LIBERTY UTILITIES - KEENE DIVISION

CALCULATION OF COST OF GAS RATE SUPPLY / DEMAND BALANCE WINTER PERIOD 2020 - 2021

_		PRIOR	Actual Nov-20	Actual Dec-20	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	T
	ROPANE COSTS								
	ROPANE FIRM SENDOUT (therms)								
	DMPANY USE (therms)								
	DTAL PROPANE SENDOUT (therms)								
	OST PER THERM (WACOG) OTAL CALCULATED COST OF PROPANE		\$0.8860 \$107,605	\$0.9308 \$174,363	\$0.9441 \$214,927	\$1.0463 \$207,206	\$1.0724 \$164,311	\$1.0172 \$92,754	\$9
PR	ROPANE ADJUSTMENTS DTAL COST OF PROPANE		\$0 \$107,605	\$0 \$174,363	(\$10,000) \$204,927	(\$354) \$206,852	\$0 \$164,311	\$0 \$92,754	(9
	NG COSTS		ψ101,000	¥11 1,000	\$201,027	\$200,002	ψ101,311	402,707	ų.
	NG SENDOUT (therms)								
	DMPANY USE (therms)								
ТО	OTAL CNG SENDOUT (therms)								
	OST PER THERM (WACOG) OTAL CALCULATED COST OF CNG								
CN	NG DEMAND CHARGES								
CN	NG ADJUSTMENTS NG ADJUSTMENTS -Demand Charges Aug 2017 - Sep 2019)TAL CNG COSTS								
	EMOVED CNG ADJUSTMENTS -Demand Charges Aug 2017 - Sep 2019	Order No 26,428							
RE	EMOVED CNG ADJOST MICHAIS - Defining changes Aug 2017 - Sep 2019 EMOVED EXCESS CNG COSTS from Winter 2019-2020 ET CNG COSTS PER ORDER NO. 26,428 in Docket No. DG 20-152	Order No 26,428							
	COUNTING ADJUSTMENT								
	PO PREMIUM		(\$672)	(\$1,899)	(\$2,513)	(\$2,882)	(\$2,131)	(\$1,971)	(\$
	OTAL COSTS OF GAS		(\$0.2)	(\$1,550)	(\$2,010)	(\$2,502)	(\$2,101)	(ψ1,011)	(4
	ETURN ON INVENTORY		\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	
RE	EVENUES								
BIL	LLED FPO SALES (therms) - Interim Rate		6,716	4,909	0	0	0	0	
CO	OG FPO RATE - Interim Rate		\$1.2300 \$8,261	\$1.2300 \$6,038	\$1.2300 \$0	\$1.2300 \$0	\$1.2300 \$0	\$1.2300 \$0	9
BIL	LLED FPO SALES (therms)		0	11,834	17,830	21,340	15,269	9,429	
CC	OG FPO RATE		\$0.0000 \$0	\$1.0277 \$12,162	\$1.0277 \$18,324	\$1.0277 \$21,931	\$1.0277 \$15,692	\$1.0277 \$9,690	9
BIL	LLED FPO SALES (therms) - R-4 (GAP) -Interim Rate		204	174	0	0	0	0	
	OG FPO RATE		\$0.6765 \$138	\$0.6765 \$118	\$0.6765 \$0	\$0.6765 \$0	\$0.0000 \$0	\$0.0000 \$0	
BII	LLED FPO SALES (therms) - R-4 (GAP)		0	447	733	1,701	0	0	
	OG FPO RATE		\$0.0000 \$0	\$0.5652 \$253	\$0.5652 \$414	\$0.5484 \$933	\$0.0000 \$0	\$0.0000 \$0	
	VIED FD0 041 FD (#) D 4/04D)								
	LLED FPO SALES (therms) - R-4 (GAP) DG FPO RATE		0 \$0.5460	0 \$0.5460	\$0.5460	3,884 \$0.5460	\$0.5460	1,107 \$0.5460	
			\$0	\$0	\$0	\$2,121	\$0	\$604	
	LLED NON-FPO SALES PRIOR MONTH (therms) DG NON-FPO RATE PRIOR MONTH		\$0.0000	\$0.0000	58,329 \$1.0253	66,700 \$0.9970	0 \$0.9928	24,298 \$0.9928	1
			\$0	\$0	\$59,805	\$66,500	\$0	\$24,123	\$1
	LLED NON-FPO SALES CURRENT MONTH (therms) DG NON-FPO RATE CURRENT MONTH		62,286 \$1.0253	188,285 \$1.0253	145,706 \$0.9970	164,856 \$0.9928	166,818 \$0.9928	77,361 \$1.2816	8
			\$63,862	\$193,049	\$145,269	\$163,669	\$165,617	\$99,146	\$8
	LLED NON-FPO SALES CURRENT MONTH (therms) - R-4 (GAP) DG NON-FPO RATE CURRENT MONTH		1,211 \$0.5639	3,459 \$0.5639	1,514 \$0.5639	(31) \$0.5639	4,060 \$0.5460	1,779 \$0.7048	
	SO HOLL OURSE CONNERS MONTH		\$683	\$1,951	\$854	(\$17)	\$2,217	\$1,254	
BIL	LLED SALES OTHER PRIOR PERIODS		63	0	3,289	(1,862)	1,341	1,401	
CC	OG OTHER PRIOR PERIODS BLENDED RATE		\$0.5237 \$33	\$0.0000 \$0	\$0.5484 \$1,804	\$1.0813 (\$2,013)	\$0.8778 \$1,177	\$0.6876 \$963	
то	DTAL SALES		70,480	209,108	227,401	256,588	187,488	115,375	1,0
то	OTAL BILLED REVENUES		\$72,976	\$213,569	\$226,469	\$253,123	\$184,703	\$135,781	\$1,0
UN	NBILLED REVENUES (NET)		\$69,145	\$7,897	\$8,481	(\$53,256)	(\$8,834)	(\$250)	5
то	DTAL REVENUES		\$142,121	\$221,466	\$234,950	\$199,867	\$175,869	\$135,531	\$1,
(O)	VER)/UNDER COLLECTION		(\$28,424)	(\$29,002)	(\$4,727)	\$58,612	\$2,088	(\$42,242)	(\$
INT	TEREST AMOUNT		\$206	\$189	\$210	\$312	\$491	\$482	
	NAL (OVER)/UNDER COLLECTION	\$ 80,521	(\$28,218)	(\$28,813)	(\$4,517)	\$58,924	\$2,579	(\$41,761)	s

SUBJECT TO CONFIDENTIAL TREATMENT

CALCULATION OF PURCHASED GAS COSTS WINTER PERIOD 2020 - 2021

LINE NO.		Actual Nov-20	Actual Dec-20	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	TOTAL
1	TOTAL REQUIRED PURCHASES							
2	PROPANE PURCHASE STABILIZATION PLAN DELIVERIES	24.422	100 100	450.050	100 500		57.040	040.544
3	THERMS	84,182	128,103	150,978	123,528	96,077	57,646	640,514
4 5	RATES - from Schedule D Contract Price	\$0.9011	\$0.9011	\$0.9011	\$0.9011	\$0.9011	\$0.9011	
6	Broker Fee	incl.	incl.	نامور.عور ا	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	\$0.9011	\$0.9011	\$0.9011	\$0.9011	\$0.9011	\$0.9011	\$0.9011
11	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$75,854	\$115,430	\$136,042	\$111,307	\$86,572	\$51,943	\$577,148
12	AMHERST STORAGE PROPANE DELIVERIES						t	otal allotted
13	Therms	-	27,520	39,327	27,257	11,638	11,570	118,800
14	RATES - from Schedule F							
15	WACOG Price	\$0.0000	\$0.7186	\$0.7186	\$0.7186	\$0.7186	\$0.7186	
16 17	Trucking Fee COST PER THERM	\$0.0000 \$0.0000	\$0.0650 \$0.7836	\$0.0692 \$0.7878	\$0.0688 \$0.7874	\$0.0702 \$0.7888	\$0.0702 \$0.7888	\$0.7771
17	COST FER THERW	φυ.υυυυ	φυ./ 630	φυ./6/6	φυ./ 6/4	φυ./ 000	φυ./ 000	φυ.///
18	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$21,565	\$30,982	\$21,462	\$9,180	\$9,126	\$92,315
19	CNG DELIVERIES							
20	THERMS							
21	RATE	1						
22								
22								
22 23								
23								
23 24 25								
23 24 25 26	CROT BURGUAGES							
2324252627	SPOT PURCHASES THERMS							
24 25 26 27 28	THERMS							
24 25 26 27 28 29	THERMS From Schedule E	\$1,0005	£4 2240	\$4.4440	¢1 5670	¢1 2970	\$4.987E	\$4.2050
24 25 26 27 28	THERMS	\$1.0005	\$1.2249	\$1.4448	\$1.5670	\$1.3870	\$1.3675	\$1.3059
24 25 26 27 28 29	THERMS From Schedule E	\$1.0005	\$1.2249	\$1.4448	\$1.5670	\$1.3870	\$1.3675	\$1.3059
24 25 26 27 28 29 30 31	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases	\$1.0005	\$1.2249	\$1.4448	\$1.5670	\$1.3870	\$1.3675	\$1.3059
24 25 26 27 28 29 30	THERMS From Schedule E COST PER THERM	\$1.0005	\$1.2249	\$1.4448	\$1.5670	\$1.3870	\$1.3675	\$1.3059 -
24 25 26 27 28 29 30 31	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS	\$1.0005 159,527	\$1.2249 220,744	\$1.4448 238,895	\$1.5670 233,435	\$1.3870 191,131	\$1.3675 92,516	-
23 24 25 26 27 28 29 30 31 32 33 34	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS							-
23 24 25 26 27 28 29 30 31 32 33 34	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL							-
23 24 25 26 27 28 29 30 31 32 33 34	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL THERMS FROM PROPANE							-
23 24 25 26 27 28 29 30 31 32 33 34	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL							-
24 25 26 27 28 29 30 31 32 33 34 35 36 37	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL THERMS FROM PROPANE COST							-
23 24 25 26 27 28 29 30 31 32 33 34	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL THERMS FROM PROPANE							-
24 25 26 27 28 29 30 31 32 33 34 35 36 37	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL THERMS FROM PROPANE COST THERMS FROM CNG							- 1,136,248
24 25 26 27 28 29 30 31 32 33 34 35 36 37	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL THERMS FROM PROPANE COST THERMS FROM CNG COST	159,527	220,744	238,895	233,435	191,131	92,516	- 1,136,248
24 25 26 27 28 29 30 31 32 33 34 35 36 37	THERMS From Schedule E COST PER THERM TOTAL COST - Spot Purchases OTHER ITEMS Storage ((inject) / withdraw) TOTAL OTHER ITEMS TOTAL THERMS FROM PROPANE COST THERMS FROM CNG COST	159,527	220,744	238,895	233,435	191,131	92,516	\$1.3059 - 1,136,248 \$1.0701

INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION WINTER PERIOD 2020 - 2021

INE NO.					Doto
1	August 2020 (Actual)	Therms	Cost	<u>Therm</u>	<u>Rate</u> <u>Gal.</u>
2	Beginning Balance Purchases Received	51,735 131,267	\$44,533 \$100,417	\$0.8608 \$0.7650	\$0.7876 \$0.7000
4 5	Total Available Less Sendout	183,002	\$144,951	\$0.7921	\$0.7248 \$0.7248
6	Ending Balance	33,056 149,946	\$26,183 \$118,768	\$0.7921 \$0.7921	\$0.7248
_				_	Rate
7	September 2020 (actual		Cost	Therm	<u>Gal.</u>
8 9	Beginning Balance Purchases Received	149,946 59,967	\$118,768 \$46,040	\$0.7921 \$0.7650	\$0.7248 \$0.7000
10	Total Available	209,913	\$164,808	\$0.7851	\$0.7184
11 12	Less Sendout Ending Balance	42,093 167,820	\$33,048 \$131,760	\$0.7851 \$0.7851	\$0.7184 \$0.7184
12	Ending Balance	107,020	φ131,700	φυ./ ου ι	
13	October 2020 (actual)	Therms	Cost	Therm	Rate Gal.
14	Beginning Balance	167,820	\$131,760	\$0.7851	\$0.7184
15	Purchases Received	64,729	\$63,162	\$0.8634	\$0.7900
16	Total Available	232,549		\$0.8382	\$0.7670
17 18	Less Sendout Ending Balance	74,266 158,283	\$62,249 \$132,672	\$0.8382 \$0.8382	\$0.7670 \$0.7670
10	Ending Balance	100,200	Ψ102,012	ψ0.0002	
19	November 2020 (actual)	Therms	Cost	Therm	<u>Rate</u> <u>Gal.</u>
20	Beginning Balance	158,283	\$132,672	\$0.8382	\$0.7670
21	Purchases Received	139,147	\$130,844	\$0.9403	\$0.8604
22	Total Available	297,430	\$263,516	\$0.8860	\$0.8107
23 24	Less Sendout Ending Balance	121,453 175,977	\$107,605 \$155,911	\$0.8860 \$0.8860	\$0.8107 \$0.8107
24	Lifting Balance	175,577	ψ133,311	ψ0.0000	ψ0.0107
25	December 2020 (Actual) <u>Therms</u>	Cost	Therm	Rate Gal.
	•				
26	Beginning Balance	175,977		\$0.8860	\$0.8107
27 28	Purchases Received Total Available	161,274 337,251	\$157,991 \$313,903	\$0.9796 \$0.9308	\$0.8964 \$0.8517
29	Less Sendout	187,332		\$0.9308	\$0.8517
30	Ending Balance	149,919	\$139,540	\$0.9308	\$0.8517
					Rate
31	January 2021 (Actual)	Therms	Cost	<u>Therm</u>	Gal.
32	Beginning Balance	149,919	\$139,540	\$0.9308	\$0.8517
33	Purchases Received	162,798	\$155,682	\$0.9563	\$0.8750
34	Total Available	312,717	\$295,221	\$0.9441	\$0.8638
35 36	Less Sendout Ending Balance	217,072 95,645	\$204,927 \$90,294	\$0.9441 \$0.9441	\$0.8638 \$0.8638
30	Lifting Balance	95,045	ψ30,23 4	ψ0.3441	
37	February 2021 (Actual)	Therms	Cost	Therm	Rate Gal.
		<u> </u>			
38	Beginning Balance	95,645	\$90,294	\$0.9441	\$0.8638
39 40	Purchases Received Total Available	173,178 268,823	\$190,982 \$281,277	\$1.1028 \$1.0463	\$1.0091 \$0.9574
41	Less Sendout	198,032	\$207,206	\$1.0463	\$0.9574
42	Ending Balance	70,791	\$74,071	\$1.0463	\$0.9574
					Rate
43	March 2021 (Actual)	Therms	Cost	<u>Therm</u>	Gal.
44	Beginning Balance	70,791	\$74,071	\$1.0463	\$0.9574
45	Purchases Received	151,663	\$164,489	\$1.0846	\$0.9924
46 47	Total Available Less Sendout	222,454		\$1.0724	\$0.9813
47 48	Less Sendout Ending Balance	153,218 69,236	\$164,311 \$74,248	\$1.0724 \$1.0724	\$0.9813 \$0.9813
70		00,200	ψ. τ,Σ-τΟ	ψJ12-7	
49	April 2021 (actual)	Therms	Cost	Therm	Rate Gal.
	, , ,				
50 51	Beginning Balance Purchases Received	69,236 63,536	\$74,248 \$60,810	\$1.0724 \$0.9571	\$0.9813 \$0.8758
51 52	Total Available	63,536 132,772		\$1.0172	\$0.8758
53	Less Sendout	91,184	\$92,754	\$1.0172	\$0.9308
54	Ending Balance	41,588	\$42,304	\$1.0172	\$0.9308
55		AVERAGE WIN	TER RATE -	SENDOUT	
E.C.					
56 57					

INCREMENTAL COSTS CNG VS. SPOT PROPANE WINTER 2020-2021 ACTUALS

CNG PURCHASES CNG Volumes (Schedule C Reconciliation)	Actual Nov-20	Actual Dec-20	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	
CNG Costs (Schedule C Reconciliation) Total Cost per Actual CNG Costs (Schedule C Reconciliation)							
CNG Cost Per Therm Actual							
SPOT PROPANE PURCHASES Spot Propane Volumes (Schedule C Reconciliation)							
Total Costs Spot Propane							
Total Cost Spot Propane							
Spot Propane Cost Per Therm Actual	\$1.0005	\$1.2249	\$1.4448	\$1.5670	\$1.3870	\$1.3675	\$1.3059
CNG Volumes							
Price differebnce CNG vs Spot Propane Adj. for rounding Incremental Costs Propane							

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CONVERSION OF COSTS - GALLONS TO THERMS WINTER PERIOD 2020 - 2021

	(1)	(2)	(3)	(4)	(5	5)	(6)
			VOLU	JMES		UNIT	COST
	<u>UNIT</u>	CONVERSION FACTOR	<u>GALLONS</u>	<u>THERMS</u>	PE <u>GAL</u>		PER <u>THERM</u>
GAS FROM INVENTORY	GALLONS	0.91502			\$0.	8988	\$0.9823
GAS FROM CNG	THERMS	N/A	N/A		N	'A	

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