## CONVERSION OF GAS COSTS - GALLONS TO THERMS SUMMER PERIOD 2018

	(1)	(2)	(3)	(4)	(5)	(6)
			VOLU	JMES	UNIT	COST
	<u>UNIT</u>	CONVERSION FACTOR	<u>GALLONS</u>	THERMS	PER <u>GALLON</u>	PER <u>THERM</u>
PROPANE FROM INVENTORY	GALLONS	0.91502	388,102	355,121	\$1.0697	\$1.1691

#### CALCULATION OF COST OF GAS RATE SUPPLY / DEMAND BALANCE SUMMER PERIOD 2018

		PRIOR	MAY-18	JUN-18	JUL-18	AUG-18	SEP-19	OCT-18	TOTAL
	SENDOUT (THERMS)								
1	FIRM SENDOUT *		66,615	48,138	44,108	45,930	47,824	88,604	341,219
2	COMPANY USE		2,703	2,202	2,002	2,126	2,170	2,699	13,902
3	TOTAL SENDOUT		69,318	50,340	46,110	48,056	49,994	91,303	355,121
4	* UNACCTED FOR VOLS INCLUDED		2,141	1,547	1,417	1,476	1,537	2,847	10,964
	COSTS								
5	PROPANE SENDOUT FROM ABOVE		69,318	50,340	46,110	48,056	49,994	91,303	355,121
6	COST/THERM FROM SCHEDULE D		\$1.2238	\$1.2399	\$1.1753	\$1.1532	\$1.1424	\$1.1084	\$1.1691
7	TOTAL PROPANE COSTS		\$84,828	\$62,416	\$54,193	\$55,420	\$57,114	\$101,198	\$415,169
	REVENUES								
8	FIRM SALES (THERMS)		86,888	61,769	44,129	38,460	44,670	48,574	324,490
9	RATE/THERM PER TARIFF		\$0.9995	\$0.9995	\$0.9995	\$0.9995	\$0 9995	\$0 9995	\$0.9995
10	TOTAL REVENUES		\$86,846	\$61,739	\$44,108	\$38,441	\$44,648	\$48,551	\$324,333
11	(OVER)/UNDER COLLECTION		(\$2,018)	\$677	\$10,085	\$16,979	\$12,466	\$52,647	\$90,836
12	INTEREST FROM SCHEDULE F		(\$283)	(\$286)	(\$270)	(\$228)	(\$183)	(\$82)	(\$1,332)
13	FINAL (OVER)/UNDER COLLECTION	(\$89,504)	(\$2,301)	\$391	\$9,815	\$16,751	\$12,283	\$52,565	(\$0)

### PROPANE SPOT MARKET PURCHASE COST ANALYSIS SUMMER PERIOD 2018

		(1)	(2) Broker	(3) Pipeline		(4) PERC		(5) Supplier		(6) Cost		(7) Trucking		(8)		(9)
		Mt. Belvieu	Fee	Rate		Fee		Charge		@ Selkirk		to Keene		\$ per Gal.	_	\$ per Therm
1	MAY	0.7388	+ 0.1150 +	0.0000	+	0.0045	+	0.1400	=	0.9983	+	0.0864	=	1.0847	=	1.1854
2	JUN	0.7306	+ 0.1150 +	0.0000	+	0.0045	+	0.1400	=	0.9901	+	0.0864	=	1.0765	=	1.1765
3	JUL	0.7294	+ 0.1150 +	0.0000	+	0.0045	+	0.1400	=	0.9889	+	0.0864	=	1.0753	=	1.1751
4	AUG	0.7319	+ 0.1150 +	0.0000	+	0.0045	+	0.1400	=	0.9914	+	0.0864	=	1.0778	=	1.1779
5	SEP	0.7350	+ 0.1150 +	0.0000	+	0.0045	+	0.1400	=	0.9945	+	0.0864	=	1.0809	=	1.1813
6	OCT	0.7400	+ 0.1150 +	0.0000	+	0.0045	+	0.1400	=	0.9995	+	0.0864	=	1.0859	=	1.1868

NOTE: Summer spot purchases are based on market quotes from local suppliers. The above schedule provides a breakdown of the quote taken at the time (March 15th)

- 1. Propane futures market quotations (cmegroup.com) on 03/14/18 close. See Appendix 1.
- 2. A generally accepted standard broker fee
- 3. Summer prices are quoted on a delivered basis with pipeline charges embedded in delivered price
- 4. Propane Education Research Council (propanecouncel.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

### PROPANE INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION SUMMER PERIOD 2018

LINE NO.									
1	May 2018 (Forecasted)	Therms	Cost	<u>Rate</u> <u>Therm</u>		Gal.			
2 3 4 5	Beginning Balance Purchases Received Total Available Less Sendout	42,352 75,000 117,352 69,318	\$50,193 \$93,416 \$143,609 \$84,828		\$1.1851 \$1.2455 \$1.2237 \$1.2238 \$1.2237	\$1.0844 \$1.1397 \$1.1198 \$1.1198 \$1.1197		69,318	\$84,828
0	Ending Balance	48,034	\$58,781		\$1.2237	\$1.1197			
7	June 2018 (Forecasted)	Therms	Cost	<u>Rate</u> <u>Therm</u>		Gal.			
8 9 10 11 12	Beginning Balance Purchases Received Total Available Less Sendout Ending Balance	48,034 40,000 88,034 50,340 37,694	\$58,781 \$50,370 \$109,151 \$62,416 \$46,735		\$1.2237 \$1.2593 \$1.2399 \$1.2399 \$1.2399	\$1.1197 \$1.1522 \$1.1345 \$1.1345 \$1.1345		50,340	\$62,416
13	July 2018 (Forecasted)	Therms	Cost	Rate Therm		Gal.			
14 15 16 17 18	Beginning Balance Purchases Received Total Available Less Sendout Ending Balance	37,694 55,000 92,694 46,110 46,584	\$46,735 \$62,208 \$108,943 \$54,193 \$54,750		\$1.2399 \$1.1311 \$1.1753 \$1.1753 \$1.1753	\$1.1345 \$1.0349 \$1.0754 \$1.0754 \$1.0754		46,110	\$54,193
19	August 2018 (Forecasted)	Therms	Cost	Rate Therm		Gal.			
20 21 22 23 24	Beginning Balance Purchases Received Total Available Less Sendout Ending Balance	46,584 55,000 101,584 48,056 53,528	\$54,750 \$62,400 \$117,150 \$55,420 \$61,730		\$1.1753 \$1.1345 \$1.1532 \$1.1532 \$1.1532	\$1.0754 \$1.0381 \$1.0552 \$1.0552 \$1.0552		48,056	\$55,420
25	September 2018 (Forecasted)	Therms	Cost	<u>Rate</u> Therm		Gal.			
26 27 28 29 30	Beginning Balance Purchases Received Total Available Less Sendout Ending Balance	53,528 55,000 108,528 49,994 58,534	\$61,730 \$62,253 \$123,983 \$57,114 \$66,869	THEATH	\$1.1532 \$1.1319 \$1.1424 \$1.1424 \$1.1424	\$1.0552 \$1.0357 \$1.0453 \$1.0453 \$1.0453		49,994	\$57,114
31	October 2018 (Forecasted)	Therms	Cost	Rate Therm		Gal.			
32 33	Beginning Balance Purchases Received	58,534 95,000	\$66,869 \$103.304		\$1.1424 \$1.0874	\$1.0453 \$0.9950			
34 35 36	Total Available Less Sendout Ending Balance	153,534 91,303 62,231	\$170,173 \$101,198 \$68,975		\$1.1084 \$1.1084 \$1.1084	\$1.0142 \$1.0142 \$1.0142		91,303	\$101,198
37				AVERAGE SUMMER RATE -		•	\$1.1691	355,121	\$415,169

## PRIOR PERIOD (OVER)/UNDER COLLECTION SUMMER PERIOD 2017

	COSTS	PRIOR	<u>MAY-17</u>	<u>JUN-17</u>	<u>JUL-17</u>	<u>AUG-17</u>	<u>SEP-17</u>	<u>OCT-17</u>	[1] <u>TOTAL</u>
1	FIRM SENDOUT (therms)		66,038	46,368	42,691	44,455	44,794	64,102	308,448
2	COMPANY USE (therms)		2,703	2,202	2,002	2,126	2,170	2,699	13,902
3	TOTAL SENDOUT (therms)		68,741	48,570	44,693	46,581	46,964	66,801	322,350
4	COST PER THERM		\$0.9454	\$0.9163	\$0.9194	\$0.9764	\$0.9119	\$0.9981	\$0.9479
5	DIRECT PROPANE PURCHASED COSTS		\$64,989	\$44,507	\$41,089	\$45,479	\$42,827	\$66,672	\$305,563
6	PROPANE COST ADJUSTMENTS		\$0	\$107	(\$54)	(\$54)	\$0	\$32	\$32
7	UNBILLED PROPANE COSTS (NET)		(\$34,717)	\$12,148	(\$991)	\$23,560	\$0	(\$42,254)	(\$42,253)
8	TOTAL PROPANE COSTS		\$30,272	\$56,762	\$40,045	\$68,986	\$42,827	\$24,450	\$263,341
	REVENUES								
9	FIRM SALES (therms)		78,722	64,784	44,215	38,458	44,671	45,174	316,024
10	RATE PER THERM		\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6984
11	TOTAL REVENUES		\$49,266	\$40,691	\$30,358	\$29,865	\$35,071	\$35,466	\$220,717
12	(OVER)/UNDER COLLECTION		(\$18,995)	\$16,071	\$9,687	\$39,121	\$7,756	(\$11,016)	\$42,624
13	INTEREST AMOUNT		\$53	\$56	\$104	\$199	\$313	\$356	\$1,082
14	TOTAL (OVER)/UNDER COLLECTION -	(\$131,588)	(\$18,941)	\$16,127	\$9,791	\$39,320	\$8,069	(\$10,660)	(\$87,881)

<sup>[1]</sup> Slightly off due to rounding

### INTEREST CALCULATION SUMMER PERIOD 2018

LINE NO.	MONTH	(1) BEG. OF MONTH BALANCE	(2) (OVER) UNDER COLLECT	(3) REFUNDS	(4) END OF MONTH BALANCE (COL.1+2+3)	(5) AVERAGE BALANCE COL. (COL. [1+4]/2)	(6) ANNUAL INTEREST RATE	(7) INTEREST AMOUNT	(8) MONTH END BAL. WITH INTEREST (COL. 4+7)
1	NOV 2017	(\$87,881)	\$0	\$0	(\$87,881)	(\$87,881)	3.50%	(\$256)	(\$88,137)
2	DEC	(88,137)	0	0	(88,137)	(88,137)		(257)	(88,394)
3	JAN 2018	(88,394)	0	0	(88,394)	(88,394)		(276)	(88,670)
4	FEB	(88,670)	0	0	(88,670)	(88,670)	3.75%	(277)	(88,947)
5	MAR	(88,947)	0	0	(88,947)	(88,947)	3.75%	(278)	(89,225)
6	APR	(89,225)	0	0	(89,225)	(89,225)	3.75%	(279)	(89,504)
7	MAY	(89,504)	(2,018)	0	(91,522)	(90,513)	3.75%	(283)	(91,805)
8	JUN	(91,805)	677	0	(91,128)	(91,467)	3.75%	(286)	(91,414)
9	JUL	(91,414)	10,085	0	(81,329)	(86,372)	3.75%	(270)	(81,599)
10	AUG	(81,599)	16,979	0	(64,620)	(73,110)	3.75%	(228)	(64,848)
11	SEP	(64,848)	12,466	0	(52,382)	(58,615)	3.75%	(183)	(52,565)
12	OCT	(52,565)	52,647	0	82	(26,242)	3.75%	(82)	(0)
13							·		
14							<u>-</u>	(\$2,955)	
							-		
15	=	COL. 1, LINE 1		+	COL. 7, LINES	S 1 TO 6			
16	=	(87,881)		+	(1,623)	=	(89,504)	@ MAY 1, 20	18 TO SCHEDULE 1

(TRANSFER TO SCHEDULE B, LINE 13) (UNLESS ADJUSTMENTS UNDER COLUMN 2 LINES 1-6)

	LIBERTY UTILITIES - KEENE DIVISION Weather Normalization - Firm Sendout														
	Actual Firm			Actual Calendar Month	Normal Calendar Month	Colder (Warmer)	Actual Unit Heat Load	Weather	Normal	Normalized Firm	Actual Company	Unaccounted For	Total Firm		
Period	Sendout	Base Use	Heat Use	Degree Days	Degree Days	Than Normal	Therm/DD	Adjustment	Heat Load	Sendout	Use	3.32%	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) * 3.32%	(10) - (11) +(12)		
May-17	68,741	45,637	23,104	325	303	22	71.09	(1,564)	21,540	67,177	2,703	2,141	66,615		
Jun-17	48,570	45,637	2,934	79	85	(6)	37.14	223	3,157	48,793	2,202	1,547	48,138		
Jul-17	44,693	45,637	0	15	17	(2)	0.00	0	0	44,693	2,002	1,417	44,108		
Aug-17	46,581	45,637	0	38	31	7	0.00	0	0	46,581	2,126	1,476	45,930		
Sep-17	46,964	45,637	1,327	88	187	(99)	15.08	1,493	2,820	48,457	2,170	1,537	47,824		
Oct-17	66,801	45,637	21,164	259	524	(265)	81.72	21,655	42,819	88,456	2,699	2,847	88,604		
Total	322,350	273,821	48,529	804	1,147	(343)		21,807	70,336	344,156	13,902	10,964	341,219		

					RTY UTILITIES - lormalization - Sa						
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
May-17	759	15,460	6,540	8,920	445	537	(92)	20.04	1,844	10,764	17,304
Jun-17	733	12,950	6,540	6,410	288	251	37	22.26	(824)	5,586	12,126
Jul-17	735	6,960	6,540	420	69	67	2	6.09	(12)	408	6,948
Aug-17	727	6,120	6,540	0	19	15	4	0.00	0	0	6,120
Sep-17	733	7,140	6,540	0	47	50	(3)	0.00	0	0	7,140
Oct-17	730	7,350	6,540	810	114	215	(101)	7.11	718	1,528	8,068
Total		55,980	39,240	16,560	982	1,135	(153)	11.28	1,726	18,286	57,706

	LIBERTY UTILITIES - KEENE DIVISION Wea her Normaliza ion - Sales 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) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)				
May-17	450	63,270	34,795	28,475	451	551	(100)	63.14	6,314	34,789	69,584				
Jun-17	455	51,830	34,795	17,035	296	258	38	57.55	(2,187)	14,848	49,643				
Jul-17	449	37,250	34,795	2,455	71	69	2	34.58	(69)	2,386	37,181				
Aug-17	446	32,340	34,795	0	18	14	4	0.00	0	0	32,340				
Sep-17	444	37,530	34,795	0	45	44	1	0.00	0	0	37,530				
Oct-17	449	37,820	34,795	3,025	107	202	(95)	28.27	2,686	5,711	40,506				
Total		260,040	208,770	50,990	988	1,138	(150)	44.96	6,743	57,733	266,784				

#### Summary - Total Summer Season Billed Sales

	Actual 2017	Normalized
May	78,730	86,888
June	64,780	61,769
July	44,210	44,129
August	38,460	38,460
September	44,670	44,670
October	45,170	48,574
Total	316.020	324.490

# LIBERTY UTILITIES - KEENE DIVISION Typical Residential Heating Bill - Fixed Price Option Program Forecasted 2018 Summer Period vs. Actual 2017 Summer Period

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2	12 MONTHS ENDED 10/2017	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Winter Nov-Apr	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Summer May-Oct	Total Nov-Oct
3 4	Typical Usage - therms (1) Residential Heating	40	76	104	110	117	87	534	57	29	17	17	22	17	159	693
5 6	Customer Charge Delivery Charge: Winter Summer	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$108.00
7	First 80 therms @ \$1.1522 \$1.1522	\$46.09	\$87 57	\$92.18	\$92.18	\$92.18	\$92.18	\$502 38	\$65.68	\$33.41	\$19 59	\$19 59	\$25.35	\$19 59	\$183 21	\$685.59
8 9	Next 120 therms @ \$0.9442 \$0.9442 Over 200 therms @ \$0.7946 \$0.7946	\$0.00 \$0.00	\$0.00 \$0.00	\$22.66 \$0.00	\$28 33 \$0.00	\$34.94 \$0.00	\$6.61 \$0.00	\$92 54 \$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	\$92.54 \$0.00
9	-		,	• • • • •	• • • • • • • • • • • • • • • • • • • •		,	,		****				• • • • • • • • • • • • • • • • • • • •		,
10	Base Delivery Revenue Total	\$55.09	\$96.57	\$123.84	\$129.51	\$136.12	\$107.79	\$648.92	\$74.68	\$42.41	\$28.59	\$28.59	\$34.35	\$28.59	\$237.21	\$886.13
11	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		
12	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
13	COG Rates	\$1.5352	\$1 5352	\$1.5352	\$1 5352	\$1.5352	\$1.5352	\$1 5352	\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6887	
14	Cost of Gas Total	\$61.41	\$116.68	\$159.66	\$168.87	\$179.62	\$133.56	\$819.80	\$35.80	\$18.21	\$11.67	\$13.20	\$17.27	\$13.35	\$109.50	\$929.30
15	Total Bill	\$117	\$213	\$284	\$298	\$316	\$241	\$1,469	\$110	\$61	\$40	\$42	\$52	\$42	\$347	\$1.815
								, ,								, , , , ,
16								Winter							Summer	Total
17	12 MONTHS ENDED 10/2018	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Nov-Apr	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	May-Oct	Nov-Oct
18 19	Typical Usage - therms (1)  Residential Heating	40	76	104	110	117	87	534	57	29	17	17	22	17	159	693
20 21	Customer Charge Delivery Charge: Winter Summer	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$108.00
22	First 80 therms @ \$1.1522 \$1.1522	\$46.09	\$87 57	\$92.18	\$92.18	\$92.18	\$92.18	\$502 38	\$65.68	\$33.41	\$19 59	\$19 59	\$25.35	\$19 59	\$183 21	\$685.59
23 24	Next 120 therms @ \$0.9442 \$0.9442 Over 200 therms @ \$0.7946 \$0.7946	\$0.00 \$0.00	\$0.00 \$0.00	\$22.66 \$0.00	\$28 33 \$0.00	\$34.94 \$0.00	\$6.61 \$0.00	\$92 54 \$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	\$92.54 \$0.00
27	Over 200 therms @ \$0.7340 \$0.7340	ψ0.00	ψ0.00	Ψ0.00	Ψ0.00	Ψ0.00	ψ0.00	·					ψ0.00	Ψ0.00	•	
25 26	Base Delivery Revenue Total Seasonal Base Delivery Difference from previous year	\$55.09	\$96.57	\$123.84	\$129.51	\$136.12	\$107.79	<b>\$648.92</b> \$0.00	\$74.68	\$42.41	\$28.59	\$28.59	\$34.35	\$28.59	<b>\$237.21</b> \$0.00	\$886.13 \$0.00
26	Seasonal Percent Change from previous year							0.0%							0.0%	0.0%
			** ***		*****		•••••		*****		*****			** ***		
28 29	Deferred Revenue Surcharge Rate  Deferred Revenue Surcharge Total	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.00	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.0000 <b>\$0.00</b>	\$0.00	\$0.00
																,
30 31	COG Rates Cost of Gas Total	\$1.2408 \$49.63		\$1.2408 \$129.04	\$1 2408 \$136.49	\$1.2408 \$145.17	\$1.2408 \$107.95	\$1 2408 <b>\$662.58</b>	\$0 9995 \$56.97	\$0.9995 \$28.99	\$0.9995 \$16.99	\$0 9995 \$16.99	\$0.9995 \$21.99	\$0.9995 <b>\$16.99</b>	\$0 9995 <b>\$158.92</b>	\$821.50
32	Seasonal COG Difference from previous year	ψ-10.00	ψ54.00	<b>\$120.07</b>	ψ100.43	ψ10.11	ψ.σσσ	-\$157 22	ψ00.31	Ψ20.03	ψ10.03	ψ10.03	Ψ21.33	ψ10.33	\$49.42	-\$107.80
33	Seasonal Percent Change from previous year							-19 2%							45.1%	-11.6%
34	Total Bill	\$105	\$191	\$253	\$266	\$281	\$216	\$1,312	\$132	\$71	\$46	\$46	\$56	\$46	\$396	\$1,708
35	Seasonal Total Bill Difference from previous year				_			-\$157 22	_	_				_	\$49.42	-\$107.80
36 37	Seasonal Percent Change from previous year Seasonal Percent Change resulting from Base Rates (inc	l . Def. Reve	enue Surch \					-10.7% 0.0%							14 3% 0.0%	-5.9% 0.0%
38	Seasonal Percent Change resulting from COG	0						-10.7%							14 3%	-5.9%

<sup>(1)</sup> Residential Heating Typical Usage: Single family detached home using gas for heat, hot water and cooking.

# LIBERTY UTILITIES - KEENE DIVISION Typical Residential Heating Bill - Non-Fixed Price Option Program Forecasted 2018 Summer Period vs. Actual 2017 Summer Period

_		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2	12 MONTHS ENDED 10/2017	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Winter Nov-Apr	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Summer May-Oct	Total Nov-Oct
3 4	Typical Usage - therms (1) Residential Heating	40	76	104	110	117	87	534	57	29	17	17	22	17	159	693
5 6	Customer Charge Delivery Charge: Winter Summer	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$108.00
7	First 80 therms @ \$1.1522 \$1.1522	\$46.09	\$87 57	\$92.18	\$92.18	\$92.18	\$92.18	\$502 38	\$65.68	\$33.41	\$19 59	\$19 59	\$25.35	\$19 59	\$183 21	\$685.59
8 9	Next 120 therms @ \$0.9442 \$0.9442 Over 200 therms @ \$0.7946 \$0.7946	\$0.00 \$0.00	\$0.00 \$0.00	\$22.66 \$0.00	\$28 33 \$0.00	\$34.94 \$0.00	\$6.61 \$0.00	\$92 54 \$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	\$92.54 \$0.00
_	_			• • • • • • • • • • • • • • • • • • • •			,	,		****				• • • • • • • • • • • • • • • • • • • •		
10	Base Delivery Revenue Total	\$55.09	\$96.57	\$123.84	\$129.51	\$136.12	\$107.79	\$648.92	\$74.68	\$42.41	\$28.59	\$28.59	\$34.35	\$28.59	\$237.21	\$886.13
11	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		
12	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
13	COG Rates	\$1.5152	\$1.6165		\$1.7694	\$1.2750	\$1.1678	\$1 5223	\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6887	
14	Cost of Gas Total	\$60.61	\$122.85	\$184.02	\$194.63	\$149.18	\$101.60	\$812.89	\$35.80	\$18.21	\$11.67	\$13.20	\$17.27	\$13.35	\$109.50	\$922.39
15	Total Bill	\$116	\$219	\$308	\$324	\$285	\$209	\$1,462	\$110	\$61	\$40	\$42	\$52	\$42	\$347	\$1,809
16								Winter							Summer	Total
17	12 MONTHS ENDED 10/2018	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Nov-Apr	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	May-Oct	Nov-Oct
18 19	Typical Usage - therms (1) Residential Heating	40	76	104	110	117	87	534	57	29	17	17	22	17	159	693
20 21	Customer Charge Delivery Charge: Winter Summer	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$108.00
22	First 80 therms @ \$1.1522 \$1.1522	\$46.09	\$87 57	\$92.18	\$92.18	\$92.18	\$92.18	\$502 38	\$65.68	\$33.41	\$19 59	\$19 59	\$25.35	\$19 59	\$183 21	\$685.59
23 24	Next 120 therms @ \$0.9442 \$0.9442 Over 200 therms @ \$0.7946 \$0.7946	\$0.00 \$0.00	\$0.00 \$0.00	\$22.66 \$0.00	\$28 33 \$0.00	\$34.94 \$0.00	\$6.61 \$0.00	\$92 54 \$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	\$92.54 \$0.00
	_							·							•	
25 26	Base Delivery Revenue Total Seasonal Base Delivery Difference from previous year	\$55.09	\$96.57	\$123.84	\$129.51	\$136.12	\$107.79	<b>\$648.92</b> \$0.00	\$74.68	\$42.41	\$28.59	\$28.59	\$34.35	\$28.59	<b>\$237.21</b> \$0.00	\$886.13 \$0.00
27	Seasonal Percent Change from previous year							0.0%							0.0%	0.0%
28	Deferred Revenue Surcharge Rate	\$0.0000	\$0,000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
29	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
30	COG Rates	\$1.2533	\$1 2533	\$1.3008	\$1 5666	\$1.5188	\$1.5188	\$1.4285	\$0 9995	\$0.9995	\$0.9995	\$0 9995	\$0.9995	\$0.9995	\$0 9995	
31	Cost of Gas Total	\$50.13		\$135.28	\$172.33	\$177.70	\$132.14	\$762.83	\$56.97	\$28.99	\$16.99	\$16.99	\$21.99	\$16.99	\$158.92	\$921.75
32 33	Seasonal COG Difference from previous year Seasonal Percent Change from previous year							-\$50.06 -6 2%							\$49.42 45.1%	-\$0.64 -0.1%
34	Total Bill	\$105	\$192	\$259	\$302	\$314	\$240	\$1,412	\$132	\$71	\$46	\$46	\$56	\$46	\$396	\$1.808
35	Seasonal Total Bill Difference from previous year	ψ103	Ψ132	Ψ <b>2</b> .33	ψυυΖ	ψJ1+	Ψ <b>2</b> 70	-\$50.06	ψισε	ψri	UTU	VŦU	400	Ψ+υ	\$49.42	-\$0.64
36	Seasonal Percent Change from previous year							-3.4%							14 3%	0.0%
37 38	Seasonal Percent Change resulting from Base Rates (inc. Seasonal Percent Change resulting from COG	. Def. Reve	nue Surch.)					0.0% -3.4%							0.0% 14 3%	0.0% 0.0%

<sup>(1)</sup> Residential Heating Typical Usage: Single family detached home using gas for heat, hot water and cooking.

#### BID PREMIUM FOR PRE-PURCHASED GALLONS - PRIOR YEAR

	Mt. Belvieu		Pipeline	Br	oker + Suppli	ier					Keene Div.	Contract	Keene Div.	Fixed	Plan	Contract	Plan	Cost	Per Gallon
	Price		Rate		Fee		PERC		Trucking		Price	Volumes	Cost	Basis Bid	Price	Volumes	Cost	Premium	Premium
Apr-17	\$0.7001	+	\$0.2169	+	\$0.1000	+	\$0.0045	+	\$0.0810	=	\$1.1025	115,000	\$126,783	\$0 315	\$1.0151	115,000	\$116,732	(\$10,051)	-\$0.0874
May-17	\$0.6657	+	\$0.2169	+	\$0.1000	+ :	\$0.0045	+	\$0.0810	=	\$1.0681	86,250	\$92,123	\$0 315	\$0.9807	86,250	\$84,584	(\$7,538)	-\$0.0874
Jun-17	\$0.6257	+	\$0.2169	+	\$0.1000	+ :	\$0.0045	+	\$0.0810	=	\$1.0281	86,250	\$88,673	\$0 315	\$0.9407	86,250	\$81,134	(\$7,538)	-\$0.0874
Jul-17	\$0.6675	+	\$0.2169	+	\$0.1000	+ :	\$0.0045	+	\$0.0810	=	\$1.0699	115,000	\$123,036	\$0 315	\$0.9825	115,000	\$112,985	(\$10,051)	-\$0.0874
Aug-17	\$0.7535	+	\$0.2169	+	\$0.1000	+ :	\$0.0045	+	\$0.0810	=	\$1.1559	86,250	\$99,699	\$0 315	\$1.0685	86,250	\$92,160	(\$7,538)	-\$0.0874
Sep-17	\$0.8272	+	\$0.2169	+	\$0.1000	+ :	\$0.0045	+	\$0.0810	=	\$1 2296	86,250	\$106,050	\$0 315	\$1.1422	86,250	\$98,512	(\$7,538)	-\$0.0874
Total												575,000	\$636,362			575,000	\$586,107	(\$50,255)	-\$0.0874

## COMPARISON OF CONTRACT COST TO HYPOTHETICAL SPOT COST WINTER SEASON 2017-2018 TO DATE

Delivery Month	Contract Price (1)	Contract Volumes (2)	Contract Cost (3)	Average Spot Price (4)	Contract Volumes (5)	Hypothetical Spot Cost (6)	Incremental Cost / (Savings) of Plan (7)
			(1) x (2)			(4) x (5)	(3) - (6)
Nov-17	\$1.0285	75,346	\$77,493	\$1.3388	75,346	\$100,873	(\$23,380)
Dec-17	\$1.0341	115,000	\$118,924	\$1.3289	115,000	\$152,824	(\$33,899)
Jan-18	\$1.0398	134,828	\$140,187	\$1.5853	134,828	\$213,743	(\$73,555)
Feb-18	\$1.0321	111,034	\$114,601	\$1.3169	111,034	\$146,221	(\$31,620)
Total			\$451,206			\$613,660	(\$162,454)

-26.5%

# PROPANE PURCHASING STABILIZATION PLAN PRE-PURCHASES AND DELIVERY SCHEDULE

Delivery	Pre-Purchases (Gallons)									
Month	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total			
Nov-18	15,069	11,302	11,302	15,069	11,302	11,302	75,346			
Dec-18	23,000	17,250	17,250	23,000	17,250	17,250	115,000			
Jan-19	26,966	20,224	20,224	26,966	20,224	20,224	134,828			
Feb-19	22,207	16,655	16,655	22,207	16,655	16,655	111,034			
Mar-19	17,448	13,086	13,086	17,448	13,086	13,086	87,240			
Apr-19	10,310	7,733	7,733	10,310	7,733	7,733	51,552			
Total	115,000	86,250	86,250	115,000	86,250	86,250	575,000			
Monthly %	20.0%	15.0%	15.0%	20.0%	15.0%	15.0%				

The monthly allocation percentage for the pre-purchases is unchanged.

#### CALCULATION OF PURCHASED GAS COSTS SUMMER PERIOD 2018

MAY-18	INE								
CHANGE TO END NG NYENTORY BALANCE (GALLONS)   7.5.756   5.5.016   50.302   \$2.519   \$4.637   90.783   388.102	NO.		MAY-18	JUN-18	JUL-18	AUG-18	SEP-19	OCT-18	TOTAL
TOTAL REQUIRED PURCHASES (GALLONS)   75,756   55,016   50,392   52,519   54,637   99,783   388,102	1	TOTAL SENDOUT (GALLONS)	75,756	55,016	50,392	52,519	54,637	99,783	388,102
PROPARE PURCHASE STABILIZATION PLAN DELIVERIES   GALLONS	2	CHANGE TO END NG NVENTORY BALANCE (GALLONS)	-	-	-	-	-	-	-
BAITES   rom Schedule	3	TOTAL REQUIRED PURCHASES (GALLONS)	75,756	55,016	50,392	52,519	54,637	99,783	388,102
BAIES - from Schedule D	4								
Total Cost	5 6		-	-	-	-	-	-	-
Pipeline Fee	7		\$0.0000	\$0.0000	\$0.0000	\$0 0000	\$0 0000	\$0.0000	
PERC Fee	8								
Trucking Fee   incl.	9								
2 COST PER GALLON  \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$ 0,0000 \$									
### AMHERST STORAGE PROPANE DELIVERIES   GALLONS	12								
5 GALLONS	13	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5 GALLONS	14	AMHERST STORAGE PROPANE DELIVERIES							
7         WACOG Price         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000         \$0,0000 <th< td=""><td>15</td><td>GALLONS</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></th<>	15	GALLONS	-	-	-	-	-	-	-
8 Trucking Fee S0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000	16								
9 COST PER GALLON	17								
TOTAL COST - Amherst Storage Propane Deliveries   \$0	18 19								
2 GALLONS 3 RATE 4 16,393 16,393 16,393 32,796 81,965 81,965 RATE 5 16,393 16,393 32,796 81,965 81,965 RATE 5 17,000 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE	20		\$0				\$0		\$0
2 GALLONS 3 RATE 4 16,393 16,393 16,393 32,796 81,965 81,965 RATE 5 16,393 16,393 32,796 81,965 81,965 RATE 5 17,000 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE 1 16,393 16,393 32,796 81,965 RATE 1 16,393 RATE	24	CNC DELIVEDIES							
37 RATE 44 PRICE 55 COST PER GALLON 66 COST - CNG 75 DEMAND FIXED 75 TOTAL CNG 79 TOTAL CNG 70 SPOT PURCHASES 75 GALLONS 75,756 55,016 33,999 36,126 38,244 66,997 306,137 75 RATES - from Schedule E 75 Market Cuotes 3'14/18 75 Pipeline Fee \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000 \$0,0000	21 22				16 303	16 303	16 303	32 796	81 065
A PRICE   COST PER GALLON	22 23		-	-	10,393	10,393	10,393	32,100	01,900
COST PER GALLON   COST PER G	23 24								
TOTAL CNG	25								
TOTAL CNG	26	COST - CNG							
9 TOTAL CNG    SPOT PURCHASES	27								
SPOT PURCHASES   T5,756   55,016   33,999   36,126   38,244   66,997   306,137	28	COST PER GALLON							
GALLONS   75,756   55,016   33,999   36,126   38,244   66,997   306,137     RATES - from Schedule E	29	TOTAL CNG							
RATES - from Schedule E Market Quotes 3/14/18 Broker Fee \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 Pipeline Fee \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 PERC Fee \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000	30		75 750	FF 040	00.000	00.100	00.044	00.00=	000 107
Market Quotes 3/14/18   Store Fee   \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000 \$0.0000	31		75,756	55,016	33,999	36,126	38,244	66,997	306,137
Broker Fee	32								
Pipeline Fee	33	· · · · · · · · · · · · · · · · · · ·	¢0.0000	¢0,0000	¢0 0000	en 0000	¢0.0000	2000 02	
PERC Fee	34 35								
Supplier Charge   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.0000   \$0.000	36								
Trucking Fee COST PER GALLON  TOTAL COST - Spot Purchases  OTHER ITEMS Storage - Winter Period 2015-2016 Refund of Deferred Revenue Surcharge overcollection TOTAL OTHER ITEMS TOTAL OTHER ITEMS  TOTAL OTHER ITEMS TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL  GALLONS  TOTAL  GALLONS  TOTAL  GALLONS  TOTAL  THERMS  TOT	37								
COST PER GALLON  TOTAL COST - Spot Purchases  OTHER ITEMS Storage - Winter Period 2015-2016 Refund of Deferred Revenue Surcharge overcollection TOTAL OTHER ITEMS  TOTAL OTHER ITEMS  TOTAL  GALLONS TOTAL  GALLONS THERMS TOTAL  GALLONS THERMS	38								
OTHER ITEMS   Storage - Winter Period 2015-2016   \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	39								
Storage - Winter Period 2015-2016   \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	40	TOTAL COST - Spot Purchases							
Storage - Winter Period 2015-2016   \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	41	OTHER ITEMS							
Refund of Deferred Revenue Surcharge overcollection   \$0	41 42		\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	43								
66     GALLONS     75,756     55,016     50,392     52,519     54,637     99,783     388,102       77     THERMS     69,318     50,340     46,110     48,056     49,994     91,303     355,121       88     COST     \$86,339     \$63,391     \$52,153     \$54,522     \$56,587     \$99,284     \$412,275       99     COST PER GALLON     \$1.1397     \$1.1522     \$1.0349     \$1 0381     \$1 0357     \$0.9950     \$1.0623	14								
66     GALLONS     75,756     55,016     50,392     52,519     54,637     99,783     388,102       77     THERMS     69,318     50,340     46,110     48,056     49,994     91,303     355,121       88     COST     \$86,339     \$63,391     \$52,153     \$54,522     \$56,587     \$99,284     \$412,275       99     COST PER GALLON     \$1.1397     \$1.1522     \$1.0349     \$1 0381     \$1 0357     \$0.9950     \$1.0623	45	TOTAL							
7 THERMS 69,318 50,340 46,110 48,056 49,994 91,303 355,121 8 COST \$86,339 \$63,391 \$52,153 \$54,522 \$56,587 \$99,284 \$412,275 \$9 COST PER GALLON \$1.1397 \$1.1522 \$1.0349 \$1 0381 \$1 0357 \$0.9950 \$1.0623	45 46		75.756	55,016	50.392	52,519	54,637	99,783	388.102
8 COST \$86,339 \$63,391 \$52,153 \$54,522 \$56,587 \$99,284 \$412,275 9 COST PER GALLON \$1.1397 \$1.1522 \$1.0349 \$1.0381 \$1.0357 \$0.9950 \$1.0623									
		THERMS							
	47			\$63,391	\$52,153	\$54,522	\$56,587	\$99,284	\$412,275
	47 48 49	COST	\$86,339						