

LIBERTY UTILITIES - KEENE DIVISION

CONVERSION OF GAS COSTS - GALLONS TO THERMS
WINTER PERIOD 2019 - 2020

	(1)	(2)	(3)	(4)	(5)	(6)
			<u>VOLUMES</u>		<u>UNIT COST</u>	
	<u>UNIT</u>	<u>CONVERSION FACTOR</u>	<u>GALLONS</u>	<u>THERMS</u>	<u>PER GALLON</u>	<u>PER THERM</u>
GAS FROM INVENTORY	GALLONS	0.91502	1,321,331	1,209,044	\$0.9467	\$1.0347

LIBERTY UTILITIES - KEENE DIVISION
 CALCULATION OF COST OF GAS RATE
 SUPPLY / DEMAND BALANCE
 WINTER PERIOD 2019 - 2020

	PRIOR	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	TOTAL
<u>SENDOUT (THERMS)</u>								
1 FIRM SENDOUT *		149,930	222,245	263,968	248,152	177,069	114,316	1,175,680
2 COMPANY USE		4,975	6,115	7,357	6,035	6,854	2,028	33,364
3 TOTAL SENDOUT		154,905	228,360	271,325	254,187	183,923	116,344	1,209,044
4 * UNACCTED FOR VOLS INCLUDED		1,338	1,984	2,356	2,215	1,581	1,020	10,494
<u>COSTS</u>								
5 SENDOUT FROM ABOVE		154,905	228,360	271,325	254,187	183,923	116,344	1,209,044
6 COST/THERM FROM SCHEDULE F		\$0.9866	\$1.0183	\$1.0438	\$1.0483	\$1.0503	\$1.0548	\$1.0347
7 FPO PREMIUM		(\$402)	(\$622)	(\$803)	(\$946)	(\$879)	(\$625)	(\$4,277)
8 TOTAL COSTS		\$152,434	\$231,917	\$282,414	\$265,521	\$192,295	\$122,096	\$1,246,677
<u>REVENUES</u>								
9 FIRM SALES (THERMS)		105,744	163,603	211,287	248,842	231,329	164,526	1,125,331
10 RATE/THERM PER TARIFF		\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492
11 TOTAL REVENUES		\$100,373	\$155,293	\$200,555	\$236,203	\$219,579	\$156,169	\$1,068,172
12 (OVER)/UNDER COLLECTION		\$52,061	\$76,624	\$81,859	\$29,318	(\$27,284)	(\$34,073)	\$178,505
13 INTEREST FROM SCHEDULE H		(\$664)	(\$386)	(\$41)	\$202	\$208	\$74	(\$607)
14 FINAL (OVER)/UNDER COLLECTION	(\$177,896)	\$51,397	\$76,238	\$81,818	\$29,520	(\$27,076)	(\$33,999)	\$2
TOTAL REVENUES INCLUDING FPO		\$100,775	\$155,915	\$201,358	\$237,149	\$220,458	\$156,794	\$1,072,449

LIBERTY UTILITIES - KEENE DIVISION
CALCULATION OF PURCHASED GAS COSTS
WINTER PERIOD 2019 - 2020

LINE NO.		13%	19%	22%	21%	15%	10%	TOTAL
		Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	
1	TOTAL SENDOUT (GALLONS)	169,291	249,568	296,524	277,794	201,004	127,149	1,321,331
2	CHANGE TO ENDING INVENTORY BALANCE (GALLONS)	-	-	-	-	-	-	-
3	TOTAL REQUIRED PURCHASES (GALLONS)	169,291	249,568	296,524	277,794	201,004	127,149	1,321,331
4	<u>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</u>							
5	GALLONS	91,726	140,000	164,138	135,172	106,205	62,759	700,000
6	<u>RATES - from Schedule D</u>							
7	Contract Price	\$0.9097	\$0.9097	\$0.9097	\$0.9097	\$0.9097	\$0.9097	
8	Broker Fee	incl.	incl.	incl.	incl.	incl.	incl.	
9	Pipeline Fee	incl.	incl.	incl.	incl.	incl.	incl.	
10	PERC Fee	incl.	incl.	incl.	incl.	incl.	incl.	
11	Trucking Fee	incl.	incl.	incl.	incl.	incl.	incl.	
12	COST PER GALLON	\$0.9097	\$0.9097	\$0.9097	\$0.9097	\$0.9097	\$0.9097	\$0.9097
13	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$83,443	\$127,358	\$149,316	\$122,966	\$96,615	\$57,092	\$636,790
14	<u>AMHERST STORAGE PROPANE DELIVERIES</u>							
15	GALLONS	-	32,786	49,179	34,972	9,836	2,404	129,178
16	<u>RATES - from Schedule F</u>							
17	WACOG Price	\$0.0000	\$0.6107	\$0.6106	\$0.6106	\$0.6107	\$0.6103	
18	Trucking Fee	\$0.0000	\$0.0621	\$0.0621	\$0.0621	\$0.0621	\$0.0621	
19	COST PER GALLON	\$0.0000	\$0.6728	\$0.6727	\$0.6727	\$0.6728	\$0.6724	\$0.6727
20	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$22,059	\$33,083	\$23,526	\$6,618	\$1,617	\$86,901
21	<u>CNG DELIVERIES</u>							
22	GALLONS	[REDACTED]						
23	RATE	[REDACTED]						
24	[REDACTED]							
25	[REDACTED]							
26	[REDACTED]							
27	<u>SPOT PURCHASES</u>							
28	GALLONS	[REDACTED]						
29	<u>RATES - from Schedule E</u>							
30	Mt. Belvieu Futures Price (08/27/19)	\$0.4656	\$0.4776	\$0.4894	\$0.4931	\$0.4794	\$0.4669	
31	Broker Fee	\$0.0100	\$0.0100	\$0.0100	\$0.0100	\$0.0100	\$0.0100	
32	Pipeline Fee	\$0.2362	\$0.2362	\$0.2362	\$0.2362	\$0.2362	\$0.2362	
33	PERC Fee	\$0.0050	\$0.0050	\$0.0050	\$0.0050	\$0.0050	\$0.0050	
34	Supplier Charge	\$0.0500	\$0.0500	\$0.0500	\$0.0500	\$0.0500	\$0.0500	
35	Trucking Fee	\$0.0939	\$0.0939	\$0.0939	\$0.0939	\$0.0939	\$0.0939	
36	COST PER GALLON	\$0.8608	\$0.8727	\$0.8845	\$0.8883	\$0.8745	\$0.8620	\$0.8742
37	TOTAL COST - Spot Purchases	[REDACTED]						
38	<u>OTHER ITEMS</u>							
39	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42	<u>TOTAL</u>							
43	GALLONS	169,291	249,568	296,524	277,794	201,004	127,149	1,321,331
44	THERMS	154,905	228,360	271,325	254,187	183,923	116,344	1,209,044
45	COST	\$164,004	\$234,629	\$284,902	\$266,762	\$193,306	\$123,019	\$1,266,622
46	COST PER GALLON	\$0.9688	\$0.9401	\$0.9608	\$0.9603	\$0.9617	\$0.9675	\$0.9586
47	COST PER THERM	\$1.0587	\$1.0275	\$1.0500	\$1.0495	\$1.0510	\$1.0574	\$1.0476

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LIBERTY UTILITIES - KEENE DIVISION

PROPANE PURCHASING STABILIZATION PLAN
WINTER PERIOD 2019 - 2020

Line
No.

Line No.	Delivery Month	Hedging Schedule & Volume (Gallons)						
		Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Total
1								
2								
3	Nov-19	15,069	14,578	14,578	18,345	14,578	14,578	91,726
4	Dec-19	23,000	22,250	22,250	28,000	22,250	22,250	140,000
5	Jan-20	26,966	26,086	26,086	32,828	26,086	26,086	164,138
6	Feb-20	22,207	21,483	21,483	27,034	21,483	21,483	135,172
7	Mar-20	17,448	16,879	16,879	21,241	16,879	16,879	106,205
8	Apr-20	10,310	9,974	9,974	12,552	9,974	9,974	62,759
9	Total Volume	115,000	111,250	111,250	140,000	111,250	111,250	700,000
10	Monthly %	16.4%	15.9%	15.9%	20.0%	15.9%	15.9%	

11	Delivery Price per Gallon	\$0.9031	\$0.9118	\$0.9209	\$0.9219	\$0.8981	\$0.8784	
12	Total Cost	\$82,839	\$127,654	\$151,154	\$124,613	\$95,378	\$55,125	\$636,763
13	Weighted Average Winter Contract Price per gallon							\$0.9097
14	Weighted Average Winter Contract Price per therm							\$0.9942

LIBERTY UTILITIES - KEENE DIVISION
 PROPANE SPOT MARKET PURCHASE COST ANALYSIS
 WINTER PERIOD 2019 - 2020

	(1) Mt. Belvieu		(2) Broker Fee		(3) Pipeline Rate		(4) PERC Fee		(5) Supplier Charge		(6) Cost @ Selkirk		(7) Trucking to Keene		(8) \$ per Gal.		(9) \$ per Therm
1 NOV	0.4656	+	0.0100	+	0.2362	+	0.0050	+	0.0500	=	0.7669	+	0.0939	=	0.8608	=	0.9407
2 DEC	0.4776	+	0.0100	+	0.2362	+	0.0050	+	0.0500	=	0.7788	+	0.0939	=	0.8727	=	0.9537
3 JAN	0.4894	+	0.0100	+	0.2362	+	0.0050	+	0.0500	=	0.7906	+	0.0939	=	0.8845	=	0.9666
4 FEB	0.4931	+	0.0100	+	0.2362	+	0.0050	+	0.0500	=	0.7944	+	0.0939	=	0.8883	=	0.9707
5 MAR	0.4794	+	0.0100	+	0.2362	+	0.0050	+	0.0500	=	0.7806	+	0.0939	=	0.8745	=	0.9557
6 APR	0.4669	+	0.0100	+	0.2362	+	0.0050	+	0.0500	=	0.7681	+	0.0939	=	0.8620	=	0.9421

1. Propane futures market quotations (cmegroup.com) on 9/5/19 close. See Appendix 1.
2. A generally accepted standard broker fee
3. Pipeline rate from Mt.Belvieu to Selkirk
4. Propane Education Research Council (propanecouncil.org)
5. A generally accepted standard supplier charge
6. Selkirk Cost - all fees plus propane cost
7. Northern Gas Transport trucking rate including diesel fuel surcharge. See Appendix 3A & 3B.
8. Delivered Price per Gallon
9. Delivered Price per therm as converted using per gallon price / .91502

LIBERTY UTILITIES - KEENE DIVISION
 INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION
 WINTER PERIOD 2019 - 2020

										AMHERST STORAGE INVENTORY				129,800 GALLONS			
LINE NO.																	
	Therms	Cost	Therm	Rate Gal.		Therms	Cost	Therm	Rate Gal.		Therms	Cost	Therm	Rate Gal.			
1	August 2019 (Actual)					August 2019 (Actual)											
2	Beginning Balance	38,354	\$31,323	\$0.8167	\$0.7473	Beginning Balance	4,839	\$4,293	\$0.8872	\$0.8118							
3	Purchases Received	65,000	\$48,308	\$0.7432	\$0.6800	Purchases Received	113,931	\$74,969	\$0.6580	\$0.6021							
4	Total Available	103,354	\$79,631	\$0.7705	\$0.7050	Total Available	118,770	\$79,262	\$0.6674	\$0.6106							
5	Less Sendout	45,930	\$35,388	\$0.7705	\$0.7050	Less Sendout	0	\$0	\$0.0000	\$0.0000							
6	Ending Balance	57,424	\$44,243	\$0.7705	\$0.7050	Ending Balance	118,770	\$79,262	\$0.6674	\$0.6106							
September 2019 (Estimated)																	
7	September 2019 (Estimated)					September 2019 (Estimated)											
8	Beginning Balance	57,424	\$44,243	\$0.7705	\$0.7050	Beginning Balance	118,770	\$79,262	\$0.6674	\$0.6106							
9	Purchases Received	55,000	\$43,879	\$0.7978	\$0.7300	Purchases Received	0	\$0	\$0.0000	\$0.0000							
10	Total Available	112,424	\$88,122	\$0.7838	\$0.7172	Total Available	118,770	\$79,262	\$0.6674	\$0.6106							
11	Less Sendout	47,824	\$37,486	\$0.7838	\$0.7172	Less Sendout	0	\$0	\$0.0000	\$0.0000							
12	Ending Balance	64,600	\$50,636	\$0.7838	\$0.7172	Ending Balance	118,770	\$79,262	\$0.6674	\$0.6106							
October 2019 (Estimated)																	
13	October 2019 (Estimated)					October 2019 (Estimated)											
14	Beginning Balance	64,600	\$50,636	\$0.7838	\$0.7172	Beginning Balance	118,770	\$79,262	\$0.6674	\$0.6106							
15	Purchases Received	90,000	\$75,735	\$0.8415	\$0.7700	Purchases Received	0	\$0	\$0.0000	\$0.0000							
16	Total Available	154,600	\$126,371	\$0.8174	\$0.7479	Total Available	118,770	\$79,262	\$0.6674	\$0.6106							
17	Less Sendout	88,604	\$72,425	\$0.8174	\$0.7479	Less Sendout	0	\$0	\$0.0000	\$0.0000							
18	Ending Balance	65,996	\$53,946	\$0.8174	\$0.7479	Ending Balance	118,770	\$79,262	\$0.6674	\$0.6106							
November 2019 (Forecasted)																	
19	November 2019 (Forecasted)					November 2019 (Forecasted)											
20	Beginning Balance	65,996	\$53,946	\$0.8174	\$0.7479	Beginning Balance	118,770	\$79,262	\$0.6674	\$0.6106							
21	Purchases Received	154,905	\$164,004	\$1.0587	\$0.9688	Purchases Received	0	\$0	\$0.0000	\$0.0000							
22	Total Available	220,901	\$217,950	\$0.9866	\$0.9028	Total Available	118,770	\$79,262	\$0.6674	\$0.6106							
23	Less Sendout	154,905	\$152,836	\$0.9866	\$0.9028	Less Sendout	0	\$0	\$0.0000	\$0.0000	0	\$0					
24	Ending Balance	65,996	\$65,114	\$0.9866	\$0.9028	Ending Balance	118,770	\$79,262	\$0.6674	\$0.6106							
December 2019 (Forecasted)																	
25	December 2019 (Forecasted)					December 2019 (Forecasted)											
26	Beginning Balance	65,996	\$65,114	\$0.9866	\$0.9028	Beginning Balance	118,770	\$79,262	\$0.6674	\$0.6106							
27	Purchases Received	228,360	\$234,629	\$1.0275	\$0.9401	Purchases Received	0	\$0	\$0.0000	\$0.0000							
28	Total Available	294,356	\$299,743	\$1.0183	\$0.9318	Total Available	118,770	\$79,262	\$0.6674	\$0.6106							
29	Less Sendout	228,360	\$232,539	\$1.0183	\$0.9318	Less Sendout	30,000	\$20,021	\$0.6674	\$0.6107	30,000	\$20,021					
30	Ending Balance	65,996	\$67,204	\$1.0183	\$0.9318	Ending Balance	88,770	\$59,241	\$0.6674	\$0.6106							
January 2020 (Forecasted)																	
31	January 2020 (Forecasted)					January 2020 (Forecasted)											
32	Beginning Balance	65,996	\$67,204	\$1.0183	\$0.9318	Beginning Balance	88,770	\$59,241	\$0.6674	\$0.6106							
33	Purchases Received	271,325	\$284,902	\$1.0500	\$0.9608	Purchases Received	0	\$0	\$0.0000	\$0.0000							
34	Total Available	337,321	\$352,106	\$1.0438	\$0.9551	Total Available	88,770	\$59,241	\$0.6674	\$0.6106							
35	Less Sendout	271,325	\$283,217	\$1.0438	\$0.9551	Less Sendout	45,000	\$30,031	\$0.6674	\$0.6106	45,000	\$30,031					
36	Ending Balance	65,996	\$68,889	\$1.0438	\$0.9551	Ending Balance	43,770	\$29,210	\$0.6674	\$0.6106							
February 2020 (Forecasted)																	
37	February 2020 (Forecasted)					February 2020 (Forecasted)											
38	Beginning Balance	65,996	\$68,889	\$1.0438	\$0.9551	Beginning Balance	43,770	\$29,210	\$0.6674	\$0.6106							
39	Purchases Received	254,187	\$266,762	\$1.0495	\$0.9603	Purchases Received	0	\$0	\$0.0000	\$0.0000							
40	Total Available	320,183	\$335,651	\$1.0483	\$0.9592	Total Available	43,770	\$29,210	\$0.6674	\$0.6106							
41	Less Sendout	254,187	\$266,467	\$1.0483	\$0.9592	Less Sendout	32,000	\$21,355	\$0.6673	\$0.6106	32,000	\$21,355					
42	Ending Balance	65,996	\$69,184	\$1.0483	\$0.9592	Ending Balance	11,770	\$7,855	\$0.6674	\$0.6107							
March 2020 (Forecasted)																	
43	March 2020 (Forecasted)					March 2020 (Forecasted)											
44	Beginning Balance	65,996	\$69,184	\$1.0483	\$0.9592	Beginning Balance	11,770	\$7,855	\$0.6674	\$0.6107							
45	Purchases Received	183,923	\$193,306	\$1.0510	\$0.9617	Purchases Received	0	\$0	\$0.0000	\$0.0000							
46	Total Available	249,919	\$262,490	\$1.0503	\$0.9610	Total Available	11,770	\$7,855	\$0.6674	\$0.6107							
47	Less Sendout	183,923	\$193,174	\$1.0503	\$0.9610	Less Sendout	9,000	\$6,007	\$0.6674	\$0.6107	9,000	\$6,007					
48	Ending Balance	65,996	\$69,316	\$1.0503	\$0.9611	Ending Balance	2,770	\$1,848	\$0.6672	\$0.6105							
April 2020 (Forecasted)																	
49	April 2020 (Forecasted)					April 2020 (Forecasted)											
50	Beginning Balance	65,996	\$69,316	\$1.0503	\$0.9611	Beginning Balance	2,770	\$1,848	\$0.6672	\$0.6105							
51	Purchases Received	116,344	\$123,019	\$1.0574	\$0.9675	Purchases Received	0	\$0	\$0.0000	\$0.0000							
52	Total Available	182,340	\$192,335	\$1.0548	\$0.9652	Total Available	2,770	\$1,848	\$0.6672	\$0.6105							
53	Less Sendout	116,344	\$122,721	\$1.0548	\$0.9652	Less Sendout	2,200	\$1,468	\$0.6673	\$0.6106	2,200	\$1,468					
54	Ending Balance	65,996	\$69,614	\$1.0548	\$0.9652	Ending Balance	570	\$380	\$0.6670	\$0.6103							
55	AVERAGE WINTER RATE - SENDOUT					\$1.0347	1,209,044	\$1,250,954	AVERAGE WINTER RATE - SENDOUT					\$0.6674	118,200	\$78,882	
56											FPO Premium (Sch. B, Line 7)		(\$4,277)				
57											Total Cost - Sendout (Sch. B, Line 8)		\$1,246,677				

LIBERTY UTILITIES - KEENE DIVISION
PRIOR PERIOD (OVER)/UNDER COLLECTION
WINTER PERIOD 2019-2020

	<u>PRIOR</u>	<u>Nov-18</u>	<u>Dec-18</u>	<u>Jan-19</u>	<u>Jan-19</u>	<u>Mar-19</u>	<u>Apr-19</u>	<u>TOTAL</u>
<u>COSTS</u>								
1 FIRM SENDOUT (therms)		169,142	210,561	255,145	236,474	192,264	110,440	1,174,026
2 COMPANY USE (therms)		4,975	6,115	7,357	6,035	6,854	2,028	33,364
3 TOTAL SENDOUT (therms)		174,117	216,676	262,502	242,509	199,118	112,468	1,207,390
4 COST PER THERM (WACOG)	\$	1.1987	\$ 1.2170	\$ 1.2430	\$ 1.2469	\$ 1.2434	\$ 1.1330	\$ 1.2225
PRODUCTION COSTS	\$	18,601	\$ 16,858	\$ (10,908)	\$ 10,992	\$ 19,584	\$ 23,752	\$ 78,879
6 PROPANE COST ADJUSTMENT	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7 CNG DEMAND CHARGES	\$	47,917	\$ 16,667	\$ 16,667	\$ 16,667	\$ 16,667	\$ -	\$ 114,584
8 REMOVAL OF CNG DEMAND CHARGES	\$	(47,917)	\$ (16,667)	\$ (16,667)	\$ (16,667)	\$ (16,667)	\$ -	\$ (114,584)
9 ACCOUNTING ADJUSTMENT	\$	(138)	\$ 138	\$ -	\$ -	\$ -	\$ 13,974	\$ 13,974
10 TOTAL PROPANE COSTS	\$	227,176	\$ 280,687	\$ 315,369	\$ 313,375	\$ 267,168	\$ 165,155	\$ 1,568,930
<u>REVENUES</u>								
11 FPO SALES (therms)		2,130	32,117	35,866	42,563	38,550	30,259	181,485
12 NON-FPO SALES (therms)		113,318	151,969	171,571	206,193	188,971	147,101	979,123
13 TOTAL SALES		115,448	184,086	207,437	248,756	227,521	177,360	1,160,608
14 FPO RATE PER THERM	\$	1.3743	\$ 1.3743	\$ 1.3743	\$ 1.3743	\$ 1.3743	\$ 1.3743	\$ 1.3743
15 NON-FPO RATE PER THERM	\$	1.3802	\$ 1.4734	\$ 1.5311	\$ 1.5011	\$ 1.4298	\$ 1.2651	\$ 1.4301
16 FPO REVENUES	\$	2,927	\$ 44,138	\$ 49,291	\$ 58,494	\$ 52,979	\$ 41,585	\$ 249,415
17 NON-FPO REVENUES	\$	142,378	\$ 211,826	\$ 254,236	\$ 315,070	\$ 278,693	\$ 192,520	\$ 1,394,722
18 TOTAL BILLED REVENUES	\$	145,305	\$ 255,964	\$ 303,526	\$ 373,564	\$ 331,672	\$ 234,105	\$ 1,644,137
UNBILLED REVENUES (NET)	\$	197,614	\$ 65,006	\$ 58,366	\$ (29,286)	\$ (83,344)	\$ (91,132)	\$ 117,224
TOTAL REVENUES	\$	342,919	\$ 320,970	\$ 361,892	\$ 344,279	\$ 248,328	\$ 142,973	\$ 1,761,361
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19 (OVER)/UNDER COLLECTION	\$	(115,743)	\$ (40,283)	\$ (46,523)	\$ (30,904)	\$ 18,840	\$ 22,182	\$ (192,432)
20 INTEREST AMOUNT	\$	577	\$ 395	\$ 278	\$ 170	\$ 240	\$ 363	\$ 2,023
21 TOTAL (OVER)/UNDER COLLECTION	\$	25,999	\$ (115,166)	\$ (39,888)	\$ (46,246)	\$ 19,080	\$ 22,545	\$ (164,410)

LIBERTY UTILITIES - KEENE DIVISION

INTEREST CALCULATION
WINTER PERIOD 2019 - 2020

LINE NO.	MONTH	(1) BEG. OF MONTH BALANCE	(2) (OVER) UNDER COLLECT	(3) ADJUSTMENTS	(4) REFUNDS	(5) END OF MONTH BALANCE (COL.1+2+3)	(6) AVERAGE BALANCE COL. (COL. [1+4]/2)	(7) ANNUAL INTEREST RATE	(8) INTEREST AMOUNT	(9) MONTH END BAL. WITH INTEREST (COL. 4+7)
1	MAY 2019	(\$164,410)	\$0	\$113,835	\$0	(\$50,575)	(\$107,493)	5.50%	(\$493)	(\$51,068)
2	JUN	(51,068)	0	(90,428)	0	(\$141,496)	(96,282)	5.50%	(441)	(141,937)
3	JUL	(141,937)	0	(330)	0	(\$142,267)	(142,102)	5.25%	(622)	(142,889)
4	AUG	(142,889)	0	(32,763)	0	(\$175,652)	(159,270)	5.25%	(697)	(176,349)
5	SEP	(176,349)	0	0	0	(\$176,349)	(176,349)	5.25%	(772)	(177,121)
6	OCT	(177,121)	0	0	0	(\$177,121)	(177,121)	5.25%	(775)	(177,896)
7	NOV	(177,896)	52,061	0	0	(\$125,835)	(151,865)	5.25%	(664)	(126,499)
8	DEC	(126,499)	76,624	0	0	(\$49,875)	(88,187)	5.25%	(386)	(50,261)
9	JAN 2020	(50,261)	81,859	0	0	\$31,598	(9,331)	5.25%	(41)	31,557
10	FEB	31,557	29,318	0	0	\$60,875	46,216	5.25%	202	61,077
11	MAR	61,077	(27,284)	0	0	\$33,793	47,435	5.25%	208	34,001
12	APR	34,001	(34,073)	0	0	(\$72)	16,965	5.25%	74	2
13										
14									<u>(\$4,407)</u>	

15 PRIOR PERIOD BEG. BALANCE w/INTEREST @ NOVEMBER 1, 2019 =
 16 PRIOR PERIOD BEG. BAL. @ MAY 1, 2019 + INTEREST AMOUNT FOR MAY 2019 - OCTOBER 2019

17 = COL. 1, LINE 1 + COL. 3 LINES 1 TO 6 + COL. 8, LINES 1 TO 6
 18 = (164,410) + (\$9,686) + (3,800) = (177,896) @ NOVEMBER 1, 2019
 (TRANSFER TO SCHEDULE B, LINE 14)

Liberty Utilities - Keene Division Weather Normalization - Firm Sendout (Therms)													
Period	Actual Firm Sendout	Base Use	Heat Use	Actual Calendar Month Degree Days	Normal Calendar Month Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normalized Firm Sendout	Actual Company Use	Unaccounted For 0.90%	Total Firm Sendout
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)		(10 - 11) * 0.90%	(10) - (11) + (12)
Nov-18	174,117	40,821	133,296	947	801	146	140.76	(20,550)	112,746	153,567	4,975	1,338	149,930
Dec-18	216,676	40,821	175,855	1,124	1,186	(62)	156.45	9,700	185,555	226,376	6,115	1,984	222,245
Jan-19	262,502	40,821	221,681	1,337	1,376	(39)	165.80	6,466	228,148	268,968	7,357	2,356	263,968
Feb-19	242,509	40,821	201,688	1,087	1,138	(51)	185.55	9,463	211,151	251,972	6,035	2,215	248,152
Mar-19	199,118	40,821	158,298	1,104	987	117	143.39	(16,776)	141,522	182,342	6,854	1,581	177,069
Apr-19	112,468	40,821	71,647	577	600	(23)	124.17	2,856	74,503	115,324	2,028	1,020	114,316
Total	1,207,390	244,925	962,466	6,176	6,088	88		(8,841)	953,624	1,198,549	33,364	10,494	1,175,680

Liberty Utilities - Keene Division Weather Normalization - Sales (Therms) - Rate Residential											
Period	Billing Cycle Customers	Billing Cycle Sales	Base Load	Heating Load	Billing Cycle Monthly Actual Degree Days	Billing Cycle Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
Nov-18	881	24,789	6,971	17,819	611	532	79	29.16	(2,304)	15,515	22,485
Dec-18	888	46,124	6,971	39,154	973	841	132	40.24	(5,312)	33,842	40,812
Jan-19	890	51,959	6,971	44,989	1,168	1,193	(25)	38.52	963	45,951	52,922
Feb-19	893	62,447	6,971	55,477	1,287	1,289	(2)	43.11	86	55,563	62,533
Mar-19	896	55,595	6,971	48,625	1,090	1,109	(19)	44.61	848	49,472	56,443
Apr-19	897	43,500	6,971	36,530	1,018	926	92	35.88	(3,301)	33,228	40,199
Total		284,414	41,823	242,591	6,147	5,890	257	35.10	(9,020)	233,571	275,394

Liberty Utilities - Keene Division Weather Normalization - Sales (Therms) - Rate Commercial											
Period	Billing Cycle Customers	Billing Cycle Sales	Base Load	Heating Load	Billing Cycle Monthly Actual Degree Days	Billing Cycle Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (3)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
Nov-18	316	90,660	31,651	59,009	598	523	75	98.68	(7,401)	51,608	83,259
Dec-18	317	137,963	31,651	106,312	967	829	138	109.94	(15,172)	91,140	122,791
Jan-19	314	155,478	31,651	123,827	1,158	1,185	(27)	106.93	2,887	126,714	158,365
Feb-19	315	186,309	31,651	154,658	1,299	1,299	0	119.06	0	154,658	186,309
Mar-19	318	171,926	31,651	140,275	1,090	1,113	(23)	128.69	2,960	143,235	174,886
Apr-19	318	133,860	31,651	102,209	1,040	943	97	98.28	(9,533)	92,676	124,327
Total		876,196	189,906	686,290	6,152	5,892	260	100.99	(26,258)	660,032	849,937

Summary - Total Winter Season Billed Sales

	Actual 2018-2019	Normalized
November	115,449	105,744
December	184,087	163,603
January	207,437	211,287
February	248,756	248,842
March	227,521	231,329
April	177,360	164,526
Total	1,160,610	1,125,331

LIBERTY UTILITIES - KEENE DIVISION
Typical Residential Heating Bill - Fixed Price Option Program
Forecasted 2019-2020 Winter Period vs. Actual 2018-2019 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
12 MONTHS ENDED 04/2019	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Winter Nov-Apr	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
Customer Charge	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$90.12	\$14.88	\$14.88	\$15.02	\$15.02	\$15.02	\$15.02	\$89.84	\$179.96
Delivery Charge:															
All therms @	\$0.5631	\$0.5580													
Base Delivery Revenue Total	\$36.98	\$53.87	\$60.63	\$73.02	\$65.14	\$52.18	\$341.82	\$34.41	\$24.92	\$20.09	\$18.96	\$19.52	\$21.78	\$139.68	\$481.50
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$0.9995	\$1.0765	\$0.9752	\$0.7462	\$0.7800	\$1.2494	\$1.0066	
Cost of Gas Total	\$53.60	\$94.83	\$111.32	\$141.55	\$122.31	\$90.70	\$614.31	\$34.98	\$19.38	\$8.78	\$5.22	\$6.24	\$14.99	\$89.59	\$703.90
Total Bill	\$91	\$149	\$172	\$215	\$187	\$143	\$956	\$69	\$44	\$29	\$24	\$26	\$37	\$229	\$1,185
12 MONTHS ENDED 04/2020	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
Customer Charge	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$91.20	\$15.02	\$15.02	\$15.20	\$15.20	\$15.20	\$15.20	\$90.84	\$182.04
Delivery Charge:															
All therms @	\$0.5569	\$0.5631													
Base Delivery Revenue Total	\$36.92	\$53.63	\$60.31	\$72.56	\$64.76	\$51.96	\$340.14	\$34.73	\$25.16	\$20.21	\$19.10	\$19.66	\$21.88	\$140.74	\$480.88
Seasonal Base Delivery Difference from previous year														\$1.06	-\$0.62
Seasonal Percent Change from previous year														0.8%	-0.1%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.8928	
Cost of Gas Total	\$37.80	\$66.87	\$78.51	\$99.83	\$86.26	\$63.97	\$433.24	\$38.75	\$18.11	\$7.97	\$4.95	\$3.87	\$5.81	\$79.46	\$512.70
LDAC Rates	\$0.0635	\$0.0635	\$0.0635	\$0.0635	\$0.0635	\$0.0635	\$0.3112	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0661	
LDAC Total	\$2.48	\$4.38	\$5.14	\$6.54	\$5.65	\$4.19	\$28.38	\$2.31	\$1.19	\$0.59	\$0.46	\$0.53	\$0.79	\$5.87	\$34.25
Seasonal COG Difference from previous year														-\$10.13	-\$191.20
Seasonal Percent Change from previous year														-11.3%	-27.2%
Total Bill	\$77	\$125	\$144	\$179	\$157	\$120	\$802	\$76	\$44	\$29	\$25	\$24	\$28	\$226	\$1,028
Seasonal Total Bill Difference from previous year														-\$3.20	-\$157.57
Seasonal Percent Change from previous year														-1.4%	-13.3%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)														0.5%	-0.1%
Seasonal Percent Change resulting from COG														-4.4%	-16.1%
Seasonal Percent Change resulting from LDAC														2.6%	2.9%

(1) Residential Heating Typical Usage: Residence using gas for heat, hot water and cooking.

LIBERTY UTILITIES - KEENE DIVISION
Typical Residential Heating Bill - Non-Fixed Price Option Program
Forecasted 2019-2020 Winter Period vs. Actual 2018-2019 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
12 MONTHS ENDED 04/2019	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Winter Nov-Apr	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
Customer Charge 07/01/18 05/01/18	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$90.12	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28	\$179.40
Delivery Charge: Winter Summer															
All therms @ \$0.5631 \$0.5580	\$21.96	\$38.85	\$45.61	\$58.00	\$50.12	\$37.16	\$251.70	\$19.53	\$10.04	\$5.07	\$3.94	\$4.50	\$6.76	\$49.84	\$301.54
Base Delivery Revenue Total	\$36.98	\$53.87	\$60.63	\$73.02	\$65.14	\$52.18	\$341.82	\$34.41	\$24.92	\$19.95	\$18.82	\$19.38	\$21.64	\$139.12	\$480.94
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$1.3802	\$1.4734	\$1.5311	\$1.5011	\$1.4298	\$1.2651	\$1.4427	\$0.9995	\$1.0765	\$0.9752	\$0.7462	\$0.7800	\$1.2494	\$1.0066	
Cost of Gas Total	\$53.83	\$101.66	\$124.02	\$154.61	\$127.25	\$83.50	\$644.87	\$34.98	\$19.38	\$8.78	\$5.22	\$6.24	\$14.99	\$89.59	\$734.46
Total Bill	\$91	\$156	\$185	\$228	\$192	\$136	\$987	\$69	\$44	\$29	\$24	\$26	\$37	\$229	\$1,215
12 MONTHS ENDED 04/2020	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
Customer Charge 07/01/19 05/01/19	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$91.20	\$15.02	\$15.02	\$15.20	\$15.20	\$15.20	\$15.20	\$90.84	\$182.04
Delivery Charge: Winter Summer															
All therms @ \$0.5569 \$0.5631	\$21.72	\$38.43	\$45.11	\$57.36	\$49.56	\$36.76	\$248.94	\$19.71	\$10.14	\$5.01	\$3.90	\$4.46	\$6.68	\$49.90	\$298.84
Base Delivery Revenue Total	\$36.92	\$53.63	\$60.31	\$72.56	\$64.76	\$51.96	\$340.14	\$34.73	\$25.16	\$20.21	\$19.10	\$19.66	\$21.88	\$140.74	\$480.88
Seasonal Base Delivery Difference from previous year							-\$1.68							\$1.62	-\$0.06
Seasonal Percent Change from previous year							-0.5%							1.2%	0.0%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.8928	
Cost of Gas Total	\$37.02	\$65.49	\$76.89	\$97.77	\$84.48	\$62.65	\$424.30	\$38.75	\$18.11	\$7.97	\$4.95	\$3.87	\$5.81	\$79.46	\$503.76
LDAC Rates	\$0.0635	\$0.0635	\$0.0635	\$0.0635	\$0.0635	\$0.0635	\$0.3112	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0661	
LDAC Total	\$2.48	\$4.38	\$5.14	\$6.54	\$5.65	\$4.19	\$28.38	\$2.31	\$1.19	\$0.59	\$0.46	\$0.53	\$0.79	\$5.87	\$34.25
Seasonal COG Difference from previous year							-\$220.57							-\$10.13	-\$230.70
Seasonal Percent Change from previous year							-34.2%							-11.3%	-31.4%
Total Bill	\$76	\$124	\$142	\$177	\$155	\$119	\$793	\$76	\$44	\$29	\$25	\$24	\$28	\$226	\$1,019
Seasonal Total Bill Difference from previous year							-\$193.87							-\$2.64	-\$196.51
Seasonal Percent Change from previous year							-19.6%							-1.2%	-16.2%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-0.2%							0.7%	0.0%
Seasonal Percent Change resulting from COG							-22.4%							-4.4%	-19.0%
Seasonal Percent Change resulting from LDAC							2.9%							2.6%	2.8%

(1) Residential Heating Typical Usage: Residence using gas for heat, hot water and cooking.

LIBERTY UTILITIES - KEENE DIVISION
 Typical Commercial Bill - Fixed Price Option Program
 Forecasted 2019-2020 Winter Period vs. Actual 2018-2019 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
12 MONTHS ENDED 04/2019	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Winter Nov-Apr	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer May-Oct	Total Nov-Oct
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
Customer Charge 07/01/18 05/01/18	\$55.68	\$55.68	\$55.68	\$55.68	\$55.68	\$55.68	\$334.08	\$56.07	\$56.07	\$56.58	\$56.58	\$56.58	\$56.58	\$338.46	\$672.54
Delivery Charge: Winter Summer															
First 100 therms @ \$0.4566 \$0.4639	\$45.66	\$45.66	\$45.66	\$45.66	\$45.66	\$45.66	\$273.96	\$9.28	\$9.28	\$9.13	\$7.31	\$8.22	\$9.13	\$52.35	\$326.31
Over 100 therms @ \$0.3067 \$0.3116	\$10.12	\$45.70	\$63.49	\$92.93	\$81.89	\$49.69	\$343.82	\$33.65	\$11.22	\$0.61	\$0.00	\$0.00	\$1.84	\$47.32	\$391.14
Base Delivery Revenue Total	\$111.46	\$147.04	\$164.83	\$194.27	\$183.23	\$151.03	\$951.86	\$99.00	\$76.57	\$66.32	\$63.89	\$64.80	\$67.55	\$438.13	\$1,389.99
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$1.3743	\$0.9995	\$1.0765	\$0.9752	\$0.7462	\$0.7800	\$1.2494	\$1.0080	
Cost of Gas Total	\$182.78	\$342.20	\$421.91	\$553.84	\$504.37	\$360.07	\$2,365.17	\$127.94	\$60.28	\$21.45	\$11.94	\$14.04	\$32.48	\$268.13	\$2,633.30
Total Bill	\$294	\$489	\$587	\$748	\$688	\$511	\$3,317	\$227	\$137	\$88	\$76	\$79	\$100	\$706	\$4,023
12 MONTHS ENDED 04/2020	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
Customer Charge 07/01/19 05/01/19	\$56.36	\$56.36	\$56.36	\$56.36	\$56.36	\$56.36	\$338.16	\$55.68	\$55.68	\$56.36	\$56.36	\$56.36	\$56.36	\$336.80	\$674.96
Delivery Charge: Winter Summer															
First 100 therms @ \$0.4621 \$0.4566	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$277.26	\$9.13	\$9.13	\$9.24	\$7.39	\$8.32	\$9.24	\$52.45	\$329.71
Over 100 therms @ \$0.3104 \$0.3067	\$10.24	\$46.25	\$64.25	\$94.05	\$82.88	\$50.28	\$347.96	\$33.12	\$11.04	\$0.62	\$0.00	\$0.00	\$1.86	\$46.64	\$394.60
Base Delivery Revenue Total	\$112.81	\$148.82	\$166.82	\$196.62	\$185.45	\$152.85	\$963.38	\$97.93	\$75.85	\$66.22	\$63.75	\$64.68	\$67.46	\$435.89	\$1,399.27
Seasonal Base Delivery Difference from previous year							\$11.52							-\$2.24	\$9.28
Seasonal Percent Change from previous year							1.2%							-0.5%	0.7%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.9405	
Cost of Gas Total	\$128.90	\$241.33	\$297.54	\$390.59	\$355.70	\$253.93	\$1,667.99	\$141.71	\$56.35	\$19.48	\$11.31	\$8.72	\$12.59	\$250.16	\$1,918.15
LDAC Rates	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	
LDAC Total	\$6.57	\$12.30	\$15.17	\$19.91	\$18.13	\$12.94	\$85.02	\$9.69	\$4.24	\$1.67	\$1.21	\$1.36	\$1.97	\$20.14	\$105.16
Seasonal COG Difference from previous year							-\$697.18							-\$17.97	-\$715.15
Seasonal Percent Change from previous year							-29.5%							-6.7%	-27.2%
Total Bill	\$248	\$402	\$480	\$607	\$559	\$420	\$2,716	\$249	\$136	\$87	\$76	\$75	\$82	\$706	\$3,423
Seasonal Total Bill Difference from previous year							-\$600.64							-\$0.07	-\$600.71
Seasonal Percent Change from previous year							-18.1%							0.0%	-14.9%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							0.3%							-0.3%	0.2%
Seasonal Percent Change resulting from COG							-21.0%							-2.5%	-17.8%
Seasonal Percent Change resulting from LDAC							2.6%							2.9%	2.6%

LIBERTY UTILITIES - KEENE DIVISION
Typical Commercial Bill - Non-Fixed Price Option Program
Forecasted 2019-2020 Winter Period vs. Actual 2018-2019 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
12 MONTHS ENDED 04/2019	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Winter Nov-Apr	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer May-Oct	Total Nov-Oct
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
Customer Charge	\$55.68	\$55.68	\$55.68	\$55.68	\$55.68	\$55.68	\$334.08	\$56.07	\$56.07	\$56.58	\$56.58	\$56.58	\$56.58	\$338.46	\$672.54
Delivery Charge:															
Winter															
Summer															
First 100 therms @ \$0.4566	\$45.66	\$45.66	\$45.66	\$45.66	\$45.66	\$45.66	\$273.96	\$9.28	\$9.28	\$9.13	\$7.31	\$8.22	\$9.13	\$52.35	\$326.31
Over 100 therms @ \$0.3067	\$10.12	\$45.70	\$63.49	\$92.93	\$81.89	\$49.69	\$343.82	\$33.65	\$11.22	\$0.61	\$0.00	\$0.00	\$1.84	\$47.32	\$391.14
Base Delivery Revenue Total	\$111.46	\$147.04	\$164.83	\$194.27	\$183.23	\$151.03	\$951.86	\$99.00	\$76.57	\$66.32	\$63.89	\$64.80	\$67.55	\$438.13	\$1,389.99
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$1.3802	\$1.4734	\$1.5311	\$1.5011	\$1.4298	\$1.2651	\$1.4420	\$0.9995	\$1.0765	\$0.9752	\$0.7462	\$0.7800	\$1.2494	\$1.0080	
Cost of Gas Total	\$183.57	\$366.88	\$470.05	\$604.94	\$524.74	\$331.46	\$2,481.64	\$127.94	\$60.28	\$21.45	\$11.94	\$14.04	\$32.48	\$268.13	\$2,749.77
Total Bill	\$295	\$514	\$635	\$799	\$708	\$482	\$3,434	\$227	\$137	\$88	\$76	\$79	\$100	\$706	\$4,140
12 MONTHS ENDED 04/2020	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
Customer Charge	\$56.58	\$56.58	\$56.58	\$56.58	\$56.58	\$56.58	\$339.48	\$55.68	\$55.68	\$56.36	\$56.36	\$56.36	\$56.36	\$336.80	\$676.28
Delivery Charge:															
Winter															
Summer															
First 100 therms @ \$0.4621	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$277.26	\$9.13	\$9.13	\$9.24	\$7.39	\$8.32	\$9.24	\$52.45	\$329.71
Over 100 therms @ \$0.3104	\$10.24	\$31.04	\$31.04	\$31.04	\$31.04	\$31.04	\$165.44	\$33.12	\$11.04	\$0.62	\$0.00	\$0.00	\$1.86	\$46.64	\$212.08
Base Delivery Revenue Total	\$113.03	\$133.83	\$133.83	\$133.83	\$133.83	\$133.83	\$782.18	\$97.93	\$75.85	\$66.22	\$63.75	\$64.68	\$67.46	\$435.89	\$1,218.07
Seasonal Base Delivery Difference from previous year							-\$169.68							-\$2.24	-\$171.92
Seasonal Percent Change from previous year							-17.8%							-0.5%	-12.4%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
Deferred Revenue Surcharge Total	\$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
COG Rates	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$0.9492	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.9405	
Cost of Gas Total	\$126.24	\$236.35	\$291.40	\$382.53	\$348.36	\$248.69	\$1,633.57	\$141.71	\$56.35	\$19.48	\$11.31	\$8.72	\$12.59	\$250.16	\$1,883.73
LDAC Rates	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0494	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0529
LDAC Total	\$6.57	\$12.30	\$15.17	\$19.91	\$18.13	\$12.94	\$85.02	\$9.69	\$4.24	\$1.67	\$1.21	\$1.36	\$1.97	\$20.14	\$105.16
Seasonal COG Difference from previous year							-\$848.07							-\$17.97	-\$866.04
Seasonal Percent Change from previous year							-34.2%							-6.7%	-31.5%
Total Bill	\$246	\$382	\$440	\$536	\$500	\$395	\$2,501	\$249	\$136	\$87	\$76	\$75	\$82	\$706	\$3,207
Seasonal Total Bill Difference from previous year							-\$932.73							-\$0.07	-\$932.80
Seasonal Percent Change from previous year							-27.2%							0.0%	-22.5%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-4.9%							-0.3%	-4.2%
Seasonal Percent Change resulting from COG							-24.7%							-2.5%	-20.9%
Seasonal Percent Change resulting from LDAC							2.5%							2.9%	2.5%

LIBERTY UTILITIES - KEENE DIVISION									
Historical COG Comparison - FPO vs. Non-FPO Bill									
Winter Period	FPO Rate	Amount of Premium	Percent Participation (therms)	Actual FPO Volumes	Premium Revenue	Typical Residential FPO bill	Average Non-FPO Rate	Typical Residential Non-FPO bill	Cost/(Savings) to FPO Customers
2018-2019	\$1.3743	(\$0.01)	15.64%	181,485	-\$1,071	\$614	\$1.4301	\$639	(\$25)
2017-2018	\$1.2408	\$0.02	20.14%	221,383	\$4,428	\$527	\$1.4053	\$597	(\$70)
2016-2017	\$1.5352	\$0.02	19.32%	201,959	\$4,039	\$863	\$1.5247	\$900	(\$37)
2015-2016	\$0.8988	\$0.02	24.54%	224,981	\$4,500	\$480	\$0.6620	\$354	\$126
2014-2015	\$1.7269	\$0.02	32.16%	384,297	\$7,686	\$929	\$1.4213	\$765	\$164
2013-2014	\$1.6985	\$0.02	17.94%	206,379	\$4,128	\$914	\$2.0092	\$1,081	(\$167)
2012-2013	\$1.5217	\$0.02	20.81%	207,298	\$4,146	\$819	\$1.5002	\$807	\$12
2011-2012	\$2.2357	\$0.02	18.21%	152,560	\$3,051	\$1,203	\$2.1253	\$1,143	\$59
2010-2011	----- FPO not offered due to Selkirk terminal embargo -----								
2009-2010	\$1.3402	\$0.02	17.12%	163,486	\$3,270	\$721	\$1.4900	\$802	(\$81)
2008-2009	\$2.2408	\$0.02	21.08%	205,970	\$4,119	\$1,206	\$1.7347	\$933	\$272
2007-2008	\$1.5212	\$0.02	28.01%	266,419	\$5,328	\$818	\$1.7646	\$949	(\$131)
2006-2007	\$1.4741	\$0.02	21.86%	206,686	\$4,134	\$793	\$1.5397	\$828	(\$35)
2005-2006	\$1.5260	\$0.02	42.91%	348,849	\$6,977	\$821	\$1.3742	\$739	\$82
2004-2005	\$1.2323	n/a	39.44%	340,315	n/a	\$663	\$1.2647	\$680	(\$17)
2003-2004	\$0.8877	n/a	38.78%	316,300	n/a	\$478	\$1.0325	\$555	(\$78)
Average						\$790		\$785	\$5