

**New Hampshire Public Utilities Commission
Unitil Energy Systems, Inc.
Docket No. DE 17-136**



**2018-2020 New Hampshire Statewide Energy Efficiency Plan
Hearing Record Requests**

Request No. RR-003:

Please provide the bill impacts to an average Northern Utilities customer as a result of the LDAC change attributable to the proposed EERS programs for 2020.

Response:

Please see RR-003 Attachment 1 for the requested information. Attachment 1, page 1 provides a summary of the LDAC change attributable to the proposed EERS programs for the Winter and Summer 2018-2019 periods vs the Winter and Summer 2019-2020 periods. Attachment 1 pages 2-6 provide detailed bill impacts for the Residential Heat and Residential Non-heat classes and Commercial & Industrial classes, G-40, G-41 and G-51.

Person Responsible: Christopher Goulding

Date: December 19, 2019

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
Summary of EEC/LRR Typical Bill Analysis
2019-2020 Period vs. 2018-2019 Period

Energy Efficiency Charge/Lost Revenue Rate (\$/therm)	<u>2018-2019</u>	<u>2019-2020</u>
Residential	\$0.0573	\$0.0613
Commercial & Industrial	\$0.0278	\$0.0266

<u>Bill per period</u>	<u>Winter</u>	<u>Summer</u>	<u>Winter</u>	<u>Summer</u>
Residential Heat - R-5	\$1,113.09	\$263.95	\$979.28	\$258.96
Residential Non-Heat - R-6	\$319.18	\$195.07	\$296.37	\$193.55
G-40 Commercial & Industrial	\$2,324.18	\$620.73	\$1,921.53	\$608.07
G-41 Commercial & Industrial	\$20,127.28	\$3,553.34	\$16,228.95	\$3,413.49
G-51 Commercial & Industrial	\$10,592.63	\$4,563.19	\$8,319.51	\$4,420.48

Change from prior period - \$ per period

Residential Heat - R-5		\$2.51	\$0.53
Residential Non-Heat - R-6		\$0.50	\$0.24
G-40 Commercial & Industrial		-\$2.13	-\$0.35
G-41 Commercial & Industrial		-\$20.16	-\$4.64
G-51 Commercial & Industrial		-\$12.06	-\$9.06

Change from prior period - %

Residential Heat - R-5		0.23%	0.20%
Residential Non-Heat - R-6		0.16%	0.12%
G-40 Commercial & Industrial		-0.09%	-0.06%
G-41 Commercial & Industrial		-0.10%	-0.13%
G-51 Commercial & Industrial		-0.11%	-0.20%

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION

Typical Residential Heating Bill - 759 therms/year Comparison of 2019-2020 Period vs. 2018-2019 Period

			Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
			57	99	134	149	109	79	627	46	22	15	12	13	23	131	759
1	Typical Usage: therms (*)																
2																	
3	Winter 2019 - 2020																
4	Customer Charge	units @	\$ 22.20						\$133.20								
5	First	50 units @	\$0.6920						\$207.60								
6	Over	50 units @	\$0.6920						\$226.51								
7	COG 1		\$0.5861						\$33.53								
8	COG 2		\$0.5861	\$58.09					\$58.09								
9	COG 3		\$0.5861		\$78.50				\$78.50								
10	COG 4		\$0.5861			\$87.42			\$87.42								
11	COG 5		\$0.5861				\$64.07		\$64.07								
12	COG 6		\$0.5861					\$46.08	\$46.08								
13	LDAC less SBC		\$0.0093	\$0.53	\$0.92	\$1.25	\$1.39	\$1.02	\$0.73								
14	EECLRR		\$0.0613	\$3.51	\$6.08	\$8.21	\$9.14	\$6.70	\$4.82								
15	Summer 2020																
16	Customer Charge	units @	\$ 22.20						\$133.20								
17	First	50 units @	\$0.6099						\$80.12								
18	Over	50 units @	\$0.6099						\$0.00								
19	COG 1		\$0.2768						\$12.77								
20	COG 2		\$0.2768						\$6.16								
21	COG 3		\$0.2768						\$4.17								
22	COG 4		\$0.2768						\$3.43								
23	COG 5		\$0.2768						\$3.52								
24	COG 6		\$0.2768						\$6.32								
25	Summer Period 2020 Weighted Avg. COG		\$0.2768														
26	LDAC less SBC		\$0.0093						\$0.43								
27	EECLRR		\$0.0613						\$2.83								
28									\$1.36								
29	TOTAL			\$99.35	\$155.88	\$202.83	\$223.36	\$169.62	\$128.23	\$66.37	\$43.49	\$36.61	\$34.06	\$34.38	\$44.06	\$258.96	\$1,238.23
30	Base Rate Change 19-20 Period vs. 18-19 Period	\$ Change	\$2.33	\$3.42	\$4.32	\$4.72	\$3.68	\$2.34	\$21.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	% Change	% Change	2.10%	1.87%	1.84%	1.82%	1.99%	2.37%	1.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
32	COG Change 19-20 Period vs. 18-19 Period	\$ Change	-\$13.79	-\$30.65	-\$36.93	-\$41.12	-\$19.56	-\$14.06	-\$156.10	-\$4.16	-\$2.01	\$0.18	\$0.15	\$0.16	\$0.28	-\$5.40	-\$2.05%
33	% Change	% Change	-12.45%	-16.75%	-15.70%	-15.84%	-10.55%	-10.10%	-14.02%	-5.91%	-4.42%	0.50%	0.45%	0.45%	0.64%	-2.05%	-2.05%
34	LDAC Change 19-20 Period vs. 18-19 Period	\$ Change	-\$0.14	-\$0.25	-\$0.33	-\$0.37	-\$0.27	-\$0.20	-\$1.57	-\$0.04	-\$0.02	-\$0.01	-\$0.01	-\$0.01	-\$0.02	-\$0.12	-\$0.12
35	% Change	% Change	-0.13%	-0.14%	-0.14%	-0.14%	-0.15%	-0.14%	-0.14%	-0.06%	-0.04%	-0.04%	-0.03%	-0.03%	-0.05%	-0.05%	-0.05%
36	EECLRR Change 19-20 Period vs. 18-19 Period	\$ Change	\$0.23	\$0.40	\$0.54	\$0.60	\$0.44	\$0.31	\$2.51	\$0.18	\$0.09	\$0.06	\$0.05	\$0.05	\$0.09	\$0.53	\$0.53
37	% Change	% Change	0.21%	0.22%	0.23%	0.23%	0.24%	0.23%	0.23%	0.26%	0.20%	0.17%	0.15%	0.15%	0.21%	0.20%	0.20%
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45																	
46	Winter 2018 - 2019																
47	Customer Charge	units @	\$ 21.36						\$128.16								
48	First	50 units @	\$0.6660						\$199.80								
49	Over	50 units @	\$0.6660						\$218.00								
50	COG 1		\$0.8271						\$47.32								
51	COG 2		\$0.8953	\$88.74					\$88.74								
52	COG 3		\$0.8618		\$115.42				\$115.42								
53	COG 4		\$0.8618			\$128.54			\$128.54								
54	COG 5		\$0.7650				\$83.62		\$83.62								
55	COG 6		\$0.7650					\$60.14	\$60.14								
56	Winter Period 18-19 Weighted Avg. COG		\$0.8349														
57	LDAC less SBC		\$0.0118	\$0.68	\$1.17	\$1.58	\$1.76	\$1.29	\$0.93								
58	EECLRR		\$0.0573	\$3.28	\$5.68	\$7.67	\$8.55	\$6.26	\$4.50								
59	Summer 2019																
60	Customer Charge	units @	\$ 22.20						\$133.20								
61	First	50 units @	\$0.6099						\$80.12								
62	Over	50 units @	\$0.6099						\$0.00								
63	COG 1		\$0.3670						\$16.93								
64	COG 2		\$0.3670						\$8.16								
65	COG 3		\$0.2646						\$3.98								
66	COG 4		\$0.2646						\$3.28								
67	COG 5		\$0.2646						\$3.37								
68	COG 6		\$0.2646						\$6.04								
69	Summer Period 2019 Weighted Avg. COG		\$0.3179														
70	LDAC less SBC		\$0.0102						\$0.47								
71	EECLRR		\$0.0573						\$2.64								
72	TOTAL			\$110.73	\$182.97	\$235.24	\$259.53	\$185.33	\$139.29	\$70.38	\$45.42	\$36.38	\$33.87	\$34.18	\$43.71	\$263.95	\$1,377.03
73	Change			(\$11.37)	(\$27.08)	(\$32.40)	(\$36.18)	(\$15.71)	(\$11.06)	(\$4.02)	(\$1.94)	\$0.23	\$0.19	\$0.19	\$0.35	(\$4.99)	(\$138.80)
74	% Chg			-10.27%	-14.80%	-13.77%	-13.94%	-8.48%	-7.94%	-5.71%	-4.26%	0.63%	0.56%	0.57%	0.80%	-1.89%	-10.08%

*Note- Weighted by usage Actual Weather Normalized

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
Typical Residential Non Heating Bill - 186 therms/year
Comparison of 2019-2020 Period vs. 2018-2019 Period

		Nov 15	Dec 21	Jan 25	Feb 27	Mar 21	Apr 17	Winter 125	May 13	June 11	July 9	August 9	Sept 9	October 10	Summer 61	Annual 186	
2	Typical Usage: therms (*)																
3	Winter 2019 - 2020																
4	Customer Charge units @	\$ 22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$133.20									
5	First 50 units @	\$0.6470	\$9.54	\$13.46	\$16.21	\$17.64	\$13.32	\$10.80	\$80.98								
6	Over 50 units @	\$0.6470	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00								
7	COG 1	\$0.5861	\$8.64					\$8.64									
8	COG 2	\$0.5861		\$12.19				\$12.19									
9	COG 3	\$0.5861			\$14.68			\$14.68									
10	COG 4	\$0.5861				\$15.98		\$15.98									
11	COG 5	\$0.5861					\$12.07	\$12.07									
12	COG 6	\$0.5861						\$9.78	\$9.78								
13	LDAC less SBC	\$0.0093	\$0.14	\$0.19	\$0.23	\$0.25	\$0.19	\$0.16	\$1.16								
14	EEC/LRR	\$0.0613	\$0.90	\$1.28	\$1.54	\$1.67	\$1.26	\$1.02	\$7.67								
15	Summer 2020																
16	Customer Charge units @	\$ 22.20							\$ 22.20	\$22.20	\$22.20	\$22.20	\$ 22.20	\$22.20	\$133.20		
17	First 50 units @	\$0.6470							\$8.55	\$6.92	\$5.66	\$5.94	\$5.63	\$6.58	\$39.27		
18	Over 50 units @	\$0.6470							\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
19	COG 1	\$0.2768							\$3.66						\$3.66		
20	COG 2	\$0.2768								\$2.96					\$2.96		
21	COG 3	\$0.2768									\$2.42				\$2.42		
22	COG 4	\$0.2768										\$2.54			\$2.54		
23	COG 5	\$0.2768											\$2.41		\$2.41		
24	COG 6	\$0.2768												\$2.81	\$2.81		
25	Summer Period 2020 Weighted Avg. COG	\$0.2768															
26	LDAC less SBC	\$0.0093							\$0.12	\$0.10	\$0.08	\$0.09	\$0.08	\$0.09	\$0.56		
27	EEC/LRR	\$0.0613							\$0.81	\$0.66	\$0.54	\$0.56	\$0.53	\$0.62	\$3.72		
28																	
29	TOTAL		\$41.42	\$49.33	\$54.86	\$57.75	\$49.04	\$43.96	\$296.37	\$35.34	\$32.83	\$30.90	\$31.33	\$30.85	\$32.31	\$193.55	\$489.92
30	Base Rate Change 19-20 Period vs. 18-19 Period	\$ Change	\$1.20	\$1.35	\$1.45	\$1.50	\$1.34	\$1.25	\$8.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
31	% Change	% Change	2.74%	2.47%	2.40%	2.36%	2.61%	2.73%	2.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
32	COG Change 19-20 Period vs. 18-19 Period	\$ Change	-\$3.55	-\$6.43	-\$6.91	-\$7.52	-\$3.68	-\$2.99	-\$31.08	-\$1.19	-\$0.96	\$0.11	\$0.11	\$0.11	\$0.12	-\$1.71	
33	% Change	% Change	-8.12%	-11.83%	-11.46%	-11.80%	-7.17%	-6.54%	-9.74%	-3.27%	-2.86%	0.35%	0.36%	0.35%	0.39%	-0.87%	
34	LDAC Change 19-20 Period vs. 18-19 Period	\$ Change	-\$0.04	-\$0.05	-\$0.06	-\$0.07	-\$0.05	-\$0.04	-\$0.31	-\$0.01	-\$0.01	-\$0.01	-\$0.01	-\$0.01	-\$0.01	-\$0.05	
35	% Change	% Change	-0.08%	-0.10%	-0.10%	-0.11%	-0.10%	-0.09%	-0.10%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	
36	EEC/LRR Change 19-20 Period vs. 18-19 Period	\$ Change	\$0.06	\$0.08	\$0.10	\$0.11	\$0.08	\$0.07	\$0.50	\$0.05	\$0.04	\$0.04	\$0.04	\$0.03	\$0.04	\$0.24	
37	% Change	% Change	0.13%	0.15%	0.17%	0.17%	0.16%	0.15%	0.16%	0.14%	0.13%	0.11%	0.12%	0.11%	0.13%	0.12%	
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45																	
46	Winter Period 18-19 Weighted Avg. COG	\$0.8344															
47	LDAC less SBC	\$0.0118	\$0.17	\$0.25	\$0.30	\$0.32	\$0.24	\$0.20	\$1.48								
48	EEC/LRR	\$0.0573	\$0.84	\$1.19	\$1.44	\$1.56	\$1.18	\$0.96	\$7.17								
49	Summer 2019																
50	Customer Charge units @	\$ 22.20							\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$133.20		
51	First 50 units @	\$0.6470							\$8.55	\$6.92	\$5.66	\$5.94	\$5.63	\$6.58	\$39.27		
52	Over 50 units @	\$0.6470							\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
53	COG 1	\$0.3670							\$4.85						\$4.85		
54	COG 2	\$0.3670								\$3.92					\$3.92		
55	COG 3	\$0.2646									\$2.32				\$2.32		
56	COG 4	\$0.2646										\$2.43			\$2.43		
57	COG 5	\$0.2646											\$2.30		\$2.30		
58	COG 6	\$0.2646												\$2.69	\$2.69		
59	Summer Period 2019 Weighted Avg. COG	\$0.3049															
60	LDAC less SBC	\$0.0102							\$0.13	\$0.11	\$0.09	\$0.09	\$0.09	\$0.10	\$0.62		
61	EEC/LRR	\$0.0573							\$0.76	\$0.61	\$0.50	\$0.53	\$0.50	\$0.58	\$3.48		
62	TOTAL		\$43.75	\$54.38	\$60.28	\$63.72	\$51.35	\$45.68	\$319.18	\$36.49	\$33.76	\$30.77	\$31.19	\$30.72	\$32.15	\$195.07	\$514.25
63	Change		(\$2.33)	(\$5.06)	(\$5.42)	(\$5.97)	(\$2.31)	(\$1.72)	(\$22.81)	(\$1.15)	(\$0.93)	\$0.13	\$0.14	\$0.13	\$0.16	(\$1.52)	(\$24.33)
64	% Chg		-5.33%	-9.30%	-8.99%	-9.38%	-4.50%	-3.76%	-7.1%	-3.15%	-2.76%	0.44%	0.45%	0.43%	0.48%	-0.78%	-4.73%

*-Note- Weighted by usage Actual Weather Normalized

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
Typical G-40 Commercial & Industrial Bill - 2,066 therms/year
Comparison of 2019-2020 Period vs. 2018-2019 Period

Northern Utilities, Inc.
New Hampshire Division
DE 17-136 RR-003 Attachment 1
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		Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
		145	265	390	407	327	237	1,771	112	58	30	26	31	38	295	2,066
1	Typical Usage: therms (*)															
2	Winter 2019 - 2020															
3	Customer Charge units @	\$ 75.09	\$75.09	\$75.09	\$75.09	\$75.09	\$75.09	\$450.54								
4	First 75 units @	\$0.1865	\$13.99	\$13.99	\$13.99	\$13.99	\$13.99	\$83.93								
5	Over 75 units @	\$0.1865	\$13.06	\$35.44	\$58.75	\$61.92	\$47.00	\$246.37								
6	COG 1	\$88.19						\$88.19								
7	COG 2	\$0.6082	\$161.17					\$161.17								
8	COG 3	\$0.6082		\$237.20				\$237.20								
9	COG 4	\$0.6082			\$247.54			\$247.54								
10	COG 5	\$0.6082				\$198.88		\$198.88								
11	COG 6	\$0.6082					\$144.14	\$144.14								
12	LDAC less SBC	\$0.0093	\$1.35	\$2.46	\$3.63	\$3.79	\$3.04	\$2.20								
13	EEC/LRR	\$0.0266	\$3.86	\$7.05	\$10.37	\$10.83	\$8.70	\$6.30								
14								\$47.11								
15	Summer 2020															
16	Customer Charge units @	\$ 75.09							\$ 75.09	\$75.09	\$75.09	\$75.09	\$ 75.09	\$75.09	\$450.54	
17	First 75 units @	\$0.1865							\$13.99	\$10.82	\$5.60	\$4.85	\$5.78	\$7.09	\$48.12	
18	Over 75 units @	\$0.1865							\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6.90	
19	COG 1	\$0.3116							\$34.90						\$34.90	
20	COG 2	\$0.3116								\$18.07					\$18.07	
21	COG 3	\$0.3116									\$9.35				\$9.35	
22	COG 4	\$0.3116										\$8.10			\$8.10	
23	COG 5	\$0.3116											\$9.66		\$9.66	
24	COG 6	\$0.3116												\$11.84	\$11.84	
25	Summer Period 2020 Weighted Avg. COG	\$0.3116														
26	LDAC less SBC	\$0.0093							\$1.04	\$0.54	\$0.28	\$0.24	\$0.29	\$0.35	\$2.74	
27	EEC/LRR	\$0.0266							\$2.98	\$1.54	\$0.80	\$0.69	\$0.82	\$1.01	\$7.85	
28	TOTAL		\$195.53	\$295.20	\$399.02	\$413.14	\$346.70	\$271.94	\$1,921.53	\$134.90	\$106.06	\$91.11	\$88.97	\$91.64	\$95.38	\$2,529.60
29	Base Rate Change 19-20 Period vs. 18-19 Period	\$ Change	\$3.85	\$4.69	\$5.56	\$5.68	\$5.12	\$4.49	\$29.38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	% Change		2%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
30	COG Change 19-20 Period vs. 18-19 Period	\$ Change	-\$33.96	-\$80.14	-\$104.87	-\$109.44	-\$56.28	-\$40.79	-\$425.47	-\$9.43	-\$4.88	\$0.55	\$0.47	\$0.56	\$0.69	-\$12.04
	% Change		-15%	-22%	-21%	-21%	-14%	-13%	-18%	-7%	-4%	1%	1%	1%	1%	-2%
31	LDAC Change 19-20 Period vs. 18-19 Period	\$ Change	-\$0.36	-\$0.66	-\$0.98	-\$1.02	-\$0.82	-\$0.59	-\$4.43	-\$0.10	-\$0.05	-\$0.03	-\$0.02	-\$0.03	-\$0.03	-\$0.27
	% Change		-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
32	EEC/LRR Change 19-20 Period vs. 18-19 Period	\$ Change	-\$0.17	-\$0.32	-\$0.47	-\$0.49	-\$0.39	-\$0.28	-\$2.13	-\$0.13	-\$0.07	-\$0.04	-\$0.03	-\$0.04	-\$0.05	-\$0.35
	% Change		-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%
33	Typical Usage: therms															
34	Winter 2018 - 2019															
35	Customer Charge units @	\$ 72.26	\$72.26	\$72.26	\$72.26	\$72.26	\$72.26	\$433.56								
36	First 75 units @	\$0.1795	\$13.46	\$13.46	\$13.46	\$13.46	\$13.46	\$80.78								
37	Over 75 units @	\$0.1795	\$12.57	\$34.11	\$56.54	\$59.59	\$45.23	\$237.12								
38	COG 1	\$0.8424	\$122.15					\$122.15								
39	COG 2	\$0.9106	\$241.31					\$241.31								
40	COG 3	\$0.8771		\$342.07				\$342.07								
41	COG 4	\$0.8771			\$356.98			\$356.98								
42	COG 5	\$0.7803				\$255.16		\$255.16								
43	COG 6	\$0.7803					\$184.93	\$184.93								
44	Winter Period 18-19 Weighted Avg. COG	\$0.8484														
45	LDAC less SBC	\$0.0118	\$1.71	\$3.13	\$4.60	\$4.80	\$3.86	\$2.80								
46	EEC/LRR	\$0.0278	\$4.03	\$7.37	\$10.84	\$11.31	\$9.09	\$6.59	\$49.23							
47																
48	Summer 2019															
49	Customer Charge units @	\$ 75.09							\$75.09	\$75.09	\$75.09	\$75.09	\$75.09	\$75.09	\$450.54	
50	First 75 units @	\$0.1865							\$13.99	\$10.82	\$5.60	\$4.85	\$5.78	\$7.09	\$48.12	
51	Over 75 units @	\$0.1865							\$6.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6.90	
52	COG 1	\$0.3958							\$44.33						\$44.33	
53	COG 2	\$0.3958								\$22.96					\$22.96	
54	COG 3	\$0.2934									\$8.80				\$8.80	
55	COG 4	\$0.2934										\$7.63			\$7.63	
56	COG 5	\$0.2934											\$9.10		\$9.10	
57	COG 6	\$0.2934												\$11.15	\$11.15	
58	Summer Period 2019 Weighted Avg. COG	\$0.3524														
59	LDAC less SBC	\$0.0102							\$1.14	\$0.59	\$0.31	\$0.27	\$0.32	\$0.39	\$3.01	
60	EEC/LRR	\$0.0278							\$3.11	\$1.61	\$0.83	\$0.72	\$0.86	\$1.06	\$8.20	
61	TOTAL		\$226.18	\$371.63	\$499.78	\$518.41	\$399.06	\$309.12	\$2,324.18	\$144.56	\$111.07	\$90.63	\$88.56	\$91.14	\$94.77	\$2,944.91
62	Change		(\$30.65)	(\$76.43)	(\$100.75)	(\$105.27)	(\$52.37)	(\$37.18)	(\$402.65)	(\$9.67)	(\$5.01)	\$0.48	\$0.42	\$0.50	\$0.61	(\$415.31)
63	% Chg		-13.55%	-20.57%	-20.16%	-20.31%	-13.12%	-12.03%	-17.32%	-6.69%	-4.51%	0.53%	0.47%	0.55%	0.65%	-14.10%

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

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
Typical G-41 Commercial & Industrial Bill - 20,667 therms/year
Comparison of 2019-2020 Period vs. 2018-2019 Period

		Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
1	Typical Usage: therms (°)	1,665	2,567	3,605	3,735	3,064	2,162	16,798	1,219	755	443	412	451	589	3,869	20,667
2	Winter 2019 - 2020															
3	Customer Charge units @	\$ 222.64	\$222.64	\$222.64	\$222.64	\$222.64	\$222.64	\$1,335.84							\$1,335.84	
4	All units @	\$0.2425	\$403.76	\$622.50	\$874.21	\$905.74	\$524.29	\$4,073.52							\$733.18	
5	COG 1	\$0.6082	\$1,012.65					\$1,012.65							\$379.84	
6	COG 2	\$0.6082		\$1,561.25				\$1,561.25							\$235.26	
7	COG 3	\$0.6082			\$2,192.56			\$2,192.56							\$138.04	
8	COG 4	\$0.6082				\$2,271.63		\$2,271.63							\$128.38	
9	COG 5	\$0.6082					\$1,863.52	\$1,863.52							\$140.53	
10	COG 6	\$0.6082					\$1,314.93	\$1,314.93							\$183.53	
11	LDAC less SBC	\$0.0093	\$15.48	\$23.87	\$33.53	\$34.74	\$28.50	\$20.11	\$11.34	\$7.02	\$4.12	\$3.83	\$4.19	\$5.48	\$35.98	
12	EEC/LRR	\$0.0266	\$44.29	\$68.28	\$95.89	\$99.35	\$81.50	\$57.51	\$32.43	\$20.08	\$11.78	\$10.96	\$12.00	\$15.67	\$102.92	
13	Summer 2020															
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							\$231.00	\$143.07	\$83.95	\$78.07	\$85.46	\$111.62	\$733.18	
16	COG 1	\$0.3116							\$379.84						\$379.84	
17	COG 2	\$0.3116								\$235.26					\$235.26	
18	COG 3	\$0.3116									\$138.04				\$138.04	
19	COG 4	\$0.3116										\$128.38			\$128.38	
20	COG 5	\$0.3116											\$140.53		\$140.53	
21	COG 6	\$0.3116												\$183.53	\$183.53	
22	Summer Period 2020 Weighted Avg. COG	\$0.3116														
23	LDAC less SBC	\$0.0093														
24	EEC/LRR	\$0.0266														
25	TOTAL		\$1,698.83	\$2,498.54	\$3,418.83	\$3,534.09	\$2,939.18	\$2,139.47	\$16,228.95	\$877.24	\$628.08	\$460.53	\$443.88	\$464.83	\$538.93	\$3,413.49
26	Base Rate Change 19-20 Period vs. 18-19 Period	% Change	\$23.53	\$31.74	\$41.19	\$42.37	\$36.26	\$28.05	\$203.14	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27		% Change	1.14%	0.98%	0.94%	0.94%	1.05%	1.13%	1.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
28	COG Change 19-20 Period vs. 18-19 Period	% Change	-\$389.94	-\$776.26	-\$969.38	-\$1,004.34	-\$527.31	-\$372.08	-\$4,039.32	-\$102.64	-\$83.57	\$8.06	\$7.50	\$8.21	\$10.72	-\$131.72
29		% Change	-18.83%	-23.87%	-22.23%	-22.27%	-15.32%	-14.93%	-20.07%	-10.45%	-9.17%	1.78%	1.71%	1.79%	2.02%	-3.71%
30	LDAC Change 19-20 Period vs. 18-19 Period	% Change	-\$4.16	-\$6.42	-\$9.01	-\$9.34	-\$7.66	-\$5.41	-\$42.00	-\$1.10	-\$0.68	-\$0.40	-\$0.37	-\$0.41	-\$0.53	-\$3.48
31		% Change	-0.201%	-0.197%	-0.207%	-0.207%	-0.223%	-0.217%	-0.209%	-0.112%	-0.098%	-0.088%	-0.085%	-0.089%	-0.100%	-0.098%
32	EEC/LRR Change 19-20 Period vs. 18-19 Period	% Change	-\$2.00	-\$3.08	-\$4.33	-\$4.48	-\$3.68	-\$2.59	-\$20.16	-\$1.46	-\$0.91	-\$0.53	-\$0.49	-\$0.54	-\$0.71	-\$4.64
33		% Change	-0.096%	-0.095%	-0.099%	-0.099%	-0.107%	-0.184%	-0.100%	-0.149%	-0.131%	-0.117%	-0.113%	-0.118%	-0.133%	-0.131%
34	Winter 2018 - 2019															
35	Customer Charge units @	\$ 214.26	\$214.26	\$214.26	\$214.26	\$214.26	\$214.26	\$1,285.56							\$1,285.56	
36	All units @	\$0.2334	\$388.61	\$599.14	\$841.41	\$871.75	\$715.14	\$504.61							\$3,920.65	
37	COG 1	\$0.8424	\$1,402.60					\$1,402.60							\$1,402.60	
38	COG 2	\$0.9106		\$2,337.51				\$2,337.51							\$2,337.51	
39	COG 3	\$0.8771			\$3,161.95			\$3,161.95							\$3,161.95	
40	COG 4	\$0.8771				\$3,275.97		\$3,275.97							\$3,275.97	
41	COG 5	\$0.7803					\$2,390.84	\$2,390.84							\$2,390.84	
42	COG 6	\$0.7803					\$1,687.01	\$1,687.01							\$1,687.01	
43	Winter Period 18-19 Weighted Avg. COG	\$0.8487														
44	LDAC less SBC	\$0.0118	\$19.65	\$30.29	\$42.54	\$44.07	\$36.16	\$25.51	\$198.22						\$198.22	
45	EEC/LRR	\$0.0278	\$46.29	\$71.36	\$100.22	\$103.83	\$85.18	\$60.10	\$466.98						\$466.98	
46	Summer 2019															
47	Customer Charge units @	\$ 222.64							\$222.64	\$222.64	\$222.64	\$222.64	\$222.64	\$222.64	\$1,335.84	
48	All units @	\$0.1895							\$231.00	\$143.07	\$83.95	\$78.07	\$85.46	\$111.62	\$733.18	
49	COG 1	\$0.3958							\$482.48						\$482.48	
50	COG 2	\$0.3958								\$298.83					\$298.83	
51	COG 3	\$0.2934									\$129.98				\$129.98	
52	COG 4	\$0.2934										\$120.88			\$120.88	
53	COG 5	\$0.2934											\$132.32		\$132.32	
54	COG 6	\$0.2934												\$172.81	\$172.81	
55	Summer Period 2019 Weighted Avg. COG	\$0.3456														
56	LDAC less SBC	\$0.0102														
57	EEC/LRR	\$0.0278														
58	TOTAL		\$2,071.40	\$3,252.56	\$4,360.37	\$4,509.88	\$3,441.57	\$2,491.49	\$20,127.28	\$982.44	\$693.23	\$453.40	\$437.25	\$457.57	\$529.45	\$3,553.34
59	Change		(\$372.57)	(\$754.02)	(\$941.54)	(\$975.79)	(\$502.39)	(\$352.03)	(\$3,898.34)	(\$105.20)	(\$65.16)	\$7.13	\$6.63	\$7.26	\$9.48	(\$139.85)
60	% Chg		-17.99%	-23.18%	-21.59%	-21.64%	-14.60%	-14.13%	-19.37%	-10.71%	-9.40%	1.57%	1.52%	1.59%	1.79%	-3.94%

* Note- Weighted by usage. Actual Weather Normalized.

NORTHERN UTILITIES, INC. - NEW HAMPSHIRE DIVISION
Typical G-51 Commercial & Industrial Bill - 17,593 therms/year
Comparison of 2019-2020 Period vs. 2018-2019 Period

		Nov	Dec	Jan	Feb	Mar	Apr	Winter	May	June	July	August	Sept	October	Summer	Annual
1	Typical Usage: therms (*)	1,369	1,582	1,899	1,882	1,798	1,517	10,047	1,393	1,305	1,186	1,207	1,171	1,284	7,546	17,593
2	Winter 2019 - 2020															
3																
4	Customer Charge units @	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 1,335.84								
5	First 1,300 units @	\$ 17.12	\$ 17.12	\$ 17.12	\$ 17.12	\$ 17.12	\$ 17.12	\$ 1,335.36								
6	Over 1,300 units @	\$ 13.99	\$ 13.99	\$ 13.99	\$ 13.99	\$ 13.99	\$ 13.99	\$ 314.36								
7	COG 1	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 677.66								
8	COG 2	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 783.09								
9	COG 3	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 940.01								
10	COG 4	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 931.59								
11	COG 5	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 890.01								
12	COG 6	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 495.0	\$ 750.92								
13	LDAC less SBC	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 93.44								
14	EEC/LRR	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 267.25								
15																
16	Summer 2020															
17	Customer Charge units @	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 1,335.84	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 1,335.84	
18	First 1,000 units @	\$ 13.37	\$ 13.37	\$ 13.37	\$ 13.37	\$ 13.37	\$ 13.37	\$ 802.20	\$ 133.70	\$ 133.70	\$ 133.70	\$ 133.70	\$ 133.70	\$ 133.70	\$ 802.20	
19	Over 1,000 units @	\$ 10.87	\$ 10.87	\$ 10.87	\$ 10.87	\$ 10.87	\$ 10.87	\$ 168.05	\$ 42.72	\$ 33.15	\$ 20.22	\$ 22.50	\$ 18.59	\$ 30.87	\$ 168.05	
20	COG 1	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 340.31	\$ 340.31	\$ 318.81	\$ 289.74	\$ 294.87	\$ 286.08	\$ 313.68	\$ 340.31	
21	COG 2	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 318.81	\$ 318.81	\$ 289.74	\$ 294.87	\$ 286.08	\$ 313.68	\$ 340.31	\$ 318.81	
22	COG 3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 289.74	\$ 289.74	\$ 294.87	\$ 286.08	\$ 313.68	\$ 340.31	\$ 318.81	\$ 289.74	
23	COG 4	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 294.87	\$ 294.87	\$ 286.08	\$ 313.68	\$ 340.31	\$ 318.81	\$ 289.74	\$ 294.87	
24	COG 5	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 286.08	\$ 286.08	\$ 313.68	\$ 340.31	\$ 318.81	\$ 289.74	\$ 294.87	\$ 286.08	
25	COG 6	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 313.68	\$ 313.68	\$ 340.31	\$ 318.81	\$ 289.74	\$ 294.87	\$ 286.08	\$ 313.68	
26	Summer Period 2020 Weighted Avg. COG	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 244.3	\$ 12.95	\$ 12.14	\$ 11.03	\$ 11.23	\$ 10.89	\$ 11.94	\$ 70.18	
27	LDAC less SBC	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 93.44	\$ 37.05	\$ 34.71	\$ 31.55	\$ 32.11	\$ 31.15	\$ 34.15	\$ 200.72	
28	EEC/LRR	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 0.0266	\$ 267.25	\$ 37.05	\$ 34.71	\$ 31.55	\$ 32.11	\$ 31.15	\$ 34.15	\$ 200.72	
29																
30	TOTAL	\$1,181.66	\$1,324.54	\$1,537.18	\$1,525.78	\$1,469.43	\$1,280.93	\$8,319.51	\$789.38	\$755.15	\$708.88	\$717.04	\$703.04	\$746.99	\$4,420.48	\$12,739.99
31	Base Rate Change 19-20 Period vs. 18-19 Period	\$17.07	\$18.19	\$19.87	\$19.78	\$19.34	\$17.85	\$112.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.00
32	% Change	1.15%	1.02%	0.98%	0.98%	1.10%	1.17%	1.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
33	COG Change 19-20 Period vs. 18-19 Period	\$-315.42	\$-472.39	\$-503.42	\$-498.92	\$-302.60	\$-255.31	\$-2,348.06	(\$115.06)	(\$107.79)	\$23.48	\$23.90	\$23.19	\$25.42	\$-126.86	
34	% Change	-21.24%	-26.47%	-24.83%	-24.80%	-17.20%	-16.75%	-22.17%	-12.68%	-12.45%	3.41%	3.44%	3.40%	3.51%	-2.78%	
35	LDAC Change 19-20 Period vs. 18-19 Period	\$-3.42	\$-3.96	\$-4.75	\$-4.71	\$-4.50	\$-3.79	\$-25.12	\$-1.25	\$-1.17	\$-1.07	\$-1.09	\$-1.05	\$-1.16	\$-6.79	
36	% Change	-0.23%	-0.22%	-0.23%	-0.23%	-0.26%	-0.25%	-0.24%	-0.14%	-0.14%	-0.16%	-0.16%	-0.15%	-0.16%	-0.15%	
37	EEC/LRR Change 19-20 Period vs. 18-19 Period	\$-1.64	\$-1.90	\$-2.28	\$-2.26	\$-2.16	\$-1.82	\$-12.06	\$-1.67	\$-1.57	\$-1.42	\$-1.45	\$-1.41	\$-1.54	\$-9.08	
38	% Change	-0.11%	-0.11%	-0.11%	-0.11%	-0.12%	-0.12%	-0.11%	-0.18%	-0.18%	-0.21%	-0.21%	-0.21%	-0.21%	-0.20%	
39																
40	Winter 2018 - 2019															
41																
42	Customer Charge units @	\$ 214.26	\$ 214.26	\$ 214.26	\$ 214.26	\$ 214.26	\$ 214.26	\$ 1,285.56								
43	First 1,300 units @	\$ 16.48	\$ 16.48	\$ 16.48	\$ 16.48	\$ 16.48	\$ 16.48	\$ 1,285.44								
44	Over 1,300 units @	\$ 13.46	\$ 13.46	\$ 13.46	\$ 13.46	\$ 13.46	\$ 13.46	\$ 302.45								
45	COG 1	\$ 725.4	\$ 725.4	\$ 725.4	\$ 725.4	\$ 725.4	\$ 725.4	\$ 993.07								
46	COG 2	\$ 793.6	\$ 793.6	\$ 793.6	\$ 793.6	\$ 793.6	\$ 793.6	\$ 1,255.48								
47	COG 3	\$ 760.1	\$ 760.1	\$ 760.1	\$ 760.1	\$ 760.1	\$ 760.1	\$ 1,443.43								
48	COG 4	\$ 760.1	\$ 760.1	\$ 760.1	\$ 760.1	\$ 760.1	\$ 760.1	\$ 1,430.51								
49	COG 5	\$ 663.3	\$ 663.3	\$ 663.3	\$ 663.3	\$ 663.3	\$ 663.3	\$ 1,192.61								
50	COG 6	\$ 663.3	\$ 663.3	\$ 663.3	\$ 663.3	\$ 663.3	\$ 663.3	\$ 1,006.23								
51	Winter Period 18-19 Weighted Avg. COG	\$ 728.7	\$ 728.7	\$ 728.7	\$ 728.7	\$ 728.7	\$ 728.7	\$ 728.7								
52	LDAC less SBC	\$ 0.0118	\$ 0.0118	\$ 0.0118	\$ 0.0118	\$ 0.0118	\$ 0.0118	\$ 118.55								
53	EEC/LRR	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 279.31								
54																
55	Summer 2019															
56	Customer Charge units @	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 1,335.84	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 222.64	\$ 1,335.84	
57	First 1,000 units @	\$ 13.37	\$ 13.37	\$ 13.37	\$ 13.37	\$ 13.37	\$ 13.37	\$ 802.20	\$ 133.70	\$ 133.70	\$ 133.70	\$ 133.70	\$ 133.70	\$ 133.70	\$ 802.20	
58	Over 1,000 units @	\$ 10.87	\$ 10.87	\$ 10.87	\$ 10.87	\$ 10.87	\$ 10.87	\$ 168.05	\$ 42.72	\$ 33.15	\$ 20.22	\$ 22.50	\$ 18.59	\$ 30.87	\$ 168.05	
59	COG 1	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 455.37	\$ 455.37	\$ 426.60	\$ 266.26	\$ 270.97	\$ 262.89	\$ 288.26	\$ 455.37	
60	COG 2	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 426.60	\$ 426.60	\$ 266.26	\$ 270.97	\$ 262.89	\$ 288.26	\$ 455.37	\$ 426.60	
61	COG 3	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 266.26	\$ 266.26	\$ 270.97	\$ 262.89	\$ 288.26	\$ 455.37	\$ 426.60	\$ 266.26	
62	COG 4	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 270.97	\$ 270.97	\$ 262.89	\$ 288.26	\$ 455.37	\$ 426.60	\$ 266.26	\$ 270.97	
63	COG 5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 262.89	\$ 262.89	\$ 288.26	\$ 455.37	\$ 426.60	\$ 266.26	\$ 270.97	\$ 262.89	
64	COG 6	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 224.5	\$ 288.26	\$ 288.26	\$ 455.37	\$ 426.60	\$ 266.26	\$ 270.97	\$ 262.89	\$ 288.26	
65	Summer Period 2019 Weighted Avg. COG	\$ 261.1	\$ 261.1	\$ 261.1	\$ 261.1	\$ 261.1	\$ 261.1	\$ 261.1	\$ 14.21	\$ 13.31	\$ 12.10	\$ 12.31	\$ 11.94	\$ 13.10	\$ 76.97	
66	LDAC less SBC	\$ 0.0102	\$ 0.0102	\$ 0.0102	\$ 0.0102	\$ 0.0102	\$ 0.0102	\$ 102.02	\$ 38.73	\$ 36.28	\$ 32.97	\$ 33.55	\$ 32.55	\$ 35.70	\$ 209.79	
67	EEC/LRR	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 0.0278	\$ 279.31	\$ 38.73	\$ 36.28	\$ 32.97	\$ 33.55	\$ 32.55	\$ 35.70	\$ 209.79	
68																
69	TOTAL	\$1,485.07	\$1,784.58	\$2,027.76	\$2,011.87	\$1,759.35	\$1,524.01	\$10,592.63	\$907.36	\$865.69	\$687.88	\$695.68	\$682.32	\$724.26	\$4,563.19	\$15,155.82
70	Change	(\$303.42)	(\$460.04)	(\$490.58)	(\$486.10)	(\$289.92)	(\$243.07)	(\$2,273.13)	(\$117.99)	(\$110.53)	\$20.99	\$21.36	\$20.73	\$22.73	(\$142.71)	(\$2,415.84)
71	% Chg	-20.43%	-25.78%	-24.19%	-24.16%	-16.48%	-15.95%	-21.46%	-13.00%	-12.77%	3.05%	3.07%	3.04%	3.14%	-3.13%	-15.94%

*Note- Weighted by usage Actual Weather Normalized