

Northern Utilities New Hampshire
Weather Normalization and Customer Annualization

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]	[O]
				Per Books					Weather Normalization					
				2020 Therms -	2020 Therms -	2020 Therms -	2020							
				Summer	Winter	Total	Customers	2020 UPC	2020 Normal	WN Therm	Adjustment	WN Therm	Adjustment	WN Revenue
Line	Rate Class	Description	Month					[G] / [H]	Normal UPC	Therms	Adjustment	Summer	Winter	Adjustment
									WNA	[H] x [J]	[K] - [G]	[K] - [G]	[K] - [G]	[M] x Rate + [N] x Rate
1	R-5	Residential Heating	January	(11,181)	2,990,270	2,979,089	25,300	117.748	133.131	3,368,269	389,180		389,180	\$269,312
2			February	(1,088)	3,028,644	3,027,557	25,213	120.080	139.422	3,515,228	487,671		487,671	\$337,469
3		Rates	March	(331)	2,582,100	2,581,769	25,370	101.764	115.348	2,926,418	344,649		344,649	\$238,497
4		Customer	April	(520)	1,794,556	1,794,035	25,211	71.161	77.829	1,962,150	168,115		168,115	\$116,336
5		\$22.20	May	609,620	675,934	1,285,554	25,458	50.496	44.372	1,129,646	(155,908)	(73,933)	(81,975)	-\$101,819
6		Summer	June	547,616	(9,388)	538,228	25,363	21.221	25.582	648,829	110,601	110,601		\$67,456
7		\$0.6099	July	356,914	(784)	356,130	25,483	13.975	11.294	287,818	(68,312)	(68,312)		-\$41,664
8		Winter	August	296,799	(535)	296,265	25,442	11.645	9.396	239,056	(57,209)	(57,209)		-\$34,892
9		\$0.6920	September	383,497	0	383,497	25,600	14.981	13.677	350,119	(33,378)	(33,378)		-\$20,357
10			October	540,827	894	541,721	25,795	21.001	26.443	682,104	140,383	140,383		\$85,620
11			November	684,892	561,474	1,246,367	26,120	47.718	51.958	1,357,123	110,756	60,862	49,894	\$71,646
12			December	(283)	2,258,625	2,258,342	26,171	86.291	100.691	2,635,202	376,860		376,860	\$260,787
13				3,406,764	13,881,789	17,288,553		678.081	749.144	19,101,961	1,813,408	79,014	1,734,393	\$1,248,391
14	R-10	Res. Heating, Low Income	January	585	77,516	78,101	742	105.309	121.181	89,872	11,771		11,771	\$8,145
15			February	1,125	86,314	87,439	817	106.994	130.166	106,377	18,937		18,937	\$13,105
16		Rates	March	331	70,723	71,054	760	93.463	115.534	87,833	16,779		16,779	\$11,611
17		Customer	April	441	55,771	56,212	879	63.928	82.227	72,302	16,090		16,090	\$11,134
18		\$22.20	May	16,946	18,090	35,036	794	44.142	46.837	37,175	2,139	1,035	1,104	\$1,395
19		Summer	June	12,319	9,654	21,973	781	28.148	26.009	20,304	(1,669)	(1,669)		-\$1,018
20		\$0.6099	July	7,455	772	8,226	688	11.954	10.336	7,112	(1,114)	(1,114)		-\$679
21		Winter	August	6,497	464	6,961	663	10.497	8.367	5,549	(1,412)	(1,412)		-\$861
22		\$0.6920	September	7,994	0	7,994	644	12.409	12.880	8,298	304	304		\$185
23		Rates, Jan-Oct	October	11,941	1	11,943	641	18.631	27.210	17,442	5,499	5,499		\$3,354
24		\$8.88	November	14,175	14,146	28,321	630	44.977	49.718	31,307	2,985	1,494	1,491	\$1,943
25		\$0.2440	December	296	51,744	52,039	644	80.845	86.220	55,499	3,460		3,460	\$2,394
26		\$0.2760		80,105	385,195	465,300		621.298	716.686	539,069	73,769	4,136	69,633	\$50,708
27	R-6	Residential Non-Heating	January	17	29,096	29,113	1,267	22.977	25.217	31,951	2,838		2,838	\$1,836
28			February	29	28,355	28,384	1,289	22.021	25.601	32,998	4,614		4,614	\$2,985
29		Rates	March	0	26,031	26,031	1,295	20.094	21.109	27,347	1,316		1,316	\$851
30		Customer	April	0	21,269	21,269	1,280	16.619	16.378	20,961	(309)		(309)	-\$200
31		\$22.20	May	8,884	9,778	18,661	1,311	14.238	13.681	17,932	(730)	(347)	(382)	-\$472
32		Summer	June	14,744	0	14,744	1,331	11.074	11.394	15,170	426	426		\$275
33		\$0.6470	July	12,608	0	12,608	1,354	9.312	9.076	12,289	(319)	(319)		-\$206
34		Winter	August	11,288	0	11,288	1,355	8.329	8.367	11,340	52	52		\$34
35		\$0.6470	September	14,017	0	14,017	1,358	10.320	9.705	13,181	(836)	(836)		-\$541
36			October	12,848	5	12,852	1,347	9.543	10.630	14,317	1,464	1,464		\$947
37			November	10,298	7,240	17,538	1,312	13.366	13.709	17,988	450	264	186	\$291
38			December	0	25,111	25,111	1,277	19.669	20.978	26,783	1,672		1,672	\$1,082
39				84,733	146,885	231,617		177.562	185.845	242,254	10,637	703	9,934	\$6,882

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[A]	[B]	[C]	[D]	[P]	[Q]	[R]	[S]	[T]	[U]	[V]	[W]
				Customer Annualization					Rate Change	Pro Forma Adjustment	
				Year-End	Annualization		Annualization			Test Year	
				Customer	Annualization	Therm Adj.	Therm Adj.	Annualization Revenue	R-10 Rate Change	Total Therm	Revenue
Line	Rate Class	Description	Month	Adjustment	Therm Adjustment	Summer	Winter	Adjustment	Annualization	Adjustment	Adjustment
				[H]Dec - [H]	[J] x [P]	[J] x [P]	[J] x [P]	[P]xRt+[R]xRt+[S]xRt	[E]xDif+[H]xDif	[L] + [Q]	[U]+[O]+[T]
1	R-5	Residential Heating	January	871	115,908		115,908	\$99,536		505,088	\$368,849
2			February	958	133,593		133,593	\$113,719		621,265	\$451,187
3		Rates	March	801	92,379		92,379	\$81,705		437,027	\$320,202
4		Customer	April	960	74,721		74,721	\$73,021		242,836	\$189,356
5		\$22.20	May	713	31,620	14,994	16,625	\$36,470		(124,289)	-\$65,349
6		Summer	June	809	20,686	20,686		\$30,567		131,287	\$98,023
7		\$0.6099	July	688	7,771	7,771		\$20,014		(60,541)	-\$21,650
8		Winter	August	730	6,856	6,856		\$20,378		(50,353)	-\$14,513
9		\$0.6920	September	572	7,818	7,818		\$17,458		(25,561)	-\$2,900
10			October	376	9,944	9,944		\$14,413		150,327	\$100,032
11			November	51	2,676	1,470	1,205	\$2,874		113,432	\$74,521
12			December	0	-		-	\$0		376,860	\$260,787
13				7,528	503,971	69,538	434,432	\$510,154		2,317,378	\$1,758,545
14	R-10	Res. Heating, Low Income	January	(98)	(11,868)		(11,868)	-\$10,387	\$42,339	(97)	\$40,097
15			February	(174)	(22,589)		(22,589)	-\$19,485	\$47,204	(3,652)	\$40,824
16		Rates	March	(117)	(13,464)		(13,464)	-\$11,905	\$39,668	3,315	\$39,375
17		Customer	April	(236)	(19,373)		(19,373)	-\$18,637	\$35,074	(3,283)	\$27,572
18		\$22.20	May	(150)	(7,026)	(3,398)	(3,628)	-\$7,914	\$24,298	(4,887)	\$17,780
19		Summer	June	(137)	(3,562)	(3,562)		-\$5,212	\$18,922	(5,231)	\$12,691
20		\$0.6099	July	(44)	(459)	(459)		-\$1,267	\$12,215	(1,573)	\$10,268
21		Winter	August	(20)	(163)	(163)		-\$533	\$11,404	(1,576)	\$10,010
22		\$0.6920	September	(1)	(7)	(7)		-\$16	\$11,506	297	\$11,675
23		Rates, Jan-Oct	October	3	73	73		\$104	\$12,908	5,572	\$16,366
24		\$8.88	November	14	697	349	348	\$764	\$9,655	3,682	\$12,363
25		\$0.2440	December	0	-		-	\$0	\$108	3,460	\$2,502
26		\$0.2760		(958)	(77,743)	(7,168)	(70,575)	-\$74,485	\$265,302	(3,974)	\$241,525
27	R-6	Residential Non-Heating	January	10	244		244	\$372		3,081	\$2,208
28			February	(12)	(314)		(314)	-\$475		4,300	\$2,510
29		Rates	March	(19)	(396)		(396)	-\$673		919	\$178
30		Customer	April	(3)	(51)		(51)	-\$103		(360)	-\$302
31		\$22.20	May	(34)	(465)	(221)	(243)	-\$1,055		(1,194)	-\$1,527
32		Summer	June	(55)	(623)	(623)		-\$1,618		(198)	-\$1,342
33		\$0.6470	July	(77)	(701)	(701)		-\$2,169		(1,020)	-\$2,375
34		Winter	August	(79)	(657)	(657)		-\$2,168		(605)	-\$2,134
35		\$0.6470	September	(82)	(791)	(791)		-\$2,322		(1,628)	-\$2,863
36			October	(70)	(745)	(745)		-\$2,039		719	-\$1,092
37			November	(35)	(485)	(285)	(200)	-\$1,100		(36)	-\$809
38			December	0	-		-	\$0		1,672	\$1,082
39				(456)	(4,986)	(4,024)	(962)	-\$13,349		5,651	-\$6,467

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				Per Books					Weather Normalization					
				2020 Therms -	2020 Therms -	2020 Therms -	2020		2020 Normal	WN Therm	WN Therm	WN Therm	WN Therm	WN Revenue
Line	Rate Class	Description	Month	Summer	Winter	Total	Customers	2020 UPC	Normal UPC	Therms	Adjustment	Adjustment	Adjustment	Adjustment
								[G] / [H]	WNA	[H] x [J]	[K] - [G]	[K] - [G]	[K] - [G]	[M] x Rate + [N] x Rate
40	G-40/T-40	Low Annual, High Winter	January	(9)	1,800,364	1,800,355	5,126	351.2	396.3	2,031,250	230,896		230,896	\$43,062
41			February	69	1,761,135	1,761,204	5,124	343.7	408.0	2,090,502	329,298		329,298	\$61,414
42		Rates	March	6	1,471,715	1,471,721	5,128	287.0	337.4	1,729,963	258,243		258,243	\$48,162
43		Customer	April	(1)	934,832	934,831	5,081	184.0	216.4	1,099,281	164,450		164,450	\$30,670
44		\$75.09	May	297,681	307,245	604,927	5,099	118.6	117.7	600,046	(4,881)	(2,402)	(2,479)	-\$910
45		Summer	June	207,272	(24)	207,248	4,953	41.8	59.4	294,140	86,892	86,892		\$16,205
46		\$0.1865	July	116,133	0	116,133	4,905	23.7	16.5	80,797	(35,336)	(35,336)		-\$6,590
47		Winter	August	99,054	88	99,142	4,924	20.1	11.7	57,787	(41,355)	(41,355)		-\$7,713
48		\$0.1865	September	156,660	0	156,660	4,941	31.7	23.0	113,863	(42,797)	(42,797)		-\$7,982
49			October	229,293	(27)	229,266	4,986	46.0	64.2	319,906	90,641	90,641		\$16,904
50			November	371,818	331,258	703,076	5,026	139.9	141.1	709,174	6,098	3,225	2,873	\$1,137
51			December	(53)	1,360,353	1,360,300	5,234	259.9	287.2	1,503,339	143,039		143,039	\$26,677
52				1,477,924	7,966,938	9,444,862		1,847.7	2,078.7	10,630,049	1,185,187	58,867	1,126,319	\$221,037
53	G-50/T-50	Low Annual, Low Winter	January	0	162,592	162,592	812	200.3	200.3	162,592	0		-	\$0
54			February	0	163,761	163,761	825	198.5	198.5	163,761	0		-	\$0
55		Rates	March	0	156,891	156,891	826	190.1	190.1	156,891	0		-	\$0
56		Customer	April	8	98,889	98,897	828	119.5	119.5	98,897	0		-	\$0
57		\$75.09	May	46,723	44,759	91,482	833	109.8	109.8	91,482	0	-	-	\$0
58		Summer	June	100,996	0	100,996	844	119.6	119.6	100,996	0	-	-	\$0
59		\$0.1865	July	110,175	0	110,175	857	128.6	128.6	110,175	0	-	-	\$0
60		Winter	August	106,021	0	106,021	848	125.0	125.0	106,021	0	-	-	\$0
61		\$0.1865	September	126,540	0	126,540	848	149.3	149.3	126,540	0	-	-	\$0
62			October	100,562	(48)	100,514	816	123.1	123.1	100,514	0	-	-	\$0
63			November	65,069	49,618	114,688	821	139.8	139.8	114,688	0	-	-	\$0
64			December	0	141,206	141,206	831	169.8	169.8	141,206	0		-	\$0
65				656,093	817,670	1,473,763		1,773.5	1,773.5	1,473,763	0	0	0	\$0
66	G-41/T-41	Med. Annual, High Winter	January	11,142	2,457,584	2,468,726	742	3,326	3,610	2,679,813	211,087		211,087	\$51,189
67			February	0	2,407,737	2,407,737	739	3,258	3,694	2,730,344	322,606		322,606	\$78,232
68		Rates	March	0	2,077,387	2,077,387	736	2,821	3,141	2,312,568	235,182		235,182	\$57,032
69		Customer	April	1,824	1,333,734	1,335,559	736	1,814	2,034	1,497,721	162,162		162,162	\$39,324
70		\$222.64	May	479,198	448,673	927,870	735	1,263	1,217	894,001	(33,869)	(17,492)	(16,378)	-\$7,286
71		Summer	June	401,386	0	401,386	729	551	716	521,704	120,318	120,318		\$22,800
72		\$0.1895	July	259,893	0	259,893	726	358	332	241,016	(18,876)	(18,876)		-\$3,577
73		Winter	August	151,231	0	151,231	721	210	280	201,676	50,445	50,445		\$9,559
74		\$0.2425	September	319,271	(2,303)	316,968	722	439	397	286,497	(30,471)	(30,471)		-\$5,774
75			October	490,403	1,490	491,893	723	680	735	531,558	39,664	39,664		\$7,516
76			November	513,191	576,140	1,089,331	728	1,497	1,570	1,142,289	52,958	24,949	28,009	\$11,520
77			December	0	1,820,964	1,820,964	704	2,586	2,756	1,940,963	119,999		119,999	\$29,100
78				2,627,539	11,121,406	13,748,945		18,802	20,482	14,980,151	1,231,206	168,537	1,062,669	\$289,635

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				Customer Annualization					Rate Change	Pro Forma Adjustment	
				Year-End	Annualization		Annualization			Test Year	
				Customer	Annualization	Therm Adj.	Therm Adj.	Annualization Revenue	R-10 Rate Change	Total Therm	Revenue
Line	Rate Class	Description	Month	Adjustment	Therm Adjustment	Summer	Winter	Adjustment	Annualization	Adjustment	Adjustment
				[H]Dec - [H]	[J] x [P]	[J] x [P]	[J] x [P]	[P]xRt+[R]xRt+[S]xRt	[E]xDif+[H]xDif	[L] + [Q]	[U]+[O]+[T]
40	G-40/T-40	Low Annual, High Winter	January	108	42,970		42,970	\$16,156		273,865	\$59,218
41			February	110	44,986		44,986	\$16,670		374,285	\$78,084
42		Rates	March	106	35,861		35,861	\$14,670		294,103	\$62,832
43		Customer	April	154	33,268		33,268	\$17,750		197,719	\$48,420
44		\$75.09	May	135	15,869	7,809	8,060	\$13,087		10,988	\$12,176
45		Summer	June	282	16,732	16,732		\$24,276		103,624	\$40,481
46		\$0.1865	July	329	5,421	5,421		\$25,723		(29,915)	\$19,133
47		Winter	August	310	3,640	3,640		\$23,972		(37,715)	\$16,259
48		\$0.1865	September	293	6,763	6,763		\$23,298		(36,034)	\$15,316
49			October	248	15,906	15,906		\$21,584		106,547	\$38,488
50			November	208	29,367	15,530	13,836	\$21,106		35,465	\$22,243
51			December	0	-		-	\$0		143,039	\$26,677
52				2,284	250,784	71,802	178,982	\$218,291		1,435,971	\$439,328
53	G-50/T-50	Low Annual, Low Winter	January	20	3,975		3,975	\$2,231		3,975	\$2,231
54			February	6	1,277		1,277	\$721		1,277	\$721
55		Rates	March	6	1,134		1,134	\$660		1,134	\$660
56		Customer	April	4	438		438	\$357		438	\$357
57		\$75.09	May	(2)	(172)	(172)		-\$150		(172)	-\$150
58		Summer	June	(13)	(1,512)	(1,512)		-\$1,231		(1,512)	-\$1,231
59		\$0.1865	July	(25)	(3,224)	(3,224)		-\$2,484		(3,224)	-\$2,484
60		Winter	August	(17)	(2,079)	(2,079)		-\$1,637		(2,079)	-\$1,637
61		\$0.1865	September	(16)	(2,428)	(2,428)		-\$1,674		(2,428)	-\$1,674
62			October	15	1,868	1,868		\$1,488		1,868	\$1,488
63			November	11	1,533		1,533	\$1,109		1,533	\$1,109
64			December	0	-		-	\$0		-	\$0
65				(10)	810	(7,547)	8,357	-\$609		810	-\$609
66	G-41/T-41	Med. Annual, High Winter	January	(38)	(137,312)		(137,312)	-\$41,766		73,775	\$9,423
67			February	(35)	(128,568)		(128,568)	-\$38,926		194,039	\$39,307
68		Rates	March	(32)	(100,815)		(100,815)	-\$31,594		134,367	\$25,437
69		Customer	April	(32)	(65,520)		(65,520)	-\$23,061		96,642	\$16,263
70		\$222.64	May	(30)	(36,883)	(36,883)		-\$13,736		(70,753)	-\$21,023
71		Summer	June	(25)	(17,678)	(17,678)		-\$8,849		102,640	\$13,951
72		\$0.1895	July	(21)	(7,108)	(7,108)		-\$6,111		(25,984)	-\$9,689
73		Winter	August	(17)	(4,781)	(4,781)		-\$4,713		45,664	\$4,846
74		\$0.2425	September	(17)	(6,869)	(6,869)		-\$5,153		(37,340)	-\$10,928
75			October	(19)	(13,797)	(13,797)		-\$6,793		25,867	\$724
76			November	(24)	(36,988)		(36,988)	-\$14,216		15,970	-\$2,696
77			December	0	-		-	\$0		119,999	\$29,100
78				(290)	(556,319)	(87,117)	(469,203)	-\$194,920		674,887	\$94,715

Northern Utilities New Hampshire
Weather Normalization and Customer Annualization

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]	[O]
				Per Books					Weather Normalization					
				2020 Therms -	2020 Therms -	2020 Therms -	2020			2020 Normal	WN Therm	Adjustment	WN Therm	
Line	Rate Class	Description	Month	Summer	Winter	Total	Customers	2020 UPC	Normal UPC	Therms	Adjustment	Summer	Winter	WN Revenue
								[G] / [H]	WNA	[H] x [J]	[K] - [G]	[K] - [G]	[K] - [G]	[M] x Rate + [N] x Rate
79	G-51/T-51	Med. Annual, Low Winter	January	404	573,932	574,336	279	2,057	2,040	569,637	(4,699)		(4,699)	-\$657
80			February	0	564,038	564,038	277	2,035	2,076	575,391	11,353		11,353	\$1,588
81		Rates	March	0	535,718	535,718	278	1,927	1,928	536,049	331		331	\$46
82		Customer	April	359	307,104	307,462	278	1,106	1,485	412,752	105,290		105,290	\$14,730
83		\$222.64	May	138,093	137,155	275,248	278	989	1,336	371,675	96,428	48,378	48,050	\$11,981
84		Summer	June	266,334	(3,946)	262,387	277	948	1,267	350,616	88,229	88,229		\$9,590
85		\$0.1337	July	272,663	0	272,663	277	986	1,133	313,453	40,790	40,790		\$4,434
86		\$0.1087	August	256,063	0	256,063	274	934	1,059	290,228	34,165	34,165		\$3,714
87			September	310,812	0	310,812	276	1,127	1,190	328,287	17,475	17,475		\$1,900
88		Winter	October	299,345	411	299,755	279	1,073	1,147	320,330	20,575	20,575		\$2,236
89		\$0.1712	November	202,739	160,794	363,532	278	1,306	1,418	394,656	31,124	17,358	13,766	\$3,813
90		\$0.1399	December	0	447,486	447,486	267	1,679	1,787	476,284	28,798		28,798	\$4,029
91				1,746,810	2,722,691	4,469,501		16,168	17,866	4,939,359	469,858	266,970	202,888	\$57,404
92	G-42/T-42	High Annual, High Winter	January	0	883,132	883,132	34	25,974	29,522	1,003,732	120,600		120,600	\$23,927
93			February	0	842,264	842,264	35	24,065	26,436	925,261	82,997		82,997	\$16,467
94		Rates	March	0	710,411	710,411	35	20,297	23,699	829,467	119,056		119,056	\$23,621
95		Customer	April	14,062	516,408	530,470	35	15,156	16,620	581,698	51,228		51,228	\$10,164
96		\$1,335.81	May	302,173	38,889	341,062	35	9,607	10,463	371,433	30,370	26,907	3,463	\$3,932
97		Summer	June	218,221	0	218,221	35	6,235	7,036	246,274	28,053	28,053		\$3,383
98		\$0.1206	July	184,562	0	184,562	35	5,273	6,112	213,906	29,344	29,344		\$3,539
99		Winter	August	191,592	0	191,592	35	5,474	6,198	216,926	25,333	25,333		\$3,055
100		\$0.1984	September	243,881	0	243,881	34	7,173	7,488	254,575	10,694	10,694		\$1,290
101			October	392,858	11,382	404,240	34	11,889	12,378	420,845	16,606	16,606		\$2,003
102			November	42,102	531,834	573,936	34	16,880	18,657	634,352	60,416	4,432	55,984	\$11,642
103			December	0	699,750	699,750	31	22,573	25,385	786,923	87,173		87,173	\$17,295
104				1,589,451	4,234,069	5,823,520		170,598	189,993	6,485,392	661,872	141,371	520,501	\$120,317
105	G-52/T-52	High Annual, Low Winter	January	0	1,285,855	1,285,855	32	40,393	40,393	1,285,855	0	-		\$0
106			February	0	1,458,466	1,458,466	32	45,577	45,577	1,458,466	0	-		\$0
107		Rates	March	0	1,334,531	1,334,531	32	41,704	41,704	1,334,531	0	-		\$0
108		Customer	April	41,018	1,300,352	1,341,370	32	41,918	41,918	1,341,370	0	-		\$0
109		\$1,335.81	May	1,276,171	5,650	1,281,821	34	38,263	38,263	1,281,821	0	-	-	\$0
110		Summer	June	1,261,218	12,462	1,273,681	34	37,461	37,461	1,273,681	0	-	-	\$0
111		\$0.0792	July	1,220,236	0	1,220,236	33	36,977	36,977	1,220,236	0	-	-	\$0
112		Winter	August	1,282,733	0	1,282,733	33	38,871	38,871	1,282,733	0	-	-	\$0
113		\$0.1720	September	1,373,207	0	1,373,207	32	42,913	42,913	1,373,207	0	-	-	\$0
114			October	1,344,057	43,229	1,387,286	32	43,353	43,353	1,387,286	0	-	-	\$0
115			November	28,665	1,354,228	1,382,893	32	42,726	42,726	1,382,893	0	-	-	\$0
116			December	0	1,562,138	1,562,138	33	47,338	47,338	1,562,138	0	-	-	\$0
117				7,827,306	8,356,912	16,184,218		497,493	497,493	16,184,218	0	0	0	\$0
118		Total Test Year Adjustment		19,496,726	49,633,554	69,130,280				74,576,215	5,445,936	719,598	4,726,338	\$1,994,374

Northern Utilities New Hampshire
Weather Normalization and Customer Annualization

[A]	[B]	[C]	[D]	[P]	[Q]	[R]	[S]	[T]	[U]	[V]	[W]
				Customer Annualization					Rate Change	Pro Forma Adjustment	
				Year-End		Annualization	Annualization				Test Year
				Customer	Annualization	Therm Adj.	Therm Adj.	Annualization Revenue	R-10 Rate Change	Total Therm	Revenue
Line	Rate Class	Description	Month	Adjustment	Therm Adjustment	Summer	Winter	Adjustment	Annualization	Adjustment	Adjustment
				[H]Dec - [H]	[J] x [P]	[J] x [P]	[J] x [P]	[P]xRt+[R]xRt+[S]xRt	[E]xDif+[H]xDif	[L] + [Q]	[U]+[O]+[T]
79	G-51/T-51	Med. Annual, Low Winter	January	(13)	(25,976)		(25,976)	-\$6,987		(30,675)	-\$7,645
80			February	(11)	(22,144)		(22,144)	-\$5,907		(10,791)	-\$4,318
81		Rates	March	(12)	(22,175)		(22,175)	-\$6,131		(21,844)	-\$6,084
82		Customer	April	(12)	(17,074)		(17,074)	-\$5,417		88,215	\$9,313
83		\$222.64	May	(12)	(15,719)	(15,719)		-\$4,623		80,709	\$7,358
84		Summer	June	(10)	(12,884)	(12,884)		-\$3,918		75,345	\$5,672
85		\$0.1337	July	(10)	(11,446)	(11,446)		-\$3,745		29,344	\$689
86		\$0.1087	August	(8)	(8,116)	(8,116)		-\$2,781		26,050	\$933
87			September	(9)	(11,185)	(11,185)		-\$3,544		6,290	-\$1,644
88		Winter	October	(13)	(14,607)	(14,607)		-\$4,741		5,967	-\$2,505
89		\$0.1712	November	(12)	(16,734)		(16,734)	-\$5,448		14,391	-\$1,636
90		\$0.1399	December	0	-		-	\$0		28,798	\$4,029
91				(120)	(178,059)	(73,956)	(104,102)	-\$53,242		291,799	\$4,162
92	G-42/T-42	High Annual, High Winter	January	(3)	(88,565)		(88,565)	-\$21,579		32,036	\$2,348
93			February	(4)	(105,744)		(105,744)	-\$26,323		(22,747)	-\$9,856
94		Rates	March	(4)	(94,796)		(94,796)	-\$24,151		24,260	-\$530
95		Customer	April	(4)	(66,480)		(66,480)	-\$18,533		(15,252)	-\$8,369
96		\$1,335.81	May	(4)	(47,083)	(47,083)		-\$11,689		(16,713)	-\$7,757
97		Summer	June	(4)	(28,146)	(28,146)		-\$8,738		(92)	-\$5,354
98		\$0.1206	July	(4)	(24,446)	(24,446)		-\$8,291		4,898	-\$4,753
99		Winter	August	(4)	(24,792)	(24,792)		-\$8,333		542	-\$5,278
100		\$0.1984	September	(3)	(22,463)	(22,463)		-\$6,716		(11,768)	-\$5,427
101			October	(3)	(37,133)	(37,133)		-\$8,486		(20,527)	-\$6,483
102			November	(3)	(55,973)		(55,973)	-\$15,112		4,443	-\$3,471
103			December	0	-		-	\$0		87,173	\$17,295
104				(41)	(595,620)	(184,063)	(411,557)	-\$157,951		66,252	-\$37,635
105	G-52/T-52	High Annual, Low Winter	January	1	47,125		47,125	\$9,664		47,125	\$9,664
106			February	1	45,577		45,577	\$9,175		45,577	\$9,175
107		Rates	March	1	41,704		41,704	\$8,509		41,704	\$8,509
108		Customer	April	1	41,917		41,917	\$8,546		41,917	\$8,546
109		\$1,335.81	May	(1)	(19,132)	(19,132)		-\$2,183		(19,132)	-\$2,183
110		Summer	June	(1)	(37,461)	(37,461)		-\$4,303		(37,461)	-\$4,303
111		\$0.0792	July	0	-	-	-	\$0		-	\$0
112		Winter	August	0	-	-	-	\$0		-	\$0
113		\$0.1720	September	1	42,913	42,913		\$4,734		42,913	\$4,734
114			October	1	43,353	43,353		\$4,769		43,353	\$4,769
115			November	1	27,060		27,060	\$5,500		27,060	\$5,500
116			December	0	-		-	\$0		-	\$0
117				5	233,056	29,672	203,384	\$44,412		233,056	\$44,412
118		Total Test Year Adjustment		7,942	(424,106)	(192,862)	(231,244)	\$278,301	\$265,302	5,021,830	\$2,537,977

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalization

Line	Account Description	FERC Account	Account Balance	Allocation Factor	Indirect Production & O.H.	Distribution	Onsite	Customer Accounts & Services
1	RATE BASE							
2	Plant in Service							
3	Intangible Plant							
4	Miscellaneous Intangible Plant, Plant-related	303	212,619	INT_PLANT	1,424	123,191	88,003	-
5	Miscellaneous Intangible Plant, Customer-related	303	9,041,497	DISTRIBUTION	-	9,041,497	-	-
6	Miscellaneous Intangible Plant, Labor-related	303	<u>3,572,231</u>	INT_LABOR	<u>160,985</u>	<u>1,044,144</u>	<u>1,614,481</u>	<u>752,621</u>
7	Subtotal - Intangible Plant		12,826,347		162,409	10,208,833	1,702,484	752,621
8	Mfg. Gas Produc. Plant							
9	Land and Land Rights	304	2,787	PROD_OH	2,787	-	-	-
10	Structures & Improvements	305	-	-	-	-	-	-
11	Other Equipment	320	-	-	-	-	-	-
12	LNG Equipment	321	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
13	Subtotal - Mfg. Gas Produc. Plant		2,787		2,787	-	-	-
14	Other Storage Plant							
15	Land - Lewiston	360	23,833	PROD_OH	23,833	-	-	-
16	Structures & Improvements	361	232,281	PROD_OH	232,281	-	-	-
17	Gas Holders	362	1,585,468	PROD_OH	1,585,468	-	-	-
18	Other Equipment	363	<u>35,693</u>	<u>PROD_OH</u>	<u>35,693</u>	<u>-</u>	<u>-</u>	<u>-</u>
19	Subtotal - Other Storage Plant		1,877,275		1,877,275	-	-	-
20	Distribution Plant							
21	Land & Land Rights, Other Distr Sys	374.4	89,111	DISTRIBUTION	-	89,111	-	-
22	Land & Land Rights, Right of Way	374.5	17,911	DISTRIBUTION	-	17,911	-	-
23	Structures & Improvements	375	3,260,871	DISTRIBUTION	-	3,260,871	-	-
24	Mains	376	151,932,588	DISTRIBUTION	-	151,932,588	-	-
25	M&R Station Equip. - Regulating	378	7,288,982	DISTRIBUTION	-	7,288,982	-	-
26	M&R Station Equip. - G	379	39,266	DISTRIBUTION	-	39,266	-	-
27	Services	380	82,837,047	ONSITE	-	-	82,837,047	-
28	Meters	381	4,624,610	ONSITE	-	-	4,624,610	-
29	Meter Installations	382	26,001,685	ONSITE	-	-	26,001,685	-
30	House Regulators	383	733,550	ONSITE	-	-	733,550	-
31	Water Heaters/Conversion Burners	386	<u>1,978,895</u>	<u>ONSITE</u>	<u>-</u>	<u>-</u>	<u>1,978,895</u>	<u>-</u>
32	Subtotal - Distribution Plant		278,804,516			162,628,729	116,175,787	-
33	General Plant							
34	Land and Land Rights	389	232,947	INT_PLANT	1,560	134,969	96,417	-
35	Office Furniture & Equipment	391	508,135	INT_LABOR	22,899	148,525	229,653	107,057
36	Stores Equipment	393	31,520	INT_PLANT	211	18,263	13,046	-
37	Tools, Shop & Garage Equip.	394	1,430,421	INT_PLANT	9,581	828,787	592,054	-
38	Power Operated Equip.	396	75,266	INT_PLANT	504	43,609	31,153	-
39	Communication Equip.	397	1,873,480	INT_PLANT	12,549	1,085,495	775,436	-
40	Metscan Communication Equip	397.25	112,656	ONSITE	-	-	112,656	-
41	ERT Automatic Reading Dev	397.35	<u>3,470,146</u>	<u>ONSITE</u>	<u>-</u>	<u>-</u>	<u>3,470,146</u>	<u>-</u>
42	Subtotal - General Plant		7,734,572		47,305	2,259,648	5,320,562	107,057
43	Total Plant in Service		301,245,498		2,089,776	175,097,210	123,198,833	859,678

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalization

Line No.	Account Description	FERC Account	Account Balance	Allocation Factor	Indirect Production & O.H.	Distribution	Onsite	Customer Accounts & Services
44	Accumulated Depreciation							
45	Intangible Plant							
46	Miscellaneous Intangible Plant, Plant-related	303	(81,184)	INT_PLANT	(544)	(47,038)	(33,602)	-
47	Miscellaneous Intangible Plant, Customer-related	303	(3,452,299)	DISTRIBUTION	-	(3,452,299)	-	-
48	Miscellaneous Intangible Plant, Labor-related	303	(1,363,979)	INT_LABOR	(61,469)	(398,684)	(616,454)	(287,372)
49	Subtotal - Intangible Plant		(4,897,461)		(62,012)	(3,898,020)	(650,057)	(287,372)
50	Mfg. Gas Produc. Plant							
51	Land and Land Rights	304	-	-	-	-	-	-
52	Structures & Improvements	305	374	PROD_OH	374	-	-	-
53	Other Equipment	320	4,438	PROD_OH	4,438	-	-	-
54	LNG Equipment	321	27,544	PROD_OH	27,544	-	-	-
55	Subtotal - Mfg. Gas Produc. Plant		32,357		32,357	-	-	-
56	Other Storage Plant							
57	Land - Lewiston	360	-	-	-	-	-	-
58	Structures & Improvements	361	(109,222)	PROD_OH	(109,222)	-	-	-
59	Gas Holders	362	(1,203,365)	PROD_OH	(1,203,365)	-	-	-
60	Other Equipment	363	(37,603)	PROD_OH	(37,603)	-	-	-
61	Subtotal - Other Storage Plant		(1,350,190)		(1,350,190)	-	-	-
62	Distribution Plant							
63	Land & Land Rights, Other Distr Sys	374.4	-	-	-	-	-	-
64	Land & Land Rights, Right of Way	374.5	-	-	-	-	-	-
65	Structures & Improvements	375	(596,162)	DISTRIBUTION	-	(596,162)	-	-
66	Mains	376	(38,511,660)	DISTRIBUTION	-	(38,511,660)	-	-
67	M&R Station Equip. - Regulating	378	(666,376)	DISTRIBUTION	-	(666,376)	-	-
68	M&R Station Equip. - G	379	(6,432)	DISTRIBUTION	-	(6,432)	-	-
69	Services	380	(28,479,497)	ONSITE	-	-	(28,479,497)	-
70	Meters	381	(1,226,613)	ONSITE	-	-	(1,226,613)	-
71	Meter Installations	382	(6,859,297)	ONSITE	-	-	(6,859,297)	-
72	House Regulators	383	(212,402)	ONSITE	-	-	(212,402)	-
73	Water Heaters/Conversion Burners	386	(959,565)	ONSITE	-	-	(959,565)	-
74	Subtotal - Distribution Plant		(77,518,004)		-	(39,780,631)	(37,737,373)	-
75	General Plant							
76	Land & Land Rights	389	-	-	-	-	-	-
77	Office Furniture & Equipment	391	(298,078)	INT_LABOR	(13,433)	(87,127)	(134,717)	(62,801)
78	Stores Equipment	393	(31,511)	INT_PLANT	(211)	(18,258)	(13,042)	-
79	Tools, Shop & Garage Equip.	394	(785,741)	INT_PLANT	(5,263)	(455,259)	(325,220)	-
80	Power Operated Equip.	396	(75,266)	INT_PLANT	(504)	(43,609)	(31,153)	-
81	Communication Equip.	397	(1,570,602)	INT_PLANT	(10,520)	(910,007)	(650,074)	-
82	Metscan Communication Equip	397.25	(112,656)	ONSITE	-	-	(112,656)	-
83	ERT Automatic Reading Dev	397.35	(2,766,299)	ONSITE	-	-	(2,766,299)	-
84	Subtotal - General Plant		(5,640,154)		(29,931)	(1,514,260)	(4,033,162)	(62,801)
85	Total Accumulated Depreciation		(89,373,452)		(1,409,777)	(45,192,910)	(42,420,592)	(350,173)

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalization

Line No.	Account Description	FERC Account	Account Balance	Allocation Factor	Indirect Production & O.H.	Distribution	Onsite	Customer Accounts & Services
86	Other Rate Base Items							
87	Material and Supplies	154	2,773,457	INT_DIST_PLANT	-	1,617,778	1,155,679	-
88	Prepayments	165	64,895	INT_DIST_PLANT	-	37,854	27,041	-
89	Cash Working Capital	131	1,773,194	INT_TOTAL_PLANT	12,301	1,030,659	725,174	5,060
90	Cash Working Capital - Pro Forma	131	235,191	INT_TOTAL_PLANT	1,632	136,703	96,185	671
91	Customer Deposits	235	(249,677)	ACCTS_SERVICES	-	-	-	(249,677)
92	Net Deferred Income Taxes	283	(21,177,756)	INT_TOTAL_PLANT	(146,913)	(12,309,449)	(8,660,959)	(60,436)
93	Excess Deferred Income Taxes - Regulatory Liability	254	(8,999,336)	INT_TOTAL_PLANT	(62,429)	(5,230,812)	(3,680,412)	(25,682)
94	Excess Deferred Income Taxes - Gross up	283	2,427,244	INT_TOTAL_PLANT	16,838	1,410,821	992,657	6,927
95	Total Other Rate Base Items		<u>(23,152,788)</u>		<u>(178,572)</u>	<u>(13,306,445)</u>	<u>(9,344,634)</u>	<u>(323,137)</u>
96	TOTAL RATE BASE		<u>188,719,257</u>		<u>501,428</u>	<u>116,597,855</u>	<u>71,433,607</u>	<u>186,368</u>
97	OPERATION AND MAINTENANCE EXPENSE							
98	Production, Storage, and Distribution Expense							
99	Mfg. Gas Produc. Plant							
100	Supervision	710	12,038	PROD_OH	12,038	-	-	-
101	Propane Expenses	717	9,904	PROD_OH	9,904	-	-	-
102	Misc. Intangible Plant	735	24,360	PROD_OH	24,360	-	-	-
103	Subtotal - Mfg. Gas Produc. Plant		<u>46,302</u>		<u>46,302</u>	-	-	-
104	Maintenance Expenses							
105	Supervision	740	12,038	PROD_OH	12,038	-	-	-
106	Maintenance of Plant	741	3,460	PROD_OH	3,460	-	-	-
107	Maintenance of Equipment	742	11,687	PROD_OH	11,687	-	-	-
108	Maint of Scada - Production	769	2,704	PROD_OH	2,704	-	-	-
109	Subtotal - Maintenance Expenses		<u>29,889</u>		<u>29,889</u>	-	-	-
110	Other Gas Expenses							
111	Other Gas Supply Exp	813	290,076	PROD_OH	290,076	-	-	-
112	Other Gas Supp Exp - Del Serv	813	<u>180,290</u>	DISTRIBUTION	-	<u>180,290</u>	-	-
113	Subtotal - Other Gas Expenses		<u>470,367</u>		<u>290,076</u>	<u>180,290</u>	-	-
114	Operation Expenses							
115	System Cntl/Load Dispatching	851.02	2,885	DISTRIBUTION	-	2,885	-	-
116	System Cntl/Load Dispatching - Gas Supply	851.0201	-	-	-	-	-	-
117	Communication System Exp	852	<u>62,100</u>	DISTRIBUTION	-	<u>62,100</u>	-	-
118	Subtotal - Operation Expenses		<u>64,985</u>		-	<u>64,985</u>	-	-

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalization

Line No.	Account Description	FERC Account	Account Balance	Allocation Factor	Indirect Production & O.H.	Distribution	Onsite	Customer Accounts & Services
119	Distribution Operation Expenses							
120	Op Superv-Eng-Gas Distr	870	39,588	INT_874-879	-	14,895	24,694	-
121	Mains & Services	874	793,237	INT_MAIN_SVCS	-	513,348	279,889	-
122	Regulator Station Expense	875	320,571	DISTRIBUTION	-	320,571	-	-
123	Meter & House Regulator	878	1,054,382	ONSITE	-	-	1,054,382	-
124	Customer Installation Exp	879	48,280	ONSITE	-	-	48,280	-
125	Operations Exp Other	880	1,139,382	INT_874-879	-	428,678	710,704	-
126	Subtotal - Distribution Operation Expenses		3,395,440		-	1,277,492	2,117,948	-
127	Distribution Maintenance Expenses							
128	Maint Supervision	885	90,410	INT_887-894	-	39,513	50,897	-
129	Structures & Improvements	886	35,514	INT_887-894	-	15,521	19,993	-
130	Mains	887	81,512	DISTRIBUTION	-	81,512	-	-
131	Measuring & Regulating - Atatew EQ	889	64,637	DISTRIBUTION	-	64,637	-	-
132	Measuring & Regulating - EQ Industry	890	5,322	DISTRIBUTION	-	5,322	-	-
133	Measuring & Regulating - EQ City Gate	891	45,328	DISTRIBUTION	-	45,328	-	-
134	Main Distri SCADA	891.01	40,137	DISTRIBUTION	-	40,137	-	-
135	Services	892	142,056	ONSITE	-	-	142,056	-
136	Meters & House Regulators	893	26,058	ONSITE	-	-	26,058	-
137	Other Equipment	894	1,035	INT_887-894	-	452	582	-
138	Water Heaters & Conv Burn	894.01	137,082	ONSITE	-	-	137,082	-
139	Rented Conv Burn		-	-	-	-	-	-
140	Subtotal - Distribution Maintenance Expenses		669,090		-	292,422	376,668	-
141	Total Production, Storage, and Distribution Expense		4,676,073		366,267	1,815,190	2,494,616	-
142	Customer Accounts, Service, and Sales Expense							
143	Customer Accounts Expense							
144	Meter Reading Expense	902	202,880	ACCTS_SERVICES	-	-	-	202,880
145	Cust Records and Col	903	2,052,586	ACCTS_SERVICES	-	-	-	2,052,586
146	Uncollectible Accts	904	437,750	ACCTS_SERVICES	-	-	-	437,750
147	Subtotal - Customer Accounts Expense		2,693,217		-	-	-	2,693,217
148	Customer Service & Information Expense							
149	Customer Assistance - other	908	-	-	-	-	-	-
150	Inf and Instruct Expense	909	73,965	ACCTS_SERVICES	-	-	-	73,965
151	Subtotal - Customer Service & Information Expense		73,965		-	-	-	73,965
152	Sales Expense							
153	Advertising Expense	913	70,021	ACCTS_SERVICES	-	-	-	70,021
154	Interest on Customer Deposits		9,371	ACCTS_SERVICES	-	-	-	9,371
155	Subtotal - Sales Expense		79,392		-	-	-	79,392
156	Total Customer Accounts, Service, and Sales Expense		2,846,573		-	-	-	2,846,573

Northern Utilities New Hampshire
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Design Day with Customer Component of Mains
Functionalization

Line No.	Account Description	FERC Account	Account Balance	Allocation Factor	Indirect Production & O.H.	Distribution	Onsite	Customer Accounts & Services
157	Administrative and General Expense							
158	Administrative and General Salaries	920	11,414	INT_LABOR	514	3,336	5,158	2,405
159	Office Supplies and Exp	921	425,018	INT_LABOR	19,154	124,230	192,088	89,546
160	Outside Service Employed	923	3,909,556	INT_LABOR	176,187	1,142,742	1,766,936	823,691
161	Property Insurance	924	2,931	INT_PLANT	20	1,698	1,213	-
162	Injuries and Damages	925	293,510	INT_LABOR	13,227	85,792	132,653	61,839
163	Employee Pension and Benefits	926	2,201,576	INT_LABOR	99,216	643,509	995,009	463,842
164	Regulatory Commission Exp	928	504,386	INT_RATEBASE	1,340	311,629	190,919	498
165	General Advertising Expense	930	42,897	INT_LABOR	1,933	12,539	19,387	9,038
166	Rents Admin and General	931	23,527	INT_LABOR	1,060	6,877	10,633	4,957
167	Maint General Plant - Equip Shared	932	130,652	INT_GEN_PLANT	799	38,170	89,875	1,808
168	Maint of General Plant	935	6,985	INT_GEN_PLANT	43	2,041	4,805	97
169	Subtotal - Administrative and General Expense		7,552,453		313,493	2,372,562	3,408,678	1,457,720
170	Total Administrative and General Expense		<u>7,552,453</u>		<u>313,493</u>	<u>2,372,562</u>	<u>3,408,678</u>	<u>1,457,720</u>
171	TOTAL OPERATION AND MAINTENANCE EXPENSE		<u>15,075,099</u>		<u>679,760</u>	<u>4,187,752</u>	<u>5,903,294</u>	<u>4,304,293</u>
172	Depreciation and Amortization Expense							
173	Intangible Plant							
174	Miscellaneous Intangible Plant, Plant-related	303	-	-	-	-	-	-
175	Miscellaneous Intangible Plant, Customer-related	303	-	-	-	-	-	-
176	Miscellaneous Intangible Plant, Labor-related	303	-	-	-	-	-	-
177	Subtotal - Intangible Plant		-		-	-	-	-
178	Mfg. Gas Produc. Plant							
179	Land and Land Rights	304	-	-	-	-	-	-
180	Structures & Improvements	305	931	PROD_OH	931	-	-	-
181	Other Equipment	320	-	-	-	-	-	-
182	LNG Equipment	321	-	-	-	-	-	-
183	Subtotal - Mfg. Gas Produc. Plant		931		931	-	-	-
184	Other Storage Plant							
185	Land - Lewiston	360	-	-	-	-	-	-
186	Structures & Improvements	361	4,785	PROD_OH	4,785	-	-	-
187	Gas Holders	362	32,149	PROD_OH	32,149	-	-	-
188	Other Equipment	363	-	-	-	-	-	-
189	Subtotal - Other Storage Plant		36,934		36,934	-	-	-

Northern Utilities New Hampshire
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Design Day with Customer Component of Mains
Functionalization

Line No.	Account Description	FERC Account	Account Balance	Allocation Factor	Indirect Production & O.H.	Distribution	Onsite	Customer Accounts & Services
190	Distribution Plant							
191	Land & Land Rights, Other Distr Sys	374.4	-	-	-	-	-	-
192	Land & Land Rights, Right of Way	374.5	-	-	-	-	-	-
193	Structures & Improvements	375	89,348	DISTRIBUTION	-	89,348	-	-
194	Mains	376	5,348,398	DISTRIBUTION	-	5,348,398	-	-
195	M&R Station Equip. - Regulating	378	354,973	DISTRIBUTION	-	354,973	-	-
196	M&R Station Equip. - G	379	1,912	DISTRIBUTION	-	1,912	-	-
197	Services	380	3,653,114	ONSITE	-	-	3,653,114	-
198	Meters	381	246,954	ONSITE	-	-	246,954	-
199	Meter Installations	382	1,099,871	ONSITE	-	-	1,099,871	-
200	House Regulators	383	24,354	ONSITE	-	-	24,354	-
201	Water Heaters/Conversion Burners	386	224,802	ONSITE	-	-	224,802	-
202	Subtotal - Distribution Plant		11,043,726		-	5,794,631	5,249,095	-
203	General Plant							
204	Land & Land Rights	389	-	-	-	-	-	-
205	Office Furniture & Equipment	391	30,265	INT_LABOR	1,364	8,846	13,678	6,376
206	Stores Equipment	393	-	-	-	-	-	-
207	Tools, Shop & Garage Equip.	394	25,364	INT_PLANT	170	14,696	10,498	-
208	Power Operated Equip.	396	-	-	-	-	-	-
209	Communication Equip.	397	19,827	INT_PLANT	133	11,488	8,206	-
210	Metscan Communication Equip	397.25	-	-	-	-	-	-
211	ERT Automatic Reading Dev	397.35	74,391	ONSITE	-	-	74,391	-
212	Subtotal - General Plant		149,847		1,667	35,030	106,774	6,376
213	Amortization Expense							
214	Amortization Expense	404	816,977	INT_INTANGIBLE	10,345	650,254	108,440	47,938
215	Amortization Expense Adjustments	404	189,288	INT_INTANGIBLE	2,397	150,659	25,125	11,107
216	Amortization Rate Case Costs - NH	407	-	-	-	-	-	-
217	Excess ADIT Flow Back	407	(308,218)	INT_RATEBASE	(819)	(190,429)	(116,666)	(304)
218	Subtotal - Amortization Expense		698,046		11,923	610,484	16,899	58,741
219	Total Depreciation and Amortization Expense		11,929,484		51,454	6,440,145	5,372,768	65,117
220	Taxes							
221	Taxes Other Than Income							
222	Payroll Taxes - FICA	408	224,247	INT_LABOR	10,106	65,546	101,349	47,246
223	Payroll Tax Pro Formas	408	137,672	INT_LABOR	6,204	40,241	62,221	29,006
224	Unemployment Tax - Federal	408.04	1,639	INT_LABOR	74	479	741	345
225	Unemployment Tax - State	408.06	1,135	INT_LABOR	51	332	513	239
226	Property Taxes	408.12	4,728,576	INT_TOTAL_PLANT	32,803	2,748,458	1,933,822	13,494
227	Property Taxes Pro Forma	408.12	617,939	INT_TOTAL_PLANT	4,287	359,173	252,715	1,763
228	Payroll Taxes Capitalized	408.1	(161,795)	INT_LABOR	(7,291)	(47,292)	(73,124)	(34,088)
229	Other Taxes	408.02	73,972	INT_RATEBASE	197	45,703	28,000	73
230	Subtotal - Taxes Other Than Income		5,623,385		46,430	3,212,640	2,306,237	58,079

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalization

Line	FERC			Indirect Production &			Customer Accounts &
No.	Account	Account Balance	Allocation Factor	O.H.	Distribution	Onsite	Services
257	INDIRECT PRODUCTION AND OVERHEAD SUMMARY						
258	LNG Production and Storage						
259	Return on Assets			38,848			
260	O&M Expenses			76,191			
261	Associated A&G and Overheads			99,499			
262	Total Production and Storage			214,538			
263	Other A&G Expenses (Energy Contracts Charges and Overheads)						
264	Other Gas Supply Expenses (Acct. 813)			290,076			
265	Associated A&G and Overheads			321,799			
266	Total Other A&G Expenses			611,875			
267	Total Indirect Production and Overhead			826,413			

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Summary of Cost of Service Study Results

Line	Account	Residential	Residential	High Winter	Low Winter	High Winter	Low Winter	High Winter	Low Winter
No.	Revenue Requirement Summary	Heat	Non-Heat	Small	Small	Medium	Medium	Large	Large
	Balance	R-5, R-10	R-6, R-11	G-40, T-40	G-50, T-50	G-41, T-41	G-51, T-51	G-42, T-42	G-52, T-52
1	Rate Base								
2	Plant in Service	\$ 301,245,498	\$ 170,246,732	\$ 6,593,386	\$ 51,245,369	\$ 6,225,067	\$ 36,771,567	\$ 7,493,599	\$ 11,647,303
3	Accumulated Reserve	(89,373,452)	(52,308,017)	(2,111,513)	(15,148,725)	(1,919,028)	(9,769,917)	(2,152,494)	(3,074,609)
4	Other Rate Base Items	(23,152,788)	(13,000,952)	(503,394)	(3,962,675)	(497,283)	(2,864,201)	(601,238)	(889,945)
5	Total Rate Base	\$ 188,719,257	\$ 104,937,763	\$ 3,978,479	\$ 32,133,969	\$ 3,808,756	\$ 24,137,449	\$ 4,739,867	\$ 7,682,750
6	Revenue at Current Rates								
7	Rate Schedule Revenue	\$ 39,796,841	\$ 20,731,783	\$ 493,626	\$ 6,745,829	\$ 1,024,226	\$ 5,235,691	\$ 1,396,947	\$ 1,545,114
8	Special Contracts	1,197,813	694,032	27,624	202,566	25,332	136,142	30,636	42,210
9	Indirect Production & OH Revenue	1,057,890	510,076	6,031	238,849	19,474	98,439	101,838	69,962
10	Late Payment Revenues	76,773	54,649	1,478	8,359	1,627	6,010	2,313	790
11	Miscellaneous Revenues	1,070,932	848,963	36,804	99,475	13,662	42,047	7,466	11,035
12	Total Revenue at Current Rates	\$ 43,200,249	\$ 22,839,504	\$ 565,562	\$ 7,295,080	\$ 1,084,321	\$ 5,518,329	\$ 1,539,199	\$ 1,669,111
13	Expenses at Current Rates								
14	O&M and A&G Expenses	\$ 15,075,099	\$ 9,171,694	\$ 380,169	\$ 2,528,361	\$ 335,891	\$ 1,440,748	\$ 417,071	\$ 427,957
15	Depreciation and Amortization Expense	11,929,484	6,938,809	281,543	2,013,209	253,539	1,348,390	283,695	415,282
16	Taxes Other Than Income	5,623,385	3,182,191	123,567	956,858	116,545	683,495	140,674	215,969
17	Income Taxes	1,626,264	903,494	34,220	276,965	32,798	208,445	40,901	66,375
18	Total Expenses at Current Rates	\$ 34,254,233	\$ 20,196,188	\$ 819,499	\$ 5,775,393	\$ 738,772	\$ 3,681,077	\$ 882,340	\$ 1,125,583
19	Operating Income at Current Rates	\$ 8,946,016	\$ 2,643,315	\$ (253,936)	\$ 1,519,687	\$ 345,548	\$ 1,837,252	\$ 656,859	\$ 543,528
20	Current Rate of Return	4.74%	2.52%	-6.38%	4.73%	9.07%	7.61%	13.86%	7.07%
21	Current Revenue at Equal Rates of Return								
22	Current Rate of Return	4.74%	4.74%	4.74%	4.74%	4.74%	4.74%	4.74%	4.74%
23	Operating Income at Current Rates - Equal ROR	\$ 8,946,016	\$ 4,974,452	\$ 188,595	\$ 1,523,273	\$ 180,550	\$ 1,144,208	\$ 224,688	\$ 364,192
24	Income Taxes - Equal ROR	1,626,264	904,288	34,284	276,910	32,821	208,001	40,845	66,205
25	Other Expenses - Equal ROR	32,627,968	19,292,694	785,279	5,498,428	705,975	3,472,633	841,439	1,059,208
26	Total Revenue @ Equal Rates of Return	\$ 43,200,249	\$ 25,171,434	\$ 1,008,158	\$ 7,298,612	\$ 919,346	\$ 4,824,842	\$ 1,106,972	\$ 1,489,605
27	Current Class (Subsidies)/Excesses	\$ -	\$ (2,331,931)	\$ (442,595)	\$ (3,532)	\$ 164,975	\$ 693,487	\$ 432,227	\$ 179,505

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Summary of Cost of Service Study Results

Summary of Cost of Service Study Results		Residential	Residential	High Winter	Low Winter	High Winter	Low Winter	High Winter	Low Winter	
Line	Account	Heat	Non-Heat	Small	Small	Medium	Medium	Large	Large	
No.	Revenue Requirement Summary	Balance	R-5, R-10	R-6, R-11	G-40, T-40	G-50, T-50	G-41, T-41	G-51, T-51	G-42, T-42	G-52, T-52
28	Revenue Requirement at Equal Rates of Return									
29	Required Return	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
30	Required Operating Income	\$ 14,621,110	\$ 8,130,101	\$ 308,234	\$ 2,489,594	\$ 295,085	\$ 1,870,060	\$ 367,223	\$ 595,225	\$ 565,588
31	Expenses at Required Return									
32	O&M and A&G Expenses	\$ 15,075,099	\$ 9,171,694	\$ 380,169	\$ 2,528,361	\$ 335,891	\$ 1,440,748	\$ 417,071	\$ 427,957	\$ 373,208
33	Depreciation and Amortization Expense	11,929,484	6,938,809	281,543	2,013,209	253,539	1,348,390	283,695	415,282	395,017
34	Taxes Other Than Income	5,623,385	3,182,191	123,567	956,858	116,545	683,495	140,674	215,969	204,087
35	Income Taxes	1,626,264	903,494	34,220	276,965	32,798	208,445	40,901	66,375	63,067
36	Gross Up - Income Taxes	2,107,856	1,171,049	44,354	358,983	42,510	270,172	53,013	86,030	81,744
36	Gross Up - Other Items	-	-	-	-	-	-	-	-	-
37	Total Expenses at Required Return	\$ 36,362,089	\$ 21,367,238	\$ 863,853	\$ 6,134,376	\$ 781,283	\$ 3,951,249	\$ 935,354	\$ 1,211,613	\$ 1,117,124
38	Total Revenue Requirement at Equal Rates of Return	\$ 50,983,199	\$ 29,497,339	\$ 1,172,087	\$ 8,623,970	\$ 1,076,368	\$ 5,821,309	\$ 1,302,577	\$ 1,806,838	\$ 1,682,712
39	Less Other Revenue	1,197,813	694,032	27,624	202,566	25,332	136,142	30,636	42,210	39,271
40	Less Indirect Production & OH Revenue	826,413	398,466	4,711	186,587	15,213	76,899	79,555	54,653	10,329
41	Less Current Miscellaneous Revenue	1,147,705	903,612	38,282	107,835	15,289	48,057	9,779	11,825	13,026
42	Total Rate Revenue @ Equal Rates of Return	\$ 47,811,268	\$ 27,501,228	\$ 1,101,470	\$ 8,126,982	\$ 1,020,534	\$ 5,560,210	\$ 1,182,608	\$ 1,698,150	\$ 1,620,086
43	Rate Revenue (Deficiency)/Surplus	\$ (8,014,427)	\$ (6,769,445)	\$ (607,844)	\$ (1,381,153)	\$ 3,692	\$ (324,520)	\$ 214,339	\$ (153,035)	\$ 1,003,538
44	Total Base Revenue as Proposed	\$ 47,811,268	\$ 25,996,394	\$ 692,442	\$ 7,764,703	\$ 1,127,357	\$ 6,026,477	\$ 1,537,608	\$ 1,778,485	\$ 2,887,802
45	Special Contracts Revenue	1,197,813	694,032	27,624	202,566	25,332	136,142	30,636	42,210	39,271
46	Indirect Production & OH Revenue	826,413	398,466	4,711	186,587	15,213	76,899	79,555	54,653	10,329
47	Miscellaneous Revenue	1,147,705	903,612	38,282	107,835	15,289	48,057	9,779	11,825	13,026
48	Total Revenue as Proposed	\$ 50,983,199	\$ 27,992,505	\$ 763,059	\$ 8,261,691	\$ 1,183,191	\$ 6,287,576	\$ 1,657,577	\$ 1,887,173	\$ 2,950,427
49	Total Distribution Margin Increase as Proposed	\$ 8,014,427	\$ 5,264,611	\$ 198,816	\$ 1,018,874	\$ 103,131	\$ 790,786	\$ 140,661	\$ 233,370	\$ 264,177
50	Special Contracts Revenue Change	-	-	-	-	-	-	-	-	-
51	Indirect Production & OH Revenue	(231,477)	(111,610)	(1,320)	(52,263)	(4,261)	(21,539)	(22,283)	(15,308)	(2,893)
52	Miscellaneous Revenue Change	-	-	-	-	-	-	-	-	-
53	Total Revenue Increase as Proposed	\$ 7,782,951	\$ 5,153,001	\$ 197,496	\$ 966,612	\$ 98,870	\$ 769,247	\$ 118,378	\$ 218,062	\$ 261,284
54	Precent Total Revenue Change	19.56%	24.86%	40.01%	14.33%	9.65%	14.69%	8.47%	14.11%	9.96%
55	Operating Income at Proposed Rates									
56	Income Prior to Taxes	\$ 18,355,231	\$ 8,699,811	\$ (22,220)	\$ 2,763,263	\$ 477,216	\$ 2,814,943	\$ 816,138	\$ 827,964	\$ 1,978,115
57	Less Income Taxes	3,734,121	2,074,543	78,574	635,948	75,308	478,617	93,914	152,405	144,811
58	Operating Income	\$ 14,621,110	\$ 6,625,267	\$ (100,794)	\$ 2,127,315	\$ 401,908	\$ 2,336,327	\$ 722,224	\$ 675,560	\$ 1,833,304
59	Proposed Return	7.75%	6.3%	-2.5%	6.6%	10.6%	9.7%	15.2%	8.8%	25.1%

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Proposed Revenue Apportionment

Proposed Class Revenues

	Total System	Residential Heat R-5, R-10	Residential Non-Heat R-6, R-11	High Winter Small G-40, T-40	Low Winter Small G-50, T-50	High Winter Medium G-41, T-41	Low Winter Medium G-51, T-51	High Winter Large G-42, T-42	Low Winter Large G-52, T-52	Special Contracts	Indirect Production & OH	Miscellaneous Revenue
1 Current Revenues	\$ 43,200,249	\$ 20,731,783	\$ 493,626	\$ 6,745,829	\$ 1,024,226	\$ 5,235,691	\$ 1,396,947	\$ 1,545,114	\$ 2,623,624	\$ 1,197,813	\$ 1,057,890	\$ 1,147,705
2 % Increase		24.2%	40.3%	15.1%	10.1%	15.1%	10.1%	15.1%	10.1%			
3 Targeted Increase	\$ 7,528,387	\$ 5,010,047	\$ 198,816	\$ 1,018,874	\$ 103,131	\$ 790,786	\$ 140,661	\$ 233,370	\$ 264,177	\$ -	\$ (231,477)	\$ -
4 Targeted Revenue	\$ 50,728,636	\$ 25,741,830	\$ 692,442	\$ 7,764,703	\$ 1,127,357	\$ 6,026,477	\$ 1,537,608	\$ 1,778,485	\$ 2,887,802	\$ 1,197,813	\$ 826,413	\$ 1,147,705
5 Allocation of Delta	\$ 254,564	\$ 254,564										
6 Proposed Increase/ (Decrease)	\$ 7,782,951	\$ 5,264,611	\$ 198,816	\$ 1,018,874	\$ 103,131	\$ 790,786	\$ 140,661	\$ 233,370	\$ 264,177	\$ -	\$ (231,477)	\$ -
7 Proposed Revenue	\$ 50,983,199	\$ 25,996,394	\$ 692,442	\$ 7,764,703	\$ 1,127,357	\$ 6,026,477	\$ 1,537,608	\$ 1,778,485	\$ 2,887,802	\$ 1,197,813	\$ 826,413	\$ 1,147,705
8 Resulting Increase % (Dist Margin)	19.6%	25.4%	40.3%	15.1%	10.1%	15.1%	10.1%	15.1%	10.1%			
9 Resulting Increase % with Total Revenues	18.0%	25.4%	40.3%	15.1%	10.1%	15.1%	10.1%	15.1%	10.1%	0.0%	-21.9%	0.0%
10 Proposed Distribution Margin	\$ 47,811,268	\$ 25,996,394	\$ 692,442	\$ 7,764,703	\$ 1,127,357	\$ 6,026,477	\$ 1,537,608	\$ 1,778,485	\$ 2,887,802			
11 Proposed Rate of Return	7.75%	6.31%	-2.53%	6.62%	10.55%	9.68%	15.24%	8.79%	25.11%			
12 Proposed Revenue to Cost Ratio		0.95	0.63	0.96	1.10	1.08	1.30	1.05	1.78			
13 Current Revenue to Cost Ratio		0.75	0.45	0.83	1.00	0.94	1.18	0.91	1.62			

	Total System
14 Rate Margin Increase	8,014,427
15 System Increase (Total Revenue)	18.55%
16 System Increase (Total Distribution Margin)	20.14%

	Total System	Residential Heat R-5, R-10	Residential Non-Heat R-6, R-11	High Winter Small G-40, T-40	Low Winter Small G-50, T-50	High Winter Medium G-41, T-41	Low Winter Medium G-51, T-51	High Winter Large G-42, T-42	Low Winter Large G-52, T-52	Special Contracts	Indirect Production & OH	Miscellaneous Revenue
17 Under Current Rates												
18 Current Revenues	\$ 43,200,249	\$ 20,731,783	\$ 493,626	\$ 6,745,829	\$ 1,024,226	\$ 5,235,691	\$ 1,396,947	\$ 1,545,114	\$ 2,623,624	\$ 1,197,813	\$ 1,057,890	\$ 1,147,705
19 Current Rate Of Return	4.74%	2.52%	-6.38%	4.73%	9.07%	7.61%	13.86%	7.07%	22.65%			
20 Current Relative Rate of Return	1.00	0.53	(1.35)	1.00	1.91	1.61	2.92	1.49	4.78			
21 Current Revenue to Cost Ratio		0.75	0.45	0.83	1.00	0.94	1.18	0.91	1.62			
22 Scenario A - Equalized Rate of Return												
23 Equalized Rate of Return	\$ 50,983,199	\$ 27,501,228	\$ 1,101,470	\$ 8,126,982	\$ 1,020,534	\$ 5,560,210	\$ 1,182,608	\$ 1,698,150	\$ 1,620,086	\$ 1,197,813	\$ 826,413	\$ 1,147,705
24 Equalized Rate of Return Increase		\$ 6,769,445	\$ 607,844	\$ 1,381,153	\$ (3,692)	\$ 324,520	\$ (214,339)	\$ 153,035	\$ (1,003,538)			
25 % Change on Dist Margin (Equalized Rate of Return)		32.7%	123.1%	20.5%	-0.4%	6.2%	-15.3%	9.9%	-38.3%			
26 % Change on Total Revenue (Equalized ROR)		32.7%	123.1%	20.5%	-0.4%	6.2%	-15.3%	9.9%	-38.3%	0.0%	0.0%	0.0%
27 Scenario B - Proportionate to Distribution Margin												
28 Resulting Revenues		\$ 27,501,228	\$ 1,101,470	\$ 8,126,982	\$ 1,020,534	\$ 5,560,210	\$ 1,182,608	\$ 1,698,150	\$ 1,620,086	\$ 1,197,813	\$ 826,413	\$ 1,147,705
29 Distribution Margin	\$ 39,796,841	\$ 20,731,783	\$ 493,626	\$ 6,745,829	\$ 1,024,226	\$ 5,235,691	\$ 1,396,947	\$ 1,545,114	\$ 2,623,624			
30 Increase on Distribution Margin		\$ 4,175,039	\$ 99,408	\$ 1,358,499	\$ 206,262	\$ 1,054,382	\$ 281,322	\$ 311,161	\$ 528,355			
31 % Change on Dist Margin (equal % on Dist Margin)		20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%			
32 Resulting Revenues	\$ 50,983,199	\$ 24,906,823	\$ 593,034	\$ 8,104,328	\$ 1,230,488	\$ 6,290,072	\$ 1,678,269	\$ 1,856,275	\$ 3,151,979	\$ 1,197,813	\$ 826,413	\$ 1,147,705

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Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalized and Classified Rate Base and Revenue Requirement, and Unit Costs by Customer Class

			Residential Heat	Residential Non-Heat	High Winter Small	Low Winter Small	High Winter Medium	Low Winter Medium	High Winter Large	Low Winter Large
Line	Description	TOTAL	R-5, R-10	R-6, R-11	G-40, T-40	G-50, T-50	G-41, T-41	G-51, T-51	G-42, T-42	G-52, T-52
Functional Rate Base										
1	Indirect Production & O.H.									
2	Demand	\$ 408,158	\$ 196,799	\$ 2,327	\$ 92,154	\$ 7,513	\$ 37,980	\$ 39,291	\$ 26,993	\$ 5,101
3	Commodity	\$ 93,270	\$ 44,971	\$ 532	\$ 21,058	\$ 1,717	\$ 8,679	\$ 8,979	\$ 6,168	\$ 1,166
4	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Subtotal	\$ 501,428	\$ 241,770	\$ 2,859	\$ 113,212	\$ 9,230	\$ 46,659	\$ 48,270	\$ 33,161	\$ 6,267
6	Distribution									
7	Demand	\$ 76,812,163	\$ 27,202,195	\$ 264,752	\$ 13,568,322	\$ 880,793	\$ 19,025,955	\$ 2,786,965	\$ 6,752,549	\$ 6,330,633
8	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Customer	\$ 39,785,691	\$ 30,314,965	\$ 1,443,349	\$ 5,917,579	\$ 939,999	\$ 796,158	\$ 301,287	\$ 35,046	\$ 37,308
10	Subtotal	\$ 116,597,855	\$ 57,517,160	\$ 1,708,101	\$ 19,485,902	\$ 1,820,792	\$ 19,822,113	\$ 3,088,251	\$ 6,787,595	\$ 6,367,941
11	Onsite									
12	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Customer	\$ 71,433,607	\$ 46,882,378	\$ 2,252,315	\$ 12,538,424	\$ 1,991,980	\$ 4,342,033	\$ 1,632,132	\$ 869,667	\$ 924,677
15	Subtotal	\$ 71,433,607	\$ 46,882,378	\$ 2,252,315	\$ 12,538,424	\$ 1,991,980	\$ 4,342,033	\$ 1,632,132	\$ 869,667	\$ 924,677
16	Customer Accounts & Services									
17	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Customer	\$ 186,368	\$ 296,455	\$ 15,204	\$ (3,569)	\$ (13,247)	\$ (73,355)	\$ (28,787)	\$ (7,673)	\$ 1,340
20	Subtotal	\$ 186,368	\$ 296,455	\$ 15,204	\$ (3,569)	\$ (13,247)	\$ (73,355)	\$ (28,787)	\$ (7,673)	\$ 1,340
31	Total									
32	Demand	\$ 77,220,321	\$ 27,398,994	\$ 267,079	\$ 13,660,476	\$ 888,306	\$ 19,063,934	\$ 2,826,256	\$ 6,779,542	\$ 6,335,734
33	Commodity	\$ 93,270	\$ 44,971	\$ 532	\$ 21,058	\$ 1,717	\$ 8,679	\$ 8,979	\$ 6,168	\$ 1,166
34	Customer	\$ 111,405,666	\$ 77,493,798	\$ 3,710,869	\$ 18,452,434	\$ 2,918,733	\$ 5,064,835	\$ 1,904,632	\$ 897,040	\$ 963,325
35	TOTAL RATE BASE	\$ 188,719,257	\$ 104,937,763	\$ 3,978,479	\$ 32,133,969	\$ 3,808,756	\$ 24,137,449	\$ 4,739,867	\$ 7,682,750	\$ 7,300,225

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalized and Classified Rate Base and Revenue Requirement, and Unit Costs by Customer Class

			Residential Heat	Residential Non-Heat	High Winter Small	Low Winter Small	High Winter Medium	Low Winter Medium	High Winter Large	Low Winter Large
Line	Description	TOTAL	R-5, R-10	R-6, R-11	G-40, T-40	G-50, T-50	G-41, T-41	G-51, T-51	G-42, T-42	G-52, T-52
Functional Revenue Requirement										
36	Indirect Production & O.H.									
37	Demand	\$ 186,350	\$ 89,851	\$ 1,062	\$ 42,074	\$ 3,430	\$ 17,340	\$ 17,939	\$ 12,324	\$ 2,329
38	Commodity	\$ 640,064	\$ 308,616	\$ 3,649	\$ 144,513	\$ 11,782	\$ 59,559	\$ 61,616	\$ 42,329	\$ 8,000
39	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
40	Subtotal	\$ 826,413	\$ 398,466	\$ 4,711	\$ 186,587	\$ 15,213	\$ 76,899	\$ 79,555	\$ 54,653	\$ 10,329
41	Distribution									
42	Demand	\$ 16,742,400	\$ 5,929,139	\$ 57,707	\$ 2,957,426	\$ 191,982	\$ 4,147,001	\$ 607,462	\$ 1,471,823	\$ 1,379,859
43	Commodity	\$ 180,290	\$ 86,929	\$ 1,028	\$ 40,706	\$ 3,319	\$ 16,776	\$ 17,356	\$ 11,923	\$ 2,253
44	Customer	\$ 8,258,399	\$ 6,292,540	\$ 299,599	\$ 1,228,324	\$ 195,118	\$ 165,260	\$ 62,539	\$ 7,275	\$ 7,744
45	Subtotal	\$ 25,181,089	\$ 12,308,609	\$ 358,334	\$ 4,226,456	\$ 390,419	\$ 4,329,038	\$ 687,356	\$ 1,491,020	\$ 1,389,857
46	Onsite									
47	Demand									
47	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49	Customer	\$ 20,530,081	\$ 13,362,790	\$ 651,400	\$ 3,578,824	\$ 568,957	\$ 1,341,303	\$ 498,865	\$ 255,592	\$ 272,350
50	Subtotal	\$ 20,530,081	\$ 13,362,790	\$ 651,400	\$ 3,578,824	\$ 568,957	\$ 1,341,303	\$ 498,865	\$ 255,592	\$ 272,350
51	Customer Accounts & Services									
52	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
53	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
54	Customer	\$ 4,445,616	\$ 3,420,336	\$ 157,068	\$ 632,591	\$ 101,567	\$ 78,054	\$ 37,303	\$ 7,095	\$ 11,602
55	Subtotal	\$ 4,445,616	\$ 3,420,336	\$ 157,068	\$ 632,591	\$ 101,567	\$ 78,054	\$ 37,303	\$ 7,095	\$ 11,602
66	Total									
67	Demand	\$ 16,928,750	\$ 6,018,990	\$ 58,769	\$ 2,999,500	\$ 195,413	\$ 4,164,341	\$ 625,401	\$ 1,484,146	\$ 1,382,189
68	Commodity	\$ 820,354	\$ 395,545	\$ 4,677	\$ 185,219	\$ 15,101	\$ 76,335	\$ 78,972	\$ 54,253	\$ 10,253
69	Customer	\$ 33,234,095	\$ 23,075,666	\$ 1,108,067	\$ 5,439,740	\$ 865,641	\$ 1,584,617	\$ 598,707	\$ 269,962	\$ 291,696
70	TOTAL REVENUE REQUIREMENT AT EQUAL RATES OF RETURN	\$ 50,983,199	\$ 29,490,202	\$ 1,171,513	\$ 8,624,458	\$ 1,076,155	\$ 5,825,294	\$ 1,303,080	\$ 1,808,361	\$ 1,684,138
71	Demand	33.20%	20.41%	5.02%	34.78%	18.16%	71.49%	47.99%	82.07%	82.07%
72	Energy	1.61%	1.34%	0.40%	2.15%	1.40%	1.31%	6.06%	3.00%	0.61%
73	Customer	65.19%	78.25%	94.58%	63.07%	80.44%	27.20%	45.95%	14.93%	17.32%

Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Design Day with Customer Component of Mains
Functionalized and Classified Rate Base and Revenue Requirement, and Unit Costs by Customer Class

			Residential Heat	Residential Non-Heat	High Winter Small	Low Winter Small	High Winter Medium	Low Winter Medium	High Winter Large	Low Winter Large
Line	Description	TOTAL	R-5, R-10	R-6, R-11	G-40, T-40	G-50, T-50	G-41, T-41	G-51, T-51	G-42, T-42	G-52, T-52
Unit Costs										
74	Indirect Production & O.H.									
75	Demand	\$ 2.81	\$ 3.83	\$ 4.65	\$ 3.59	\$ 4.51	\$ 1.06	\$ 7.46	\$ 2.11	\$ 0.43
76	Commodity	\$ 8.63	\$ 15.38	\$ 15.38	\$ 13.28	\$ 7.99	\$ 4.13	\$ 12.94	\$ 7.19	\$ 0.49
77	Customer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
78	Distribution									
79	Demand	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46
80	Commodity	\$ 0.00	\$ 4.33	\$ 4.33	\$ 3.74	\$ 2.25	\$ 1.16	\$ 3.65	\$ 2.02	\$ 0.14
81	Customer	\$ 19.56	\$ 19.56	\$ 19.56	\$ 19.56	\$ 19.56	\$ 19.56	\$ 19.56	\$ 19.56	\$ 19.56
82	Onsite									
83	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
84	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
85	Customer	\$ 48.61	\$ 41.53	\$ 42.52	\$ 56.98	\$ 57.02	\$ 158.72	\$ 155.99	\$ 687.08	\$ 687.75
86	Customer Accounts & Services									
87	Demand	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
88	Commodity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
89	Customer	\$ 10.53	\$ 10.63	\$ 10.25	\$ 10.07	\$ 10.18	\$ 9.24	\$ 11.66	\$ 19.07	\$ 29.30
98	Total - Distribution									
99	Demand - Distribution	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46	\$ 252.46
100	Commodity - Distribution	\$ 0.0024	\$ 0.0043	\$ 0.0043	\$ 0.0037	\$ 0.0023	\$ 0.0012	\$ 0.0036	\$ 0.0020	\$ 0.0001
101	Customer (per cust month)	\$ 78.70	\$ 71.71	\$ 72.33	\$ 86.60	\$ 86.76	\$ 187.51	\$ 187.21	\$ 725.70	\$ 736.61
102	Customer (Onsite/Metering & Cust Acts)	\$ 59.14	\$ 52.16	\$ 52.77	\$ 67.05	\$ 67.20	\$ 167.96	\$ 167.66	\$ 706.15	\$ 717.05
103	Demand & Customer (per cust month)	\$ 118.78	\$ 90.42	\$ 76.16	\$ 134.36	\$ 106.34	\$ 680.29	\$ 382.77	\$ 4,715.34	\$ 4,226.98
104	BILLING DETERMINANTS									
105	Demand	66,317	23,486	229	11,714	760	16,426	2,406	5,830	5,466
106	Commodity	74,152,109	20,067,257	237,269	10,880,833	1,474,573	14,423,832	4,761,300	5,889,772	16,417,274
107	Customers (Number of Bills)	422,304	321,778	15,320	62,812	9,978	8,451	3,198	372	396

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Northern Utilities New Hampshire
External Class Allocation Factors

Line	Allocation Factor	Description	Total	Residential Heat R-5, R-10	Residential Non-Heat R-6, R-11	High Winter Small G-40, T-40	Low Winter Small G-50, T-50	High Winter Medium G-41, T-41	Low Winter Medium G-51, T-51	High Winter Large G-42, T-42	Low Winter Large G-52, T-52
1	DEMAND ALLOCATION FACTORS										
2	Design Day										
3		Design Peak Day	66,317	23,486	229	11,714	760	16,426	2,406	5,830	5,466
4	DESIGN_DAY	Design Peak Day Percent	100%	35.41%	0.34%	17.66%	1.15%	24.77%	3.63%	8.79%	8.24%
5	CUSTOMER ALLOCATORS										
6	Customer Count										
7		December 2020 Customer Count	35,192	26,815	1,277	5,234	831	704	267	31	33
8	CUSTOMERS	December 2020 Customer Count Percent	100%	76.20%	3.63%	14.87%	2.36%	2.00%	0.76%	0.09%	0.09%
9	Telemetry Customers										
10		2020 Telemetered Customers	73	-	-	1	2	16	3	21	30
11	CUST_TELEMETER	2020 Telemetered Customers Percent	100%	0.00%	0.00%	1.37%	2.74%	21.92%	4.11%	28.77%	41.10%
12	Customers Excluding Telemetered (ERTs)										
13		2020 Customers excluding Telemetered	35,119	26,815	1,277	5,233	829	688	264	10	3
14	ERTS	2020 Customers excluding Telemetered Percent	100%	76.35%	3.64%	14.90%	2.36%	1.96%	0.75%	0.03%	0.01%
15	Customer Meters										
16		Meter Replacement Cost	21,291,856	12,464,988	593,480	3,963,830	629,649	2,110,810	798,784	353,746	376,568
17	METERS	Meter Replacement Cost Percent	100%	58.54%	2.79%	18.62%	2.96%	9.91%	3.75%	1.66%	1.77%
18	Services Lines										
19		Services at Current Costs	163,283,766	111,591,172	5,313,054	28,238,845	4,485,702	7,312,260	2,767,147	1,731,925	1,843,662
20	SERVICES	Services at Current Costs Percent	100%	68.34%	3.25%	17.29%	2.75%	4.48%	1.69%	1.06%	1.13%
21	Write-offs / Uncollectible, Distribution										
22		2018-2020 Average Write-offs, Distribution	254,119	214,169	6,803	22,634	4,468	-	4,885	-	1,161
23	DIST_UNCOLLECT	2018-2020 Average Write-offs, Distribution %	100%	84.28%	2.68%	8.91%	1.76%	0.00%	1.92%	0.00%	0.46%
24	Meter Reading (FERC 902)										
25		Relative Weighting Factor		1.00	1.00	1.02	1.06	1.30	1.14	10.60	13.86
26		Weighted Customers	36,333	26,815	1,277	5,360	877	915	303	329	457
27	METER_READ	Weighted Customers Percent	100%	73.80%	3.51%	14.75%	2.41%	2.52%	0.83%	0.90%	1.26%
28	Customer Deposits										
29		Customer Deposits (12/31/2020)	249,403	33,843	523	68,253	23,565	82,404	32,116	8,699	-
30	CUST_DEPOSITS	Customer Deposits (12/31/2020) Percent	100%	13.57%	0.21%	27.37%	9.45%	33.04%	12.88%	3.49%	0.00%

Northern Utilities New Hampshire
External Class Allocation Factors

Line	Allocation Factor	Description	Total	Residential Heat R-5, R-10	Residential Non-Heat R-6, R-11	High Winter Small G-40, T-40	Low Winter Small G-50, T-50	High Winter Medium G-41, T-41	Low Winter Medium G-51, T-51	High Winter Large G-42, T-42	Low Winter Large G-52, T-52
31	COMMODITY and REVENUE ALLOCATORS										
32	Total Volume										
33		2020 Adjusted Billing Determinants	74,152,109	20,067,257	237,269	10,880,833	1,474,573	14,423,832	4,761,300	5,889,772	16,417,274
34	TOTAL_VOLUME	2020 Adjusted Billing Determinants Percent	100%	27.06%	0.32%	14.67%	1.99%	19.45%	6.42%	7.94%	22.14%
35	Sales Volume (excludes Transportation)										
36		2020 Adjusted Sales Billing Determinants	41,619,185	20,067,257	237,269	9,396,744	766,130	3,872,741	4,006,477	2,752,408	520,161
37	SALES_VOLUME	2020 Adjusted Sales Billing Determinants Percent	100%	48.22%	0.57%	22.58%	1.84%	9.31%	9.63%	6.61%	1.25%
38	Sales Volume (excludes Transportation) - Allocation of Indirect Production & Overhead										
39		2020 Adjusted Sales Billing Determinants	41,619,185	20,067,257	237,269	9,396,744	766,130	3,872,741	4,006,477	2,752,408	520,161
40	IND_PROD_OH	2020 Adjusted Sales Billing Determinants Percent	100%	48.22%	0.57%	22.58%	1.84%	9.31%	9.63%	6.61%	1.25%
38	Test Year Revenue										
41		2020 Pro Forma Revenue at Current Rates	39,796,840	20,731,783	493,626	6,745,829	1,024,226	5,235,691	1,396,947	1,545,114	2,623,624
42	BASE_REVENUE	2020 Pro Forma Revenue at Current Rates Percent	100%	52.09%	1.24%	16.95%	2.57%	13.16%	3.51%	3.88%	6.59%
38	Late Fees										
43		2018-2020 Avg Late Fees	69,249	49,293	1,334	7,540	1,468	5,421	2,086	713	1,394
44	LATE_FEES	2018-2020 Avg Late Fees Percent	100%	71.18%	1.93%	10.89%	2.12%	7.83%	3.01%	1.03%	2.01%
45	Miscellaneous Service Revenue										
46		Other Revenue	852,295	727,388	32,194	62,248	9,249	14,084	1,975	2,134	3,023
47	MISC_REVENUE	Other Revenue Percent	100%	85.34%	3.78%	7.30%	1.09%	1.65%	0.23%	0.25%	0.35%
48	Water Heater and Burner Conversion Revenue										
49		Water Heater and Burner Conversion Revenue	249,162	204,026	15,142	18,735	3,119	8,140	-	-	-
50	HEAT_CONV_REV	Water Heater and Burner Conversion Revenue Percent	100%	81.88%	6.08%	7.52%	1.25%	3.27%	0.00%	0.00%	0.00%
51	Direct Assignment to Low Income										
52		Customer Deposits	1	1	-	-	-	-	-	-	-
53	RES_LOW_INCOME	Customer Deposits Percent	100%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
54	FUNCTIONAL PLANT ALLOCATORS										
55	Misc. Intangible Plant Split										
56	Plant Related	Account 303 related to plant	1.7%								
57	Customer Related	Account 303 related to billing, meter reading, customer accounts	70.5%								
58	Labor Related	Account 303 related to operations, IT, finance accounting, employees	27.9%								

Northern Utilities New Hampshire

Description of ACOSS Functionalization and Classification of Accounts

FERC	Description	Functionalization	Classification
Intangible Plant			
<i>301-303</i>	<i>Intangible Plant</i>		
303	Miscellaneous Intangible Plant, Plant-related	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
303	Miscellaneous Intangible Plant, Customer-related	Distribution	Customer-related
303	Miscellaneous Intangible Plant, Labor-related	Labor expense	Labor expense
Manufactured Gas Production Plant and Expenses			
<i>304-321</i>	<i>Other Production Plant</i>		
304	Land and Land Rights	Indirect Production and OH	Demand-related
305	Structures & Improvements	Indirect Production and OH	Demand-related
320	Other Equipment	Indirect Production and OH	Demand-related
321	LNG Equipment	Indirect Production and OH	Demand-related
<i>710-735</i>	<i>Manufactured Gas Production Plant Expenses</i>		
710	Supervision	Indirect Production and OH	Demand-related
717	Propane Expenses	Indirect Production and OH	Demand-related
735	Misc. Intangible Plant	Indirect Production and OH	Demand-related
Other Storage Plant, Other Gas & Operation Expenses			
<i>360-369</i>	<i>Other Storage Plant</i>		
360	Land-Lewiston	Indirect Production and OH	Demand-related
361	Structures & Improvements	Indirect Production and OH	Demand-related
362	Gas Holders	Indirect Production and OH	Demand-related
363	Other Equipment	Indirect Production and OH	Demand-related

FERC	Description	Functionalization	Classification
<i>740-769</i>	<i>Maintenance Expenses</i>		
740	Supervision	Indirect Production and OH	Demand-related
741	Maintenance of Plant	Indirect Production and OH	Demand-related
742	Maintenance of Equipment	Indirect Production and OH	Demand-related
769	Maintenance of Scada - Production	Indirect Production and OH	Demand-related
<i>800-813</i>	<i>Other Gas Expenses</i>		
813	Other Gas Expenses	Indirect Production and OH	Commodity-related
813	Other Gas Supply Expenses – Del Serv	Distribution	Commodity-related
<i>851-852</i>	<i>Operation Expenses</i>		
851	System Control/Load Dispatching	Distribution	Demand-related
851	System Control//Load Dispatching – Gas Supply	Indirect Production and OH	Demand-related
852	Communication System Expense	Distribution	Demand-related
Distribution Plant and Expenses			
<i>374-386</i>	<i>Distribution Plant</i>		
374	Land and Land Rights	Distribution	Demand-related
375	Structures and Improvements	Distribution	Demand-related
376	Mains	Distribution	Demand and Customer based on zero-intercept analysis
378	M&R Station Equipment - Regulating	Distribution	Demand-related
379	M&R Station Equipment - Gate	Distribution	Demand-related
380	Services	Onsite	Customer-related
381	Meters	Onsite	Customer-related
382	Meter Installations	Onsite	Customer-related
383	House Regulators	Onsite	Customer-related
386	Water Heaters/Conversion Burners	Onsite	Customer-related

FERC	Description	Functionalization	Classification
<i>870-894</i>	<i>Distribution Expenses</i>		
870	Op Supervision-Engineering-Gas Distribution	Accts 874-879	Accts 874-879
874	Mains & Services	Mains and Services Plant	Mains and Services Plant
875	Regulator Station Expense	Distribution	Demand-related
878	Meter & House Regulator	Onsite	Customer-related
879	Customer Installation Exp	Onsite	Customer-related
880	Operations Exp Other	Accts 874-879	Accts 874-879
885	Maintenance Supervision	Accts 887-894	Accts 887-894
886	Structures & Improvements	Accts 887-894	Accts 887-894
887	Mains	Distribution	Demand and Customer based on zero-intercept analysis
889	Measuring & Regulating - Atatew EQ	Distribution	Demand-related
890	Measuring & Regulating - EQ Industry	Distribution	Demand-related
891	Measuring & Regulating - EQ City Gate	Distribution	Demand-related
891	Main Distribution SCADA	Distribution	Demand-related
892	Services	Onsite	Customer-related
893	Meters & House Regulators	Onsite	Customer-related
894	Other Equipment	Accts 874-879	Accts 874-879
894	Water Heaters & Conv Burn	Onsite	Customer-related
General Plant			
<i>389-399</i>	<i>General & Common Plant</i>		
389	Land & Land Rights	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
391	Office Furniture & Equipment	Labor expense	Labor expense

FERC	Description	Functionalization	Classification
393	Stores Equipment	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
394	Tools, Shop & Garage Equip.	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
396	Power Operated Equipment	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
397	Communication Equipment	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
397.3	Metscan Communication Equipment	Onsite	Customer-related
397.4	ERT Automatic Reading Devices	Onsite	Customer-related
Depreciation Reserve			
108	Accumulated Depreciation	Corresponding plant accts.	Corresponding plant accts.
Other Rate Base Items			
154	Materials and Supplies	Distribution Plant	Distribution Plant
165	Prepayments	Distribution Plant	Distribution Plant
131	Cash Working Capital	Total plant in service	Total plant in service
235	Customer Deposits	Accounts & Services	Customer-related
283	Net Deferred Income Taxes	Total plant in service	Total plant in service
254	Excess Deferred Income Taxes	Total plant in service	Total plant in service
Customer Expenses			
901-905	Customer Accounts Expense	Accounts & Services	Customer-related
906-910	Customer Service & Information Expense	Accounts & Services	Customer-related
911-917	Sales Expense	Accounts & Services	Customer-related
Administrative and General Expenses			
920	Administrative & General Salaries	Labor expense	Labor expense

FERC	Description	Functionalization	Classification
921	Office Supplies & Expenses	Labor expense	Labor expense
923	Outside Services Employed	Labor expense	Labor expense
924	Property Insurance	Production, Storage, and Distribution Plant	Production, Storage, and Distribution Plant
925	Injuries and Damages	Labor expense	Labor expense
926	Employee Pensions and Benefits	Labor expense	Labor expense
928	Regulatory Commission Expenses	Rate Base	Rate Base
930	General/Miscellaneous Expenses	Labor expense	Labor expense
931	Rents	Labor expense	Labor expense
932	Maintenance of General Plant – Equip Shared	General Plant	General Plant
935	Maintenance of General Plant	General Plant	General Plant
Depreciation and Amortization Expenses			
403	Depreciation Expense	Corresponding plant accts.	Corresponding plant accts.
404-407	Amortization Expense	Intangible Plant	Intangible Plant
407	Excess ADIT Flow Back	Rate Base	Rate Base
Taxes Other Than Income			
408	Payroll Taxes	Labor expense	Labor expense
408	Unemployment Tax	Labor expense	Labor expense
408	Property Taxes	Total plant in service	Total plant in service
408	Payroll Taxes - Capitalized	Labor expense	Labor expense
408	Other Taxes	Rate Base	Rate Base
Income Taxes			
409-410	Income Taxes	Rate base	Rate base

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Northern Utilities New Hampshire
12 Months Ended December 31, 2020
Customer Component of Mains

Minimum System Summary

Material	Quantity	Cost 2020	Minimum Size Cost (2020)	Customer Component	Customer Component Percentage
Plastic	2,572,194	\$149,782,247	\$32.58	\$83,795,365	55.9%
Steel	421,064	\$70,715,971	\$32.58	\$13,717,152	19.4%
Total	2,993,258	\$220,498,219		\$97,512,517	44.2%

Zero-Intercept Summary

Material	Quantity	Cost 2020	Zero-Intercept Cost (2020)	Customer Component	Customer Component Percentage
Plastic	2,572,194	\$149,782,247	\$25.21	\$64,845,019	43.3%
Steel	421,064	\$70,715,971	\$25.21	\$10,615,014	15.0%
Total	2,993,258	\$220,498,219		\$75,460,033	34.2%

Rounded Customer Component 34%

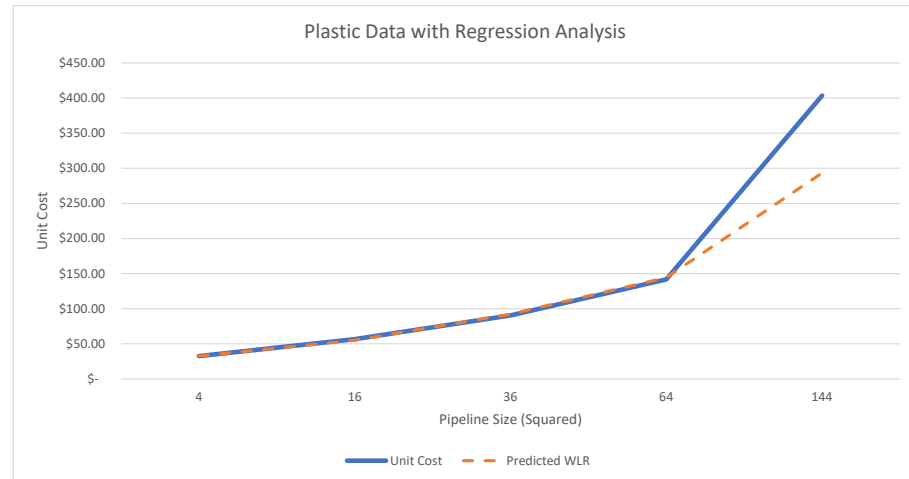
ADJUSTED MINIMUM SYSTEM

Minimum System Cost	\$97,512,517
	x
Minimum System Serving Design Day Demand (%)	6.11%
	=
Minimum System Serving Design Day Demand (Total)	\$ 5,954,778.30
Remaining Customer Portion	\$ 91,557,738
	/
Total Plastic & Steel Cost	\$220,498,219
	=
	41.52%

Description	Amount	
2 Inch Main	2	
Pipe Diameter Squared	4	Line 1 squared
Constant	0.372	
PSIG	40	
Cubic Feet of Capacity per Thousand Feet	59.52	Multiply lines 2 - 4
Feet in Mile (1,000s)	5.28	
Cubic Feet of Capacity per Mile	314.27	Line 5 * Line 6
Hours in Day	24	
Cubic Feet of Capacity per Mile per Day	7,542	Line 7 * Line 8
Total Design Day (in Ccf)	699,920	*Design Day from Company
Total Customers	35,194	
Ccf Per Customer on Design Day	19.89	Line 10 / Line 11
Customers Per Mile	62.10	Line 20
Capacity (Ccf) Required on Design Day per Mile	1235.1	Line 12 * Line 13
Cubic Feet of Capacity per Mile	7,542	Line 9
Ccf of Capacity per Mile	75.42	Line 15 / 100
Portion of Required Capacity Met by 2 Inch Main Capacity	6.11%	Line 16 / Line 14
Miles of Main from 2020 DOT Report	566.69	
Total Customers	35,194	
Customers Per Mile	62.10	

Plastic Data		Used as X-value for Regression		Weights Used for Regression				Equation: 25.208+1.862x Weighted Linear Regression
Size (Inches)	Size (Inches-Squared)	GIS footage	% Total Footage	Acct. Dollars	2020\$	Unit Cost	Predicted WLR	
2	4	1,199,189	47.24460%	\$ 25,998,228	\$ 39,066,445	\$ 32.58	32.656	
4	16	634,672	25.00426%	\$ 25,161,778	\$ 36,055,758	\$ 56.81	55	
6	36	508,384	20.02888%	\$ 32,129,456	\$ 46,029,660	\$ 90.54	92.24	
8	64	193,207	7.61182%	\$ 24,779,188	\$ 27,416,116	\$ 141.90	144.376	
12	144	2,803	0.11044%	\$ 967,760	\$ 1,131,176	\$ 403.54	293.336	
Total		2,538,256	100.00%	\$ 109,036,410	\$ 149,699,156	\$ 725.37		

```
#Weighted Linear Regression Formula
weighted_regression
##
## Call:
## lm(formula = Plastic_UnitCost ~ Size_Squared, data = Plastic_DF,
##     weights = Plastic_Weights)
##
## Coefficients:
## (Intercept) Size_Squared
##      25.208      1.862
#Regression Summary
summary(weighted_regression)
##
## Call:
## lm(formula = Plastic_UnitCost ~ Size_Squared, data = Plastic_DF,
##     weights = Plastic_Weights)
##
## Weighted Residuals:
##      1      2      3      4      5
## -0.05539  0.90138 -0.76773 -0.69121  3.66003
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  25.2081    3.1717   7.948 0.004155 **
## Size_Squared   1.8625    0.1229  15.152 0.000624 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 2.257 on 3 degrees of freedom
## Multiple R-squared:  0.9871, Adjusted R-squared:  0.9828
## F-statistic: 229.6 on 1 and 3 DF, p-value: 0.0006242
```



Steel Data		Used as X-value for Regression		Weights Used for Regression			Equation: 19.92+3.37x Weighted Linear Regression	
Size (Inches)	Size (Inches-Squared)	GIS footage	% Total Footage	Acct. Dollars	2020\$	Unit Cost	Predicted WLR	
2	4	37,133	8.94%	\$ 1,137,562	\$ 5,750,794	\$ 154.87	33.39489	
4	16	97,838	23.54%	\$ 2,743,699	\$ 10,973,455	\$ 112.16	73.83427	
6	36	87,630	21.09%	\$ 2,578,887	\$ 9,787,549	\$ 111.69	141.23322	
8	64	175,766	42.30%	\$ 11,984,562	\$ 30,987,019	\$ 176.30	235.59176	
10	100	1,853	0.45%	\$ 207,703	\$ 703,927	\$ 379.87	356.90988	
12	144	15,326	3.69%	\$ 10,690,515	\$ 12,450,031	\$ 812.36	505.18758	
Total		415,545	100.00%	\$ 29,342,928	\$ 70,652,775	\$ 1,747.26		

```
#Weighted Linear Regression Formula
weighted_regression
##
## Call:
## lm(formula = Steel_UnitCost ~ Size_Squared, data = Steel_DF,
##     weights = Steel_Weights)
##
## Coefficients:
## (Intercept) Size_Squared
##      19.92      3.37
#Regression Summary
summary(weighted_regression)
##
## Call:
## lm(formula = Steel_UnitCost ~ Size_Squared, data = Steel_DF,
##     weights = Steel_Weights)
##
## Weighted Residuals:
##      1      2      3      4      5      6
## 36.313 18.597 -13.566 -38.563  1.533 58.991
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   19.915    74.113   0.269  0.8014
## Size_Squared    3.370     1.382   2.439  0.0713 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 41.29 on 4 degrees of freedom
## Multiple R-squared:  0.5979, Adjusted R-squared:  0.4974
## F-statistic: 5.948 on 1 and 4 DF, p-value: 0.07129
```



Northern Utilities New Hampshire
2021 Rate Case Gas Marginal Cost of Service Study
Marginal Cost Summary

A	B	C	D	E	F	G	H	I	J	K	L
Line	FERC A/C	Description	Total System	Residential Heat R-5, R-10	Residential Non-Heat R-6, R-11	High Winter Small G-40, T-40	Low Winter Small G-50, T-50	High Winter Medium G-41, T-41	Low Winter Medium G-51, T-51	High Winter Large G-42, T-42	Low Winter Large G-52, T-52
1	MARGINAL COST BASED REVENUE REQUIREMENTS REPORT										
2		Demand Related Carrying Costs									
3	376	Reinforcement/Pipe Replacement	\$ 9,985,255	\$ 3,536,170	\$ 34,417	\$ 1,763,824	\$ 114,499	\$ 2,473,293	\$ 362,294	\$ 877,803	\$ 822,955
4	376	Mains Extension - Demand Component	\$ 7,789,012	\$ 2,758,394	\$ 26,847	\$ 1,375,874	\$ 89,315	\$ 1,929,296	\$ 282,608	\$ 684,731	\$ 641,948
5		Subtotal: Demand Related Carrying Costs	\$ 17,774,267	\$ 6,294,564	\$ 61,263	\$ 3,139,698	\$ 203,815	\$ 4,402,589	\$ 644,901	\$ 1,562,534	\$ 1,464,903
6		Demand Related O&M Costs									
7	920-935	A&G Expense - Demand Related	\$ 2,146,279	\$ 760,081	\$ 7,398	\$ 379,125	\$ 24,611	\$ 531,622	\$ 77,873	\$ 188,679	\$ 176,890
8		Subtotal: Demand O&M Costs	\$ 2,146,279	\$ 760,081	\$ 7,398	\$ 379,125	\$ 24,611	\$ 531,622	\$ 77,873	\$ 188,679	\$ 176,890
9		Total: Demand Related Costs	\$ 19,920,546	\$ 7,054,645	\$ 68,661	\$ 3,518,823	\$ 228,426	\$ 4,934,211	\$ 722,774	\$ 1,751,213	\$ 1,641,793
10		Customer Related Carrying Costs									
11	376	Mains Extension - Customer Component	\$ 5,171,273	\$ 3,940,285	\$ 187,604	\$ 769,156	\$ 122,179	\$ 103,483	\$ 39,161	\$ 4,555	\$ 4,849
12	380	Services	\$ 15,506,102	\$ 10,597,159	\$ 504,550	\$ 2,681,678	\$ 425,981	\$ 694,402	\$ 262,780	\$ 164,471	\$ 175,082
13	381-383	Meters, Installations, Regulators	\$ 2,944,304	\$ 1,723,697	\$ 82,068	\$ 548,131	\$ 87,070	\$ 291,889	\$ 110,458	\$ 48,917	\$ 52,073
14		Subtotal: Demand Related Carrying Costs	\$ 18,450,406	\$ 12,320,857	\$ 586,618	\$ 3,229,808	\$ 513,051	\$ 986,292	\$ 373,238	\$ 213,388	\$ 227,155
15		Customer Related O&M Costs									
16	902	Meter Reading Expenses	\$ 202,880	\$ 149,729	\$ 7,129	\$ 29,930	\$ 4,899	\$ 5,111	\$ 1,694	\$ 1,835	\$ 2,554
17	903	Customer Records & Collection Expenses	\$ 2,052,586	\$ 1,563,982	\$ 74,464	\$ 305,294	\$ 48,496	\$ 41,075	\$ 15,544	\$ 1,808	\$ 1,925
18	904	Uncollectible Accounts	\$ 437,750	\$ 368,931	\$ 11,718	\$ 38,990	\$ 7,696	\$ -	\$ 8,415	\$ -	\$ 2,000
19	908	Customer Assistance Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	909	Informational and Instructional Advertising Exp.	\$ 73,965	\$ 56,358	\$ 2,683	\$ 11,001	\$ 1,748	\$ 1,480	\$ 560	\$ 65	\$ 69
21	920-935	Customer A&G Costs	\$ 5,092,681	\$ 3,418,714	\$ 166,346	\$ 849,158	\$ 135,185	\$ 304,929	\$ 112,969	\$ 50,554	\$ 54,825
22		Subtotal: Customer O&M Costs	\$ 7,859,863	\$ 5,557,714	\$ 262,341	\$ 1,234,374	\$ 198,023	\$ 352,595	\$ 139,182	\$ 54,261	\$ 61,373
23		Total: Customer Related Costs	\$ 26,310,269	\$ 17,878,570	\$ 848,959	\$ 4,464,182	\$ 711,074	\$ 1,338,886	\$ 512,420	\$ 267,649	\$ 288,528
24		Total LRIC Based Revenue Requirement	\$ 46,230,815	\$ 24,933,216	\$ 917,620	\$ 7,983,005	\$ 939,500	\$ 6,273,097	\$ 1,235,195	\$ 2,018,862	\$ 1,930,321
25		Actual Revenue Requirement	\$ 50,983,199								
26		True-up Factor	1.1028								
27		Allocated Actual Revenue Requirement	\$ 50,983,199	\$ 27,496,273	\$ 1,011,948	\$ 8,803,633	\$ 1,036,077	\$ 6,917,952	\$ 1,362,169	\$ 2,226,395	\$ 2,128,752
28		Revenue to Cost Ratio	0.85	0.83	0.56	0.83	1.05	0.80	1.13	0.75	1.27

Northern Utilities New Hampshire
2021 Rate Case Gas Marginal Cost of Service Study
Marginal Cost Summary

A	B	C	D	E	F	G	H	I	J	K	L
Line	FERC A/C	Description	Total System	Residential Heat R-5, R-10	Residential Non-Heat R-6, R-11	High Winter Small G-40, T-40	Low Winter Small G-50, T-50	High Winter Medium G-41, T-41	Low Winter Medium G-51, T-51	High Winter Large G-42, T-42	Low Winter Large G-52, T-52
29		MARGINAL UNIT COST REPORT									
30		Demand Related Carrying Costs									
31	376	Reinforcement/Pipe Replacement	\$ 150.57	\$ 150.57	\$ 150.57	\$ 150.57	\$ 150.57	\$ 150.57	\$ 150.57	\$ 150.57	\$ 150.57
32	376	Mains Extension - Demand Component	\$ 117.45	\$ 117.45	\$ 117.45	\$ 117.45	\$ 117.45	\$ 117.45	\$ 117.45	\$ 117.45	\$ 117.45
33		Subtotal: Demand Related Carrying Costs	\$ 268.02	\$ 268.02	\$ 268.02	\$ 268.02	\$ 268.02	\$ 268.02	\$ 268.02	\$ 268.02	\$ 268.02
34		Demand Related O&M Costs									
35	920-935	A&G Expense - Demand Related	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36
36		Subtotal: Demand O&M Costs	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36
37		Total: Demand Related Costs	\$ 300.38	\$ 300.38	\$ 300.38	\$ 300.38	\$ 300.38	\$ 300.38	\$ 300.38	\$ 300.38	\$ 300.38
38		Monthly Costs	\$ 25.03	\$ 25.03	\$ 25.03	\$ 25.03	\$ 25.03	\$ 25.03	\$ 25.03	\$ 25.03	\$ 25.03
39		Customer Related Carrying Costs									
40	376	Mains Extension - Customer Component	\$ 146.94	\$ 146.94	\$ 146.94	\$ 146.94	\$ 146.94	\$ 146.94	\$ 146.94	\$ 146.94	\$ 146.94
41	380	Services	\$ 440.61	\$ 395.20	\$ 395.20	\$ 512.32	\$ 512.32	\$ 986.04	\$ 986.04	\$ 5,305.51	\$ 5,305.51
42	381-383	Meters, Installations, Regulators	\$ 83.66	\$ 64.28	\$ 64.28	\$ 104.72	\$ 104.72	\$ 414.48	\$ 414.48	\$ 1,577.97	\$ 1,577.97
43		Subtotal: Customer Related Carrying Costs	\$ 524.28	\$ 459.48	\$ 459.48	\$ 617.04	\$ 617.04	\$ 1,400.52	\$ 1,400.52	\$ 6,883.48	\$ 6,883.48
44		Customer Related O&M Costs									
45	902	Meter Reading Expenses	\$ 5.76	\$ 5.58	\$ 5.58	\$ 5.72	\$ 5.89	\$ 7.26	\$ 6.36	\$ 59.18	\$ 77.40
46	903	Customer Records & Collection Expenses	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33
47	904	Uncollectible Accounts	\$ 12.44	\$ 13.76	\$ 9.18	\$ 7.45	\$ 9.26	\$ -	\$ 31.58	\$ -	\$ 60.60
48	908	Customer Assistance Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49	909	Informational and Instructional Advertising Exp.	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10
50	920-935	Customer A&G Costs	\$ 144.71	\$ 127.49	\$ 130.29	\$ 162.23	\$ 162.59	\$ 432.99	\$ 423.90	\$ 1,630.76	\$ 1,661.37
51		Subtotal: Customer O&M Costs	\$ 223.34	\$ 207.26	\$ 205.48	\$ 235.82	\$ 238.16	\$ 500.68	\$ 522.26	\$ 1,750.37	\$ 1,859.79
52		Total: Customer Related Costs	\$ 747.62	\$ 666.74	\$ 664.96	\$ 852.87	\$ 855.20	\$ 1,901.20	\$ 1,922.78	\$ 8,633.85	\$ 8,743.27
53		Monthly Costs	\$ 62.30	\$ 55.56	\$ 55.41	\$ 71.07	\$ 71.27	\$ 158.43	\$ 160.23	\$ 719.49	\$ 728.61

Northern Utilities New Hampshire
2021 Rate Case Gas Marginal Cost of Service Study
Plant Investment

A	B	C	D	E	F	G	H	I	J	K	L	M
No.	FERC A/C	Description	Units	Total	Residential Heat	Residential Non-Heat	High Winter Small	Low Winter Small	High Winter Medium	Low Winter Medium	High Winter Large	Low Winter Large
1		Billing Determinants										
2		No. of Customers		35,192	26,815	1,277	5,234	831	704	267	31	33
3		Design Day Capacity	dt	66,317	23,486	229	11,714	760	16,426	2,406	5,830	5,466
4		Throughput	therms	74,152,109	20,067,257	237,269	10,880,833	1,474,573	14,423,832	4,761,300	5,889,772	16,417,274
5		Revenue		\$ 43,200,249	\$ 22,793,730	\$ 561,877	\$ 7,298,212	\$ 1,082,956	\$ 5,543,884	\$ 1,542,422	\$ 1,678,879	\$ 2,698,288
6		Demand Related Additions										
7	376	Reinforcement/Pipe Replacement										
8		Investment per unit capacity	\$/dt		\$1,664	\$1,664	\$1,664	\$1,664	\$1,664	\$1,664	\$1,664	\$1,664
9		Class investment	\$	\$ 110,375,535	\$39,088,299	\$380,437	\$19,497,053	\$1,265,659	\$27,339,419	\$4,004,740	\$9,703,101	\$9,096,828
10		ECCR	%		9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%
11		Annual Carrying Charge	\$	\$ 9,985,255	\$3,536,170	\$34,417	\$1,763,824	\$114,499	\$2,473,293	\$362,294	\$877,803	\$822,955
12		Unit Annual Carrying Costs	\$/dt		\$150.57	\$150.57	\$150.57	\$150.57	\$150.57	\$150.57	\$150.57	\$150.57
13	376	Mains Extension - Demand Component										
14		Investment per unit capacity	\$/dt		\$1,298	\$1,298	\$1,298	\$1,298	\$1,298	\$1,298	\$1,298	\$1,298
15		Class investment	\$	\$ 86,098,596	\$30,490,884	\$296,760	\$15,208,705	\$987,279	\$21,326,153	\$3,123,903	\$7,568,918	\$7,095,994
16		ECCR			9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%
17		Annual Carrying Charge	\$	\$ 7,789,012	\$2,758,394	\$26,847	\$1,375,874	\$89,315	\$1,929,296	\$282,608	\$684,731	\$641,948
18		Unit Annual Carrying Costs	\$/dt		\$117.45	\$117.45	\$117.45	\$117.45	\$117.45	\$117.45	\$117.45	\$117.45
19		Customer Related Additions										
20	376	Mains Extension - Customer Component										
21		Investment per customer	\$/Cust		\$1,624	\$1,624	\$1,624	\$1,624	\$1,624	\$1,624	\$1,624	\$1,624
22		Class investment	\$	\$ 57,162,494	\$43,555,332	\$2,073,747	\$8,502,142	\$1,350,554	\$1,143,888	\$432,877	\$50,353	\$53,602
23		ECCR			9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%
24		Annual Carrying Charge	\$	\$ 5,171,273	\$3,940,285	\$187,604	\$769,156	\$122,179	\$103,483	\$39,161	\$4,555	\$4,849
25		Unit Annual Carrying Costs	\$/Cust		\$146.94	\$146.94	\$146.94	\$146.94	\$146.94	\$146.94	\$146.94	\$146.94
26	380	Services										
27		Investment per customer	\$/Cust		\$4,161.55	\$4,161.55	\$5,394.93	\$5,394.93	\$10,383.29	\$10,383.29	\$55,868.54	\$55,868.54
28		Class investment	\$	\$ 163,283,766	\$111,591,172	\$5,313,054	\$28,238,845	\$4,485,702	\$7,312,260	\$2,767,147	\$1,731,925	\$1,843,662
29		ECCR			9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
30		Annual Carrying Charge	\$	\$ 15,506,102	\$10,597,159	\$504,550	\$2,681,678	\$425,981	\$694,402	\$262,780	\$164,471	\$175,082
31		Unit Annual Carrying Costs	\$/Cust		\$395.20	\$395.20	\$512.32	\$512.32	\$986.04	\$986.04	\$5,305.51	\$5,305.51
32	381-383	Meters, Installations, Regulators										
33		Investment per customer	\$/Cust		\$464.85	\$464.85	\$757.27	\$757.27	\$2,997.32	\$2,997.32	\$11,411.16	\$11,411.16
34		Class investment	\$	\$ 21,291,856	\$12,464,988	\$593,480	\$3,963,830	\$629,649	\$2,110,810	\$798,784	\$353,746	\$376,568
35		ECCR			13.83%	13.83%	13.83%	13.83%	13.83%	13.83%	13.83%	13.83%
36		Annual Carrying Charge	\$	\$ 2,944,304	\$1,723,697	\$82,068	\$548,131	\$87,070	\$291,889	\$110,458	\$48,917	\$52,073
37		Unit Annual Carrying Costs	\$/Cust		\$64.28	\$64.28	\$104.72	\$104.72	\$414.48	\$414.48	\$1,577.97	\$1,577.97

Northern Utilities New Hampshire
2021 Rate Case Gas Marginal Cost of Service Study
Plant Investment

A	B	C	D	E	F	G	H	I	J	K	L	M
No.	FERC A/C	Description	Units	Total	Residential Heat	Residential Non-Heat	High Winter Small	Low Winter Small	High Winter Medium	Low Winter Medium	High Winter Large	Low Winter Large
38		General Plant										
39	389-398	Demand Related General Plant										
40		General Plant - ECOSS Demand Allocation	\$	1,951,305	\$ 691,033	\$ 6,726	\$ 344,684	\$ 22,375	\$ 483,328	\$ 70,799	\$ 171,539	\$ 160,821
41		Less: Accumulated Depreciation	\$	(1,306,916)	\$ (462,830)	\$ (4,505)	\$ (230,857)	\$ (14,986)	\$ (323,716)	\$ (47,419)	\$ (114,891)	\$ (107,712)
42		Net General Plant - Demand Allocation	\$	644,389	\$ 228,203	\$ 2,221	\$ 113,827	\$ 7,389	\$ 159,612	\$ 23,380	\$ 56,648	\$ 53,109
43		Return on Ratebase (Pre Tax)			7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
44		Return on Ratebase (Pre Tax)	\$	49,924	\$ 17,680	\$ 172	\$ 8,819	\$ 572	\$ 12,366	\$ 1,811	\$ 4,389	\$ 4,115
45		Depreciation Expense	\$	30,626	\$ 10,846	\$ 106	\$ 5,410	\$ 351	\$ 7,586	\$ 1,111	\$ 2,692	\$ 2,524
46		Annual Carrying Charge	\$	80,550.43	\$ 28,526.06	\$ 277.64	\$ 14,228.66	\$ 923.66	\$ 19,951.90	\$ 2,922.60	\$ 7,081.18	\$ 6,638.73
47		Unit Annual Carrying Costs	\$/kW		\$1.21	\$1.21	\$1.21	\$1.21	\$1.21	\$1.21	\$1.21	\$1.21
48	389-398	General Plant - Customer Related										
49		General Plant - ECOSS Customer Allocation	\$	5,735,962	\$ 4,103,207	\$ 196,178	\$ 884,617	\$ 143,215	\$ 209,208	\$ 74,270	\$ 55,299	\$ 69,967
50		Less: Accumulated Depreciation	\$	(4,303,307)	\$ (3,073,933)	\$ (146,885)	\$ (655,956)	\$ (106,916)	\$ (155,768)	\$ (54,159)	\$ (47,692)	\$ (61,999)
51		Net General Plant - Demand Allocation	\$	1,432,655	\$ 1,029,274	\$ 49,293	\$ 228,661	\$ 36,299	\$ 53,440	\$ 20,111	\$ 7,607	\$ 7,969
52		Return on Ratebase (Pre Tax)			7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
53		Return on Ratebase (Pre Tax)	\$	110,996	\$ 79,743	\$ 3,819	\$ 17,716	\$ 2,812	\$ 4,140	\$ 1,558	\$ 589	\$ 617
54		Depreciation Expense	\$	117,554	\$ 85,854	\$ 4,110	\$ 18,371	\$ 2,916	\$ 3,904	\$ 1,470	\$ 457	\$ 473
55		Annual Carrying Charge	\$	228,550	\$ 165,597	\$ 7,929	\$ 36,087	\$ 5,728	\$ 8,045	\$ 3,028	\$ 1,046	\$ 1,091
56		Unit Annual Carrying Costs	\$/Cust		\$6.18	\$6.21	\$6.89	\$6.89	\$11.42	\$11.36	\$33.74	\$33.05

Northern Utilities New Hampshire
2021 Rate Case Gas Marginal Cost of Service Study
O&M Expense

A	B	C	D	E	F	G	H	I	J	K	L	M
No.	FERC A/C	Description	Units	Total	Residential Heat	Residential Non-Heat	High Winter Small	Low Winter Small	High Winter Medium	Low Winter Medium	High Winter Large	Low Winter Large
1		Customer Related O&M										
2	902	Meter Reading Expenses										
3		Meter Reading Expenses			\$ 149,729	\$ 7,129	\$ 29,930	\$ 4,899	\$ 5,111	\$ 1,694	\$ 1,835	\$ 2,554
4		Expenses per customer			\$ 5.58	\$ 5.58	\$ 5.72	\$ 5.89	\$ 7.26	\$ 6.36	\$ 59.18	\$ 77.40
5	903	Customer Records & Collection Expenses										
6		Customer Records & Collection Expenses			\$ 1,563,982	\$ 74,464	\$ 305,294	\$ 48,496	\$ 41,075	\$ 15,544	\$ 1,808	\$ 1,925
7		Expenses per customer			\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33	\$ 58.33
8	904	Uncollectible Accounts										
9		Uncollectible Accounts			\$ 368,931	\$ 11,718	\$ 38,990	\$ 7,696	\$ -	\$ 8,415	\$ -	\$ 2,000
10		Expenses per customer			\$ 13.76	\$ 9.18	\$ 7.45	\$ 9.26	\$ -	\$ 31.58	\$ -	\$ 60.60
11	908	Customer Assistance Expenses										
12		Customer Assistance Expenses			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13		Expenses per customer			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	909	Informational and Instructional Advertising Exp.										
15		Informational and Instructional Advertising Exp.			\$ 56,358	\$ 2,683	\$ 11,001	\$ 1,748	\$ 1,480	\$ 560	\$ 65	\$ 69
16		Expenses per customer			\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10	\$ 2.10
17	920-935	A&G Expense - Customer Related										
18		A&G Expense - Customer Allocation			\$ 3,418,714	\$ 166,346	\$ 849,158	\$ 135,185	\$ 304,929	\$ 112,969	\$ 50,554	\$ 54,825
19		Expenses per customer			\$ 127.49	\$ 130.29	\$ 162.23	\$ 162.59	\$ 432.99	\$ 423.90	\$ 1,630.76	\$ 1,661.37
20		Demand Related O&M										
21	920-935	A&G Expense - Demand Related										
22		A&G Expense - Demand Allocation		\$ 2,146,279	\$ 760,081	\$ 7,398	\$ 379,125	\$ 24,611	\$ 531,622	\$ 77,873	\$ 188,679	\$ 176,890
23		Expenses per unit Demand		32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36	\$ 32.36
24		Billing Determinants										
25		No. of Customers	count	35,192	26,815	1,277	5,234	831	704	267	31	33
26		Design Day Capacity	dt	66,317	23,486	229	11,714	760	16,426	2,406	5,830	5,466

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Northern Utilities New Hampshire

Revenue Proof and Rate Design

Test Year: January 1, 2020 Through December 31, 2020

Line No.	Rate Description	2020 Billing Units (bills or therms)	Current Rates	Calculated Revenue	Adjustments			Pro Forma at Current Rates		Pro Forma Proposed Rates		
					Normalization & Annualization Adjustments (bills or therms)	Weather Normalization & Annualization Revenue Adjustment	R-10 Rate Change Annualization	2020 Adjusted Billing Determinants (bills or therms)	2020 Adjusted Base Year Revenue ("Margin")	Projected Billing Determinants (bills or therms)	Proposed Rate	Total Proposed Revenue ("Margin")
	(A)	(B)	(C)	(D) [B * C]	(E)	(F) [C * E]		(H) [B + E]	(I) [D + F]	(J) [=H]	(K)	(L) [J * K]
1 R-5: Residential Heating												
2 Customer Charge		306,525	\$22.20	\$6,804,865	7,528	\$167,116		314,053	\$6,971,981	314,053	\$27.84	\$8,743,241
3 Summer First 50 therms		2,947,284	\$0.6099	\$1,797,548	148,552	\$90,602		3,095,836	\$1,888,150	3,095,836	\$0.8491	\$2,628,674
4 Summer Excess therms		459,480	\$0.6099	\$280,237	-	\$0		459,480	\$280,237	459,480	\$0.8491	\$390,145
5 Winter First 50 therms		6,432,280	\$0.6920	\$4,451,138	182,063	\$125,988		6,614,343	\$4,577,125	6,614,343	\$0.8491	\$5,616,239
6 Winter Excess therms		7,449,509	\$0.6920	\$5,155,060	1,986,762	\$1,374,840		9,436,272	\$6,529,900	9,436,272	\$0.8491	\$8,012,338
7 Total		17,288,553		\$18,488,849	2,317,378	\$1,758,545		19,605,931	\$20,247,394	19,605,931		\$25,390,637
8 R-10: Residential Heating, Low Income												
9 January through October												
10 Customer Charge		7,409	\$8.88	\$65,795	(972)	(\$21,587)	\$98,692					
11 Summer First 50 therms		60,977	\$0.2440	\$14,878	(4,875)	(\$2,973)	\$22,311					
12 Summer Excess therms		4,657	\$0.2440	\$1,136	-	\$0	\$1,704					
13 Winter First 50 therms		164,671	\$0.2760	\$45,449	(31,181)	(\$21,578)	\$68,503					
14 Winter Excess therms		154,635	\$0.2760	\$42,679	24,940	\$17,258	\$64,328					
15 Total		384,939		\$169,938	(11,116)	(\$28,879)	\$255,538					
16 November, December												
17 Customer Charge before rate char		335	\$8.88	\$2,979			\$4,468					
18 Customer Charge after rate chang		938	\$22.20	\$20,822	14	\$311						
19 Summer First 50 therms b/f chang		11,932	\$0.2440	\$2,911	1,843	\$1,124	\$4,366					
20 Summer Excess therms b/f chang		2,539	\$0.2440	\$620		\$0	\$929					
21 Winter First 50 therms		40,114	\$0.6920	\$27,759	701	\$485	\$0					
22 Winter Excess therms		25,775	\$0.6920	\$17,836	4,598	\$3,182	\$0					
23 Total		80,360		\$72,927	7,142	\$5,102	\$9,763					
24 Test Year												
25 Customer Charge		8,683		\$89,595	(958)	(\$21,276)	\$103,160	7,724	\$171,480	7,724	\$27.84	\$215,045
26 Summer First 50 therms		72,909		\$17,790	(3,032)	(\$1,849)	\$26,677	69,877	\$42,618	69,877	\$0.8491	\$59,333
27 Summer Excess therms		7,196		\$1,756	-	\$0	\$2,633	7,196	\$4,389	7,196	\$0.8491	\$6,110
28 Winter First 50 therms		204,785		\$73,208	(30,481)	(\$21,093)	\$68,503	174,305	\$120,619	174,305	\$0.8491	\$148,002
29 Winter Excess therms		180,409		\$60,515	29,538	\$20,441	\$64,328	209,948	\$145,284	209,948	\$0.8491	\$178,267
30 Total		465,300		\$242,865	(3,974)	(\$23,777)	\$265,302	461,326	\$484,389	461,326		\$606,756

Northern Utilities New Hampshire
Revenue Proof and Rate Design

Test Year: January 1, 2020 Through December 31, 2020

Line No.	Rate Description	2020 Billing Units (bills or therms)	Current Rates	Calculated Revenue	Adjustments			Pro Forma at Current Rates		Pro Forma Proposed Rates		
					Normalization & Annualization Adjustments (bills or therms)	Weather Normalization & Annualization Revenue Adjustment	R-10 Rate Change Annualization	2020 Adjusted Billing Determinants (bills or therms)	2020 Adjusted Base Year Revenue ("Margin")	Projected Billing Determinants (bills or therms)	Proposed Rate	Total Proposed Revenue ("Margin")
	(A)	(B)	(C)	(D) [B * C]	(E)	(F) [C * E]		(H) [B + E]	(I) [D + F]	(J) [=H]	(K)	(L) [J * K]
31 R-6: Residential Non-Heating												
32 Customer Charge		15,776	\$22.20	\$350,236	(456)	(\$10,123)		15,320	\$340,113	15,320	\$27.84	\$426,520
33 Summer First 10 therms		51,805	\$0.6470	\$33,518	(3,321)	(\$2,149)		48,484	\$31,369	48,484	\$1.1208	\$54,340
34 Summer Excess therms		32,928	\$0.6470	\$21,304	-	\$0		32,928	\$21,304	32,928	\$1.1208	\$36,906
35 Winter First 10 therms		52,602	\$0.6470	\$34,034	(599)	(\$388)		52,003	\$33,646	52,003	\$1.1208	\$58,285
36 Winter Excess therms		94,282	\$0.6470	\$61,001	9,571	\$6,193		103,854	\$67,193	103,854	\$1.1208	\$116,399
37 Total		231,617		\$500,092	5,651	(\$6,467)		237,269	\$493,626	237,269		\$692,451
38 G-40/T-40: Low Annual, High Winter Use												
39 Customer Charge		60,528	\$75.09	\$4,545,034	2,284	\$171,520		62,812	\$4,716,554	62,812	\$80.00	\$5,024,961
40 Summer First 75 therms		749,335	\$0.1865	\$139,751	130,670	\$24,370		880,005	\$164,121	880,005	\$0.2518	\$221,585
41 Summer Excess therms		728,589	\$0.1865	\$135,882	-	\$0		728,589	\$135,882	728,589	\$0.2518	\$183,459
42 Winter First 75 therms		1,918,684	\$0.1865	\$357,835	51,517	\$9,608		1,970,201	\$367,443	1,970,201	\$0.2518	\$496,097
43 Winter Excess therms		6,048,253	\$0.1865	\$1,127,999	1,253,784	\$233,831		7,302,037	\$1,361,830	7,302,037	\$0.2518	\$1,838,653
44 Total		9,444,862		\$6,306,501	1,435,971	\$439,328		10,880,833	\$6,745,829	10,880,833		\$7,764,755
45 G-50/T-50: Low Annual, Low Winter Use												
46 Customer Charge		9,988	\$75.09	\$749,978	(10)	(\$760)		9,978	\$749,218	9,978	\$80.00	\$798,208
47 Summer First 75 therms		211,366	\$0.1865	\$39,420	(7,547)	(\$1,408)		203,819	\$38,012	203,819	\$0.2232	\$45,492
48 Summer Excess therms		444,727	\$0.1865	\$82,942	-	\$0		444,727	\$82,942	444,727	\$0.2232	\$99,263
49 Winter First 75 therms		216,653	\$0.1865	\$40,406	3,516	\$656		220,169	\$41,061	220,169	\$0.2232	\$49,142
50 Winter Excess therms		601,017	\$0.1865	\$112,090	4,841	\$903		605,858	\$112,993	605,858	\$0.2232	\$135,228
51 Total		1,473,763		\$1,024,835	810	(\$609)		1,474,573	\$1,024,226	1,474,573		\$1,127,333
52 G-41/T-41: Medium Annual, High Winter Use												
53 Customer Charge		8,741	\$222.64	\$1,946,116	(290)	(\$64,630)		8,451	\$1,881,486	8,451	\$225.00	\$1,901,430
54 Summer All therms		2,627,539	\$0.1895	\$497,919	81,420	\$15,429		2,708,960	\$513,348	2,708,960	\$0.2860	\$774,762
55 Winter All therms		11,121,406	\$0.2425	\$2,696,941	593,466	\$143,916		11,714,872	\$2,840,856	11,714,872	\$0.2860	\$3,350,453
56 Total		13,748,945		\$5,140,976	674,887	\$94,715		14,423,832	\$5,235,691	14,423,832		\$6,026,646
57 G-51/T-51: Medium Annual, Low Winter Use												
58 Customer Charge		3,318	\$222.64	\$738,727	(120)	(\$26,725)		3,198	\$712,003	3,198	\$225.00	\$719,550
59 Summer First 1,000 therms		1,231,175	\$0.1337	\$164,608	(61,835)	(\$8,267)		1,169,340	\$156,341	1,169,340	\$0.1718	\$200,893
60 Summer Excess therms		515,635	\$0.1087	\$56,050	254,848	\$27,702		770,483	\$83,752	770,483	\$0.1718	\$132,369
61 Winter First 1,300 therms		1,677,170	\$0.1712	\$287,131	(75,660)	(\$12,953)		1,601,510	\$274,178	1,601,510	\$0.1718	\$275,139
62 Winter Excess therms		1,045,521	\$0.1399	\$146,268	174,446	\$24,405		1,219,967	\$170,673	1,219,967	\$0.1718	\$209,590
63 Total		4,469,501		\$1,392,785	291,799	\$4,162		4,761,300	\$1,396,947	4,761,300		\$1,537,541

Northern Utilities New Hampshire
Revenue Proof and Rate Design
Test Year: January 1, 2020 Through December 31, 2020

				Adjustments			Pro Forma at Current Rates		Pro Forma Proposed Rates		
Line No.	Rate Description	2020 Billing Units (bills or therms)	Calculated Revenue	Normalization & Annualization Adjustments (bills or therms)	Weather Normalization & Annualization Revenue Adjustment	R-10 Rate Change Annualization	2020 Adjusted Billing Determinants (bills or therms)	2020 Adjusted Base Year Revenue ("Margin")	Projected Billing Determinants (bills or therms)	Total Proposed Revenue ("Margin")	
	(A)	(B)	(C)	(D) [B * C]	(E)	(F) [C * E]	(H) [B + E]	(I) [D + F]	(J) [=H]	(K)	(L) [J * K]
64	G-42/T-42: High Annual, High Winter Use										
65	Customer Charge	413	\$1,335.81	\$551,022	(41)	(\$54,100)	372	\$496,921	372	\$1,350.00	\$502,200
66	Summer All therms	1,589,451	\$0.1206	\$191,688	(42,692)	(\$5,149)	1,546,759	\$186,539	1,546,759	\$0.2167	\$335,183
67	Winter All therms	4,234,069	\$0.1984	\$840,039	108,944	\$21,614	4,343,013	\$861,654	4,343,013	\$0.2167	\$941,131
68	Total	5,823,520		\$1,582,749	66,252	(\$37,635)	5,889,772	\$1,545,114	5,889,772		\$1,778,514
69	G-52/T-52: High Annual, Low Winter Use										
70	Customer Charge	391	\$1,335.81	\$521,901	5	\$7,080	396	\$528,981	396	\$1,350.00	\$534,600
71	Summer All therms	7,827,306	\$0.0792	\$619,923	29,672	\$2,350	7,856,979	\$622,273	7,856,979	\$0.1121	\$880,767
72	Winter All therms	8,356,912	\$0.1720	\$1,437,389	203,384	\$34,982	8,560,295	\$1,472,371	8,560,295	\$0.1720	\$1,472,371
73	Total	16,184,218		\$2,579,212	233,061	\$44,412	16,417,274	\$2,623,624	16,417,274		\$2,887,738
74	Total										
75	Customer Charge	414,362		\$16,297,475	7,942	\$168,102	422,304	\$16,568,737	422,304		\$18,865,756
76	Summer First Block therms	17,308,170		\$3,502,164	271,888	\$113,930	17,580,058	\$3,642,771	17,580,058		\$5,201,030
77	Summer Excess therms	2,188,556		\$578,170	254,848	\$27,702	2,443,404	\$608,505	2,443,404		\$848,251
78	Winter First Block therms	34,214,561		\$10,218,121	1,036,150	\$302,330	35,250,711	\$10,588,954	35,250,711		\$12,406,859
79	Winter Excess therms	15,418,993		\$6,662,934	3,458,944	\$1,660,611	18,877,936	\$8,387,873	18,877,936		\$10,490,475
80	Total	69,130,280		\$37,258,864	5,021,830	\$2,272,675	74,152,109	\$39,796,840	74,152,109		\$47,812,371

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Northern Utilities New Hampshire
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[E] [F] Billing Determinants		[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
Line	Rate Class	Description	Month	Pro Forma	Pro Forma Test	Bill Cycle to Calendar Month Conversion			Calendar Month Therms			Calendar Month Revenue	
				Test Year	Year Normal	Days In Bill	Days Billed in	% Calendar Therms	Therms Billed in	Therms Billed in	Total	Total	Calendarized
				Customers	Therms (Cycle)	Cycle	Current Month	Billed in Same	Same Month	Next Month	Calendarized	Revenue	Revenue Per
								Month			Therms		Customer
1	R-5	Residential Heating	January	26,171	3,484,177	31.0	15.0	48.4%	1,685,892	1,883,263	3,569,155	\$ 3,759,173	\$ 143.64
2			February	26,171	3,648,821	31.0	15.0	48.4%	1,765,559	1,401,584	3,167,143	\$ 3,417,824	\$ 130.60
3		Rates	March	26,171	3,018,796	28.0	15.0	53.6%	1,617,212	1,051,289	2,668,501	\$ 2,994,428	\$ 114.42
4		Customer	April	26,171	2,036,872	31.0	15.0	48.4%	985,583	580,633	1,566,216	\$ 2,058,477	\$ 78.65
5		\$27.84	May	26,171	1,161,265	30.0	15.0	50.0%	580,633	345,556	926,189	\$ 1,515,030	\$ 57.89
6		Per Therm	June	26,171	669,515	31.0	15.0	48.4%	323,959	147,794	471,753	\$ 1,129,169	\$ 43.15
7		\$0.8491	July	26,171	295,589	30.0	15.0	50.0%	147,794	126,922	274,716	\$ 961,865	\$ 36.75
8			August	26,171	245,912	31.0	15.0	48.4%	118,989	184,742	303,731	\$ 986,501	\$ 37.69
9			September	26,171	357,937	31.0	15.0	48.4%	173,195	346,024	519,219	\$ 1,169,472	\$ 44.69
10			October	26,171	692,048	30.0	15.0	50.0%	346,024	701,831	1,047,855	\$ 1,618,337	\$ 61.84
11			November	26,171	1,359,798	31.0	15.0	48.4%	657,967	1,317,601	1,975,568	\$ 2,406,058	\$ 91.94
12			December	26,171	2,635,202	30.0	15.0	50.0%	1,317,601	1,798,285	3,115,886	\$ 3,374,302	\$ 128.93
13					19,605,931	365.0	180.00				19,605,931	\$ 25,390,637	\$ 970.18
14	R-10	Res. Heating, Low Income	January	644	78,003	31.0	15.0	48.4%	37,744	43,245	80,989	\$ 86,688	\$ 134.67
15			February	644	83,787	31.0	15.0	48.4%	40,542	34,528	75,070	\$ 81,663	\$ 126.87
16		Rates	March	644	74,368	28.0	15.0	53.6%	39,840	27,318	67,158	\$ 74,945	\$ 116.43
17		Customer	April	644	52,929	31.0	15.0	48.4%	25,611	15,074	40,685	\$ 52,466	\$ 81.51
18		\$27.84	May	644	30,149	30.0	15.0	50.0%	15,074	8,641	23,715	\$ 38,057	\$ 59.12
19		Per Therm	June	644	16,742	31.0	15.0	48.4%	8,101	3,326	11,427	\$ 27,623	\$ 42.91
20		\$0.8491	July	644	6,653	30.0	15.0	50.0%	3,326	2,780	6,106	\$ 23,105	\$ 35.89
21			August	644	5,386	31.0	15.0	48.4%	2,606	4,279	6,885	\$ 23,767	\$ 36.92
22			September	644	8,291	31.0	15.0	48.4%	4,012	8,757	12,769	\$ 28,763	\$ 44.68
23			October	644	17,515	30.0	15.0	50.0%	8,757	16,518	25,275	\$ 39,382	\$ 61.18
24			November	644	32,003	31.0	15.0	48.4%	15,485	27,750	43,235	\$ 54,631	\$ 84.87
25			December	644	55,499	30.0	15.0	50.0%	27,750	40,260	68,009	\$ 75,667	\$ 117.55
26					461,326	365.0	180.00				461,326	\$ 606,756	\$ 942.62
27	R-6	Residential Non-Heating	January	1,277	32,194	31.0	15.0	48.4%	15,578	16,869	32,447	\$ 71,910	\$ 56.32
28			February	1,277	32,684	31.0	15.0	48.4%	15,815	12,513	28,328	\$ 67,293	\$ 52.71
29		Rates	March	1,277	26,950	28.0	15.0	53.6%	14,438	10,792	25,230	\$ 63,821	\$ 49.99
30		Customer	April	1,277	20,909	31.0	15.0	48.4%	10,117	8,733	18,851	\$ 56,671	\$ 44.39
31		\$27.84	May	1,277	17,467	30.0	15.0	50.0%	8,733	7,508	16,241	\$ 53,747	\$ 42.10
32		Per Therm	June	1,277	14,547	31.0	15.0	48.4%	7,039	5,794	12,833	\$ 49,926	\$ 39.11
33		\$1.1208	July	1,277	11,588	30.0	15.0	50.0%	5,794	5,514	11,308	\$ 48,217	\$ 37.77
34			August	1,277	10,683	31.0	15.0	48.4%	5,169	6,395	11,564	\$ 48,504	\$ 37.99
35			September	1,277	12,390	31.0	15.0	48.4%	5,995	6,786	12,781	\$ 49,868	\$ 39.06
36			October	1,277	13,571	30.0	15.0	50.0%	6,786	9,033	15,819	\$ 53,273	\$ 41.73
37			November	1,277	17,502	31.0	15.0	48.4%	8,469	13,391	21,860	\$ 60,044	\$ 47.03
38			December	1,277	26,783	30.0	15.0	50.0%	13,391	16,616	30,008	\$ 69,176	\$ 54.18
39					237,269	365.0	180.00				237,269	\$ 692,451	\$ 542.38

Northern Utilities New Hampshire
Proposed Revenue by Calendar Month

[A]	[B]	[C]	[D]	[F] Billing Determinants		[G]	[H]	[I]	[K] Calendar Month Therms		[L]	[M] Calendar Month Revenue		[N]
Line	Rate Class	Description	Month	Pro Forma	Pro Forma Test	Days In Bill	Days Billed in	% Calendar Therms Billed in Same	Therms Billed in	Therms Billed in	Total Calendarized	Total Calendarized	Calendarized	Revenue Per
				Customers	Therms (Cycle)									
						Cycle	Current Month	Month	Same Month	Next Month	Therms	Revenue	Customer	
40	G-40/T-40	Low Annual, High Winter	January	5,234	2,074,220	31.0	15.00	48.4%	1,003,655	1,102,188	2,105,842	\$ 948,998	\$ 181.30	
41			February	5,234	2,135,489	31.0	15.00	48.4%	1,033,301	819,847	1,853,148	\$ 885,369	\$ 169.15	
42		Rates	March	5,234	1,765,824	28.0	15.00	53.6%	945,977	584,542	1,530,519	\$ 804,131	\$ 153.63	
43		Customer	April	5,234	1,132,550	31.0	15.00	48.4%	548,008	307,957	855,965	\$ 634,279	\$ 121.18	
44		\$80.00	May	5,234	615,915	30.0	15.00	50.0%	307,957	160,450	468,408	\$ 536,692	\$ 102.53	
45		Per Therm	June	5,234	310,873	31.0	15.00	48.4%	150,422	43,109	193,531	\$ 467,478	\$ 89.31	
46		\$0.2518	July	5,234	86,217	30.0	15.00	50.0%	43,109	31,705	74,813	\$ 437,585	\$ 83.60	
47			August	5,234	61,428	31.0	15.00	48.4%	29,723	62,259	91,982	\$ 441,908	\$ 84.42	
48			September	5,234	120,626	31.0	15.00	48.4%	58,368	167,906	226,274	\$ 475,722	\$ 90.89	
49			October	5,234	335,813	30.0	15.00	50.0%	167,906	381,182	549,088	\$ 557,007	\$ 106.41	
50			November	5,234	738,541	31.0	15.00	48.4%	357,358	751,669	1,109,028	\$ 698,000	\$ 133.35	
51			December	5,234	1,503,339	30.0	15.00	50.0%	751,669	1,070,565	1,822,234	\$ 877,585	\$ 167.66	
52					10,880,833	365.0	180.00				10,880,833	\$ 7,764,755	\$ 1,483.43	
53	G-50/T-50	Low Annual, Low Winter	January	831	166,567	31.0	15.00	48.4%	80,597	85,181	165,778	\$ 103,519	\$ 124.50	
54			February	831	165,038	31.0	15.00	48.4%	79,857	73,369	153,226	\$ 100,717	\$ 121.13	
55		Rates	March	831	158,026	28.0	15.00	53.6%	84,657	51,270	135,926	\$ 96,856	\$ 116.49	
56		Customer	April	831	99,335	31.0	15.00	48.4%	48,065	45,655	93,720	\$ 87,436	\$ 105.16	
57		\$80.00	May	831	91,310	30.0	15.00	50.0%	45,655	51,347	97,002	\$ 88,168	\$ 106.04	
58		Per Therm	June	831	99,485	31.0	15.00	48.4%	48,138	53,475	101,613	\$ 89,197	\$ 107.28	
59		\$0.2232	July	831	106,951	30.0	15.00	50.0%	53,475	53,647	107,123	\$ 90,427	\$ 108.76	
60			August	831	103,942	31.0	15.00	48.4%	50,294	64,058	114,352	\$ 92,041	\$ 110.70	
61			September	831	124,112	31.0	15.00	48.4%	60,054	51,191	111,245	\$ 91,347	\$ 109.86	
62			October	831	102,382	30.0	15.00	50.0%	51,191	59,985	111,176	\$ 91,332	\$ 109.84	
63			November	831	116,220	31.0	15.00	48.4%	56,236	70,603	126,839	\$ 94,828	\$ 114.05	
64			December	831	141,206	30.0	15.00	50.0%	70,603	85,970	156,573	\$ 101,464	\$ 122.03	
65					1,474,573	365.0	180.00				1,474,573	\$ 1,127,333	\$ 1,355.84	
66	G-41/T-41	Med. Annual, High Winter	January	704	2,542,501	31.0	15.00	48.4%	1,230,243	1,342,852	2,573,095	\$ 894,358	\$ 1,269.97	
67			February	704	2,601,776	31.0	15.00	48.4%	1,258,924	1,026,886	2,285,810	\$ 812,194	\$ 1,153.30	
68		Rates	March	704	2,211,754	28.0	15.00	53.6%	1,184,868	739,200	1,924,069	\$ 708,736	\$ 1,006.39	
69		Customer	April	704	1,432,201	31.0	15.00	48.4%	693,000	428,559	1,121,559	\$ 479,218	\$ 680.48	
70		\$225.00	May	704	857,118	30.0	15.00	50.0%	428,559	260,143	688,701	\$ 355,421	\$ 504.69	
71		Per Therm	June	704	504,026	31.0	15.00	48.4%	243,884	116,954	360,838	\$ 261,652	\$ 371.54	
72		\$0.2860	July	704	233,908	30.0	15.00	50.0%	116,954	101,623	218,577	\$ 220,966	\$ 313.77	
73			August	704	196,895	31.0	15.00	48.4%	95,272	144,324	239,596	\$ 226,977	\$ 322.30	
74			September	704	279,628	31.0	15.00	48.4%	135,304	258,880	394,184	\$ 271,189	\$ 385.08	
75			October	704	517,761	30.0	15.00	50.0%	258,880	570,478	829,358	\$ 395,649	\$ 561.82	
76			November	704	1,105,301	31.0	15.00	48.4%	534,823	970,482	1,505,305	\$ 588,970	\$ 836.33	
77			December	704	1,940,963	30.0	15.00	50.0%	970,482	1,312,259	2,282,740	\$ 811,316	\$ 1,152.06	
78					14,423,832	365.0	180.00				14,423,832	\$ 6,026,646	\$ 8,557.74	

Northern Utilities New Hampshire
Proposed Revenue by Calendar Month

[A] Line	[B] Rate Class	[C] Description	[D] Month	[E] [F] Billing Determinants		[G] [H] [I] Bill Cycle to Calendar Month Conversion			[J] [K] [L] Calendar Month Therms			[M] [N] Calendar Month Revenue	
				Pro Forma Test Year Customers	Pro Forma Test Year Normal Therms (Cycle)	Days In Bill Cycle	Days Billed in Current Month	% Calendar Therms Billed in Same Month	Therms Billed in Same Month	Therms Billed in Next Month	Total Calendarized Therms	Total Calendarized Revenue	Calendarized Revenue Per Customer
79	G-51/T-51	Med. Annual, Low Winter	January	267	543,661	31.0	15.00	48.4%	263,062	285,547	548,609	\$ 154,213	\$ 578.66
80			February	267	553,247	31.0	15.00	48.4%	267,700	238,585	506,285	\$ 146,942	\$ 551.38
81		<i>Rates</i>	March	267	513,874	28.0	15.00	53.6%	275,290	204,221	479,510	\$ 142,342	\$ 534.12
82		<i>Customer</i>	April	267	395,677	31.0	15.00	48.4%	191,457	177,978	369,435	\$ 123,431	\$ 463.16
83		<i>\$225.00</i>	May	267	355,957	30.0	15.00	50.0%	177,978	174,313	352,292	\$ 120,486	\$ 452.11
84		<i>Per Therm</i>	June	267	337,732	31.0	15.00	48.4%	163,419	151,004	314,422	\$ 113,980	\$ 427.69
85		<i>\$0.1718</i>	July	267	302,008	30.0	15.00	50.0%	151,004	145,606	296,610	\$ 110,920	\$ 416.21
86			August	267	282,112	31.0	15.00	48.4%	136,506	163,666	300,172	\$ 111,532	\$ 418.51
87			September	267	317,102	31.0	15.00	48.4%	153,437	152,861	306,298	\$ 112,585	\$ 422.46
88			October	267	305,723	30.0	15.00	50.0%	152,861	195,057	347,918	\$ 119,735	\$ 449.29
89			November	267	377,923	31.0	15.00	48.4%	182,866	238,142	421,008	\$ 132,292	\$ 496.40
90			December	267	476,284	30.0	15.00	50.0%	238,142	280,599	518,741	\$ 149,082	\$ 559.41
91					4,761,300	365.0	180.00				4,761,300	\$ 1,537,541	\$ 5,769.39
92	G-42/T-42	High Annual, High Winter	January	31	915,167	31.00	31.00	100.0%	915,167	-	915,167	\$ 240,167	\$ 7,747.32
93			February	31	819,517	28.00	28.00	100.0%	819,517	-	819,517	\$ 219,439	\$ 7,078.69
94		<i>Rates</i>	March	31	734,670	31.00	31.00	100.0%	734,670	-	734,670	\$ 201,053	\$ 6,485.58
95		<i>Customer</i>	April	31	515,218	30.00	30.00	100.0%	515,218	-	515,218	\$ 153,498	\$ 4,951.54
96		<i>\$1,350.00</i>	May	31	324,350	31.00	31.00	100.0%	324,350	-	324,350	\$ 112,137	\$ 3,617.31
97		<i>Per Therm</i>	June	31	218,129	30.00	30.00	100.0%	218,129	-	218,129	\$ 89,118	\$ 2,874.79
98		<i>\$0.2167</i>	July	31	189,460	31.00	31.00	100.0%	189,460	-	189,460	\$ 82,906	\$ 2,674.38
99			August	31	192,134	31.00	31.00	100.0%	192,134	-	192,134	\$ 83,485	\$ 2,693.08
100			September	31	232,113	30.00	30.00	100.0%	232,113	-	232,113	\$ 92,149	\$ 2,972.54
101			October	31	383,712	31.00	31.00	100.0%	383,712	-	383,712	\$ 125,000	\$ 4,032.27
102			November	31	578,379	30.00	30.00	100.0%	578,379	-	578,379	\$ 167,185	\$ 5,393.06
103			December	31	786,923	31.00	31.00	100.0%	786,923	-	786,923	\$ 212,376	\$ 6,850.84
104					5,889,772	365.0	365.00				5,889,772	\$ 1,778,514	\$ 57,371.41
105	G-52/T-52	High Annual, Low Winter	January	33	1,332,981	31.00	31.00	100.0%	1,332,981	-	1,332,981	\$ 273,823	\$ 8,297.66
106			February	33	1,504,043	28.00	28.00	100.0%	1,504,043	-	1,504,043	\$ 303,245	\$ 9,189.26
107		<i>Rates</i>	March	33	1,376,235	31.00	31.00	100.0%	1,376,235	-	1,376,235	\$ 281,262	\$ 8,523.10
108		<i>Customer</i>	April	33	1,383,288	30.00	30.00	100.0%	1,383,288	-	1,383,288	\$ 280,018	\$ 8,485.41
109		<i>\$1,350.00</i>	May	33	1,262,689	31.00	31.00	100.0%	1,262,689	-	1,262,689	\$ 186,436	\$ 5,649.57
110		<i>Per Therm Summer</i>	June	33	1,236,219	30.00	30.00	100.0%	1,236,219	-	1,236,219	\$ 183,877	\$ 5,572.02
111		<i>\$0.1121</i>	July	33	1,220,236	31.00	31.00	100.0%	1,220,236	-	1,220,236	\$ 181,339	\$ 5,495.11
112		<i>Per Therm Winter</i>	August	33	1,282,733	31.00	31.00	100.0%	1,282,733	-	1,282,733	\$ 188,344	\$ 5,707.41
113		<i>\$0.1720</i>	September	33	1,416,119	30.00	30.00	100.0%	1,416,119	-	1,416,119	\$ 203,297	\$ 6,160.51
114			October	33	1,430,639	31.00	31.00	100.0%	1,430,639	-	1,430,639	\$ 207,514	\$ 6,288.30
115			November	33	1,409,953	30.00	30.00	100.0%	1,409,953	-	1,409,953	\$ 285,345	\$ 8,646.81
116			December	33	1,562,138	31.00	31.00	100.0%	1,562,138	-	1,562,138	\$ 313,238	\$ 9,492.05
117					16,417,274	365.0	365.00				16,417,274	\$ 2,887,738	\$ 87,507.22
118		Test Year Total			74,152,109						74,152,109	\$ 47,812,371	

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Northern Utilities - NH Division
Residential Heating Customer - R5
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills		\$ Difference	% Difference
		@ Present Rates	Monthly Bills @ Proposed Rates		
<u>Delivery and Supply</u>					
10.0%	5.91	\$31.26	\$37.72	\$6.46	20.7%
20.0%	22.05	\$56.01	\$64.73	\$8.71	15.6%
30.0%	37.57	\$79.81	\$90.68	\$10.88	13.6%
40.0%	52.37	\$102.51	\$115.44	\$12.94	12.6%
50.0%	67.18	\$125.22	\$140.22	\$15.00	12.0%
60.0%	82.99	\$149.46	\$166.66	\$17.21	11.5%
70.0%	101.23	\$177.42	\$197.17	\$19.75	11.1%
80.0%	124.00	\$212.35	\$235.27	\$22.92	10.8%
90.0%	155.63	\$260.84	\$288.17	\$27.33	10.5%
100.0%	240.82	\$391.47	\$430.66	\$39.20	10.0%
Average	88.98	\$158.63	\$176.67	\$18.04	11.4%
<u>Distribution Only</u>					
10.0%	5.91	\$26.29	\$32.86	\$6.57	25.0%
20.0%	22.05	\$37.46	\$46.56	\$9.10	24.3%
30.0%	37.57	\$48.20	\$59.74	\$11.54	23.9%
40.0%	52.37	\$58.44	\$72.31	\$13.87	23.7%
50.0%	67.18	\$68.69	\$84.88	\$16.19	23.6%
60.0%	82.99	\$79.63	\$98.31	\$18.68	23.5%
70.0%	101.23	\$92.25	\$113.79	\$21.54	23.4%
80.0%	124.00	\$108.01	\$133.13	\$25.12	23.3%
90.0%	155.63	\$129.90	\$159.99	\$30.09	23.2%
100.0%	240.82	\$188.84	\$232.32	\$43.47	23.0%
Average	88.98	\$83.77	\$103.39	\$19.62	23.4%
<u>Present Rates</u>		<u>Proposed Rates</u>			
Customer Charge (\$/customer)		\$22.20	(1)	Customer Charge (\$/customer)	
Distribution Charge - First 50 therms (\$/thm)		\$0.6920	(1)	Distribution Charge - All therms (\$/thm)	
Distribution Charge - Excess 50 therms (\$/thm)		\$0.6920	(1)		
LDAC (\$/thm)		\$0.1099	(1)	LDAC (\$/thm)	
COGC (\$/thm)		\$0.7315	(2)	COGC (\$/thm)	

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
Residential Heating Customer - R5
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills		\$ Difference	% Difference
		@ Present Rates	Monthly Bills @ Proposed Rates		
<u>Delivery and Supply</u>					
10.0%	0.00	\$22.20	\$27.84	\$5.64	25.4%
20.0%	1.76	\$24.13	\$30.16	\$6.04	25.0%
30.0%	5.79	\$28.53	\$35.48	\$6.95	24.4%
40.0%	9.28	\$32.34	\$40.07	\$7.74	23.9%
50.0%	12.82	\$36.20	\$44.74	\$8.54	23.6%
60.0%	16.63	\$40.36	\$49.76	\$9.40	23.3%
70.0%	21.15	\$45.30	\$55.72	\$10.42	23.0%
80.0%	27.57	\$52.31	\$64.18	\$11.87	22.7%
90.0%	39.21	\$65.02	\$79.53	\$14.51	22.3%
100.0%	83.07	\$112.92	\$137.35	\$24.42	21.6%
Average	21.73	\$45.93	\$56.48	\$10.55	23.0%
<u>Distribution Only</u>					
10.0%	0.00	\$22.20	\$27.84	\$5.64	25.4%
20.0%	1.76	\$23.28	\$29.34	\$6.06	26.0%
30.0%	5.79	\$25.73	\$32.76	\$7.03	27.3%
40.0%	9.28	\$27.86	\$35.72	\$7.86	28.2%
50.0%	12.82	\$30.02	\$38.72	\$8.71	29.0%
60.0%	16.63	\$32.34	\$41.96	\$9.62	29.7%
70.0%	21.15	\$35.10	\$45.80	\$10.70	30.5%
80.0%	27.57	\$39.01	\$51.25	\$12.23	31.4%
90.0%	39.21	\$46.11	\$61.13	\$15.02	32.6%
100.0%	83.07	\$72.86	\$98.37	\$25.51	35.0%
Average	21.73	\$35.45	\$46.29	\$10.84	30.6%
<u>Present Rates</u>		<u>Proposed Rates</u>			
Customer Charge (\$/customer)		\$22.20	(1)	Customer Charge (\$/customer)	
Distribution Charge - First 50 therms (\$/thm)		\$0.6099	(1)	Distribution Charge - All therms (\$/thm)	
Distribution Charge - Excess 50 therms (\$/thm)		\$0.6099	(1)		
LDAC (\$/thm)		\$0.1099	(1)	LDAC (\$/thm)	
COGC (\$/thm)		\$0.3724	(2)	COGC (\$/thm)	

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
Residential Low Income Heating Customer - R10
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	14.96	\$25.57	\$29.71	\$4.14	16.2%
20.0%	31.25	\$40.13	\$45.40	\$5.27	13.1%
30.0%	43.22	\$50.82	\$56.92	\$6.10	12.0%
40.0%	54.61	\$61.00	\$67.89	\$6.89	11.3%
50.0%	65.94	\$71.12	\$78.79	\$7.67	10.8%
60.0%	77.14	\$81.13	\$89.58	\$8.45	10.4%
70.0%	90.21	\$92.81	\$102.16	\$9.36	10.1%
80.0%	108.11	\$108.80	\$119.40	\$10.60	9.7%
90.0%	135.38	\$133.16	\$145.65	\$12.49	9.4%
100.0%	205.88	\$196.15	\$213.53	\$17.38	8.9%
Average	82.67	\$86.07	\$94.90	\$8.83	10.3%
<u>Distribution Only</u>					
10.0%	14.96	\$32.55	\$40.54	\$7.99	24.5%
20.0%	31.25	\$43.83	\$54.38	\$10.55	24.1%
30.0%	43.22	\$52.11	\$64.54	\$12.43	23.9%
40.0%	54.61	\$59.99	\$74.21	\$14.22	23.7%
50.0%	65.94	\$67.83	\$83.83	\$16.00	23.6%
60.0%	77.14	\$75.58	\$93.34	\$17.76	23.5%
70.0%	90.21	\$84.63	\$104.44	\$19.81	23.4%
80.0%	108.11	\$97.02	\$119.64	\$22.62	23.3%
90.0%	135.38	\$115.89	\$142.80	\$26.91	23.2%
100.0%	205.88	\$164.67	\$202.66	\$37.98	23.1%
Average	82.67	\$79.41	\$98.04	\$18.63	23.5%
<u>Present Rates</u>		<u>Proposed Rates</u>			
Customer Charge (\$/customer)		\$22.20 (1)	Customer Charge (\$/customer)		
Distribution Charge - First 50 therms (\$/thm)		\$0.6920 (1)	Distribution Charge - All therms (\$/thm)		
Distribution Charge - Excess 50 therms (\$/thm)		\$0.6920 (1)			
LDAC (\$/thm)		\$0.1099 (1)	LDAC (\$/thm)		
COGC (\$/thm)		\$0.7315 (2)	COGC (\$/thm)		
45% Customer Charge Discount (\$/customer)		-\$9.99 (6)	45% Customer Charge Discount (\$/customer)		
45% Therm Discount - First 50 therms (\$/thm)		-\$0.6400 (6)	45% Therm Discount - All therms (\$/thm)		
45% Therm Discount - Excess 50 therms (\$/thm)		-\$0.6400 (6)			

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal
(6) Low income customers receive a 45% discount on the customer charge, distribution charges, and COG in the winter period only

Northern Utilities - NH Division
Residential Low Income Heating Customer - R10
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.15	\$22.36	\$28.03	\$5.67	25.4%
20.0%	3.16	\$25.65	\$32.01	\$6.35	24.8%
30.0%	6.95	\$29.79	\$37.00	\$7.21	24.2%
40.0%	10.00	\$33.12	\$41.02	\$7.90	23.9%
50.0%	12.74	\$36.11	\$44.63	\$8.52	23.6%
60.0%	16.06	\$39.74	\$49.01	\$9.27	23.3%
70.0%	20.58	\$44.67	\$54.96	\$10.29	23.0%
80.0%	27.06	\$51.76	\$63.52	\$11.76	22.7%
90.0%	39.85	\$65.72	\$80.37	\$14.65	22.3%
100.0%	80.33	\$109.94	\$133.74	\$23.81	21.7%
Average	21.69	\$45.89	\$56.43	\$10.54	23.0%
<u>Distribution Only</u>					
10.0%	0.15	\$22.29	\$27.97	\$5.68	25.5%
20.0%	3.16	\$24.13	\$30.52	\$6.40	26.5%
30.0%	6.95	\$26.44	\$33.74	\$7.30	27.6%
40.0%	10.00	\$28.30	\$36.33	\$8.03	28.4%
50.0%	12.74	\$29.97	\$38.66	\$8.69	29.0%
60.0%	16.06	\$31.99	\$41.47	\$9.48	29.6%
70.0%	20.58	\$34.75	\$45.31	\$10.56	30.4%
80.0%	27.06	\$38.71	\$50.82	\$12.11	31.3%
90.0%	39.85	\$46.50	\$61.68	\$15.17	32.6%
100.0%	80.33	\$71.19	\$96.05	\$24.86	34.9%
Average	21.69	\$35.43	\$46.25	\$10.83	30.6%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$22.20 (1)	Customer Charge (\$/customer)		\$27.84 (3)
Distribution Charge - First 50 therms (\$/thm)		\$0.6099 (1)	Distribution Charge - All therms (\$/thm)		\$0.8491 (3)
Distribution Charge - Excess 50 therms (\$/thm)		\$0.6099 (1)			
LDAC (\$/thm)		\$0.1099 (1)	LDAC (\$/thm)		\$0.0965 (4)
COGC (\$/thm)		\$0.3724 (2)	COGC (\$/thm)		\$0.3727 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
Residential Non-Heating Customer - R6
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$22.20	\$27.84	\$5.64	25.4%
20.0%	0.50	\$22.95	\$28.81	\$5.87	25.6%
30.0%	2.23	\$25.53	\$32.19	\$6.66	26.1%
40.0%	5.44	\$30.30	\$38.43	\$8.12	26.8%
50.0%	9.21	\$35.91	\$45.76	\$9.84	27.4%
60.0%	12.95	\$41.48	\$53.03	\$11.55	27.8%
70.0%	17.13	\$47.70	\$61.15	\$13.45	28.2%
80.0%	23.24	\$56.79	\$73.02	\$16.24	28.6%
90.0%	36.13	\$75.98	\$98.09	\$22.12	29.1%
100.0%	78.37	\$138.84	\$180.22	\$41.38	29.8%
Average	18.52	\$49.77	\$63.85	\$14.09	28.3%
<u>Distribution Only</u>					
10.0%	0.00	\$22.20	\$27.84	\$5.64	25.4%
20.0%	0.50	\$22.52	\$28.40	\$5.88	26.1%
30.0%	2.23	\$23.65	\$30.34	\$6.70	28.3%
40.0%	5.44	\$25.72	\$33.94	\$8.22	32.0%
50.0%	9.21	\$28.16	\$38.17	\$10.01	35.5%
60.0%	12.95	\$30.58	\$42.36	\$11.78	38.5%
70.0%	17.13	\$33.28	\$47.04	\$13.76	41.3%
80.0%	23.24	\$37.23	\$53.88	\$16.65	44.7%
90.0%	36.13	\$45.58	\$68.33	\$22.76	49.9%
100.0%	78.37	\$72.90	\$115.67	\$42.77	58.7%
Average	18.52	\$34.18	\$48.60	\$14.42	42.2%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$22.20 (1)	Customer Charge (\$/customer)		\$27.84 (3)
Distribution Charge - First 10 therms (\$/thm)		\$0.6470 (1)	Distribution Charge - All therms (\$/thm)		\$1.1208 (3)
Distribution Charge - Excess 10 therms (\$/thm)		\$0.6470 (1)			
LDAC (\$/thm)		\$0.1099 (1)	LDAC (\$/thm)		\$0.0965 (4)
COGC (\$/thm)		\$0.7315 (2)	COGC (\$/thm)		\$0.7271 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
Residential Non-Heating Customer - R6
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Present Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$22.20	\$27.84	\$5.64	25.4%
20.0%	0.70	\$22.99	\$28.95	\$5.96	25.9%
30.0%	1.96	\$24.41	\$30.96	\$6.54	26.8%
40.0%	3.94	\$26.65	\$34.11	\$7.46	28.0%
50.0%	6.31	\$29.32	\$37.87	\$8.55	29.1%
60.0%	8.51	\$31.81	\$41.37	\$9.56	30.1%
70.0%	10.84	\$34.45	\$45.08	\$10.64	30.9%
80.0%	13.60	\$37.55	\$49.46	\$11.90	31.7%
90.0%	17.92	\$42.44	\$56.34	\$13.90	32.7%
100.0%	37.81	\$64.90	\$87.96	\$23.06	35.5%
Average	10.16	\$33.67	\$43.99	\$10.32	30.7%
<u>Distribution Only</u>					
10.0%	0.00	\$22.20	\$27.84	\$5.64	25.4%
20.0%	0.70	\$22.65	\$28.62	\$5.97	26.4%
30.0%	1.96	\$23.47	\$30.04	\$6.57	28.0%
40.0%	3.94	\$24.75	\$32.26	\$7.51	30.3%
50.0%	6.31	\$26.28	\$34.91	\$8.63	32.8%
60.0%	8.51	\$27.70	\$37.38	\$9.67	34.9%
70.0%	10.84	\$29.22	\$39.99	\$10.78	36.9%
80.0%	13.60	\$31.00	\$43.08	\$12.08	39.0%
90.0%	17.92	\$33.80	\$47.93	\$14.13	41.8%
100.0%	37.81	\$46.66	\$70.22	\$23.55	50.5%
Average	10.16	\$28.77	\$39.23	\$10.45	36.3%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$22.20 (1)	Customer Charge (\$/customer)		\$27.84 (3)
Distribution Charge - First 10 therms (\$/thm)		\$0.6470 (1)	Distribution Charge - All therms (\$/thm)		\$1.1208 (3)
Distribution Charge - Excess 10 therms (\$/thm)		\$0.6470 (1)			
LDAC (\$/thm)		\$0.1099 (1)	LDAC (\$/thm)		\$0.0965 (4)
COGC (\$/thm)		\$0.3724 (2)	COGC (\$/thm)		\$0.3727 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Low Annual, High Winter Use - G40
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	5.08	\$80.05	\$85.25	\$5.20	6.5%
20.0%	29.08	\$103.52	\$110.09	\$6.57	6.3%
30.0%	58.36	\$132.13	\$140.38	\$8.24	6.2%
40.0%	91.27	\$164.29	\$174.42	\$10.12	6.2%
50.0%	132.07	\$204.17	\$216.63	\$12.45	6.1%
60.0%	183.41	\$254.36	\$269.75	\$15.39	6.0%
70.0%	248.65	\$318.12	\$337.24	\$19.11	6.0%
80.0%	341.54	\$408.91	\$433.33	\$24.42	6.0%
90.0%	491.01	\$555.01	\$587.97	\$32.96	5.9%
100.0%	989.61	\$1,042.33	\$1,103.78	\$61.44	5.9%
Average	257.01	\$326.29	\$345.88	\$19.59	6.0%
<u>Distribution Only</u>					
10.0%	5.08	\$76.04	\$81.28	\$5.24	6.9%
20.0%	29.08	\$80.51	\$87.32	\$6.81	8.5%
30.0%	58.36	\$85.97	\$94.70	\$8.72	10.1%
40.0%	91.27	\$92.11	\$102.98	\$10.87	11.8%
50.0%	132.07	\$99.72	\$113.25	\$13.53	13.6%
60.0%	183.41	\$109.30	\$126.18	\$16.89	15.5%
70.0%	248.65	\$121.46	\$142.61	\$21.15	17.4%
80.0%	341.54	\$138.79	\$166.00	\$27.21	19.6%
90.0%	491.01	\$166.66	\$203.64	\$36.97	22.2%
100.0%	989.61	\$259.65	\$329.18	\$69.53	26.8%
Average	257.01	\$123.02	\$144.71	\$21.69	17.6%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$75.09 (1)	Customer Charge (\$/customer)		\$80.00 (3)
Distribution Charge - First 75 therms (\$/thm)		\$0.1865 (1)	Distribution Charge - All therms (\$/thm)		\$0.2518 (3)
Distribution Charge - Excess 75 therms (\$/thm)		\$0.1865 (1)			
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.7437 (2)	COGC (\$/thm)		\$0.7393 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Low Annual, High Winter Use - G40
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
30.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
40.0%	1.02	\$75.74	\$80.71	\$4.97	6.6%
50.0%	5.22	\$78.43	\$83.66	\$5.23	6.7%
60.0%	11.96	\$82.74	\$88.39	\$5.65	6.8%
70.0%	25.29	\$91.26	\$97.74	\$6.47	7.1%
80.0%	49.28	\$106.61	\$114.56	\$7.96	7.5%
90.0%	93.76	\$135.05	\$145.76	\$10.70	7.9%
100.0%	280.68	\$254.59	\$276.85	\$22.26	8.7%
Average	46.72	\$104.97	\$112.77	\$7.80	7.4%
<u>Distribution Only</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
30.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
40.0%	1.02	\$75.28	\$80.26	\$4.98	6.6%
50.0%	5.22	\$76.06	\$81.32	\$5.25	6.9%
60.0%	11.96	\$77.32	\$83.01	\$5.69	7.4%
70.0%	25.29	\$79.81	\$86.37	\$6.56	8.2%
80.0%	49.28	\$84.28	\$92.41	\$8.13	9.6%
90.0%	93.76	\$92.58	\$103.61	\$11.03	11.9%
100.0%	280.68	\$127.44	\$150.68	\$23.24	18.2%
Average	46.72	\$83.80	\$91.76	\$7.96	9.5%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$75.09 (1)	Customer Charge (\$/customer)		\$80.00 (3)
Distribution Charge - First 75 therms (\$/thm)		\$0.1865 (1)	Distribution Charge - All therms (\$/thm)		\$0.2518 (3)
Distribution Charge - Excess 75 therms (\$/thm)		\$0.1865 (1)			
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.4058 (2)	COGC (\$/thm)		\$0.4061 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Low Annual, Low Winter Use - G50
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	1.04	\$76.00	\$80.94	\$4.94	6.5%
30.0%	6.81	\$81.08	\$86.19	\$5.10	6.3%
40.0%	17.70	\$90.67	\$96.09	\$5.42	6.0%
50.0%	40.86	\$111.05	\$117.13	\$6.08	5.5%
60.0%	78.30	\$144.01	\$151.15	\$7.14	5.0%
70.0%	146.37	\$203.92	\$213.01	\$9.09	4.5%
80.0%	259.74	\$303.72	\$316.04	\$12.32	4.1%
90.0%	406.53	\$432.91	\$449.42	\$16.51	3.8%
100.0%	704.50	\$695.19	\$720.20	\$25.01	3.6%
Average	166.18	\$221.37	\$231.02	\$9.65	4.4%
<u>Distribution Only</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	1.04	\$75.28	\$80.23	\$4.95	6.6%
30.0%	6.81	\$76.36	\$81.52	\$5.16	6.8%
40.0%	17.70	\$78.39	\$83.95	\$5.56	7.1%
50.0%	40.86	\$82.71	\$89.12	\$6.41	7.7%
60.0%	78.30	\$89.69	\$97.48	\$7.78	8.7%
70.0%	146.37	\$102.39	\$112.67	\$10.28	10.0%
80.0%	259.74	\$123.53	\$137.97	\$14.44	11.7%
90.0%	406.53	\$150.91	\$170.74	\$19.83	13.1%
100.0%	704.50	\$206.48	\$237.25	\$30.77	14.9%
Average	166.18	\$106.08	\$117.09	\$11.01	10.4%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$75.09 (1)	Customer Charge (\$/customer)		\$80.00 (3)
Distribution Charge - First 75 therms (\$/thm)		\$0.1865 (1)	Distribution Charge - All therms (\$/thm)		\$0.2232 (3)
Distribution Charge - Excess 75 therms (\$/thm)		\$0.1865 (1)			
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.6465 (2)	COGC (\$/thm)		\$0.6421 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Low Annual, Low Winter Use - G50
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.81	\$75.55	\$80.48	\$4.94	6.5%
30.0%	5.32	\$78.10	\$83.19	\$5.09	6.5%
40.0%	12.20	\$82.00	\$87.31	\$5.32	6.5%
50.0%	26.67	\$90.20	\$95.99	\$5.80	6.4%
60.0%	55.97	\$106.79	\$113.56	\$6.77	6.3%
70.0%	110.70	\$137.79	\$146.37	\$8.59	6.2%
80.0%	196.19	\$186.20	\$197.63	\$11.42	6.1%
90.0%	306.05	\$248.43	\$263.50	\$15.07	6.1%
100.0%	521.36	\$370.37	\$392.59	\$22.22	6.0%
Average	123.53	\$145.05	\$154.06	\$9.01	6.2%
<u>Distribution Only</u>					
10.0%	0.00	\$75.09	\$80.00	\$4.91	6.5%
20.0%	0.81	\$75.24	\$80.18	\$4.94	6.6%
30.0%	5.32	\$76.08	\$81.19	\$5.11	6.7%
40.0%	12.20	\$77.37	\$82.72	\$5.36	6.9%
50.0%	26.67	\$80.06	\$85.95	\$5.89	7.4%
60.0%	55.97	\$85.53	\$92.49	\$6.96	8.1%
70.0%	110.70	\$95.74	\$104.71	\$8.97	9.4%
80.0%	196.19	\$111.68	\$123.79	\$12.11	10.8%
90.0%	306.05	\$132.17	\$148.31	\$16.14	12.2%
100.0%	521.36	\$172.32	\$196.37	\$24.04	14.0%
Average	123.53	\$98.13	\$107.57	\$9.44	9.6%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$75.09 (1)	Customer Charge (\$/customer)		\$80.00 (3)
Distribution Charge - First 75 therms (\$/thm)		\$0.1865 (1)	Distribution Charge - All therms (\$/thm)		\$0.2232 (3)
Distribution Charge - Excess 75 therms (\$/thm)		\$0.1865 (1)			
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.3327 (2)	COGC (\$/thm)		\$0.3330 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Medium Annual, High Winter Use - G41
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	410.78	\$647.14	\$664.01	\$16.87	2.6%
20.0%	855.12	\$1,106.32	\$1,138.89	\$32.57	2.9%
30.0%	1,123.60	\$1,383.76	\$1,425.82	\$42.05	3.0%
40.0%	1,358.83	\$1,626.86	\$1,677.22	\$50.36	3.1%
50.0%	1,592.36	\$1,868.19	\$1,926.80	\$58.61	3.1%
60.0%	1,899.01	\$2,185.08	\$2,254.53	\$69.45	3.2%
70.0%	2,385.06	\$2,687.36	\$2,773.97	\$86.62	3.2%
80.0%	3,120.90	\$3,447.78	\$3,560.39	\$112.61	3.3%
90.0%	4,464.86	\$4,836.63	\$4,996.72	\$160.09	3.3%
100.0%	8,063.23	\$8,555.18	\$8,842.39	\$287.21	3.4%
Average	2,527.37	\$2,834.43	\$2,926.07	\$91.64	3.2%
<u>Distribution Only</u>					
10.0%	410.78	\$322.25	\$342.48	\$20.23	6.3%
20.0%	855.12	\$430.01	\$469.56	\$39.56	9.2%
30.0%	1,123.60	\$495.11	\$546.35	\$51.24	10.3%
40.0%	1,358.83	\$552.16	\$613.63	\$61.47	11.1%
50.0%	1,592.36	\$608.79	\$680.42	\$71.63	11.8%
60.0%	1,899.01	\$683.15	\$768.12	\$84.97	12.4%
70.0%	2,385.06	\$801.02	\$907.13	\$106.11	13.2%
80.0%	3,120.90	\$979.46	\$1,117.58	\$138.12	14.1%
90.0%	4,464.86	\$1,305.37	\$1,501.95	\$196.58	15.1%
100.0%	8,063.23	\$2,177.97	\$2,531.08	\$353.11	16.2%
Average	2,527.37	\$835.53	\$947.83	\$112.30	13.4%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$222.64 (1)	Customer Charge (\$/customer)		\$225.00 (3)
Distribution Charge - All therms (\$/thm)		\$0.2425 (1)	Distribution Charge - All therms (\$/thm)		\$0.2860 (3)
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.7437 (2)	COGC (\$/thm)		\$0.7393 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Medium Annual, High Winter Use - G41
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	0.00	\$222.64	\$225.00	\$2.36	1.1%
20.0%	8.12	\$227.86	\$230.97	\$3.12	1.4%
30.0%	50.08	\$254.82	\$261.83	\$7.02	2.8%
40.0%	125.85	\$303.50	\$317.57	\$14.06	4.6%
50.0%	243.55	\$379.13	\$404.14	\$25.01	6.6%
60.0%	375.58	\$463.96	\$501.25	\$37.29	8.0%
70.0%	522.98	\$558.66	\$609.66	\$51.00	9.1%
80.0%	723.73	\$687.65	\$757.32	\$69.67	10.1%
90.0%	1,101.48	\$930.36	\$1,035.16	\$104.80	11.3%
100.0%	2,699.06	\$1,956.83	\$2,210.21	\$253.38	12.9%
Average	585.04	\$598.54	\$655.31	\$56.77	9.5%
<u>Distribution Only</u>					
10.0%	0.00	\$222.64	\$225.00	\$2.36	1.1%
20.0%	8.12	\$224.18	\$227.32	\$3.14	1.4%
30.0%	50.08	\$232.13	\$239.32	\$7.19	3.1%
40.0%	125.85	\$246.49	\$260.99	\$14.50	5.9%
50.0%	243.55	\$268.79	\$294.66	\$25.86	9.6%
60.0%	375.58	\$293.81	\$332.42	\$38.60	13.1%
70.0%	522.98	\$321.74	\$374.57	\$52.83	16.4%
80.0%	723.73	\$359.79	\$431.99	\$72.20	20.1%
90.0%	1,101.48	\$431.37	\$540.02	\$108.65	25.2%
100.0%	2,699.06	\$734.11	\$996.93	\$262.82	35.8%
Average	585.04	\$333.51	\$392.32	\$58.82	17.6%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$222.64 (1)	Customer Charge (\$/customer)		\$225.00 (3)
Distribution Charge - All therms (\$/thm)		\$0.1895 (1)	Distribution Charge - All therms (\$/thm)		\$0.2860 (3)
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.4058 (2)	COGC (\$/thm)		\$0.4061 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Medium Annual, Low Winter Use - G51
Proposed Rates versus Present Rates
Winter

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	298.97	\$481.21	\$481.31	\$0.10	0.0%
20.0%	665.04	\$797.83	\$795.16	(\$2.68)	-0.3%
30.0%	830.71	\$941.12	\$937.19	(\$3.93)	-0.4%
40.0%	961.40	\$1,054.16	\$1,049.24	(\$4.92)	-0.5%
50.1%	1,110.81	\$1,183.38	\$1,177.33	(\$6.05)	-0.5%
60.1%	1,275.37	\$1,325.71	\$1,318.41	(\$7.30)	-0.6%
70.0%	1,540.79	\$1,547.73	\$1,545.96	(\$1.77)	-0.1%
80.0%	1,950.17	\$1,888.99	\$1,896.93	\$7.94	0.4%
90.0%	2,919.75	\$2,697.23	\$2,728.18	\$30.95	1.1%
100.0%	5,195.70	\$4,594.46	\$4,679.41	\$84.95	1.8%
Average	1,674.87	\$1,659.50	\$1,660.91	\$1.41	0.1%
<u>Distribution Only</u>					
10.0%	298.97	\$273.82	\$276.36	\$2.54	0.9%
20.0%	665.04	\$336.50	\$339.25	\$2.76	0.8%
30.0%	830.71	\$364.86	\$367.72	\$2.86	0.8%
40.0%	961.40	\$387.23	\$390.17	\$2.94	0.8%
50.1%	1,110.81	\$412.81	\$415.84	\$3.03	0.7%
60.1%	1,275.37	\$440.98	\$444.11	\$3.13	0.7%
70.0%	1,540.79	\$478.89	\$489.71	\$10.82	2.3%
80.0%	1,950.17	\$536.16	\$560.04	\$23.88	4.5%
90.0%	2,919.75	\$671.80	\$726.61	\$54.81	8.2%
100.0%	5,195.70	\$990.21	\$1,117.62	\$127.41	12.9%
Average	1,674.87	\$497.64	\$512.74	\$15.10	3.0%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$222.64 (1)	Customer Charge (\$/customer)		\$225.00 (3)
Distribution Charge - First 1,300 therms (\$/thm)		\$0.1712 (1)	Distribution Charge - All therms (\$/thm)		\$0.1718 (3)
Distribution Charge - Excess 1,300 therms (\$/thm)		\$0.1399 (1)			
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.6465 (2)	COGC (\$/thm)		\$0.6421 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - Medium Annual, Low Winter Use - G51
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.0%	112.57	\$280.45	\$286.71	\$6.26	2.2%
20.0%	415.51	\$436.03	\$452.77	\$16.74	3.8%
30.0%	530.84	\$495.26	\$515.99	\$20.73	4.2%
40.0%	615.04	\$538.51	\$562.15	\$23.64	4.4%
50.0%	707.58	\$586.03	\$612.87	\$26.84	4.6%
60.0%	801.28	\$634.15	\$664.24	\$30.09	4.7%
70.0%	921.82	\$696.06	\$730.31	\$34.26	4.9%
80.0%	1,114.68	\$792.23	\$836.03	\$43.80	5.5%
90.0%	1,569.17	\$1,014.29	\$1,085.17	\$70.89	7.0%
100.0%	3,257.80	\$1,839.29	\$2,010.83	\$171.54	9.3%
Average	1,004.63	\$738.47	\$775.71	\$37.24	5.0%
<u>Distribution Only</u>					
10.0%	112.57	\$237.69	\$244.34	\$6.65	2.8%
20.0%	415.51	\$278.19	\$296.38	\$18.19	6.5%
30.0%	530.84	\$293.61	\$316.20	\$22.58	7.7%
40.0%	615.04	\$304.87	\$330.66	\$25.79	8.5%
50.0%	707.58	\$317.24	\$346.56	\$29.32	9.2%
60.0%	801.28	\$329.77	\$362.66	\$32.89	10.0%
70.0%	921.82	\$345.89	\$383.37	\$37.48	10.8%
80.0%	1,114.68	\$368.81	\$416.50	\$47.70	12.9%
90.0%	1,569.17	\$418.21	\$494.58	\$76.37	18.3%
100.0%	3,257.80	\$601.76	\$784.69	\$182.93	30.4%
Average	1,004.63	\$356.84	\$397.60	\$40.75	11.4%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$222.64 (1)	Customer Charge (\$/customer)		\$225.00 (3)
Distribution Charge - First 1,000 therms (\$/thm)		\$0.1337 (1)	Distribution Charge - All therms (\$/thm)		\$0.1718 (3)
Distribution Charge - Excess 1,000 therms (\$/thm)		\$0.1087 (1)			
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.3327 (2)	COGC (\$/thm)		\$0.3330 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

- (1) Current seasonal rates
- (2) 6 month average seasonal COG
- (3) Proposed Rates, Schedule RAJT-11
- (4) Seasonal rates adjusted for changes due to rate proposal
- (5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - NH Division
General Service - High Annual, High Winter Use - G42
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.1%	145.06	\$1,419.02	\$1,446.64	\$27.62	1.9%
20.2%	557.94	\$1,655.85	\$1,721.71	\$65.86	4.0%
29.8%	1,236.71	\$2,045.21	\$2,173.92	\$128.71	6.3%
39.9%	2,019.46	\$2,494.20	\$2,695.40	\$201.20	8.1%
50.0%	2,763.59	\$2,921.05	\$3,191.16	\$270.11	9.2%
60.1%	3,577.05	\$3,387.66	\$3,733.10	\$345.44	10.2%
70.2%	4,914.67	\$4,154.94	\$4,624.25	\$469.31	11.3%
79.8%	6,697.70	\$5,177.72	\$5,812.14	\$634.42	12.3%
89.9%	9,872.70	\$6,998.96	\$7,927.40	\$928.44	13.3%
100.0%	44,000.48	\$26,575.22	\$30,664.02	\$4,088.80	15.4%
Average	7,578.54	\$5,682.98	\$6,398.98	\$715.99	12.6%
<u>Distribution Only</u>					
10.1%	145.06	\$1,353.30	\$1,381.44	\$28.13	2.1%
20.2%	557.94	\$1,403.10	\$1,470.91	\$67.81	4.8%
29.8%	1,236.71	\$1,484.96	\$1,618.00	\$133.04	9.0%
39.9%	2,019.46	\$1,579.36	\$1,787.62	\$208.26	13.2%
50.0%	2,763.59	\$1,669.10	\$1,948.87	\$279.77	16.8%
60.1%	3,577.05	\$1,767.20	\$2,125.15	\$357.94	20.3%
70.2%	4,914.67	\$1,928.52	\$2,415.01	\$486.49	25.2%
79.8%	6,697.70	\$2,143.55	\$2,801.39	\$657.84	30.7%
89.9%	9,872.70	\$2,526.46	\$3,489.41	\$962.96	38.1%
100.0%	44,000.48	\$6,642.27	\$10,884.91	\$4,242.64	63.9%
Average	7,578.54	\$2,249.78	\$2,992.27	\$742.49	33.0%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$1,335.81 (1)	Customer Charge (\$/customer)		\$1,350.00 (3)
Distribution Charge - All therms (\$/thm)		\$0.1206 (1)	Distribution Charge - All therms (\$/thm)		\$0.2167 (3)
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.4058 (2)	COGC (\$/thm)		\$0.4061 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Present Rates

Proposed Rates

Customer Charge (\$/customer)	\$1,350.00	(3)
Distribution Charge - All therms (\$/thm)	\$0.1720	(3)
LDAC (\$/thm)	\$0.0434	(4)
COGC (\$/thm)	\$0.6421	(5)

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Northern Utilities - NH Division
General Service - High Annual, Low Winter Use - G52
Proposed Rates versus Present Rates
Summer

Cumulative Percentage of Bills	Average Monthly Usage (Therms)	Monthly Bills @ Present Rates	Monthly Bills @ Proposed Rates	\$ Difference	% Difference
<u>Delivery and Supply</u>					
10.1%	2,623.08	\$2,539.98	\$2,631.30	\$91.32	3.6%
20.1%	8,643.71	\$5,303.85	\$5,572.20	\$268.35	5.1%
30.2%	11,831.46	\$6,767.24	\$7,129.32	\$362.08	5.4%
40.2%	18,488.22	\$9,823.14	\$10,380.95	\$557.81	5.7%
50.3%	25,068.63	\$12,843.98	\$13,595.29	\$751.30	5.8%
59.8%	29,171.12	\$14,727.30	\$15,599.23	\$871.93	5.9%
69.8%	35,448.25	\$17,608.92	\$18,665.42	\$1,056.50	6.0%
79.9%	47,888.13	\$23,319.65	\$24,741.93	\$1,422.28	6.1%
89.9%	70,667.62	\$33,776.96	\$35,869.04	\$2,092.08	6.2%
100.0%	143,682.62	\$67,295.71	\$71,534.71	\$4,239.00	6.3%
Average	39,351.28	\$19,400.67	\$20,571.94	\$1,171.26	6.0%
<u>Distribution Only</u>					
10.1%	2,623.08	\$1,543.56	\$1,644.05	\$100.49	6.5%
20.1%	8,643.71	\$2,020.39	\$2,318.96	\$298.57	14.8%
30.2%	11,831.46	\$2,272.86	\$2,676.31	\$403.45	17.8%
40.2%	18,488.22	\$2,800.08	\$3,422.53	\$622.45	22.2%
50.3%	25,068.63	\$3,321.25	\$4,160.19	\$838.95	25.3%
59.8%	29,171.12	\$3,646.16	\$4,620.08	\$973.92	26.7%
69.8%	35,448.25	\$4,143.31	\$5,323.75	\$1,180.44	28.5%
79.9%	47,888.13	\$5,128.55	\$6,718.26	\$1,589.71	31.0%
89.9%	70,667.62	\$6,932.69	\$9,271.84	\$2,339.15	33.7%
100.0%	143,682.62	\$12,715.47	\$17,456.82	\$4,741.35	37.3%
Average	39,351.28	\$4,452.43	\$5,761.28	\$1,308.85	29.4%
<u>Present Rates</u>			<u>Proposed Rates</u>		
Customer Charge (\$/customer)		\$1,335.81 (1)	Customer Charge (\$/customer)		\$1,350.00 (3)
Distribution Charge - All therms (\$/thm)		\$0.0792 (1)	Distribution Charge - All therms (\$/thm)		\$0.1121 (3)
LDAC (\$/thm)		\$0.0472 (2)	LDAC (\$/thm)		\$0.0434 (4)
COGC (\$/thm)		\$0.3327 (2)	COGC (\$/thm)		\$0.3330 (5)

- (1) Current seasonal rates
(2) 6 month average seasonal COG
(3) Proposed Rates, Schedule RAJT-11
(4) Seasonal rates adjusted for changes due to rate proposal
(5) 6 month average seasonal COG adjusted for changes due to rate proposal

Northern Utilities - New Hampshire Division
Typical Residential Heating Bill (R-5)
Bill Impacts Illustrating Changes on a Monthly Basis
Current Rates and Proposed Rates, using 6 month average COGC

Line		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total	Total	Annual
No.	<u>Residential Heating (R-5)</u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Peak	Off-Peak	Nov-Oct
1	Test Year Monthly Weather Normalized Therms per Custome	52	\$101	133	139	115	78	44	26	11	9	14	26	618	131	749
2																
3	<u>Current November - October Rates</u>															
4	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
5	Distribution	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099			
6	LDAC (\$/therm)	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099			
7	COGC (\$/therm)	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.3724	\$0.3724	\$0.3724	\$0.3724	\$0.3724	\$0.3724			
8																
9	TOTAL BILL	\$101.87	\$176.60	\$226.34	\$235.99	\$199.08	\$141.54	\$70.66	\$50.14	\$34.54	\$32.46	\$37.14	\$51.08	\$1,081	\$276	\$1,357
10																
11																
12	<u>Proposed November - October Rates</u>															
13	Customer Charge	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84			
14	Distribution	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491			
15	LDAC (\$/therm)	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965			
16	COGC (\$/therm) inc. increment	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.3727	\$0.3727	\$0.3727	\$0.3727	\$0.3727	\$0.3727			
17																
18	TOTAL BILL	\$114.75	\$196.27	\$250.53	\$261.05	\$220.79	\$158.03	\$86.33	\$61.56	\$42.73	\$40.23	\$45.87	\$62.70	\$1,201	\$339	\$1,541
19																
20	<u>Proposed Bill less Current Bill</u>															
21	Total Bill increase/(decrease)	\$12.88	\$19.67	\$24.19	\$25.06	\$21.71	\$16.48	\$15.67	\$11.42	\$8.19	\$7.76	\$8.73	\$11.62	\$120	\$63	\$183
22	Percentage increase/(decrease)	12.6%	11.1%	10.7%	10.6%	10.9%	11.6%	22.2%	22.8%	23.7%	23.9%	23.5%	22.7%	11.1%	23.0%	13.5%

Northern Utilities - New Hampshire Division
Typical Low Income Residential Heating Bill (R-10)
Bill Impacts Illustrating Changes on a Monthly Basis
Current Rates and Proposed Rates, using 6 month average COGC

Line No.	Low Income Residential Heating (R-10)	Nov (1)	Dec (2)	Jan (3)	Feb (4)	Mar (5)	Apr (6)	May (7)	Jun (8)	Jul (9)	Aug (10)	Sep (11)	Oct (12)	Total Peak (13)	Total Off-Peak (14)	Annual Nov-Oct (15)
1	Test Year Monthly Weather Normalized Therms per Custome	50	86	121	130	116	82	47	26	10	8	13	27	585	132	717
2																
3	<u>Current November - October Rates</u>															
4	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
5	Distribution	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6920	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099	\$0.6099			
6	LDAC (\$/therm)	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099			
7	COGC (\$/therm)	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.3724	\$0.3724	\$0.3724	\$0.3724	\$0.3724	\$0.3724			
8																
9	45% Customer Charge Discount (\$/customer)	-\$9.99	-\$9.99	-\$9.99	-\$9.99	-\$9.99	-\$9.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
10	45% Therm Discount - (\$/thm)	-\$0.3114	-\$0.3114	-\$0.3114	-\$0.3114	-\$0.3114	-\$0.3114	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
11	45% Therm Discount - Cost of Gas (\$/thm)	-\$0.3292	-\$0.3292	-\$0.3292	-\$0.3292	-\$0.3292	-\$0.3292	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
12																
13	TOTAL BILL	\$56.60	\$89.19	\$120.40	\$128.43	\$115.36	\$85.62	\$73.35	\$50.61	\$33.49	\$31.34	\$36.27	\$51.92	\$596	\$277	\$873
14																
15																
16	<u>Proposed November - October Rates</u>															
17	Customer Charge	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84			
18	Distribution	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491	\$0.8491			
19	LDAC (\$/therm)	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965			
20	COGC (\$/therm)	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.3727	\$0.3727	\$0.3727	\$0.3727	\$0.3727	\$0.3727			
21																
22	45% Customer Charge Discount (\$/customer)	-\$12.53	-\$12.53	-\$12.53	-\$12.53	-\$12.53	-\$12.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
23	45% Therm Discount - (\$/thm)	-\$0.3821	-\$0.3821	-\$0.3821	-\$0.3821	-\$0.3821	-\$0.3821	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
24	45% Therm Discount - Cost of Gas (\$/thm)	-\$0.3272	-\$0.3272	-\$0.3272	-\$0.3272	-\$0.3272	-\$0.3272	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000			
25																
26	TOTAL BILL	\$63.21	\$98.38	\$132.06	\$140.72	\$126.62	\$94.53	\$89.58	\$62.13	\$41.46	\$38.87	\$44.82	\$63.71	\$656	\$341	\$996
27																
28	<u>Proposed Bill less Current Bill</u>															
29	Total Bill increase/(decrease)	\$6.61	\$9.19	\$11.66	\$12.29	\$11.26	\$8.91	\$16.23	\$11.52	\$7.98	\$7.53	\$8.55	\$11.79	\$60	\$64	\$124
30	Percentage increase/(decrease)	11.7%	10.3%	9.7%	9.6%	9.8%	10.4%	22.1%	22.8%	23.8%	24.0%	23.6%	22.7%	10.1%	23.0%	14.2%

Northern Utilities - New Hampshire Division
Typical Residential Non-Heating Bill (R-6)
Bill Impacts Illustrating Changes on a Monthly Basis
Current Rates and Proposed Rates, using 6 month average COGC

Line No.	Residential Non-Heating (R-6)	Nov (1)	Dec (2)	Jan (3)	Feb (4)	Mar (5)	Apr (6)	May (7)	Jun (8)	Jul (9)	Aug (10)	Sep (11)	Oct (12)	Total Peak (13)	Total Off-Peak (14)	Annual Nov-Oct (15)
1	Test Year Monthly Weather Normalized Therms per Custome	14	21	25	26	21	16	14	11	9	8	10	11	123	63	186
2																
3	<u>Current November - October Rates</u>															
4	Customer Charge	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20	\$22.20			
5	Distribution	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470	\$0.6470			
6	LDAC (\$/therm)	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099	\$0.1099			
7	COGC (\$/therm)	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.7315	\$0.3724	\$0.3724	\$0.3724	\$0.3724	\$0.3724	\$0.3724			
8																
9	TOTAL BILL	\$42.60	\$53.42	\$59.73	\$60.30	\$53.62	\$46.58	\$37.65	\$35.07	\$32.45	\$31.65	\$33.16	\$34.20	\$316	\$204	\$520
10																
11																
12	<u>Proposed November - October Rates</u>															
13	Customer Charge	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84	\$27.84			
14	Distribution	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208	\$1.1208			
15	LDAC (\$/therm)	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965	\$0.0965			
16	COGC (\$/therm)	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.7271	\$0.3727	\$0.3727	\$0.3727	\$0.3727	\$0.3727	\$0.3727			
17																
18	TOTAL BILL	\$54.50	\$68.63	\$76.87	\$77.62	\$68.89	\$59.69	\$49.59	\$45.96	\$42.27	\$41.14	\$43.27	\$44.74	\$406	\$267	\$673
19																
20	Proposed Bill less Current Bill															
21	Total Bill increase/(decrease)	\$11.89	\$15.21	\$17.14	\$17.31	\$15.27	\$13.11	\$11.94	\$10.89	\$9.82	\$9.49	\$10.11	\$10.54	\$90	\$63	\$153
22	Percentage increase/(decrease)	27.9%	28.5%	28.7%	28.7%	28.5%	28.1%	31.7%	31.1%	30.3%	30.0%	30.5%	30.8%	28.4%	30.8%	29.3%

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