

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CONVERSION OF COSTS - GALLONS TO THERMS
WINTER PERIOD 2022 – 2023

	(1)	(2)	(3)	(4)	(5)	(6)
			VOLUMES		UNIT COST	
	<u>UNIT</u>	<u>CONVERSION FACTOR</u>	<u>GALLONS</u>	<u>THERMS</u>	<u>PER GALLON</u>	<u>PER THERM</u>
1 GAS FROM PROPANE	GALLONS	0.91502			\$1.4600	\$1.5956
2 GAS FROM CNG	THERMS	N/A	N/A		N/A	
3 TOTAL				1,130,362		

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CALCULATION OF COST OF GAS RATE
SUPPLY / DEMAND BALANCE
WINTER PERIOD 2022 – 2023

	PRIOR	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	TOTAL	REFERENCE
PROPANE COSTS															
1 PROPANE FIRM SENDOUT (therms)															Company actuals
2 COMPANY USE (therms)															Company actuals
3 TOTAL PROPANE SENDOUT (therms)															Ln 1 + Ln 2
4 COST PER THERM (WACOG)		\$1,5547	\$1,5637	\$1,6160	\$1,6346	\$1,5996	\$1,5924	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		Sch F, Col. 2
5 TOTAL CALCULATED COST OF PROPANE		\$188,430	\$300,324	\$299,955	\$292,935	\$243,266	\$135,651	\$0	\$1	\$0	\$0	\$0	\$0	\$1,460,561	Ln 3 * Ln 4
6 INDIRECT COSTS FROM DG 20-105		\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$0	\$0	\$0	\$0	\$0	\$0	\$208,129	DG 20-105, Section 11.2 (§
7 PROPANE ADJUSTMENTS		(\$1)	(\$0)	\$0	\$1	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
8 TOTAL COST OF PROPANE		\$223,117.56	\$335,011.93	\$334,643.21	\$327,623.75	\$277,954.05	\$170,339.46	\$0	\$1	\$0	\$0	\$0	\$0	\$1,668,690	Ln 5 + Ln 6 + Ln 7
CNG COSTS															
9 CNG SENDOUT (therms)															Company actuals
10 COMPANY USE (therms)															Company actuals
11 TOTAL CNG SENDOUT (therms)															Ln 9 + Ln 10
12 COST PER THERM (WACOG)															Sch C, Ln 21
13 TOTAL CALCULATED COST OF CNG															Ln 9 * Ln 10
14 CNG DEMAND CHARGES															Sch C, Ln 26
15 PROJECTED INCREMENTAL COSTS Winter 2022-2023															Sch. N Ln 7 Ln. 25
16 NET INCREMENTAL COSTS															Ln 13 + Ln 14
17 CNG ADJUSTMENT															
18 TOTAL CNG COSTS															Ln 11 + Ln 12 + Ln 13 + Ln
19 GAS ASSISTANCE PLAN (GAP)		(145.33)	(42.71)	(10,909.25)	(763.89)	(13,427.90)	(89.64)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$25,379)	
20 TOTAL COSTS OF GAS															Ln 8 + Ln 16 + Ln 17 + Ln 1
21 RETURN ON INVENTORY		\$2,554	\$2,554	\$2,554	\$2,554	\$2,554	\$2,554	\$0	\$0	\$0	\$0	\$0	\$0	\$15,323	Company calculation
REVENUES															
22 BILLED FPO SALES (therms)		428	844	12,913	848	10,405	0	0	0	0	0	0	0		Company actuals
23 COG FPO RATE		\$2,1416	\$2,1416	\$2,1416	\$2,1416	\$2,1416	\$2,1416	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (€
24 BILLED FPO REVENUE - CURRENT MONTH		\$916.60	\$1,808	\$27,654	\$1,815	\$22,283	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,477	Ln 22 * Ln 23
25 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	6,427	170,804	0	271,872	320	0	0	0	0	0	0		Company actuals
26 COG NON-FPO RATE PRIOR MONTH		\$0.0000	\$2,1216	\$2,1118	\$1,8120	\$1,8120	\$2,0122	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (€
27 BILLED FPO REVENUE - PRIOR MONTH		\$0	\$13,636	\$360,704	\$0	\$492,632	\$644	\$0	\$0	\$0	\$0	\$0	\$0	\$867,615	Ln 22 * Ln 23
28 BILLED NON-FPO SALES CURRENT MONTH (therms)		14,450	16,881	131,123	26,386	135,775	317	0	0	0	0	0	0	324,933	Company actuals
29 COG NON-FPO RATE CURRENT MONTH		\$2,1216	\$2,1118	\$1,8120	\$1,8120	\$2,0122	\$2,6520	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (€
30 BILLED NON-FPO REVENUE - CURRENT MONTH		\$30,657	\$35,649	\$237,596	\$47,811	\$273,207	\$841	\$0	\$0	\$0	\$0	\$0	\$0	\$625,761	Ln 22 * Ln 23
31 BILLED SALES OTHER PRIOR PERIODS		89	120	124,100	965	29,449	393	0	0	0	0	0	0		Company actuals
32 COG OTHER PRIOR PERIODS BLENDED RATE		\$1,1706	\$1,1810	\$2,0121	\$1,1285	\$1,5744	(\$1,0891)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		DG 22-057 Order 26,716 (€
33 BILLED OTHER BLENDED REVENUE - PRIOR PERIODS		\$104	\$141	\$249,699	\$1,089	\$46,364	(\$428)	\$0	\$0	\$0	\$0	\$0	\$0	\$296,969	Ln 22 * Ln 23
34 TOTAL SALES		14,967	24,272	438,941	28,199	447,501	1,030	0	0	0	1	0	2	954,909	Ln 22 + Ln 25 + Ln 28 + Ln 31
35 TOTAL BILLED REVENUES		\$31,678	\$51,234	\$875,653	\$50,716	\$834,486	\$1,057	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,844,822	Ln 24 + Ln 27 + Ln 30 + Ln
36 UNBILLED REVENUES (NET)		267,317	172,062	(298,425)	207,180	(288,265)	204,081	-	-	-	-	-	-	\$263,950	
37 TOTAL REVENUES		\$298,995	\$223,296	\$577,228	\$257,896	\$546,221	\$205,137	\$0						\$2,108,773	Ln 35 + Ln 36
38 (OVER)/UNDER COLLECTION		(\$37,215)	\$178,819	(\$194,335)	\$121,560	(\$235,681)	(\$8,763)	\$6,875	\$6,876	\$6,875	\$6,875	\$6,875	\$6,875	(\$83,629)	Ln 20 + Ln 21 - Ln 37
39 INTEREST AMOUNT		145.95	570.24	592.49	366.77	33.68	(670.86)	-	-	-	-	-	-	\$1,038	
40 FINAL (OVER)/UND	\$50,737	\$13,668	\$193,057	(\$686)	\$121,241	(\$114,407)	(\$123,840)	(\$116,965)	(\$110,089)	(\$103,214)	(\$96,339)	(\$89,464)	(\$82,589)	(\$82,550)	Prior Mo Ln 40 + Ln 38 + Ln

L BERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A L BERTY - KEENE DIVISION

CALCULATION OF PURCHASED GAS COSTS
WINTER PERIOD 2022 – 2023

LINE NO.		actual Nov-22	actual Dec-22	actual Jan-23	actual Feb-23	actual Mar-23	actual Apr-23	TOTAL
1	TOTAL REQUIRED PURCHASES							
2	<u>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</u>	check	check	check	check	check	check	
3	THERMS	84,182	128,103	150,978	123,528	96,077	57,646	640,514
4	<u>RATES</u> - from Schedule D							
5	Contract Price	\$1.6535	\$1.6481	\$1.6481	\$1.6481	\$1.6481	\$1.6481	
6	Broker Fee	incl.	incl.	incl.	incl.	incl.	incl.	
7	Pipeline Fee	incl.	incl.	incl.	incl.	incl.	incl.	
8	PERC Fee	incl.	incl.	incl.	incl.	incl.	incl.	
9	Trucking Fee	incl.	incl.	incl.	incl.	incl.	incl.	
10	COST PER THERM	\$1.6535	\$1.6481	\$1.6481	\$1.6481	\$1.6481	\$1.6481	\$1.6488
11	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$139,196	\$211,120	\$248,820	\$203,580	\$158,340	\$95,004	\$1,056,060
12	<u>AMHERST STORAGE PROPANE DELIVERIES</u>	check	check	check	check	check	check	
13	Therms	-	24,814	33,385	35,597	17,133	8,396	118,800
14	<u>RATES</u> - from Schedule F							
15	WACOG Price	\$0.0000	\$1.6000	\$1.6000	\$1.6000	\$1.6000	\$1.6000	
16	Trucking Fee	\$0.0000	\$0.0926	\$0.0918	\$0.1116	\$0.0911	\$0.0876	
17	COST PER THERM	\$0.0000	\$1.6926	\$1.6918	\$1.7116	\$1.6911	\$1.6876	\$1.7050
18	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$42,000	\$56,480	\$60,928	\$28,974	\$14,169	\$202,551
19	<u>CNG DELIVERIES</u>	check	check	check	check	check	check	
20	THERMS							
21	RATE							
22								
23	COST PER THERM							
24								
25	COST - CNG							
26								
27	TOTAL CNG							
28	<u>SPOT PURCHASES</u>	check	check	check	check	check	check	
29	THERMS							
30	From Schedule E							
31	COST PER THERM	\$1.3923	\$1.2834	\$1.6239	\$1.4625	\$1.3314	\$1.2813	\$1.3615
32	TOTAL COST - Spot Purchases							
33	<u>OTHER ITEMS</u>							
34	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	<u>TOTAL</u>							
38	THERMS FROM PROPANE							
39	COST							
40	THERMS FROM CNG							
41	COST							
42	COST PER THERM	\$1.5955	\$1.5935	\$1.6176	\$1.5802	\$1.5245	\$1.5388	\$1.5796

LINE NO.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	August 2022 (Actual)	Therms	Cost	Therm	Rate Gal.	CNG therms	Cost	Total Sendout	Total Cost		Therm Rate
2	Beginning Balance	47,654	\$78,129	\$1 6395	\$1.5002						
3	Purchases Received	154,719	\$251,655	\$1 6265	\$1.4883						
4	Total Available	202,373	\$329,784	\$1 6296	\$1.4911						
5	Less Sendout	37,727	\$61,479	\$1 6296	\$1.4911						
6	Ending Balance	164,646	\$268,305	\$1 6296	\$1.4911						
7	September 2022 (Actual)	Therms	Cost	Therm	Rate Gal.						
8	Beginning Balance	164,646	\$268,305	\$1 6296	\$1.4911						
9	Purchases Received	54,758	\$78,635	\$1.4361	\$1.3140						
10	Total Available	219,404	\$346,940	\$1 5813	\$1.4469						
11	Less Sendout	43,054	\$68,081	\$1 5813	\$1.4469						
12	Ending Balance	176,350	\$278,859	\$1 5813	\$1.4469						
13	October 2022 (Actual)	Therms	Cost	Therm	Rate Gal.						
14	Beginning Balance	176,350	\$278,859	\$1 5813	\$1.4469						
15	Purchases Received	81,584	\$117,761	\$1.4434	\$1.3208						
16	Total Available	257,934	\$396,621	\$1 5377	\$1.4070						
17	Less Sendout	77,885	\$119,762	\$1 5377	\$1.4070						
18	Ending Balance	180,049	\$276,859	\$1 5377	\$1.4070						
19	November 2022 (Actual)	Therms	Cost	Therm	Rate Gal.						
20	Beginning Balance	180,049	\$276,859	\$1 5377	\$1.4070						
21	Purchases Received	116,064	\$183,502	\$1 5810	\$1.4467						
22	Total Available	296,113	\$460,361	\$1 5547	\$1.4226						
23	Less Sendout	121,202	\$188,430	\$1 5547	\$1.4226						\$1 573
24	Ending Balance	174,911	\$271,931	\$1 5547	\$1.4226						
25	December 2022 (Actual)	Therms	Cost	Therm	Rate Gal.						
26	Beginning Balance	174,911	\$271,931	\$1 5547	\$1.4226						
27	Purchases Received	169,215	\$266,181	\$1 5730	\$1.4394						
28	Total Available	344,126	\$538,112	\$1 5637	\$1.4308						
29	Less Sendout	192,059	\$300,324	\$1 5637	\$1.4308						\$1 583
30	Ending Balance	152,067	\$237,788	\$1 5637	\$1.4308						
31	January 2023 (Actual)	Therms	Cost	Therm	Rate Gal.						
32	Beginning Balance	152,067	\$237,788	\$1 5637	\$1.4308						
33	Purchases Received	157,486	\$262,452	\$1 6665	\$1.5249						
34	Total Available	309,553	\$500,240	\$1 6160	\$1.4787						
35	Less Sendout	185,615	\$299,955	\$1 6160	\$1.4787						\$1 585
36	Ending Balance	123,938	\$200,285	\$1 6160	\$1.4787						
37	February 2023 (Actual)	Therms	Cost	Therm	Rate Gal.						
38	Beginning Balance	123,938	\$200,285	\$1 6160	\$1.4787						
39	Purchases Received	142,818	\$235,762	\$1 6508	\$1.5105						
40	Total Available	266,756	\$436,047	\$1 6346	\$1.4957						
41	Less Sendout	179,206	\$292,935	\$1 6346	\$1.4957						\$1 576
42	Ending Balance	87,550	\$143,112	\$1 6346	\$1.4957						
43	March 2023 (Actual)	Therms	Cost	Therm	Rate Gal.						
44	Beginning Balance	87,550	\$143,112	\$1 6346	\$1.4957						
45	Purchases Received	132,923	\$209,546	\$1 5764	\$1.4425						
46	Total Available	220,473	\$352,658	\$1 59							

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION
INCREMENTAL COSTS CNG VS. SPOT PROPANE Winter 2022-2023

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Actual	Actual	Actual	Actual	Actual	Actual	
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	
1 <u>CNG PURCHASES</u>							
2 CNG Volumes (Schedule C Filing)							
3							
4 CNG Costs (Schedule C Filing)							
5 Total Cost per Actual CNG Costs (Schedule C Filing)							
6							
7 CNG Cost Per Therm Actual							
8							
9 <u>SPOT PROPANE PURCHASES</u>							
10 Spot Propane Volumes (Schedule C Filing)							
11							
12 Total Costs Spot Propane							
13 Total Cost Spot Propane							
14							
15 Spot Propane Cost Per Therm Actual	\$ 1.3923	\$ 1.2834	\$ 1.6239	\$ 1.4625	\$ 1.3474	\$ 1.3020	
16							
17							
18							
19 CNG Volumes							
20 Price difference CNG vs Spot Propane							
21 Adj. for rounding							\$0.0000
22 Incremental Costs Propane							(\$10,974)
23							
24							
25							
						50%	2
						Allowed Recoverable Costs \$	(5,487)