0.6916	0.6108	0.6108	0.6108	0.6108	0.6108	0.6108	
7	Lost Residential Revenue		$ 27,078	$ 27,683	$ 27,963	$ 28,432	$ 28,993	$ 29,649	$ 26,764	$ 27,757	$ 28,832	$ 29,410	$ 30,568	$ 31,395	$ 344,524
8	Monthly C&I Savings		2,719	3,399	930	930	1,395	1,628	930	1,163	1,628	2,558	2,790	3,023	23,092
9	Cumulative C&I Savings	73,946	76,665	80,063	80,994	81,924	83,319	84,946	85,877	87,039	88,667	91,225	94,015	97,038	1,031,771
10	Average C&I Distribution Rate		0.1993	0.1993	0.1993	0.1993	0.1993	0.1993	0.1198	0.1198	0.1198	0.1198	0.1198	0.1198	
11	Lost C&I Revenue		$ 15,282	$ 15,960	$ 16,145	$ 16,331	$ 16,609	$ 16,933	$ 10,292	$ 10,431	$ 10,626	$ 10,933	$ 11,267	$ 11,629	$ 162,437
12	**Total Lost Revenue**		**$ 42,360**	**$ 43,642**	**$ 44,109**	**$ 44,762**	**$ 45,602**	**$ 46,582**	**$ 37,056**	**$ 38,188**	**$ 39,458**	**$ 40,343**	**$ 41,835**	**$ 43,024**	**506,960**

Line 1: Page 4, Line 15
Line 1: Page 4, Line 21
Line 3: Line 1 + Line 2
Line 4: Line 1 / 12
Line 5: Prior Month Line 5 + Current Month Line 4
Line 6: Page 5, Line 30, Col. 3; Page 5, Line 30, Col. 3
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Line 9: Prior Month Line 9 + Current Month Line 8
Line 10: Page 5, Line 37, Col. 3; Page 5, Line 52, Col. 3
Line 11: Line 9 x Line 10
Line 12: Line 7 + Line 11

Northern Utilities, Inc.
Gas Savings for LRR Calculation

Planned Gas Savings - 2020	Annual Therms
1. Residential Programs	
2. Home Energy Assistance	21,368
3. EnergyStar Homes	15,065
4. Home Performance w/EnergyStar	17,165
5. EnergyStar Products	58,268
6. Residential Behavior	19,340
7. Residential	131,206
8.	
9. Commercial & Industrial Programs	
10. Large Business Energy Solutions	190,942
11. Small Business Energy Solutions	80,964
12. Education (Gas)	-
13. Commercial & Industrial	271,906

LBR Savings Allocation	Unit	Actual Nov-19	Actual Dec-19	Estimate Jan-20	Estimate Feb-20	Estimate Mar-20	Estimate Apr-20	Estimate May-20	Estimate Jun-20	Estimate Jul-20	Estimate Aug-20	Estimate Sep-20	Estimate Oct-20	Estimate Nov-20	Estimate Dec-20	Nov-19 to Oct-20 Total	Jan-20 to Dec-20 Total
14. Residential Programs				3.0%	5.0%	6.0%	7.0%	7.0%	12.0%	13.0%	7.0%	14.0%	10.0%	8.0%	8.0%		100.0%
15. Annualized Therms	Therms	0	0	3,936	6,560	7,872	9,184	9,184	15,745	17,057	9,184	18,369	13,121	10,496	10,496	110,213	131,206
16.																	
17. Monthly Incremental	Therms	0	0	328	547	656	765	765	1,312	1,421	765	1,531	1,093	875	875	9,184	10,934
18. Monthly Cumulative	Therms	29,095	29,095	29,423	29,970	30,626	31,391	32,156	33,468	34,890	35,655	37,186	38,279	39,154	40,029	391,235	412,228
19.																	
20. Commercial & Industrial Programs				4.0%	4.0%	6.0%	7.0%	4.0%	5.0%	7.0%	11.0%	12.0%	13.0%	12.0%	15.0%		100.0%
21. Annualized Therms	Therms	65,423	7,159	10,876	10,876	16,314	19,033	10,876	13,595	19,033	29,910	32,629	35,348	32,629	40,786	271,073	271,906
22.																	
23. Monthly Incremental	Therms	5,452	597	906	906	1,360	1,586	906	1,133	1,586	2,492	2,719	2,946	2,719	3,399	22,589	22,659
24. Monthly Cumulative	Therms	56,808	57,405	58,311	59,217	60,577	62,163	63,069	64,202	65,788	68,281	71,000	73,946	76,665	80,063	760,767	803,281

Northern Utilities, Inc.
Gas Savings for LRR Calculation

Planned Gas Savings - 2021	Annual Therms
1. Residential Programs	
2. Home Energy Assistance	24,422
3. EnergyStar Homes	27,485
4. Home Performance w/EnergyStar	14,078
5. EnergyStar Products	64,270
6. Residential Behavior	32,216
7. Residential	162,471
8.	
9. Commercial & Industrial Programs	
10. Large Business Energy Solutions	196,132
11. Small Business Energy Solutions	82,898
12. Education (Gas)	-
13. Commercial & Industrial	279,030

LBR Savings Allocation	Unit	Estimate Nov-20	Estimate Dec-20	Estimate Jan-21	Estimate Feb-21	Estimate Mar-21	Estimate Apr-21	Estimate May-21	Estimate Jun-21	Estimate Jul-21	Estimate Aug-21	Estimate Sep-21	Estimate Oct-21	Estimate Nov-21	Estimate Dec-21	Nov-20 to Oct-21 Total	Jan-21 to Dec-21 Total
14. Residential Programs		8.0%	8.0%	3.0%	5.0%	6.0%	7.0%	7.0%	12.0%	13.0%	7.0%	14.0%	10.0%	8.0%	8.0%		100.0%
15. Annualized Therms	Therms	10,496	10,496	4,874	8,124	9,748	11,373	11,373	19,497	21,121	11,373	22,746	16,247	12,998	12,998	157,469	162,471
16.																	
17. Monthly Incremental	Therms	875	875	406	677	812	948	948	1,625	1,760	948	1,895	1,354	1,083	1,083	13,122	13,539
18. Monthly Cumulative	Therms	39,154	40,029	40,435	41,112	41,924	42,872	43,820	45,444	47,205	48,152	50,048	51,402	52,485	53,568	531,597	558,467
19.																	
20. Commercial & Industrial Programs		12.0%	15.0%	4.0%	4.0%	6.0%	7.0%	4.0%	5.0%	7.0%	11.0%	12.0%	13.0%	12.0%	15.0%		100.0%
21. Annualized Therms	Therms	32,629	40,786	11,161	11,161	16,742	19,532	11,161	13,952	19,532	30,693	33,484	36,274	33,484	41,855	277,107	279,030
22.																	
23. Monthly Incremental	Therms	2,719	3,399	930	930	1,395	1,628	930	1,163	1,628	2,558	2,790	3,023	2,790	3,488	23,092	23,253
24. Monthly Cumulative	Therms	76,665	80,063	80,994	81,924	83,319	84,946	85,877	87,039	88,667	91,225	94,015	97,038	99,828	103,316	1,031,771	1,078,186

Northern Utilities, Inc.

Summary of Average Distribution Rate for Lost Revenue

Calculation of Average Distribution Rate for Lost Revenue (Detail)

	(1) Number of Customers	(2) Customer Charge	(3)=(1)X(2) Calculated Customer Charge	(4) Billing Determinants - Winter First Therms	Excess Therms	(5) Winter Distribution Rates First Therms $/thm	Excess Therms $/thm	(6) = (4) X (5) Winter Distribution Revenue	(7) Billing Determinants - Summer First Therms	Excess Therms	(8) Summer Distribution Rates First Therms $/thm	Excess Therms $/thm	(9) = (7) X (8) Summer Distribution Revenue
R-5 Residential, Heating	298,631	$22.20	$6,629,608	6,478,926	9,001,237	$ 0.6920	$ 0.6920	$10,712,273	2,834,361	443,163	$ 0.6099	$ 0.6099	$1,998,962
R-10 Residential Heating, Low Income	8,632	$8.88	$76,652	220,721	233,658	$ 0.6920	$ 0.6920	$314,430	76,929	10,603	$ 0.6099	$ 0.6099	$53,386
R-6 Residential, Non-Heating	15,334	$22.20	$340,415	52,030	102,959	$ 0.6470	$ 0.6470	$100,278	50,338	31,354	$ 0.6470	$ 0.6470	$52,855
Total Residential Service	322,597		$7,046,675	6,751,677	9,337,854			$11,126,981	2,961,628	485,120			$2,105,202
G-40 Low Annual, High Winter Use	60,426	$75.09	$4,537,388	1,992,261	7,546,425	$ 0.1865	$ 0.1865	$1,778,965	764,224	873,989	$ 0.1865	$ 0.1865	$305,527
G-50 Low Annual, Low Winter Use	9,931	$75.09	$745,719	222,671	971,369	$ 0.1865	$ 0.1865	$222,688	215,924	504,561	$ 0.1865	$ 0.1865	$134,370
G-41 Medium Annual, High Winter Use	8,238	$222.64	$1,834,108	11,812,715		$ 0.2425		$2,864,583	2,550,957		$ 0.1895		$483,406
G-51 Medium Annual, Low Winter Use	3,357	$222.64	$747,402	1,848,039	1,299,553	$ 0.1712	$ 0.1399	$498,192	1,394,554	800,973	$ 0.1337	$ 0.1087	$273,518
G-42 High Annual, High Winter Use	377	$1,335.81	$503,600	4,461,198		$ 0.1984		$885,102	1,555,205		$ 0.1206		$187,558
G-52 High Annual, Low Winter Use	395	$1,335.81	$527,645	8,729,046		$ 0.1720		$1,501,396	8,525,494		$ 0.0792		$675,219
Total General Service	82,724		$8,895,863	29,065,930	9,817,347			$7,750,926	15,006,358	2,179,523			$2,059,598
Total Company	405,321		$15,942,538	35,817,607	19,155,201			$18,877,907	17,967,986	2,664,643			$4,164,800

Notes:
Column (1),Column (4) and Column (7): 2018 actual billing determinants.
Column (2), Column (5) and Column (8): Winter and Summer distribution rates effective May 1, 2019.

R-11 Rate Class is closed May 1, 2017. R-11 Rate Class Customers migrated to R-6 Rate Class.

Calculation of Average Distribution Rate for Lost Revenue Winter and Summer (Summary)

	(10)=(3) Total Calculated Customer Revenue	(11) = (6) + (9) Total Volumetric Revenue	12=(10+(11) Total Distribution Revenue	(13)=(4)+(7) Total Annual Therms
R-5	$6,629,608	$12,711,235	$19,340,843	18,757,687
R-10	$76,652	$367,816	$444,468	541,911
R-6	$340,415	$153,133	$493,547	236,681
Total Residential Service	$7,046,675	$13,232,183	$20,278,858	19,536,279
G-40	$4,537,388	$2,084,492	$6,621,880	11,176,899
G-50	$745,719	$357,059	$1,102,778	1,914,525
G-41	$1,834,108	$3,347,990	$5,182,098	14,363,672
G-51	$747,402	$771,709	$1,519,112	5,343,119
G-42	$503,600	$1,072,659	$1,576,260	6,016,403
G-52	$527,645	$2,176,615	$2,704,260	17,254,540
Total General Service	$8,895,863	$9,810,524	$18,706,387	56,069,158
Total Company	$15,942,538	**$23,042,707**	$38,985,246	**75,605,437**

Based on Actual Billing Determinants for 2019 at Current Distribution Rates- Winter

	(1) Total Volumetric Revenue	(2) Total Winter therms	(3)=(1)X(2) Average Distribution Rate $/therm
R-5	$10,712,273	15,480,163	$0.6920
R-10	$314,430	454,379	$0.6920
R-6	$100,278	154,989	$0.6470
Total Residential Service	$11,126,981	16,089,531	**$0.6916**
G-40	$1,778,965	9,538,686	$0.1865
G-50	$222,688	1,194,040	$0.1865
G-41	$2,864,583	11,812,715	$0.2425
G-51	$498,192	3,147,592	$0.1583
G-42	$885,102	4,461,198	$0.1984
G-52	$1,501,396	8,729,046	$0.1720
Total General Service	$7,750,926	38,883,277	**$0.1993**

Based on Actual Billing Determinants for 2019 at Current Distribution Rates- Summer

	(1) Total Volumetric Revenue	(2) Total Summer therms	(3)=(1)X(2) Average Distribution Rate $/therm
R-5	$1,998,962	3,277,524	$0.6099
R-10	$53,386	87,532	$0.6099
R-6	$52,855	81,692	$0.6470
Total Residential Service	$2,105,202	3,446,748	**$0.6108**
G-40	$305,527	1,638,213	$0.1865
G-50	$134,370	720,485	$0.1865
G-41	$483,406	2,550,957	$0.1895
G-51	$273,518	2,195,527	$0.1246
G-42	$187,558	1,555,205	$0.1206
G-52	$675,219	8,525,494	$0.0792
Total General Service	$2,059,598	17,185,881	**$0.1198**
Total	**$ 23,042,707**	**75,605,437**	

CALCULATION OF ENVIRONMENTAL RESPONSE COST RATE

November 1, 2020 through October 31, 2021

Total ERC Costs for the Period	$421,540	(See 2020 ERC Invoice Filing, Schedule 1)
RPC/RCE Ending Balance (1)	($3,011)	
Less Current (Over)/Under Collection (Estimated)	$25,122	(See page 2 of 2)
Total ERC Cost to be Recovered	$443,652	
Forcasted Firm Sales & Firm Transportation Volumes (Attachment 2 to Schedule 10B, Page 2 of 3, "Total Division" subtract "Special Contracts").	72,579,945	
ERC Recovery Rate	**$0.0061**	

(1) In DG 17-070 the Company proposed to include any over or under recovery of the Rate Case Expense (RCE) and Recoupment of the difference between Temporary and Permanent Rates (RPC) in the ERC.

Northern Utilities, Inc. - New Hampshire Division
Environmental Response Cost 12 Month Reconciliation

Month	Actual or Forecast	Beginning Balance (Over)/Under	Revenue	Prior Period ERC Costs To be recovered	Ending Balance (Over)/Under
November-'19	Actual	($13,198)	$34,075	$435,575	$388,302
December	Actual	$388,302	$52,173		$336,129
January- '20	Actual	$336,129	$58,492		$277,637
February	Actual	$277,637	$58,945		$218,692
March	Actual	$218,692	$51,106		$167,586
April	Actual	$167,586	$36,598		$130,988
May	Actual	$130,988	$27,710		$103,278
June	Actual	$103,278	$17,331		$85,947
July	Actual	$85,947	$14,489		$71,458
August	Est.	$71,458	$13,853		$57,605
September	Est.	$57,605	$14,383		$43,223
October	Est.	$43,223	$18,100		$25,122

NORTHERN UTILITIES, INC.- NEW HAMPSHIRE DIVISION
REMEDIATION ADJUSTMENT CLAUSE COMPLIANCE FILING
2019-2020 ENVIRONMENTAL RESPONSE COSTS
SITE SPECIFIC EXPENSES

Line	Description	Total	11/11 - 10/12	11/12 - 10/13	11/13 - 10/14	11/14-10/15	11/15-10/16	11/16-10/17	11/17-10/18	11/18-10/19	11/19-10/20	11/20-10/21	11/21-10/22	11/22-10/23	11/23-10/24	11/24-10/25	11/25-10/26	11/26-10/27
	ENVIRONMENTAL RESPONSE COST (ERC)																	
1	July 10 - June 11 Expenses Amortization (1/7)	$ 121,209	$ 17,316	$ 17,316	$ 17,316	$ 17,316	$ 17,316	$ 17,316	$ 17,316									
2	July 11 - June 12 Expenses Amortization (1/7)	$ 159,020		$ 22,717	$ 22,717	$ 22,717	$ 22,717	$ 22,717	$ 22,717	$ 22,717								
3	July 12 - June 13 Expenses Amortization (1/7)	$ 175,406			$ 25,058	$ 25,058	$ 25,058	$ 25,058	$ 25,058	$ 25,058	$ 25,058							
4	July 13 - June 14 Expenses Amortization (1/7)	$ 40,881				$ 5,840	$ 5,840	$ 5,840	$ 5,840	$ 5,840	$ 5,840	$ 5,840						
5	July 14 - June 15 Expenses Amortization (1/7)	$ 112,198					$ 16,028	$ 16,028	$ 16,028	$ 16,028	$ 16,028	$ 16,028	$ 16,028					
6	July 15 - June 16 Expenses Amortization (1/7)	$ 2,179,885						$ 311,412	$ 311,412	$ 311,412	$ 311,412	$ 311,412	$ 311,412	$ 311,412				
7	July 16 - June 17 Expenses Amortization (1/7)	$ 54,154							$7,736	$7,736	$7,736	$7,736	$7,736	$7,736	$7,736			
8	July 17 - June 18 Expenses Amortization (1/7)	$ 283,143								$40,449	$40,449	$40,449	$40,449	$40,449	$40,449	$40,449		
9	July 18 - June 19 Expenses Amortization (1/7)	$ 203,357									$ 29,051	$ 29,051	$ 29,051	$ 29,051	$ 29,051	$ 29,051	$ 29,051	
10	July 19 - June 20 Expenses Amortization (1/7)	$ 77,165										$ 11,024	$ 11,024	$ 11,024	$ 11,024	$ 11,024	$ 11,024	$ 11,024
11	Subtotal (Line 1 through Line 7)	$ 3,406,418	$ 17,316	$ 40,033	$ 65,091	$ 70,931	$ 86,959	$ 398,371	$ 406,108	$ 429,241	$ 435,575	$ 421,540	$ 415,700	$ 399,672	$ 88,260	$ 80,524	$ 40,074	$ 11,024
12	Add: Excess amortization from prior years (from schedule 5, Line 10)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Less: Excess amortization to be deferred (from schedule 5, Line 9)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Total Environmental Response cost to be recovered (ERC)	$ 3,406,418	$ 17,316	$ 40,033	$ 65,091	$ 70,931	$ 86,959	$ 398,371	$ 406,108	$ 429,241	$ 435,575	$ 421,540	$ 415,700	$ 399,672	$ 88,260	$ 80,524	$ 40,074	$ 11,024
15	July 2010 - June 2011 Unamortized beginning balance		$ 121,209	$ 103,893	$ 86,578	$ 69,262	$ 51,947	$ 34,631	$ 17,316									
16	July 2011 - June 2012 Unamortized beginning balance			$ 159,020	$ 136,303	$ 113,586	$ 90,869	$ 68,151	$ 45,434	$ 22,717								
17	July 2012 - June 2013 Unamortized beginning balance				$ 175,406	$ 150,348	$ 125,290	$ 100,232	$ 75,174	$ 50,116	$ 25,058							
18	July 2013 - June 2014 Unamortized beginning balance					$ 40,881	$ 35,041	$ 29,201	$ 23,361	$ 17,521	$ 11,680	$ 5,840						
19	July 2014 - June 2015 Unamortized beginning balance						$ 112,198	$ 96,170	$ 80,141	$ 64,113	$ 48,085	$ 32,057	$ 16,028					
20	July 2015 - June 2016 Unamortized beginning balance							$ 2,179,885	$ 1,868,473	$ 1,557,061	$ 1,245,649	$ 934,236	$ 622,824	$ 311,412				
21	July 2016 - June 2017 Unamortized beginning balance								$ 54,154	$ 46,418	$ 38,681	$ 30,945	$ 23,209	$ 15,473	$ 7,736			
22	July 2017 - June 2018 Unamortized beginning balance									$ 283,143	$ 242,694	$ 202,245	$ 161,796	$ 121,347	$ 80,898	$ 40,449		
23	July 2018 - June 2019 Unamortized beginning balance										$ 203,357	$ 174,306	$ 145,255	$ 116,204	$ 87,153	$ 58,102	$ 29,051	
24	July 2019 - June 2020 Unamortized beginning balance											$ 77,165	$ 66,141	$ 55,118	$ 44,094	$ 33,071	$ 22,047	$ 11,024
25	Total Unamortized beginning balance		$ 121,209	$ 262,913	$ 398,287	$ 374,077	$ 415,344	$ 2,508,270	$ 2,164,053	$ 2,041,089	$ 1,815,204	$ 1,456,794	$ 1,035,254	$ 619,553	$ 219,881	$ 131,622	$ 51,098	$ 11,024
26	INSURANCE/3RD PARTY EXPENSES (IE) Expenses (from schedule 2)																	
27	INSURANCE/3RD PARTY RECOVERIES (IR)																	

Northern Utilities, Inc.

Schedule 39-FXW
REDACTED

Eliot CNG Cost Detail

Denotes Confidential Material

Month	Vendor Code	Expense
May 2020	[redacted]	
May 2020		
May 2020		
May 2020		
May 2020		
June 2020		
June 2020		
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TOTAL		**286,007.85**