

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty**  
**Step 2 Adjustment List of Projects**

<u>Line</u>	<u>(a)</u> <u>Project Number</u>	<u>(b)</u> <u>Project Name</u>	<u>(c)</u> <u>Priority</u>	<u>(d)</u>		<u>(e)</u>		<u>(f)</u>	<u>(g)</u> <u>In service Date</u>	<u>(h)</u> <u>FERC</u>
				<u>04/08/2022</u>	<u>Filing</u>	<u>8/15/2022</u>	<u>Audit Adjustments</u>	<u>9/1/2022</u> <u>Proposal</u>		
1	8840-2011	Main Replacement LPP-Restoration	2. Mandated	\$	2,045,661	\$	-	\$ 2,045,660.95	various	367
2	8840-2024	Nashua Paving	5. Discretionary	\$	531,719	\$	(531,719)	\$ -	various	367
3	8840-2102	Meter Protection Program	2. Mandated	\$	484,378	\$	-	\$ 484,377.56	12/31/2021	381
4	8840-2103	Cathodic Protection Program	2. Mandated	\$	511,291	\$	-	\$ 511,290.52	12/31/2021	376
5	8840-2105	Replacement Services Random	2. Mandated	\$	605,038	\$	-	\$ 605,038.33	various	380
6	8840-2110	Leak Repairs	2. Mandated	\$	1,325,264	\$	(3,330)	\$ 1,321,934.13	12/31/21	367
7	8840-2111	Main Replacement LPP	2. Mandated	\$	8,128,528	\$	-	\$ 8,128,527.75	various	367
8	8840-2113	Main Replacement Fitting LPP	5. Discretionary	\$	560,975	\$	-	\$ 560,974.62	12/31/21	367
9	8840-2114	K Meter Replacement Program	5. Discretionary	\$	380,282	\$	-	\$ 380,281.58	12/31/21	381
10	8840-2115	Aldyl-A Replacement Program	5. Discretionary	\$	110,184	\$	-	\$ 110,184.07	10/11/21	367
11	8840-2116	Main Replacement Reactive	5. Discretionary	\$	350,593	\$	-	\$ 350,593.36	various	367
12	8840-2118	Purchase Misc Capital Equipment & Tools	1. Safety	\$	247,679	\$	-	\$ 247,678.76	12/31/2021	394
13	8840-2123	Main Replacement City/State Construction	2. Mandated	\$	7,864,636	\$	-	\$ 7,864,635.64	various	367
14	8840-2125	Service Replacement Fitting City/State Construction	2. Mandated	\$	549,782	\$	-	\$ 549,782.02	12/31/21	367
15	8840-2131	Gas System Planning & Reliability	5. Discretionary	\$	959,389	\$	-	\$ 959,389.01	various	367
16	8840-2138	IT	5. Discretionary	\$	351,408	\$	(287,893)	\$ 63,514.90	12/31/2021	303
17	8840-2190	Transportation	5. Discretionary	\$	970,393	\$	-	\$ 970,392.57	12/31/2021	392
18	8840-2191	Meters	2. Mandated	\$	1,541,057	\$	(308,211)	\$ 1,232,845.86	various	381
19	8843-1819	Keene Expansion CNG Phase I Expansion*	5. Discretionary	\$	659,613	\$	-	\$ 659,613.20	2019	367
20				\$	28,177,868	\$	(1,131,152.98)	\$ 27,046,714.83		

\*Keene Phase I CNG expansion costs are recovered according to a risk sharing mechanism.

The \$660K includes investment made in 2017-2019 related to installation of the temporary CNG facility, but deferred for recovery purposes until the second step adjustment.

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty**  
**Step 2 Adjustment - Revenue Requirement**  
(Revised per Audit Adjustments and Depreciation Study)

Line	Description	IT	Transmission Mains	Distribution Mains	Services	Meters	Transportation	GEN-Tools-Shop- Garage Equip	Total
	<i>FERC Account</i>	<i>303</i>	<i>367</i>	<i>376</i>	<i>380</i>	<i>381</i>	<i>392</i>	<i>394</i>	
1	Capital Spending	\$ 63,515	\$ 22,551,295	\$ 511,291	\$ 605,038	\$ 2,097,505	\$ 970,393	\$ 247,679	\$ 27,046,715
2									
3	Deferred Tax Calculation								
4	Tax Method	MACRS5	MACRS20	MACRS20	MACRS20	MACRS20	MACRS5	MACRS7	
5	Tax Depreciation Rate	20.00%	3.75%	3.75%	3.75%	3.75%	20.00%	14.29%	
6									
7	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8									
9	Tax Basis	\$ 63,515	\$ 22,551,295	\$ 511,291	\$ 605,038	\$ 2,097,505	\$ 970,393	\$ 247,679	\$ 27,046,715
10	MACRS Depreciation	\$ 12,703	\$ 845,674	\$ 19,173	\$ 22,689	\$ 78,656	\$ 194,079	\$ 35,393	\$ 1,208,367
11									
12	Tax Depreciation - Federal	\$ 12,703	\$ 845,674	\$ 19,173	\$ 22,689	\$ 78,656	\$ 194,079	\$ 35,393	\$ 1,208,367
13	Tax Depreciation - State	\$ 12,703	\$ 845,674	\$ 19,173	\$ 22,689	\$ 78,656	\$ 194,079	\$ 35,393	\$ 1,208,367
14									
15	Book Depreciation Rate	20.00%	1.92%	1.92%	3.20%	3.33%	20.00%	5.26%	
16	Book Depreciation	\$ 12,703	\$ 432,985	\$ 9,817	\$ 19,361	\$ 69,847	\$ 194,079	\$ 13,028	\$ 751,819
17									
18	Tax over (under) Book - Federal	\$ -	\$ 412,689	\$ 9,357	\$ 3,328	\$ 8,810	\$ -	\$ 22,365	\$ 456,548
19	Tax over (under) Book - State	0	412,689	9,357	3,328	8,810	0	22,365	456,548
20	Deferred Taxes - Federal @ 21.00%	0	86,665	1,965	699	1,850	0	4,697	95,875
21	Deferred Taxes - State @ 7.60%	0	31,364	711	253	670	0	1,700	34,698
22	Deferred Tax Balance @ 0.00%	\$ -	\$ 118,029	\$ 2,676	\$ 952	\$ 2,520	\$ -	\$ 6,397	\$ 130,573
23									
24	Rate Base Calculation								
25	Plant in Service	\$ 63,515	\$ 22,551,295	\$ 511,291	\$ 605,038	\$ 2,097,505	\$ 970,393	\$ 247,679	\$ 27,046,715
26	Accumulated Depreciation	(12,703)	(432,985)	(9,817)	(19,361)	(69,847)	(194,079)	(13,028)	\$ (751,819)
27	Deferred Tax Balance	0	(118,029)	(2,676)	(952)	(2,520)	0	(6,397)	\$ (130,573)
28	<b>Rate Base</b>	<b>\$ 50,812</b>	<b>\$ 22,000,281</b>	<b>\$ 498,798</b>	<b>\$ 584,725</b>	<b>\$ 2,025,139</b>	<b>\$ 776,314</b>	<b>\$ 228,254</b>	<b>\$ 26,164,323</b>
29									
30	Revenue Requirement Calculation								
31	Return on Rate Base @ 8.76%	\$ 4,451	\$ 1,927,335	\$ 43,697	\$ 51,225	\$ 177,412	\$ 68,009	\$ 19,996	\$ 2,292,126
32	Depreciation Expense	12,703	432,985	9,817	19,361	69,847	194,079	13,028	\$ 751,819
33	Property Tax @ \$6.60 per \$1000	419	148,839	3,375	3,993	13,844	6,405	1,635	\$ 178,508
34	<b>Annual Revenue Requirement</b>	<b>\$ 17,574</b>	<b>\$ 2,509,158</b>	<b>\$ 56,888</b>	<b>\$ 74,579</b>	<b>\$ 261,103</b>	<b>\$ 268,492</b>	<b>\$ 34,659</b>	<b>\$ 3,222,453</b>
35									
36	Keene CNG Phase I Expansion Revenue Requirement Adjustment (per risk sharing calculation)								(21,962)
37	<b>Total Annual Revenue Requirement Related 2021 Plant Additions</b>								<b>3,200,491</b>
	<b>Cap to Revenue Requirement per Settlement Agreement in DG 20-105</b>								<b>3,200,000</b>
	<b>Adjustment to Depreciation Expense Schedule A page 2</b>								<b>(660,216)</b>
38	<b>Resulting Total Annual Revenue Requirement</b>								<b>\$ 2,539,784</b>
39									
40									
41									<b>Capped at \$3,200,000</b>

Rate of Return Calculation*	Capital Structure	Cost of Capital	Weighted Cost of Capital	Tax Rate	Pre-Tax WACC
Equity	52.0%	9.30%	4.84%	27.004%	6.63%
Debt	48.0%	4.42%	2.12%		2.12%
	100.0%	13.72%	6.96%		8.76%

\*As approved in the Settlement Agreement in Docket No. DG 20-105 with exception of the effective tax rate

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Rate Calculation

		Non Heat	MEP Non Heat	Heat	MEP Heat	Low Annual	MEP Low Annual	Medium Annual	MEP Medium Annual	High Annual	MEP High Annual	Low Annual	MEP Low Annual	Medium Annual	MEP Medium Annual	High Annual	MEP High Annual	High Annual	MEP High Annual	
	(A)	R-1 (B)	R-5 (C)	R-3/R-4 (D)	R-6/R-7 (E)	G-41 (F)	G-44 (G)	G-42 (H)	G-45 (I)	G-43 (J)	G-46 (K)	G-51 (L)	G-55 (M)	G-52 (N)	G-56 (O)	G-53 (P)	G-57 (Q)	G-54 (R)	G-58 (S)	
1	A. TY revenues																			
2	Winter																			
3	Rates																			
4	Customer charge	\$15.39	\$20.01	\$15.39	\$20.01	\$57.06	\$74.18	\$171.19	\$222.55	\$734.69	\$955.10	\$57.06	\$74.18	\$171.19	\$222.55	\$756.10	\$982.93	\$756.10	\$982.93	
5	Headblock	\$0.384	\$0.500	\$0.384	\$0.500	\$0.469	\$0.609	\$0.426	\$0.554	\$0.262	\$0.341	\$0.282	\$0.366	\$0.243	\$0.316	\$0.170	\$0.221	\$0.065	\$0.084	
6	Tailblock	\$0.384	\$0.500	\$0.384	\$0.500	\$0.315	\$0.409	\$0.284	\$0.369	\$0.262	\$0.341	\$0.183	\$0.238	\$0.162	\$0.210	\$0.170	\$0.221	\$0.065	\$0.084	
7	TY Quantities (w/ EOY adjustment)																			
8	Customers	20,569	321	477,410	886	57,400	16	8,565	30	332	27	7,806	18	2,374	0	207	0	162	6	
9	Headblock	480,581	11,918	52,125,602	136,395	4,760,423	1,312	8,153,718	29,152	8,788,188	0	547,547	693	2,290,320	0	6,233,247	0	7,866,954	163,520	
10	Tailblock	0	0	0	0	16,976,813	7,131	20,939,418	78,004	0	0	1,977,978	2,318	3,700,373	0	0	0	0	0	
11	Summer																			
12	Rates																			
13	Customer charge	\$15.39	\$20.01	\$15.39	\$20.01	\$57.06	\$74.18	\$171.19	\$222.55	\$734.69	\$955.10	\$57.06	\$74.18	\$171.19	\$222.55	\$756.10	\$982.93	\$756.10	\$982.93	
14	Headblock	\$0.384	\$0.500	\$0.384	\$0.500	\$0.469	\$0.609	\$0.426	\$0.554	\$0.262	\$0.341	\$0.282	\$0.366	\$0.176	\$0.229	\$0.081	\$0.106	\$0.035	\$0.046	
15	Tailblock	\$0.384	\$0.500	\$0.384	\$0.500	\$0.315	\$0.409	\$0.284	\$0.369	\$0.262	\$0.341	\$0.183	\$0.238	\$0.100	\$0.130	\$0.081	\$0.106	\$0.035	\$0.046	
16	TY Quantities (w/ EOY adjustment)																			
17	Customers	20,892	379	480,333	1,126	56,024	16	8,666	33	318	39	7,918	18	2,424	0	203	0	159	6	
18	Headblock	238,935	3,635	10,768,507	30,580	677,093	279	2,364,147	10,153	2,573,105	0	483,696	402	2,027,375	0	4,192,201	0	10,136,028	115,234	
19	Tailblock	0	0	0	0	2,430,074	1,378	3,448,189	16,180	0	0	1,087,314	112	1,646,101	0	0	0	0	0	
20	Revenues																			
21	Customer	\$638,178	\$14,001	\$14,741,922	\$40,258	\$6,472,076	\$2,374	\$2,949,835	\$13,991	\$477,379	\$63,037	\$897,192	\$2,708	\$821,458	\$0	\$310,531	\$0	\$243,011	\$11,959	
22	Volumetric	\$276,556	\$7,771	\$35,424,180	\$122,260	\$8,661,249	\$4,454	\$11,405,663	\$56,535	\$2,610,567	\$0	\$852,576	\$980	\$1,675,738	\$0	\$1,399,474	\$0	\$866,002	\$19,036	
23	Total	\$914,734	\$21,772	\$50,166,102	\$162,518	\$15,133,324	\$6,828	\$14,355,498	\$70,526	\$3,087,946	\$63,037	\$1,749,768	\$3,688	\$2,497,195	\$0	\$1,710,005	\$0	\$1,109,013	\$30,995	
24	Combined	\$936,507		\$50,328,620		\$15,140,152		\$14,426,024		\$3,150,983		\$1,753,456		\$2,497,195		\$1,710,005		\$1,140,008		
25	Class requirements (combined)																			
26	Step																			
27	Share	1%		55%		17%		16%		3%		2%		3%		2%		1%		
28	Set changes (X="no increment")																			
29	Customer	X		X	X															
30	Volumetric																			
31	Revenue ratios																			
32	From RATES-5																			
33	Customer	70%		29%		43%		21%		17%		51%		33%		18%		22%		
34	Volumetric	30%		71%		57%		79%		83%		49%		67%		82%		78%		
35	Adjusted share																			
36	Customer	0%		0%		43%		21%		17%		51%		33%		18%		22%		
37	Volumetric	100%		100%		57%		79%		83%		49%		67%		82%		78%		
38	Incremental class revenue requirement																			
39	Customer	\$0		\$0		\$180,535		\$82,644		\$15,069		\$25,093		\$22,906		\$8,659		\$7,110		
40	Volumetric	\$26,114		\$1,403,378		\$241,637		\$319,615		\$72,794		\$23,801		\$46,727		\$39,023		\$24,679		
41	Incremental charge																			
42	Customers - 2021																			
43	Bill count	42,101	924	979,006	4,012	115,459	191	17,529	97	697	66	15,627	48	4,949	0	417	0	314	12	
44	Bliss allocator	43,302		984,221		115,708		17,656		783		15,690		4,949		417		330		
45	Base (non-MEP) rate	\$0.00		\$0.00		\$1.56		\$4.68		\$19.25		\$1.60		\$4.63		\$20.75		\$21.57		
46	Incremental rate	\$0.00		\$0.00		\$1.56		\$4.68		\$19.25		\$1.60		\$4.63		\$20.75		\$21.57		
47	Volumes - 2021																			
48	Winter																			
49	Headblock volumes	559,431	16,904	51,857,298	178,096	4,561,858	6,611	7,983,157	44,765	9,563,203	1	518,832	1,054	2,246,152	0	5,946,038	0	7,703,088	122,528	
50	Tailblock volumes	0	0	0	0	16,717,662	18,295	20,825,525	163,071	0	0	1,904,222	2,675	3,036,500	0	0	0	0	0	
51	Summer																			
52	Headblock volumes	242,642	4,538	10,570,040	37,225	668,437	582	2,283,483	13,639	2,618,686	2	459,811	798	1,867,958	0	3,987,281	0	9,234,988	106,592	
53	Tailblock volumes	0	0	0	0	2,246,854	1,191	2,966,606	19,754	0	0	957,689	761	1,294,404	0	0	0	0	0	
54	Rate change																			
55	Total volumes	802,072	21,442	62,427,339	215,321	24,194,811	26,679	34,058,771	241,230	12,181,888	3	3,840,553	5,288	8,445,014	0	9,933,319	0	16,938,076	229,120	
56	Volumes allocator	829,947		62,707,256		24,229,494		34,372,369		12,181,892		3,847,427		8,445,014		9,933,319		17,235,932		
57	Base (non-MEP) rate	\$0.0015		\$0.0224		\$0.0100		\$0.0093		\$0.0060		\$0.0062		\$0.0055		\$0.0039		\$0.0014		
58	Incremental rate	\$0.0015		\$0.0409		\$0.0224		\$0.0291		\$0.0100		\$0.0078		\$0.0062		\$0.0039		\$0.0051		
59	Incremental revenue proof																			
60	Customer																			
61	Customers	42,101	924	979,006	4,012	115,459	191	17,529	97	697	66	15,627	48	4,949	0	417	0	314	12	
62	Incremental rate	\$0.00		\$0.00		\$1.56		\$4.68		\$19.25		\$1.60		\$4.63		\$20.75		\$21.57		
63	Incremental revenues	\$0		\$0		\$180,148		\$388		\$592		\$11,417		\$24,993		\$100		\$8,659		
64	Winter																			
65	Headblock volumes	559,431	16,904	51,857,298	178,096	4,561,858	6,611	7,983,157	44,765	9,563,203	1	518,832	1,054	2,246,152	0	5,946,038	0	7,703,088	122,528	
66	Headblock incremental charge	\$0.031	\$0.041	\$0.022	\$0.029	\$0.010	\$0.013	\$0.009	\$0.012	\$0.006	\$0.008	\$0.006	\$0.008	\$0.006	\$0.007	\$0.004	\$0.005	\$0.001	\$0.002	
67	Headblock incremental revenues	\$17,602	\$691	\$1,160,558	\$5,181	\$45,495	\$86	\$74,232	\$541	\$57,146	\$0	\$3,210	\$8	\$12,428	\$0	\$23,359	\$0	\$11,029	\$228	
68	Tailblock volumes	0	0	0	0	16,717,662	18,295	20,825,525	163,071	0	0	1,904,222	2,675	3,036,500	0	0	0	0	0	
69	Tailblock incremental charge	\$0.031	\$0.041	\$0.022	\$0.029	\$0.010	\$0.013	\$0.009	\$0.012	\$0.006	\$0.008	\$0.006	\$0.008	\$0.006	\$0.007	\$0.004	\$0.005	\$0.001	\$0.002	
70	Tailblock incremental revenues	\$0	\$0	\$0	\$0	\$166,723	\$237	\$193,648	\$1,971	\$0	\$0	\$11,780	\$22	\$16,801	\$0	\$0	\$0	\$0	\$0	
71	Summer																			
72	Headblock volumes	242,642	4,538	10,570,040	37,225	668,437	582	2,283,483	13,639	2,618,686	2	459,811	798	1,867,958	0	3,987,281	0	9,234,988	106,592	
73	Headblock incremental charge	\$0.031	\$0.041	\$0.022	\$0.029	\$0.010	\$0.013	\$0.009	\$0.012	\$0.006	\$0.008	\$0.006	\$0.008	\$0.006	\$0.007	\$0.004	\$0.005	\$0.001	\$0.002	
74	Headblock incremental revenues	\$7,635	\$186	\$236,556	\$1,083	\$6,666	\$8	\$21,233	\$165	\$15,648	\$0	\$2,844	\$6	\$10,336	\$0	\$15,664	\$0	\$13,223	\$198	
75	Tailblock volumes	0	0	0	0	2,246,854	1,191	2,966,606	19,754	0	0	957,689	761	1,294,404	0	0	0	0	0	
76	Tailblock incremental charge	\$0.031	\$0.041	\$0.022	\$0.029	\$0.010	\$0.013	\$0.009	\$0.012	\$0.006	\$0.008	\$0.006	\$0.008	\$0.006	\$0.007	\$0.004	\$0.005	\$0.001	\$0.002	
77	Tailblock incremental revenues	\$0	\$0	\$0	\$0	\$22,408	\$15	\$27,585	\$239	\$0	\$0	\$5,924	\$6	\$7,162	\$0	\$0	\$0	\$0	\$0	
78	Summer																			
79	Headblock volumes	242,642	4,538	10,570,040	37,225	668,437	582	2,283,483	13,639	2,618,686	2	459,811	798	1,867,958	0	3,987,281	0	9,234,988	106,592	
80	Headblock incremental charge	\$0.031	\$0.041	\$0.022	\$0.029	\$0.010	\$0.013	\$0.009	\$0.012	\$0.006	\$0.008	\$0.006	\$0.008	\$0.006	\$0.007	\$0.004	\$0.005	\$0.001	\$0.002	
81	Headblock incremental revenues	\$7,635	\$186	\$236,556	\$1,083	\$6,666	\$8	\$21,233	\$165	\$15,648	\$0	\$2,844	\$6	\$10,336	\$0	\$15,664	\$0	\$13,223	\$198	
82	Tailblock volumes	0	0	0	0	2,246,854	1,191	2,966,606	19,754	0	0	957,689	761	1,294,404	0	0	0	0	0	
83	Tailblock incremental charge																			

Liberty Utilities (EnergyNorth Natural Gas) d/b/a Liberty

Base Rates

Rate	8/1/2022 Rates	Request for Rates Effective 9/1/2022	Proposed Base Rates Effective 9/1/2022	\$4M Decrease for delayed first step full recovery effective 8/1/23	Proposed Rate Effective 8/1/23
		(a)	(b)	(c)	(d)
R1 Customer Charge	\$ 15.39	\$ -	\$ 15.39	\$ -	\$ 15.39
Winter Charge for 1st Therms	\$ 0.4873	\$ 0.0315	\$ 0.5188	\$ (0.0515)	\$ 0.4673
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.4873	\$ 0.0315	\$ 0.5188	\$ (0.0515)	\$ 0.4673
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
Summer Charge for 1st Therms	\$ 0.4873	\$ 0.0315	\$ 0.5188	\$ (0.0515)	\$ 0.4673
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.4873	\$ 0.0315	\$ 0.5188	\$ (0.0515)	\$ 0.4673
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
R3 Customer Charge	\$ 15.39	\$ -	\$ 15.39	\$ -	\$ 15.39
Winter Charge for 1st Therms	\$ 0.6337	\$ 0.0224	\$ 0.6561	\$ (0.0352)	\$ 0.6209
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.6337	\$ 0.0224	\$ 0.6561	\$ (0.0352)	\$ 0.6209
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
Summer Charge for 1st Therms	\$ 0.6337	\$ 0.0224	\$ 0.6561	\$ (0.0352)	\$ 0.6209
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.6337	\$ 0.0224	\$ 0.6561	\$ (0.0352)	\$ 0.6209
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
R4 Winter Customer Charge	\$ 8.47	\$ -	\$ 8.47	\$ -	\$ 8.47
Summer Customer Charge	\$ 15.39	\$ -	\$ 15.39	\$ -	\$ 15.3924
Winter Charge for 1st Therms	\$ 0.3485	\$ 0.0123	\$ 0.3608	\$ (0.0194)	\$ 0.3414
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.3485	\$ 0.0123	\$ 0.3608	\$ (0.0194)	\$ 0.3414
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
Summer Charge for 1st Therms	\$ 0.6337	\$ 0.0224	\$ 0.6561	\$ (0.0352)	\$ 0.6209
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.6337	\$ 0.0224	\$ 0.6561	\$ (0.0352)	\$ 0.6209
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
41 Customer Charge	\$ 62.03	\$ 1.56	\$ 63.59	\$ (2.48)	\$ 61.11
Winter Charge for 1st Therms	\$ 0.5007	\$ 0.0100	\$ 0.5107	\$ (0.0160)	\$ 0.4947
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.3469	\$ 0.0100	\$ 0.3569	\$ (0.0160)	\$ 0.3409
Block Size Cutoff for First Block	100		100		
Cost of Gas Cost of Gas Rate					
Summer Charge for 1st Therms	\$ 0.5007	\$ 0.0100	\$ 0.5107	\$ (0.0160)	\$ 0.4947
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.3469	\$ 0.0100	\$ 0.3569	\$ (0.0160)	\$ 0.3409
Block Size Cutoff for First Block	20		20		
Cost of Gas Cost of Gas Rate					
42 Customer Charge	\$ 186.03	\$ 4.68	\$ 190.71	\$ (7.42)	\$ 183.29
Winter Charge for 1st Therms	\$ 0.4558	\$ 0.0093	\$ 0.4651	\$ (0.0149)	\$ 0.4502
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.3136	\$ 0.0093	\$ 0.3229	\$ (0.0149)	\$ 0.3080
Block Size Cutoff for First Block	1,000		1,000		
Cost of Gas Cost of Gas Rate					
Summer Charge for 1st Therms	\$ 0.4558	\$ 0.0093	\$ 0.4651	\$ (0.0149)	\$ 0.4502
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.3136	\$ 0.0093	\$ 0.3229	\$ (0.0149)	\$ 0.3080
Block Size Cutoff for First Block	400		400		
Cost of Gas Cost of Gas Rate					
43 Customer Charge	\$ 796.32	\$ 19.25	\$ 815.57	\$ (30.82)	\$ 784.76
Winter Charge for 1st Therms	\$ 0.2814	\$ 0.0060	\$ 0.2874	\$ (0.0097)	\$ 0.2777
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.2814	\$ 0.0060	\$ 0.2874	\$ (0.0097)	\$ 0.2777
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					
Summer Charge for 1st Therms	\$ 0.1392	\$ 0.0060	\$ 0.1452	\$ (0.0097)	\$ 0.1355
LDAC Charge					
Energy Charge Charge for Therms over 1st	\$ 0.1392	\$ 0.0060	\$ 0.1452	\$ (0.0097)	\$ 0.1355
Block Size Cutoff for First Block	-		-		
Cost of Gas Cost of Gas Rate					

(a) \$2.5M Increase for Second Step adjustment effective 8/1/2022 - until next rate case

(b) Proposed Rate Effective 8/1/22 including step 2 adjustment

Liberty Utilities (EnergyNorth Natural Gas) d/b/a Liberty

Base Rates

Rate		8/1/2022 Rates	Request for Rates Effective 9/1/2022	Proposed Base Rates Effective 9/1/2022	\$4M Decrease for delayed first step full recovery effective 8/1/23	Proposed Rate Effective 8/1/23
			(a)	(b)	(c)	(d)
51	Customer Charge	\$ 62.08	\$ 1.60	\$ 63.68	\$ (2.51)	\$ 61.17
	<u>Winter</u> Charge for 1st Therms	\$ 0.3020	\$ 0.0062	\$ 0.3082	\$ (0.0101)	\$ 0.2981
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.2034	\$ 0.0062	\$ 0.2096	\$ (0.0101)	\$ 0.1995
	Block Size Cutoff for First Block	100		100		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.3020	\$ 0.0062	\$ 0.3082	\$ (0.0101)	\$ 0.2981
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.2034	\$ 0.0062	\$ 0.2096	\$ (0.0101)	\$ 0.1995
	Block Size Cutoff for First Block	100		100		
	Cost of Gas Cost of Gas Rate					
52	Customer Charge	\$ 185.80	\$ 4.63	\$ 190.43	\$ (7.30)	\$ 183.13
	<u>Winter</u> Charge for 1st Therms	\$ 0.2602	\$ 0.0055	\$ 0.2657	\$ (0.0087)	\$ 0.2570
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.1791	\$ 0.0055	\$ 0.1846	\$ (0.0087)	\$ 0.1759
	Block Size Cutoff for First Block	1,000		1,000		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.1933	\$ 0.0055	\$ 0.1988	\$ (0.0087)	\$ 0.1901
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.1174	\$ 0.0055	\$ 0.1229	\$ (0.0087)	\$ 0.1142
	Block Size Cutoff for First Block	1,000		1,000		
	Cost of Gas Cost of Gas Rate					
53	Customer Charge	\$ 821.64	\$ 20.75	\$ 842.39	\$ (32.77)	\$ 809.62
	<u>Winter</u> Charge for 1st Therms	\$ 0.1819	\$ 0.0039	\$ 0.1858	\$ (0.0061)	\$ 0.1797
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.1819	\$ 0.0039	\$ 0.1858	\$ (0.0061)	\$ 0.1797
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.0936	\$ 0.0039	\$ 0.0975	\$ (0.0061)	\$ 0.0914
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.0936	\$ 0.0039	\$ 0.0975	\$ (0.0061)	\$ 0.0914
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
54	Customer Charge	\$ 821.65	\$ 21.57	\$ 843.22	\$ (32.77)	\$ 810.44
	<u>Winter</u> Charge for 1st Therms	\$ 0.0693	\$ 0.0014	\$ 0.0707	\$ (0.0023)	\$ 0.0685
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.0693	\$ 0.0014	\$ 0.0707	\$ (0.0023)	\$ 0.0685
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.0397	\$ 0.0014	\$ 0.0411	\$ (0.0023)	\$ 0.0389
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.0397	\$ 0.0014	\$ 0.0411	\$ (0.0023)	\$ 0.0389
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
R5	Customer Charge	\$ 20.01	\$ -	\$ 20.01	\$ -	\$ 20.01
	<u>Winter</u> Charge for 1st Therms	\$ 0.6335	\$ 0.0409	\$ 0.6744	\$ (0.0669)	\$ 0.6075
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.6335	\$ 0.0409	\$ 0.6744	\$ (0.0669)	\$ 0.6075
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.6335	\$ 0.0409	\$ 0.6744	\$ (0.0669)	\$ 0.6075
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.6335	\$ 0.0409	\$ 0.6744	\$ (0.0669)	\$ 0.6075
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
R6	Customer Charge	\$ 20.01	\$ -	\$ 20.01	\$ -	\$ 20.01
	<u>Winter</u> Charge for 1st Therms	\$ 0.8238	\$ 0.0291	\$ 0.8529	\$ (0.0458)	\$ 0.8071
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.8238	\$ 0.0291	\$ 0.8529	\$ (0.0458)	\$ 0.8071
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.8238	\$ 0.0291	\$ 0.8529	\$ (0.0458)	\$ 0.8071
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.8238	\$ 0.0291	\$ 0.8529	\$ (0.0458)	\$ 0.8071
	Block Size Cutoff for First Block	-		-		
	Cost of Gas Cost of Gas Rate					

(a) \$2.5M Increase for Second Step adjustment effective 8/1/2022 - until next rate case

(b) Proposed Rate Effective 8/1/22 including step 2 adjustment

Liberty Utilities (EnergyNorth Natural Gas) d/b/a Liberty

Base Rates

Rate		8/1/2022 Rates	Request for Rates Effective 9/1/2022	Proposed Base Rates Effective 9/1/2022	\$4M Decrease for delayed first step full recovery effective 8/1/23	Proposed Rate Effective 8/1/23
			(a)	(b)	(c)	(d)
R7	Customer Charge	\$ 11.01	\$ -	\$ 11.01	\$ -	\$ 11.01
	<u>Winter</u> Charge for 1st Therms	\$ 0.4531	\$ 0.0160	\$ 0.4691	\$ (0.0252)	\$ 0.4439
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.4531	\$ 0.0160	\$ 0.4691	\$ (0.0252)	\$ 0.4439
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.8238	\$ 0.0291	\$ 0.8529	\$ (0.0458)	\$ 0.8071
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.8238	\$ 0.0291	\$ 0.8529	\$ (0.0458)	\$ 0.8071
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
44	Customer Charge	\$ 80.64	\$ 2.03	\$ 82.67	\$ (3.23)	\$ 79.44
	<u>Winter</u> Charge for 1st Therms	\$ 0.6509	\$ 0.0130	\$ 0.6639	\$ (0.0208)	\$ 0.6431
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.4509	\$ 0.0130	\$ 0.4639	\$ (0.0208)	\$ 0.4431
	Block Size Cutoff for First Block	100		100		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.6509	\$ 0.0130	\$ 0.6639	\$ (0.0208)	\$ 0.6431
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.4509	\$ 0.0130	\$ 0.4639	\$ (0.0208)	\$ 0.4431
	Block Size Cutoff for First Block	20		20		
	Cost of Gas Cost of Gas Rate					
45	Customer Charge	\$ 241.83	\$ 6.09	\$ 247.92	\$ (9.64)	\$ 238.27
	<u>Winter</u> Charge for 1st Therms	\$ 0.5925	\$ 0.0121	\$ 0.6046	\$ (0.0193)	\$ 0.5853
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.4077	\$ 0.0121	\$ 0.4198	\$ (0.0193)	\$ 0.4005
	Block Size Cutoff for First Block	1,000		1,000		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.5925	\$ 0.0121	\$ 0.6046	\$ (0.0193)	\$ 0.5853
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.4077	\$ 0.0121	\$ 0.4198	\$ (0.0193)	\$ 0.4005
	Block Size Cutoff for First Block	400		400		
	Cost of Gas Cost of Gas Rate					
46	Customer Charge	\$ 1,035.22	\$ 25.03	\$ 1,060.25	\$ (40.06)	\$ 1,020.19
	<u>Winter</u> Charge for 1st Therms	\$ 0.3659	\$ 0.0078	\$ 0.3737	\$ (0.0126)	\$ 0.3610
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.3659	\$ 0.0078	\$ 0.3737	\$ (0.0126)	\$ 0.3610
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.1810	\$ 0.0078	\$ 0.1888	\$ (0.0126)	\$ 0.1761
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.1810	\$ 0.0078	\$ 0.1888	\$ (0.0126)	\$ 0.1761
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
55	Customer Charge	\$ 80.70	\$ 2.08	\$ 82.78	\$ (3.26)	\$ 79.52
	<u>Winter</u> Charge for 1st Therms	\$ 0.3927	\$ 0.0080	\$ 0.4007	\$ (0.0131)	\$ 0.3876
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.2645	\$ 0.0080	\$ 0.2725	\$ (0.0131)	\$ 0.2594
	Block Size Cutoff for First Block	100		100		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.3927	\$ 0.0080	\$ 0.4007	\$ (0.0131)	\$ 0.3876
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.2645	\$ 0.0080	\$ 0.2725	\$ (0.0131)	\$ 0.2594
	Block Size Cutoff for First Block	100		100		
	Cost of Gas Cost of Gas Rate					
56	Customer Charge	\$ 241.54	\$ 6.02	\$ 247.56	\$ (9.49)	\$ 238.06
	<u>Winter</u> Charge for 1st Therms	\$ 0.3383	\$ 0.0072	\$ 0.3455	\$ (0.0113)	\$ 0.3342
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.2328	\$ 0.0072	\$ 0.2400	\$ (0.0113)	\$ 0.2287
	Block Size Cutoff for First Block	1,000		1,000		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.2513	\$ 0.0072	\$ 0.2585	\$ (0.0113)	\$ 0.2472
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.1526	\$ 0.0072	\$ 0.1598	\$ (0.0113)	\$ 0.1485
	Block Size Cutoff for First Block	1,000		1,000		
	Cost of Gas Cost of Gas Rate					

(a) \$2.5M Increase for Second Step adjustment effective 8/1/2022 - until next rate case

(b) Proposed Rate Effective 8/1/22 including step 2 adjustment

Liberty Utilities (EnergyNorth Natural Gas) d/b/a Liberty

Base Rates

Rate		8/1/2022 Rates	Request for Rates Effective 9/1/2022	Proposed Base Rates Effective 9/1/2022	\$4M Decrease for delayed first step full recovery effective 8/1/23	Proposed Rate Effective 8/1/23
			(a)	(b)	(c)	(d)
57	Customer Charge	\$ 1,068.13	\$ 26.98	\$ 1,095.11	\$ (42.60)	\$ 1,052.51
	<u>Winter</u> Charge for 1st Therms	\$ 0.2365	\$ 0.0051	\$ 0.2416	\$ (0.0079)	\$ 0.2337
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.2365	\$ 0.0051	\$ 0.2416	\$ (0.0079)	\$ 0.2337
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.1217	\$ 0.0051	\$ 0.1268	\$ (0.0079)	\$ 0.1189
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.1217	\$ 0.0051	\$ 0.1268	\$ (0.0079)	\$ 0.1189
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
58	Customer Charge	\$ 1,068.14	\$ 28.03	\$ 1,096.17	\$ (42.61)	\$ 1,053.57
	<u>Winter</u> Charge for 1st Therms	\$ 0.0901	\$ 0.0019	\$ 0.0920	\$ (0.0029)	\$ 0.0890
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.0901	\$ 0.0019	\$ 0.0920	\$ (0.0029)	\$ 0.0890
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					
	<u>Summer</u> Charge for 1st Therms	\$ 0.0516	\$ 0.0019	\$ 0.0535	\$ (0.0029)	\$ 0.0505
	LDAC Charge					
	Energy Charge Charge for Therms over 1st	\$ 0.0516	\$ 0.0019	\$ 0.0535	\$ (0.0029)	\$ 0.0505
	Block Size Cutoff for First Block	-		\$ -		
	Cost of Gas Cost of Gas Rate					

(a) \$2.5M Increase for Second Step adjustment effective 8/1/2022 - until next rate case

(b) Proposed Rate Effective 8/1/22 including step 2 adjustment

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Bill Impact Analysis

1 Winter Season (Jan. - Apr., Nov. - Dec.)  
2 Residential Non-Heating (R1)

Summer Season (May - Oct.)

PROPOSED	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	20	26	27	26	23	19	140	14	11	9	9	11	13	69	209
Winter:															
Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35								
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00								
Tailblock	\$10.18	\$13.29	\$14.13	\$13.53	\$11.90	\$9.70	\$72.74								
HB Threshold															
Summer:															
Cust. Chg								\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35	\$184.71
Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock								\$7.51	\$5.92	\$4.81	\$4.92	\$5.48	\$6.94	\$35.58	\$108.31
HB Threshold															
Total Base Rate Amount	\$25.58	\$28.69	\$29.52	\$28.92	\$27.29	\$25.09	\$165.09	\$22.90	\$21.32	\$20.20	\$20.31	\$20.87	\$22.33	\$127.93	\$293.02
COG Rate - (Winter)	\$0.1230	\$0.1230	\$0.1230	\$0.1230	\$0.1230	\$0.1230	\$0.1230								
COG amount - Winter	\$2.41	\$3.15	\$3.35	\$3.21	\$2.82	\$2.30	\$17.24								
COG Rate - (Summer)								\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0826
COG amount - Summer								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17.24
LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
LDAC amount	\$2.59	\$3.38	\$3.59	\$3.44	\$3.02	\$2.46	\$18.48	\$1.91	\$1.51	\$1.22	\$1.25	\$1.39	\$1.76	\$9.04	\$27.52
Total Bill	\$30.58	\$35.22	\$36.46	\$35.56	\$33.14	\$29.86	\$200.81	\$24.81	\$22.82	\$21.42	\$21.56	\$22.27	\$24.09	\$136.97	\$337.78

31 Winter Season (Jan. - Apr., Nov. - Dec.)  
32 Residential Non-Heating (R1)

Summer Season (May - Oct.)

CURRENT	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	20	26	27	26	23	19	140	14	11	9	9	11	13	69	209
Winter:															
Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35								
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00								
Tailblock	\$9.57	\$12.49	\$13.27	\$12.71	\$11.18	\$9.11	\$68.32								
HB Threshold															
Summer:															
Cust. Chg								\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35	\$184.71
Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock								\$7.05	\$5.56	\$4.51	\$4.62	\$5.15	\$6.52	\$33.42	\$101.74
HB Threshold															
Total Base Rate Amount	\$24.96	\$27.88	\$28.66	\$28.10	\$26.57	\$24.50	\$160.68	\$22.45	\$20.96	\$19.91	\$20.01	\$20.54	\$21.91	\$125.77	\$286.45
COG Rate - (Winter)	\$0.1230	\$0.1230	\$0.1230	\$0.1230	\$0.1230	\$0.1230	\$0.1230								
COG amount - Winter	\$2.41	\$3.15	\$3.35	\$3.21	\$2.82	\$2.30	\$17.24								
COG Rate - (Summer)								\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0826
COG amount - Summer								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17.24
LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
LDAC amount	\$2.59	\$3.38	\$3.59	\$3.44	\$3.02	\$2.46	\$18.48	\$1.91	\$1.51	\$1.22	\$1.25	\$1.39	\$1.76	\$9.04	\$27.52
Total Bill	\$29.96	\$34.41	\$35.60	\$34.74	\$32.42	\$29.27	\$196.40	\$24.35	\$22.46	\$21.13	\$21.26	\$21.93	\$23.67	\$134.81	\$331.21

62 DIFFERENCE:

Total Bill	\$0.62	\$0.81	\$0.86	\$0.82	\$0.72	\$0.59	\$4.41	\$0.46	\$0.36	\$0.29	\$0.30	\$0.33	\$0.42	\$2.16	\$6.57
% Change	2.06%	2.34%	2.41%	2.36%	2.23%	2.01%	2.25%	1.87%	1.60%	1.38%	1.40%	1.52%	1.78%	1.60%	1.98%
Base Rate	\$0.62	\$0.81	\$0.86	\$0.82	\$0.72	\$0.59	\$4.41	\$0.46	\$0.36	\$0.29	\$0.30	\$0.33	\$0.42	\$2.16	\$6.57
% Change	2.47%	2.89%	2.99%	2.92%	2.72%	2.40%	2.75%	2.03%	1.71%	1.46%	1.49%	1.62%	1.92%	1.72%	2.29%
COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

71 Winter Season (Jan. - Apr., Nov. - Dec.)  
72 Residential Heating (R3)

Summer Season (May - Oct.)

PROPOSED	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	83	122	145	139	105	62	657	33	18	13	14	18	38	134	791
Winter:															
Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.35								
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00								
Tailblock	\$54.63	\$79.99	\$95.38	\$90.88	\$69.16	\$40.97	\$431.01								
HB Threshold															
Summer:															
Cust. Chg								\$15.68	\$15.68	\$15.68	\$15.68	\$15.68	\$15.68	\$94.09	\$186.45
Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock								\$21.71	\$11.71	\$8.78	\$8.94	\$11.60	\$25.22	\$87.96	\$518.97
HB Threshold															
Total Base Rate Amount	\$70.02	\$95.38	\$110.77	\$106.27	\$84.55	\$56.36	\$523.36	\$37.39	\$27.40	\$24.46	\$24.62	\$27.28	\$40.90	\$182.05	\$705.42
COG Rate - (Winter)	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295								
COG amount - Winter	\$102.38	\$149.90	\$178.75	\$170.32	\$129.61	\$76.78	\$807.74								
COG Rate - (Summer)								\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
COG amount - Summer								\$40.68	\$21.95	\$16.45	\$16.75	\$21.74	\$47.26	\$164.85	\$972.59
LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
LDAC amount	\$10.98	\$16.07	\$19.16	\$18.26	\$13.89	\$8.23	\$86.59	\$4.36	\$2.35	\$1.76	\$1.80	\$2.33	\$5.07	\$17.67	\$104.26
Total Bill	\$183.38	\$261.35	\$308.69	\$294.85	\$228.05	\$141.38	\$1,417.69	\$82.44	\$51.70	\$42.68	\$43.17	\$51.35	\$93.23	\$364.57	\$1,782.27



Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Bill Impact Analysis

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

102 Residential Heating (R3)

103 CURRENT

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter
104 average Usage (Therms)	83	122	145	139	105	62	657
105							
106							
107 Winter:							
108 Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
109 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
110 Tailblock	\$52.77	\$77.26	\$92.13	\$87.78	\$66.80	\$39.57	\$416.31
111 HB Threshold							
112							
113 Summer:							
114 Cust. Chg							
115 Headblock							
116 Tailblock							
117 HB Threshold							
118							
119 Total Base Rate Amount	\$68.16	\$92.65	\$107.52	\$103.17	\$82.19	\$54.96	\$508.65
120							
121 COG Rate - (Winter)	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
122 COG amount - Winter	\$102.38	\$149.90	\$178.75	\$170.32	\$129.61	\$76.78	\$807.74
123							
124 COG Rate - (Summer)							
125 COG amount - Summer							
126							
127 LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
128 LDAC amount	\$10.98	\$16.07	\$19.16	\$18.26	\$13.89	\$8.23	\$86.59
129							
130 Total Bill	\$181.51	\$258.62	\$305.43	\$291.74	\$225.69	\$139.98	\$1,402.98

Summer Season (May - Oct.)

May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
33	18	13	14	18	38	134	791
\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$184.68
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$20.97	\$11.32	\$8.48	\$8.64	\$11.20	\$24.36	\$84.96	\$501.27
\$36.36	\$26.71	\$23.87	\$24.03	\$26.59	\$39.75	\$177.30	\$685.95
\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
\$40.68	\$21.95	\$16.45	\$16.75	\$21.74	\$47.26	\$164.85	\$972.59
\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
\$4.36	\$2.35	\$1.76	\$1.80	\$2.33	\$5.07	\$17.67	\$104.26
\$81.40	\$51.01	\$42.09	\$42.58	\$50.66	\$92.08	\$359.82	\$1,762.80

131

132 DIFFERENCE:

133 Total Bill	\$1.87	\$2.73	\$3.26	\$3.10	\$2.36	\$1.40	\$14.72
134 % Change	1.03%	1.06%	1.07%	1.06%	1.05%	1.00%	1.05%
135							
136 Base Rate	\$1.87	\$2.73	\$3.26	\$3.10	\$2.36	\$1.40	\$14.72
137 % Change	2.74%	2.95%	3.03%	3.01%	2.87%	2.55%	2.89%
138							
139 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
140 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

\$1.03	\$0.69	\$0.59	\$0.60	\$0.69	\$1.15	\$4.75	\$19.47
1.27%	1.36%	1.41%	1.40%	1.36%	1.25%	1.32%	1.10%
\$1.03	\$0.69	\$0.59	\$0.60	\$0.69	\$1.15	\$4.75	\$19.47
2.84%	2.59%	2.48%	2.48%	2.59%	2.90%	2.68%	2.84%
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

142 Low Income Residential Heating (R4)

143 PROPOSED

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter
144 average Usage (Therms)	81	118	140	133	103	62	636
145							
146							
147 Winter:							
148 Cust. Chg	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$50.82
149 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
150 Tailblock	\$28.06	\$41.10	\$48.95	\$46.34	\$35.74	\$21.50	\$221.69
151 HB Threshold							
152							
153 Summer:							
154 Cust. Chg							
155 Headblock							
156 Tailblock							
157 HB Threshold							
158							
159 Total Base Rate Amount	\$36.53	\$49.57	\$57.42	\$54.81	\$44.21	\$29.97	\$272.51
160							
161 COG Rate - (Winter)	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
162 COG amount - Winter	\$98.99	\$144.99	\$172.69	\$163.49	\$126.10	\$75.86	\$782.12
163							
164 COG Rate - (Summer)							
165 COG amount - Summer							
166							
167 LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
168 LDAC amount	\$10.61	\$15.54	\$18.51	\$17.53	\$13.52	\$8.13	\$83.84
169							
170 Total Bill	\$146.14	\$210.10	\$248.62	\$235.82	\$183.83	\$113.96	\$1,138.47

Summer Season (May - Oct.)

May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
33	18	14	14	18	38	134	770
\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$8.47	\$50.82	\$101.64
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$21.53	\$12.08	\$9.07	\$9.21	\$11.57	\$24.62	\$88.08	\$309.78
\$30.00	\$20.55	\$17.54	\$17.68	\$20.04	\$33.09	\$138.90	\$411.42
\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
\$40.35	\$22.63	\$17.00	\$17.26	\$21.68	\$46.15	\$165.08	\$947.20
\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
\$4.33	\$2.43	\$1.82	\$1.85	\$2.32	\$4.95	\$17.70	\$101.54
\$74.68	\$45.60	\$36.36	\$36.79	\$44.05	\$84.19	\$321.68	\$1,460.15

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

172 Low Income Residential Heating (R4)

173 CURRENT

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter
174 average Usage (Therms)	81	118	140	133	103	62	636
175							
176							
177 Winter:							
178 Cust. Chg	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
179 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
180 Tailblock	\$51.02	\$74.73	\$89.00	\$84.26	\$64.99	\$39.10	\$403.10
181 HB Threshold							
182							
183 Summer:							
184 Cust. Chg							
185 Headblock							
186 Tailblock							
187 HB Threshold							
188							
189 Total Base Rate Amount	\$66.41	\$90.12	\$104.39	\$99.65	\$80.38	\$54.49	\$495.44
190							
191 COG Rate - (Winter)	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
192 COG amount - Winter	\$98.99	\$144.99	\$172.69	\$163.49	\$126.10	\$75.86	\$782.12
193							
194 COG Rate - (Summer)							
195 COG amount - Summer							
196							
197 LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	0.1318
198 LDAC amount	\$10.61	\$15.54	\$18.51	\$17.53	\$13.52	\$8.13	\$83.84
199							
200 Total Bill	\$176.02	\$250.65	\$295.60	\$280.67	\$220.00	\$138.48	\$1,361.40

Summer Season (May - Oct.)

May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
33	18	14	14	18	38	134	770
\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$184.68
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$20.80	\$11.66	\$8.76	\$8.90	\$11.18	\$23.78	\$85.08	\$488.18
\$36.19	\$27.05	\$24.15	\$24.29	\$26.57	\$39.17	\$177.42	\$672.86
\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295	\$1.2295
\$40.35	\$22.63	\$17.00	\$17.26	\$21.68	\$46.15	\$165.08	\$947.20
\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
\$4.33	\$2.43	\$1.82	\$1.85	\$2.32	\$4.95	\$17.70	\$101.54
\$80.87	\$52.11	\$42.97	\$43.40	\$50.57	\$90.27	\$360.19	\$1,721.60

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Bill Impact Analysis

## 202 Winter Season (Jan. - Apr., Nov. - Dec.)

202 DIFFERENCE:	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	Summer Season (May - Oct.)	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
203 <b>Total Bill</b>	(\$29.88)	(\$40.55)	(\$46.98)	(\$44.84)	(\$36.17)	(\$24.51)	(\$222.93)	(\$6.19)	(\$6.51)	(\$6.61)	(\$6.61)	(\$6.61)	(\$6.53)	(\$6.08)	(\$38.52)	(\$261.45)
204 % Change	-16.98%	-16.18%	-15.89%	-15.98%	-16.44%	-17.70%	-16.38%	-7.65%	-12.49%	-15.38%	-15.22%	-12.90%	-6.74%	-10.69%	-15.19%	
205																
206 <b>Base Rate</b>	(\$29.88)	(\$40.55)	(\$46.98)	(\$44.84)	(\$36.17)	(\$24.51)	(\$222.93)	(\$6.19)	(\$6.51)	(\$6.61)	(\$6.61)	(\$6.53)	(\$6.08)	(\$38.52)	(\$261.45)	
207 % Change	-44.99%	-45.00%	-45.00%	-45.00%	-45.00%	-44.99%	-45.00%	-17.09%	-24.06%	-27.37%	-27.20%	-24.56%	-15.52%	-21.71%	-38.86%	
208																
209 <b>COG &amp; LDAC</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
210 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

## Summer Season (May - Oct.)

212 Commercial/Industrial - Low Annual Use, High Winter Use (G-41)	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	Summer Season (May - Oct.)	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
213 <b>PROPOSED</b>																
214 <b>average Usage (Therms)</b>	272	423	521	496	364	196	2,273	91	39	26	26	40	108	330	2,603	
215																
216 <b>Winter:</b>																
217 Cust. Chg	\$63.59	\$63.59	\$63.59	\$63.59	\$63.59	\$63.59	\$381.54									
218 Headblock	\$51.07	\$51.07	\$51.07	\$51.07	\$51.07	\$51.07	\$306.42									
219 Tailblock	\$61.44	\$115.24	\$150.39	\$141.29	\$94.35	\$34.22	\$596.93									
220 HB Threshold																
221																
222 <b>Summer:</b>																
223 Cust. Chg								\$63.59	\$63.59	\$63.59	\$63.59	\$63.59	\$63.59	\$381.54	\$763.08	
224 Headblock								\$10.21	\$10.21	\$10.21	\$10.21	\$10.21	\$10.21	\$61.28	\$367.70	
225 Tailblock								\$25.25	\$6.80	\$2.03	\$2.31	\$7.09	\$31.38	\$74.86	\$671.79	
226 HB Threshold																
227																
228 <b>Total Base Rate Amount</b>	\$176.10	\$229.90	\$265.05	\$255.95	\$209.01	\$148.88	\$1,284.89	\$99.06	\$80.60	\$75.83	\$76.12	\$80.89	\$105.18	\$517.68	\$1,802.57	
229																
230 <b>COG Rate - (Winter)</b>	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303									
231 COG amount - Winter	\$334.86	\$520.33	\$641.50	\$610.13	\$448.32	\$241.01	\$2,796.15									
232																
233 <b>COG Rate - (Summer)</b>								\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	
234 COG amount - Summer								\$111.66	\$48.05	\$31.60	\$32.58	\$49.05	\$132.78	\$405.71	\$3,201.86	
235																
236 <b>LDAC</b>	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	
237 LDAC amount	\$26.97	\$41.91	\$51.67	\$49.15	\$36.11	\$19.41	\$225.23	\$8.99	\$3.87	\$2.55	\$2.62	\$3.95	\$10.70	\$32.68	\$257.91	
238																
239 <b>Total Bill</b>	\$537.94	\$792.15	\$958.22	\$915.23	\$693.44	\$409.30	\$4,306.27	\$219.71	\$132.52	\$109.97	\$111.32	\$133.90	\$248.66	\$956.07	\$5,262.34	
240																

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

## Summer Season (May - Oct.)

242 Commercial/Industrial - Low Annual Use, High Winter Use (G-41)	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	Summer Season (May - Oct.)	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
243 <b>CURRENT</b>																
244 <b>average Usage (Therms)</b>	272	423	521	496	364	196	2,273	91	39	26	26	40	108	330	2,603	
245																
246 <b>Winter:</b>																
247 Cust. Chg	\$62.03	\$62.03	\$62.03	\$62.03	\$62.03	\$62.03	\$372.18									
248 Headblock	\$50.07	\$50.07	\$50.07	\$50.07	\$50.07	\$50.07	\$300.43									
249 Tailblock	\$59.73	\$112.02	\$146.18	\$137.34	\$91.71	\$33.26	\$580.25									
250 HB Threshold																
251																
252 <b>Summer:</b>																
253 Cust. Chg								\$62.03	\$62.03	\$62.03	\$62.03	\$62.03	\$62.03	\$372.18	\$744.36	
254 Headblock								\$10.01	\$10.01	\$10.01	\$10.01	\$10.01	\$10.01	\$60.09	\$360.52	
255 Tailblock								\$24.55	\$6.61	\$1.97	\$2.25	\$6.89	\$30.50	\$72.76	\$653.01	
256 HB Threshold																
257																
258 <b>Total Base Rate Amount</b>	\$171.83	\$224.12	\$258.29	\$249.44	\$203.82	\$145.37	\$1,252.86	\$96.59	\$78.65	\$74.02	\$74.29	\$78.94	\$102.54	\$505.03	\$1,757.90	
259																
260 <b>COG Rate - (Winter)</b>	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303									
261 COG amount - Winter	\$334.86	\$520.33	\$641.50	\$610.13	\$448.32	\$241.01	\$2,796.15									
262																
263 <b>COG Rate - (Summer)</b>								\$0.1203	\$0.1203	\$0.1203	\$0.1203	\$0.1203	\$0.1203	\$0.1203	\$0.1203	
264 COG amount - Summer								\$10.92	\$4.70	\$3.09	\$3.19	\$4.80	\$12.98	\$39.67	\$2,835.82	
265																
266 <b>LDAC</b>	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	
267 LDAC amount	\$26.97	\$41.91	\$51.67	\$49.15	\$36.11	\$19.41	\$225.23	\$8.99	\$3.87	\$2.55	\$2.62	\$3.95	\$10.70	\$32.68	\$257.91	
268																
269 <b>Total Bill</b>	\$533.67	\$786.37	\$951.46	\$908.72	\$688.24	\$405.79	\$4,274.25	\$116.50	\$87.22	\$79.65	\$80.10	\$87.68	\$126.22	\$577.38	\$4,851.63	
270																

## 271 DIFFERENCE:

272 <b>Total Bill</b>	\$4.27	\$5.78	\$6.76	\$6.51	\$5.19	\$3.51	\$32.03	\$103.21	\$45.30	\$30.32	\$31.22	\$46.21	\$122.43	\$378.69	\$410.71	
273 % Change	0.80%	0.73%	0.71%	0.72%	0.75%	0.87%	0.75%	88.59%	51.93%	38.07%	38.97%	52.70%	97.00%	65.59%	8.47%	
274																
275 <b>Base Rate</b>	\$4.27	\$5.78	\$6.76	\$6.51	\$5.19	\$3.51	\$32.03	\$2.47	\$1.95	\$1.82	\$1.82	\$1.96	\$2.64	\$12.65	\$44.67	
276 % Change	2.49%	2.58%	2.62%	2.61%	2.55%	2.42%	2.56%	2.55%	2.48%	2.45%	2.46%	2.48%	2.57%	2.50%	2.54%	
277																
278 <b>COG &amp; LDAC</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$100.74	\$43.35	\$28.51	\$29.39	\$44.25	\$119.80	\$366.04	\$366.04	
279 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	505.93%	505.93%	505.93%	505.93%	505.93%	505.93%	505.93%	11.83%	

## 280 Winter Season (Jan. - Apr., Nov. - Dec.)

## Summer Season (May - Oct.)

Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)																
PROPOSED																
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total	
average Usage (Therms)	2,568	3,796	4,442	4,284	3,296	2,004	20,390	1,039	507	350	368	548	1,203	4,014	24,404	
Winter:																
Cust. Chg	\$190.71	\$190.71	\$190.71	\$190.71	\$190.71	\$190.71	\$1,144.25									
Headblock	\$46.51	\$46.51	\$46.51	\$46.51	\$46.51	\$46.51	\$279.03									
Tailblock	\$796.93	\$1,193.70	\$1,402.35	\$1,351.07	\$1,031.98	\$615.04	\$6,391.07									
HB Threshold																
Summer:																
Cust. Chg								\$190.71	\$190.71	\$190.71	\$190.71	\$190.71	\$190.71	\$1,144.25	\$2,288.49	
Headblock								\$186.02	\$186.02	\$162.55	\$171.25	\$186.02	\$186.02	\$1,077.89	\$1,356.92	
Tailblock								\$206.38	\$34.44	\$0.00	\$0.00	\$47.64	\$259.31	\$547.77	\$6,938.84	
HB Threshold																
Total Base Rate Amount	\$1,034.14	\$1,430.92	\$1,639.57	\$1,588.28	\$1,269.19	\$852.25	\$7,814.35	\$583.11	\$411.17	\$353.26	\$361.95	\$424.37	\$636.04	\$2,769.90	\$10,584.25	
COG Rate - (Winter)	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303									
COG amount - Winter	\$3,159.08	\$4,670.66	\$5,465.55	\$5,270.16	\$4,054.53	\$2,466.14	\$25,086.12									
COG Rate - (Summer)								\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	
COG amount - Summer								\$1,278.36	\$623.33	\$430.03	\$453.03	\$673.62	\$1,480.00	\$4,938.37	\$30,024.44	

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Bill Impact Analysis

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

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

Summer Season (May - Oct.)

307	LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
308	LDAC amount	\$254.46	\$376.22	\$440.25	\$424.51	\$326.59	\$198.65	\$2,020.67	\$102.97	\$50.21	\$34.64	\$36.49	\$54.26	\$119.21	\$397.78	\$2,418.46
309																
310	<b>Total Bill</b>	<b>\$4,447.68</b>	<b>\$6,477.79</b>	<b>\$7,545.37</b>	<b>\$7,282.95</b>	<b>\$5,650.32</b>	<b>\$3,517.03</b>	<b>\$34,921.14</b>	<b>\$1,964.44</b>	<b>\$1,084.70</b>	<b>\$817.93</b>	<b>\$851.47</b>	<b>\$1,152.26</b>	<b>\$2,235.25</b>	<b>\$8,106.05</b>	<b>\$43,027.20</b>

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

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

Summer Season (May - Oct.)

313	<b>CURRENT</b>															
314		<b>Nov-22</b>	<b>Dec-22</b>	<b>Jan-23</b>	<b>Feb-23</b>	<b>Mar-23</b>	<b>Apr-23</b>	<b>Winter</b>	<b>May-23</b>	<b>Jun-23</b>	<b>Jul-23</b>	<b>Aug-23</b>	<b>Sep-22</b>	<b>Oct-22</b>	<b>Summer</b>	<b>Total</b>
315	average Usage (Therms)	2,568	3,796	4,442	4,284	3,296	2,004	20,390	1,039	507	350	368	548	1,203	4,014	24,404
316																
317	<b>Winter:</b>															
318	Cust. Chg	\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$1,116.18								
319	Headblock	\$455.76	\$455.76	\$455.76	\$455.76	\$455.76	\$455.76	\$2,734.55								
320	Tailblock	\$491.71	\$877.05	\$1,079.70	\$1,029.89	\$719.99	\$315.05	\$4,513.38								
321	HB Threshold															
322																
323	<b>Summer:</b>															
324	Cust. Chg								\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$1,116.18	\$2,232.36
325	Headblock								\$182.30	\$182.30	\$159.30	\$167.82	\$182.30	\$182.30	\$1,056.34	\$3,790.89
326	Tailblock								\$200.44	\$33.45	\$0.00	\$0.00	\$46.27	\$251.84	\$532.00	\$5,045.38
327	HB Threshold															
328																
329	Total Base Rate Amount	\$1,133.49	\$1,518.84	\$1,721.49	\$1,671.68	\$1,361.77	\$956.84	\$8,364.11	\$568.77	\$401.78	\$345.33	\$353.85	\$414.60	\$620.17	\$2,704.52	\$11,068.63
330																
331	COG Rate - (Winter)	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303								
332	COG amount - Winter	\$3,159.08	\$4,670.66	\$5,465.55	\$5,270.16	\$4,054.53	\$2,466.14	\$25,086.12								
333																
334	COG Rate - (Summer)								\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303
335	COG amount - Summer								\$1,278.36	\$623.33	\$430.03	\$453.03	\$673.62	\$1,480.00	\$4,938.37	\$30,024.49
336																
337	LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
338	LDAC amount	\$254.46	\$376.22	\$440.25	\$424.51	\$326.59	\$198.65	\$2,020.67	\$102.97	\$50.21	\$34.64	\$36.49	\$54.26	\$119.21	\$397.78	\$2,418.46
339																
340	<b>Total Bill</b>	<b>\$4,547.03</b>	<b>\$6,565.72</b>	<b>\$7,627.29</b>	<b>\$7,366.35</b>	<b>\$5,742.90</b>	<b>\$3,621.62</b>	<b>\$35,470.91</b>	<b>\$1,950.10</b>	<b>\$1,075.32</b>	<b>\$810.00</b>	<b>\$843.37</b>	<b>\$1,142.49</b>	<b>\$2,219.39</b>	<b>\$8,040.66</b>	<b>\$43,511.57</b>
341	<b>DIFFERENCE:</b>															
342	<b>Total Bill</b>	<b>(\$99.35)</b>	<b>(\$87.93)</b>	<b>(\$81.92)</b>	<b>(\$83.40)</b>	<b>(\$92.58)</b>	<b>(\$104.59)</b>	<b>(\$549.76)</b>	<b>\$14.34</b>	<b>\$9.39</b>	<b>\$7.93</b>	<b>\$8.10</b>	<b>\$9.77</b>	<b>\$15.86</b>	<b>\$65.39</b>	<b>(\$484.38)</b>
343	% Change	-2.18%	-1.34%	-1.07%	-1.13%	-1.61%	-2.89%	-1.55%	<b>0.74%</b>	<b>0.87%</b>	<b>0.98%</b>	<b>0.96%</b>	<b>0.86%</b>	<b>0.71%</b>	<b>0.81%</b>	<b>-1.11%</b>
344																
345	<b>Base Rate</b>	<b>(\$99.35)</b>	<b>(\$87.93)</b>	<b>(\$81.92)</b>	<b>(\$83.40)</b>	<b>(\$92.58)</b>	<b>(\$104.59)</b>	<b>(\$549.76)</b>	<b>\$14.34</b>	<b>\$9.39</b>	<b>\$7.93</b>	<b>\$8.10</b>	<b>\$9.77</b>	<b>\$15.86</b>	<b>\$65.39</b>	<b>(\$484.38)</b>
346	% Change	-8.77%	-5.79%	-4.76%	-4.99%	-6.80%	-10.93%	-6.57%	2.52%	2.34%	2.30%	2.29%	2.36%	2.56%	2.42%	-4.38%
347																
348	<b>COG &amp; LDAC</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>(\$0.00)</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
349	% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

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

Summer Season (May - Oct.)

352	<b>PROPOSED</b>															
353		<b>Nov-22</b>	<b>Dec-22</b>	<b>Jan-23</b>	<b>Feb-23</b>	<b>Mar-23</b>	<b>Apr-23</b>	<b>Winter</b>	<b>May-23</b>	<b>Jun-23</b>	<b>Jul-23</b>	<b>Aug-23</b>	<b>Sep-22</b>	<b>Oct-22</b>	<b>Summer</b>	<b>Total</b>
354	average Usage (Therms)	23,661	31,955	31,276	29,903	24,765	17,078	158,638	11,030	6,524	5,278	6,059	7,044	12,595	48,531	207,169
355																
356	<b>Winter:</b>															
357	Cust. Chg	\$815.58	\$815.58	\$815.58	\$815.58	\$815.58	\$815.58	\$4,893.45								
358	Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00								
359	Tailblock	\$6,799.78	\$9,183.34	\$8,988.11	\$8,593.46	\$7,117.02	\$4,907.91	\$45,589.63								
360	HB Threshold															
361																
362	<b>Summer:</b>															
363	Cust. Chg								\$815.58	\$815.58	\$815.58	\$815.58	\$815.58	\$815.58	\$4,893.45	\$9,786.90
364	Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
365	Tailblock								\$1,601.49	\$947.33	\$766.37	\$879.79	\$1,022.85	\$1,828.79	\$7,046.63	\$52,636.26
366	HB Threshold															
367																
368	Total Base Rate Amount	\$7,615.36	\$9,998.92	\$9,803.69	\$9,409.04	\$7,932.59	\$5,723.49	\$50,483.08	\$2,417.07	\$1,762.90	\$1,581.95	\$1,695.36	\$1,838.42	\$2,644.37	\$11,940.08	\$62,423.16
369																
370	COG Rate - (Winter)	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303								
371	COG amount - Winter	\$29,110.30	\$39,314.46	\$38,478.68	\$36,789.15	\$30,468.40	\$21,011.08	\$195,172.08								
372																
373	COG Rate - (Summer)								\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303
374	COG amount - Summer								\$13,569.79	\$8,026.90	\$6,493.63	\$7,454.64	\$8,666.81	\$15,495.75	\$59,707.51	\$254,879.58
375																
376	LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
377	LDAC amount	\$2,344.82	\$3,166.76	\$3,099.44	\$2,963.35	\$2,454.21	\$1,692.43	\$15,721.01	\$1,093.04	\$646.56	\$523.06	\$600.47	\$698.11	\$1,248.17	\$4,809.41	\$20,530.41
378																
379	<b>Total Bill</b>	<b>\$39,070.47</b>	<b>\$52,480.14</b>	<b>\$51,381.81</b>	<b>\$49,161.54</b>	<b>\$40,855.21</b>	<b>\$28,427.00</b>	<b>\$261,376.16</b>	<b>\$17,079.90</b>	<b>\$10,436.37</b>	<b>\$8,598.63</b>	<b>\$9,750.47</b>	<b>\$11,203.34</b>	<b>\$19,388.29</b>	<b>\$76,456.99</b>	<b>\$337,833.16</b>

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

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

Summer Season (May - Oct.)

Commercial/Industrial - High Annual Use, High Winter Use (G-45)																
CURRENT	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter		May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	23,661	31,955	31,276	29,903	24,765	17,078	158,638		11,030	6,524	5,278	6,059	7,044	12,595	48,531	207,169
Winter:																
Cust. Chg	\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$4,777.92									
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00									
Tailblock	\$3,293.63	\$4,448.16	\$4,353.60	\$4,162.44	\$3,447.29	\$2,377.26	\$22,082.38									
HB Threshold																
Summer:																
Cust. Chg									\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$4,777.92	\$9,555.84
Headblock									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock									\$1,535.33	\$908.19	\$734.71	\$843.44	\$980.59	\$1,753.24	\$6,755.49	\$28,837.88
HB Threshold																
Total Base Rate Amount	\$4,089.95	\$5,244.48	\$5,149.92	\$4,958.76	\$4,243.61	\$3,173.58	\$26,860.30		\$2,331.65	\$1,704.51	\$1,531.03	\$1,639.76	\$1,776.91	\$2,549.56	\$11,533.41	\$38,393.72
COG Rate - (Winter)	\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303									
COG amount - Winter	\$29,110.30	\$39,314.46	\$38,478.68	\$36,789.15	\$30,468.40	\$21,011.08	\$195,172.08									
COG Rate - (Summer)									\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303	\$1,2303
COG amount - Summer									\$13,569.79	\$8,026.90	\$6,493.63	\$7,454.64	\$8,666.81	\$15,495.75	\$59,707.51	\$254,879.56
LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991		\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
LDAC amount	\$2,344.82	\$3,166.76	\$3,099.44	\$2,963.35	\$2,454.21	\$1,692.43	\$15,721.01		\$1,093.04	\$646.56	\$523.06	\$600.47	\$698.11	\$1,248.17	\$4,809.41	\$20,530.41
Total Bill	\$35,545.07	\$47,725.70	\$46,728.04	\$44,711.26	\$37,166.22	\$25,877.09	\$237,753.38		\$16,994.47	\$10,377.97	\$8,547.71	\$9,694.87	\$11,141.83	\$19,293.48	\$76,050.33	\$313,803.71

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty

Bill Impact Analysis

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
410 DIFFERENCE:															
411 Total Bill	\$3,525.41	\$4,754.43	\$4,653.77	\$4,450.28	\$3,688.98	\$2,549.91	\$23,622.78	\$85.42	\$58.39	\$50.92	\$55.60	\$61.51	\$94.81	\$406.66	\$24,029.44
412 % Change	9.92%	9.96%	9.96%	9.95%	9.93%	9.85%	9.94%	0.50%	0.56%	0.60%	0.57%	0.55%	0.49%	0.53%	7.66%
413															
414 Base Rate	\$3,525.41	\$4,754.43	\$4,653.77	\$4,450.28	\$3,688.98	\$2,549.91	\$23,622.78	\$85.42	\$58.39	\$50.92	\$55.60	\$61.51	\$94.81	\$406.66	\$24,029.44
415 % Change	86.20%	90.66%	90.37%	89.75%	86.93%	80.35%	87.95%	3.66%	3.43%	3.33%	3.39%	3.46%	3.72%	3.53%	62.59%
416															
417 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
418 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

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

421 PROPOSED	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
422 average Usage (Therms)	279	339	379	366	317	261	1,942	225	194	173	191	195	212	1,190	3,133
423															
424															
425 Winter:															
426 Cust. Chg	\$63.68	\$63.68	\$63.68	\$63.68	\$63.68	\$63.68	\$382.06							\$382.06	\$764.13
427 Headblock	\$30.82	\$30.82	\$30.82	\$30.82	\$30.82	\$30.82	\$184.94							\$184.94	\$369.88
428 Tailblock	\$37.60	\$50.14	\$58.58	\$55.75	\$45.52	\$33.81	\$281.39							\$123.77	\$405.15
429 HB Threshold															
430															
431 Summer:															
432 Cust. Chg								\$63.68	\$63.68	\$63.68	\$63.68	\$63.68	\$63.68	\$382.06	\$764.13
433 Headblock								\$30.82	\$30.82	\$30.82	\$30.82	\$30.82	\$30.82	\$184.94	\$369.88
434 Tailblock								\$26.18	\$19.79	\$15.30	\$19.11	\$19.96	\$23.43	\$123.77	\$405.15
435 HB Threshold															
436															
437 Total Base Rate Amount	\$132.10	\$144.64	\$153.08	\$150.26	\$140.02	\$128.31	\$848.39	\$120.68	\$114.29	\$109.80	\$113.61	\$114.46	\$117.93	\$690.77	\$1,539.17
438															
439 COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284							\$1.2284	\$1.2284
440 COG amount - Winter	\$343.14	\$416.62	\$466.09	\$449.54	\$389.55	\$320.93	\$2,385.88							\$1,462.28	\$3,848.16
441															
442 COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
443 COG amount - Summer								\$276.25	\$238.79	\$212.50	\$234.83	\$239.79	\$260.12	\$1,462.28	\$3,848.16
444															
445 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
446 LDAC amount	\$27.68	\$33.61	\$37.60	\$36.27	\$31.43	\$25.89	\$192.48	\$22.29	\$19.26	\$17.14	\$18.94	\$19.34	\$20.98	\$117.97	\$310.45
447															
448 Total Bill	\$502.92	\$594.86	\$656.78	\$636.06	\$560.99	\$475.13	\$3,426.75	\$419.22	\$372.35	\$339.45	\$367.39	\$373.59	\$399.03	\$2,271.02	\$5,697.77

Summer Season (May - Oct.)

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

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

451 CURRENT	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
452 average Usage (Therms)	279	339	379	366	317	261	1,942	225	194	173	191	195	212	1,190	3,133
453															
454															
455 Winter:															
456 Cust. Chg	\$62.08	\$62.08	\$62.08	\$62.08	\$62.08	\$62.08	\$372.48							\$372.48	\$744.96
457 Headblock	\$30.20	\$30.20	\$30.20	\$30.20	\$30.20	\$30.20	\$181.23							\$181.23	\$362.46
458 Tailblock	\$36.49	\$48.66	\$56.85	\$54.11	\$44.17	\$32.81	\$273.08							\$120.12	\$393.20
459 HB Threshold															
460															
461 Summer:															
462 Cust. Chg								\$62.08	\$62.08	\$62.08	\$62.08	\$62.08	\$62.08	\$372.48	\$744.96
463 Headblock								\$30.20	\$30.20	\$30.20	\$30.20	\$30.20	\$30.20	\$181.23	\$362.46
464 Tailblock								\$25.41	\$19.20	\$14.85	\$18.55	\$19.37	\$22.74	\$120.12	\$393.20
465 HB Threshold															
466															
467 Total Base Rate Amount	\$128.77	\$140.94	\$149.14	\$146.39	\$136.46	\$125.09	\$826.79	\$117.69	\$111.49	\$107.13	\$110.83	\$111.65	\$115.02	\$673.83	\$1,500.62
468															
469 COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284							\$1.2284	\$1.2284
470 COG amount - Winter	\$343.14	\$416.62	\$466.09	\$449.54	\$389.55	\$320.93	\$2,385.88							\$1,462.28	\$3,848.16
471															
472 COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
473 COG amount - Summer								\$276.25	\$238.79	\$212.50	\$234.83	\$239.79	\$260.12	\$1,462.28	\$3,848.16
474															
475 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
476 LDAC amount	\$27.68	\$33.61	\$37.60	\$36.27	\$31.43	\$25.89	\$192.48	\$22.29	\$19.26	\$17.14	\$18.94	\$19.34	\$20.98	\$117.97	\$310.45
477															
478 Total Bill	\$499.60	\$591.17	\$652.83	\$632.20	\$557.43	\$471.92	\$3,405.15	\$416.23	\$369.55	\$336.78	\$364.61	\$370.78	\$396.12	\$2,254.08	\$5,659.22

Summer Season (May - Oct.)

481 DIFFERENCE:

481 Total Bill	\$3.33	\$3.70	\$3.94	\$3.86	\$3.56	\$3.21	\$21.60	\$2.99	\$2.80	\$2.67	\$2.78	\$2.81	\$2.91	\$16.95	\$38.55
482 % Change	0.67%	0.63%	0.60%	0.61%	0.64%	0.68%	0.63%	0.72%	0.76%	0.76%	0.76%	0.76%	0.73%	0.75%	0.68%
483															
484 Base Rate	\$3.33	\$3.70	\$3.94	\$3.86	\$3.56	\$3.21	\$21.60	\$2.99	\$2.80	\$2.67	\$2.78	\$2.81	\$2.91	\$16.95	\$38.55
485 % Change	2.58%	2.62%	2.65%	2.64%	2.61%	2.57%	2.61%	2.54%	2.51%	2.49%	2.51%	2.51%	2.53%	2.52%	2.57%
486															
487 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$0.00)
488 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

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

491 PROPOSED	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
492 average Usage (Therms)	20	26	27	26	23	19	140	14	11	9	9	11	13	69	209
493															
494															
495 Winter:															
496 Cust. Chg	\$190.43	\$190.43	\$190.43	\$190.43	\$190.43	\$190.43	\$1,142.55							\$1,142.55	\$2,285.11
497 Headblock	\$5.22	\$6.81	\$7.24	\$6.93	\$6.10	\$4.97	\$37.27							\$13.64	\$50.91
498 Tailblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00							\$0.00	\$0.00
499 HB Threshold															
500															
501 Summer:															
502 Cust. Chg								\$190.43	\$190.43	\$190.43	\$190.43	\$190.43	\$190.43	\$1,142.55	\$2,285.11
503 Headblock								\$2.88	\$2.27	\$1.84	\$1.89	\$2.10	\$2.66	\$13.64	\$50.91
504 Tailblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
505 HB Threshold															
506															
507 Total Base Rate Amount	\$195.64	\$197.24	\$197.66	\$197.36	\$196.52	\$195.40	\$1,179.82	\$193.30	\$192.70	\$192.27	\$192.31	\$192.53	\$193.09	\$1,156.19	\$2,336.01
508															
509 COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284							\$1.2284	\$1.2284
510 COG amount - Winter	\$24.11	\$31.48	\$33.46	\$32.03	\$28.18	\$22.97	\$172.24							\$84.25	\$256.49
511															
512 COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
513 COG amount - Summer								\$17.78	\$14.03	\$11.38	\$11.65	\$12.98	\$16.43	\$84.25	\$256.49

Summer Season (May - Oct.)

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Bill Impact Analysis

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

Summer Season (May - Oct.)

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
LDAC	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091
LDAC amount	\$0.18	\$0.23	\$0.25	\$0.24	\$0.21	\$0.17	\$1.28	\$0.13	\$0.10	\$0.08	\$0.09	\$0.10	\$0.12	\$0.62	\$1.90
Total Bill	\$219.93	\$228.95	\$231.37	\$229.63	\$224.91	\$218.54	\$1,353.33	\$211.22	\$206.83	\$203.73	\$204.05	\$205.60	\$209.64	\$1,241.07	\$2,594.40

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

Summer Season (May - Oct.)

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

CURRENT	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	20	26	27	26	23	19	140	14	11	9	9	11	13	69	209
Winter:															
Cust. Chg	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$1,114.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$1,114.80	\$2,229.60
Headblock	\$3.79	\$4.95	\$5.27	\$5.04	\$4.43	\$3.61	\$27.10	\$2.80	\$2.21	\$1.79	\$1.83	\$2.04	\$2.59	\$13.26	\$40.36
Tailblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HB Threshold															
Summer:															
Cust. Chg								\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$1,114.80	\$2,229.60
Headblock								\$2.80	\$2.21	\$1.79	\$1.83	\$2.04	\$2.59	\$13.26	\$40.36
Tailblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HB Threshold															
Total Base Rate Amount	\$189.59	\$190.75	\$191.07	\$190.84	\$190.23	\$189.41	\$1,141.90	\$188.60	\$188.01	\$187.59	\$187.63	\$187.84	\$188.39	\$1,128.06	\$2,269.96
COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284								
COG amount - Winter	\$24.11	\$31.48	\$33.46	\$32.03	\$28.18	\$22.97	\$172.24								
COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
COG amount - Summer								\$17.78	\$14.03	\$11.38	\$11.65	\$12.98	\$16.43	\$84.25	\$256.49
LDAC	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091
LDAC amount	\$1.95	\$2.54	\$2.70	\$2.58	\$2.27	\$1.85	\$13.90	\$1.43	\$1.13	\$0.92	\$0.94	\$1.05	\$1.33	\$6.80	\$20.69
Total Bill	\$215.65	\$224.78	\$227.22	\$225.46	\$220.69	\$214.24	\$1,328.04	\$207.81	\$203.17	\$199.89	\$200.22	\$201.87	\$206.14	\$1,219.10	\$2,547.14

DIFFERENCE:

Total Bill	\$4.28	\$4.18	\$4.15	\$4.17	\$4.22	\$4.30	\$25.30	\$3.40	\$3.66	\$3.84	\$3.82	\$3.73	\$3.50	\$21.96	\$47.26
% Change	1.99%	1.86%	1.83%	1.85%	1.91%	2.01%	1.90%	1.64%	1.80%	1.92%	1.91%	1.85%	1.70%	1.80%	1.86%
Base Rate	\$6.05	\$6.48	\$6.60	\$6.52	\$6.29	\$5.98	\$37.92	\$4.71	\$4.69	\$4.68	\$4.68	\$4.68	\$4.70	\$28.13	\$66.05
% Change	3.19%	3.40%	3.45%	3.41%	3.31%	3.16%	3.32%	2.50%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.91%
COG & LDAC	(\$1.77)	(\$2.31)	(\$2.45)	(\$2.35)	(\$2.06)	(\$1.68)	(\$12.62)	(\$1.30)	(\$1.03)	(\$0.83)	(\$0.85)	(\$0.95)	(\$1.20)	(\$6.17)	(\$18.79)
% Change	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%

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

Summer Season (May - Oct.)

Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)

PROPOSED	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	83	122	145	139	105	62	657	33	18	13	14	18	38	134	791
Winter:															
Cust. Chg	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$5,054.36								
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$5,054.36	\$10,108.73
Tailblock	\$15.48	\$22.66	\$27.02	\$25.74	\$19.59	\$11.61	\$122.09	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HB Threshold								\$3.23	\$1.74	\$1.31	\$1.33	\$1.72	\$3.75	\$13.08	\$135.17
Total Base Rate Amount	\$857.87	\$865.05	\$869.41	\$868.14	\$861.98	\$854.00	\$5,176.46	\$845.62	\$844.14	\$843.70	\$843.72	\$844.12	\$846.14	\$5,067.44	\$10,243.90
COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284								
COG amount - Winter	\$102.29	\$149.77	\$178.59	\$170.16	\$129.49	\$76.71	\$807.02								
COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
COG amount - Summer								\$40.65	\$21.93	\$16.44	\$16.74	\$21.72	\$47.22	\$164.70	\$971.72
LDAC	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091
LDAC amount	\$8.25	\$12.08	\$14.41	\$13.73	\$10.45	\$6.19	\$65.11	\$3.28	\$1.77	\$1.33	\$1.35	\$1.75	\$3.81	\$13.29	\$78.39
Total Bill	\$968.41	\$1,026.90	\$1,062.41	\$1,052.03	\$1,001.92	\$936.90	\$6,048.58	\$889.55	\$867.84	\$861.46	\$861.81	\$867.59	\$897.17	\$5,245.43	\$11,294.01

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

Summer Season (May - Oct.)

Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)

CURRENT	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
average Usage (Therms)	83	122	145	139	105	62	657	33	18	13	14	18	38	134	791
Winter:															
Cust. Chg	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84								
Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
Tailblock	\$7.79	\$11.41	\$13.61	\$12.97	\$9.87	\$5.85	\$61.49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HB Threshold								\$3.10	\$1.67	\$1.25	\$1.28	\$1.65	\$3.60	\$12.55	\$74.04
Total Base Rate Amount	\$829.43	\$833.05	\$835.25	\$834.61	\$831.51	\$827.49	\$4,991.33	\$824.74	\$823.31	\$822.89	\$822.92	\$823.29	\$825.24	\$4,942.39	\$9,933.72
COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284								
COG amount - Winter	\$102.29	\$149.77	\$178.59	\$170.16	\$129.49	\$76.71	\$807.02								
COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
COG amount - Summer								\$40.65	\$21.93	\$16.44	\$16.74	\$21.72	\$47.22	\$164.70	\$971.72

Liberty Utilities (Energy/North Natural Gas) d/b/a Liberty  
Bill Impact Analysis

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

Summer Season (May - Oct.)

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
614 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
615 LDAC amount	\$8.25	\$12.08	\$14.41	\$13.73	\$10.45	\$6.19	\$65.11	\$3.28	\$1.77	\$1.33	\$1.35	\$1.75	\$3.81	\$13.29	\$78.39
616															
617 <b>Total Bill</b>	<b>\$939.98</b>	<b>\$994.90</b>	<b>\$1,028.25</b>	<b>\$1,018.50</b>	<b>\$971.44</b>	<b>\$910.39</b>	<b>\$5,863.46</b>	<b>\$868.66</b>	<b>\$847.02</b>	<b>\$840.66</b>	<b>\$841.01</b>	<b>\$846.77</b>	<b>\$876.27</b>	<b>\$5,120.38</b>	<b>\$10,983.83</b>
618															
619 <b>DIFFERENCE:</b>															
620 <b>Total Bill</b>	<b>\$28.44</b>	<b>\$32.00</b>	<b>\$34.16</b>	<b>\$33.53</b>	<b>\$30.48</b>	<b>\$26.51</b>	<b>\$185.12</b>	<b>\$20.88</b>	<b>\$20.82</b>	<b>\$20.81</b>	<b>\$20.81</b>	<b>\$20.82</b>	<b>\$20.91</b>	<b>\$125.05</b>	<b>\$310.18</b>
621 % Change	<b>3.03%</b>	<b>3.22%</b>	<b>3.32%</b>	<b>3.29%</b>	<b>3.14%</b>	<b>2.91%</b>	<b>3.16%</b>	<b>2.40%</b>	<b>2.46%</b>	<b>2.48%</b>	<b>2.47%</b>	<b>2.46%</b>	<b>2.39%</b>	<b>2.44%</b>	<b>2.82%</b>
622															
623 <b>Base Rate</b>	<b>\$28.44</b>	<b>\$32.00</b>	<b>\$34.16</b>	<b>\$33.53</b>	<b>\$30.48</b>	<b>\$26.51</b>	<b>\$185.12</b>	<b>\$20.88</b>	<b>\$20.82</b>	<b>\$20.81</b>	<b>\$20.81</b>	<b>\$20.82</b>	<b>\$20.91</b>	<b>\$125.05</b>	<b>\$310.18</b>
624 % Change	<b>3.43%</b>	<b>3.84%</b>	<b>4.09%</b>	<b>4.02%</b>	<b>3.67%</b>	<b>3.20%</b>	<b>3.71%</b>	<b>2.53%</b>	<b>2.53%</b>	<b>2.53%</b>	<b>2.53%</b>	<b>2.53%</b>	<b>2.53%</b>	<b>2.53%</b>	<b>3.12%</b>
625															
626 <b>COG &amp; LDAC</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
627 % Change	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

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

Summer Season (May - Oct.)

629 Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
630 <b>PROPOSED</b>															
631	81	118	140	133	103	62	636	58,766	61,809	64,600	68,379	65,031	64,466	383,051	383,687
632 <b>average Usage (Therms)</b>															
633															
634 <b>Winter:</b>															
635 Cust. Chg	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$5,059.32	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$5,059.32	\$10,118.63
636 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
637 Tailblock	\$5.69	\$8.34	\$9.93	\$9.40	\$7.25	\$4.36	\$44.99	\$2,417.13	\$2,542.32	\$2,657.10	\$2,812.55	\$2,674.82	\$2,651.60	\$15,755.54	\$15,800.53
638 HB Threshold															
639															
640 <b>Summer:</b>															
641 Cust. Chg								\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$5,059.32	\$10,118.63
642 Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
643 Tailblock								\$2,417.13	\$2,542.32	\$2,657.10	\$2,812.55	\$2,674.82	\$2,651.60	\$15,755.54	\$15,800.53
644 HB Threshold															
645															
646 <b>Total Base Rate Amount</b>	<b>\$848.91</b>	<b>\$851.56</b>	<b>\$853.15</b>	<b>\$852.62</b>	<b>\$850.47</b>	<b>\$847.58</b>	<b>\$5,104.31</b>	<b>\$3,260.35</b>	<b>\$3,385.54</b>	<b>\$3,500.32</b>	<b>\$3,655.77</b>	<b>\$3,518.04</b>	<b>\$3,494.82</b>	<b>\$20,814.86</b>	<b>\$25,919.16</b>
647															
648 <b>COG Rate - (Winter)</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>								
649 <b>COG amount - Winter</b>	<b>\$98.91</b>	<b>\$144.86</b>	<b>\$172.54</b>	<b>\$163.34</b>	<b>\$125.99</b>	<b>\$75.79</b>	<b>\$781.42</b>								
650															
651 <b>COG Rate - (Summer)</b>								<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>
652 <b>COG amount - Summer</b>								<b>\$72,187.66</b>	<b>\$75,926.55</b>	<b>\$79,354.45</b>	<b>\$83,996.98</b>	<b>\$79,883.66</b>	<b>\$79,190.23</b>	<b>\$470,539.54</b>	<b>\$471,320.96</b>
653															
654 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
655 LDAC amount	\$7.98	\$11.69	\$13.92	\$13.18	\$10.16	\$6.11	\$63.04	\$5,823.67	\$6,125.30	\$6,401.84	\$6,776.38	\$6,444.54	\$6,388.60	\$37,960.33	\$38,023.37
656															
657 <b>Total Bill</b>	<b>\$955.80</b>	<b>\$1,008.11</b>	<b>\$1,039.61</b>	<b>\$1,029.14</b>	<b>\$986.62</b>	<b>\$929.49</b>	<b>\$5,948.77</b>	<b>\$181,271.68</b>	<b>\$85,437.40</b>	<b>\$89,256.62</b>	<b>\$94,429.13</b>	<b>\$89,846.24</b>	<b>\$89,073.65</b>	<b>\$529,314.72</b>	<b>\$535,263.49</b>

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

Summer Season (May - Oct.)

659 Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
660 <b>CURRENT</b>															
661	81	118	140	133	103	62	636	58,766	61,809	64,600	68,379	65,031	64,466	383,051	383,687
662 <b>average Usage (Therms)</b>															
663															
664 <b>Winter:</b>															
665 Cust. Chg	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
666 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
667 Tailblock	\$98.91	\$144.86	\$172.54	\$163.34	\$125.99	\$75.79	\$781.42	\$72,187.66	\$75,926.55	\$79,354.45	\$83,996.98	\$79,883.66	\$79,190.23	\$470,539.54	\$471,320.96
668 HB Threshold															
669															
670 <b>Summer:</b>															
671 Cust. Chg								\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
672 Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
673 Tailblock								\$72,187.66	\$75,926.55	\$79,354.45	\$83,996.98	\$79,883.66	\$79,190.23	\$470,539.54	\$471,320.96
674 HB Threshold															
675															
676 <b>Total Base Rate Amount</b>	<b>\$920.55</b>	<b>\$966.50</b>	<b>\$994.18</b>	<b>\$984.98</b>	<b>\$947.63</b>	<b>\$897.43</b>	<b>\$5,711.26</b>	<b>\$73,009.30</b>	<b>\$76,748.19</b>	<b>\$80,176.09</b>	<b>\$84,818.62</b>	<b>\$80,705.30</b>	<b>\$80,011.87</b>	<b>\$475,469.38</b>	<b>\$481,180.64</b>
677															
678 <b>COG Rate - (Winter)</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>								
679 <b>COG amount - Winter</b>	<b>\$98.91</b>	<b>\$144.86</b>	<b>\$172.54</b>	<b>\$163.34</b>	<b>\$125.99</b>	<b>\$75.79</b>	<b>\$781.42</b>								
680															
681 <b>COG Rate - (Summer)</b>								<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>	<b>\$1.2284</b>
682 <b>COG amount - Summer</b>								<b>\$72,187.66</b>	<b>\$75,926.55</b>	<b>\$79,354.45</b>	<b>\$83,996.98</b>	<b>\$79,883.66</b>	<b>\$79,190.23</b>	<b>\$470,539.54</b>	<b>\$471,320.96</b>
683															
684 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
685 LDAC amount	\$7.98	\$11.69	\$13.92	\$13.18	\$10.16	\$6.11	\$63.04	\$5,823.67	\$6,125.30	\$6,401.84	\$6,776.38	\$6,444.54	\$6,388.60	\$37,960.33	\$38,023.37
686															
687 <b>Total Bill</b>	<b>\$1,027.43</b>	<b>\$1,123.05</b>	<b>\$1,180.63</b>	<b>\$1,161.50</b>	<b>\$1,083.77</b>	<b>\$979.33</b>	<b>\$6,555.72</b>	<b>\$151,020.63</b>	<b>\$158,800.05</b>	<b>\$165,932.39</b>	<b>\$175,591.98</b>	<b>\$167,033.49</b>	<b>\$165,590.70</b>	<b>\$983,969.24</b>	<b>\$990,524.97</b>
688															
689 <b>DIFFERENCE:</b>															
690 <b>Total Bill</b>	<b>(\$71.63)</b>	<b>(\$114.94)</b>	<b>(\$141.02)</b>	<b>(\$132.36)</b>	<b>(\$97.15)</b>	<b>(\$49.85)</b>	<b>(\$606.96)</b>	<b>(\$69,748.95)</b>	<b>(\$73,362.65)</b>	<b>(\$76,675.77)</b>	<b>(\$81,162.85)</b>	<b>(\$77,187.26)</b>	<b>(\$76,517.05)</b>	<b>(\$454,654.52)</b>	<b>(\$455,261.48)</b>
691 % Change	<b>-6.97%</b>	<b>-10.23%</b>	<b>-11.94%</b>	<b>-11.40%</b>	<b>-8.96%</b>	<b>-5.09%</b>	<b>-9.26%</b>	<b>-46.19%</b>	<b>-46.20%</b>	<b>-46.21%</b>	<b>-46.22%</b>	<b>-46.21%</b>	<b>-46.21%</b>	<b>-46.21%</b>	<b>-45.96%</b>
692															
693 <b>Base Rate</b>	<b>(\$71.63)</b>	<b>(\$114.94)</b>	<b>(\$141.02)</b>	<b>(\$132.36)</b>	<b>(\$97.15)</b>	<b>(\$49.85)</b>	<b>(\$606.96)</b>	<b>(\$69,748.95)</b>	<b>(\$73,362.65)</b>	<b>(\$76,675.77)</b>	<b>(\$81,162.85)</b>	<b>(\$77,187.26)</b>	<b>(\$76,517.05)</b>	<b>(\$454,654.52)</b>	<b>(\$455,261.48)</b>
694 % Change	<b>-7.78%</b>	<b>-11.89%</b>	<b>-14.18%</b>	<b>-13.44%</b>	<b>-10.25%</b>	<b>-5.55%</b>	<b>-10.63%</b>	<b>-95.53%</b>	<b>-95.59%</b>	<b>-95.63%</b>	<b>-95.69%</b>	<b>-95.64%</b>	<b>-95.63%</b>	<b>-95.62%</b>	<b>-94.61%</b>
695															
696 <b>COG &amp; LDAC</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
697 % Change	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>

Risk Sharing Mechanism  
Update DCF Analysis for Keene Phase 1 Conversion  
Step 2 Adjustment

Capital Cost Direct (12/31/21 Rate Base)	992,249.50
Required Return (pre tax)	8.76%
Depreciation	24,806
Property tax rate (\$6.60 per \$1,000)	0.66%
Insurance rate	0.10%

Risk Sharing Calculation*	
Step 2 Adjustment Take Effect September 1, 2022	
Average revenue (years 2-4)	\$18,117.00
Average revenue requirement (years 2-4)	\$110,446.18
Difference	(\$92,329.18)
Revenue Requirement Reduction (50%)	(\$46,164.59)
Less: Revenue Requirement Reduction previously included in base distribution rates (50%)	(\$22,164.98)
Total Incremental Revenue Requirement Reduction (50%)	(\$23,999.61)
Adjustment to Distribution (91.51%)	(\$21,962.04)
Adjustment to COG (8.49%)	(\$2,037.57)

NPV (Delta yrs 1-10, discount rate 10.15%) (\$558,547.35)

Year	IRS MACRS Rates	IRS MACRS Table	Book Depr	Delta Book less Tax	Tax Rate	Deferred Inc Tax	Accumulated Deferred Inc Tax	Rate Base	Required Return	Property Tax	Insurance	O&M	Revenue Requirement	Annual Revenues	Delta Rev Req less Revenue
(40 yrs/2.5%)										0.66%	0.10%	\$ 35			
1	5.00%	49,612	24,806	(24,806)	27.004%	(6,699)	(6,699)	992,250							
2	9.50%	94,264	24,806	(69,457)	27.004%	(18,756)	(25,455)	960,745	\$85,508	\$6,549	\$992	\$0	\$117,855	\$18,117.00	(\$99,738.47)
3	8.55%	84,837	24,806	(60,031)	27.004%	(16,211)	(41,666)	917,182	\$82,221	\$6,341	\$992	\$0	\$114,361	\$18,117.00	(\$96,243.86)
4	7.70%	76,403	24,806	(51,597)	27.004%	(13,933)	(55,599)	876,165	\$78,518	\$6,053	\$992	\$0	\$110,370	\$18,117.00	(\$92,253.19)
5	6.93%	68,763	24,806	(43,957)	27.004%	(11,870)	(67,469)	837,426	\$75,026	\$5,783	\$992	\$0	\$106,607	\$18,117.00	(\$88,490.49)
6	6.23%	61,817	24,806	(37,011)	27.004%	(9,994)	(77,464)	800,749	\$71,724	\$5,527	\$992	\$0	\$103,050	\$18,117.00	(\$84,932.87)
7	5.90%	58,543	24,806	(33,736)	27.004%	(9,110)	(86,574)	765,949	\$68,595	\$5,285	\$992	\$0	\$99,678	\$18,117.00	(\$81,561.32)
8	5.90%	58,543	24,806	(33,736)	27.004%	(9,110)	(95,684)	732,032	\$65,586	\$5,055	\$992	\$0	\$96,440	\$18,117.00	(\$78,322.99)
9	5.91%	58,642	24,806	(33,836)	27.004%	(9,137)	(104,821)	698,116	\$62,616	\$4,831	\$992	\$0	\$93,246	\$18,117.00	(\$75,129.21)
10	5.90%	58,543	24,806	(33,736)	27.004%	(9,110)	(113,931)	664,172	\$59,645	\$4,608	\$992	\$0	\$90,051	\$18,117.00	(\$71,934.25)
11	5.91%	58,642	24,806	(33,836)	27.004%	(9,137)	(123,068)	630,256	\$56,674	\$4,384	\$992	\$0	\$86,856	\$18,117.00	(\$68,739.12)
12	5.90%	58,543	24,806	(33,736)	27.004%	(9,110)	(132,178)	596,313	\$53,703	\$4,160	\$992	\$0	\$83,661	\$18,117.00	(\$65,544.17)
13	5.91%	58,642	24,806	(33,836)	27.004%	(9,137)	(141,315)	562,396	\$50,732	\$3,936	\$992	\$0	\$80,466	\$18,117.00	(\$62,349.03)
14	5.90%	58,543	24,806	(33,736)	27.004%	(9,110)	(150,425)	528,453	\$47,761	\$3,712	\$992	\$0	\$77,271	\$18,117.00	(\$59,154.08)
15	5.91%	58,642	24,806	(33,836)	27.004%	(9,137)	(159,562)	494,537	\$44,790	\$3,488	\$992	\$0	\$74,076	\$18,117.00	(\$55,958.95)
16	2.95%	29,271	24,806	(4,465)	27.004%	(1,206)	(160,768)	460,593	\$41,819	\$3,264	\$992	\$0	\$70,881	\$18,117.00	(\$52,763.99)
17			24,806	24,806	27.004%	6,699	(154,070)	434,581	\$39,194	\$3,040	\$992	\$0	\$68,032	\$18,117.00	(\$49,914.94)
18			24,806	24,806	27.004%	6,699	(147,371)	416,474	\$37,262	\$2,868	\$992	\$0	\$65,929	\$18,117.00	(\$47,811.57)
19			24,806	24,806	27.004%	6,699	(140,672)	398,366	\$35,676	\$2,749	\$992	\$0	\$64,223	\$18,117.00	(\$46,106.45)
20			24,806	24,806	27.004%	6,699	(133,974)	380,259	\$34,091	\$2,629	\$992	\$0	\$62,518	\$18,117.00	(\$44,401.33)
21			24,806	24,806	27.004%	6,699		362,151	\$32,505	\$2,510	\$992	\$0	\$60,813	\$18,117.00	(\$42,696.21)

Approved Rate of Return per DG 20-105	Pre-Tax WACC	Tax Rate
Return	52.00%	9.30%
Debt	48.00%	4.42%
		8.76%

\*Risk sharing calculation per Order No. 26,122 (April 27, 2018) at 39-40 and Order No. 26,294 (July 26, 2019) beginning at page 11