

**Liberty Rate Case Summary**

Region	State	Company	Docket	Modality	Test Year	Approved ROE (%)	Approved ROR (%)	Approved Equity Thickness (%)	Approved Rate Base (\$M)	LRAM/ Decoupling	Capital Adjustment Mechanism
East	GA	Peach State	42959	Gas	Jun-22	10.20%	9.10%	56.00%	114.3	Yes	Annual rate case
East	MA	New England Gas	D.P.U. 15-75	Gas	Dec-14	9.60%	8.59%	50.00%	\$69.90	Yes	GSEP capital investment program
East	NB	New Brunswick Gas	494	Gas	Dec-22	9.80%	6.69%	45.00%	\$273.52	No	Annual rate case
East	NH	EnergyNorth	DG 20-105	Gas	Dec-19	9.30%	6.96%	52.00%	\$346.13	Yes	Capital step adjustment - non-growth, project list
East	NH	Granite State Electric	DE 19-064	Electric	Dec-18	9.10%	7.60%	52.00%	NA	Yes	Capital step adjustment - non-growth, project list
Central	AR	Empire Electric	13-111-U	Electric	Jun-13	9.30%	5.71%	50.00%	\$42.92		(1) Approves future capital spending (2) Approves historical capital spend
Central	IA	Midstates Gas	RPU-2020-0002	Gas	Dec-19	9.50%	7.17%	50.00%	\$9.40		
Central	IL	Midstates Gas	16-0401	Gas	Dec-17	9.40%	7.81%	49.30%	\$44.09		Forward-Looking Test-Year
Central	KS	Empire Electric	21-EPDE-444-RTS	Electric	Jun-22	Blackbox	Blackbox	Blackbox	Blackbox		(1) Abbreviated Rate Case (2) Environmental Compliance/ Transmission Cost Riders
Central	MO	Empire Electric	ER-2021-0312	Electric	Sep-20	Blackbox	Blackbox	Blackbox	\$2,030		Plant In Service Accounting ("PISA")
Central	MO	Empire Gas	GR-2021-0320	Gas	Dec-20	Blackbox		Blackbox	\$62.70		
Central	MO	Midstates Gas	GR-2018-0013	Gas	Jun-17	9.80%					Infrastructure System Replacement Surcharge ("ISRS")
Central	OK	Empire Electric	PUD202100163	Electric	Jun-21	9.30%	Blackbox	Blackbox	Blackbox		Environmental Compliance/ Transmission/ Security & Safety Riders
West	CA	CalPeco	A.18-12-001	Electric	Dec-19	10.00%	7.63%	52.50%	\$270.43		(1) Rate Case: Approves future capital spend with no reconciliation. (2) PTAM: Allows for rate changes to take effect between rate cases on capital projects approved in

Liberty Utilities (Granite State Electric) Corp. and Liberty Utilities (EnergyNorth Natural Gas)  
Corp. both d/b/a Liberty

IR 22-048  
Investigation of Step Adjustment Methodology and Process

NHPUC Record Requests – March 21, 2023

Date Request Received: 3/21/23  
Request No. RR 7

Date of Response: 4/20/23  
Respondent: Erica Menard

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**REQUEST:**

Please provide the Excel version of the models used to currently calculate step adjustments in New Hampshire.

- A. Provide explanations with the theoretical basis of inclusion for each component/item, and how it is calculated or treated in the model.
- B. If any of those components are part of a settlement,
  1. please explain why it is reasonable to include it in the model
  2. please explain how it is treated in the model and why.
- C. If the company's affiliates used different models in different rate cases (gas, electric, etc.), please explain the differences.

**RESPONSE:**

Please see the attached live Excel models that were used in Docket Nos. DG 22-028 and DE 22-035, Liberty's most recent step adjustment filings for EnergyNorth Natural Gas and Granite State Electric, provided as Attachment RR 7.1.xlsx and Attachment RR 7.2.xlsx, respectively.

- A. Providing "explanations" and "the theoretical basis" of the components of the step adjustment models would require Liberty to disclose the settlement conversations and the bargaining, give-and-take, and negotiations between parties with different and competing interests. Disclosure of the substance of those settlement discussions is inappropriate and a violation of Puc 203.20(a) ("All participants in settlement conferences shall treat discussions at settlement conferences as confidential and shall not disclose the contents of such discussions to third parties or seek to introduce them into evidence"). With respect, Liberty thus declines to answer this question.
- B. See the response to A. above.

- C. New Hampshire is the only jurisdiction where “step adjustments” are used. There are a variety of methods used to recover capital between and beyond rate cases through the jurisdictions that Liberty operates.

Liberty Utilities (Granite State Electric) Corp. and Liberty Utilities (EnergyNorth Natural Gas)  
Corp. both d/b/a Liberty

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Date Request Received: 3/21/23  
Request No. RR 8

Date of Response: 4/20/23  
Respondent: Erica Menard

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**REQUEST:**

Please provide the Excel version of the models used to currently calculate approved step adjustments in other jurisdictions in which the company’s affiliates operate, as applicable.

- A. Provide explanations with the theoretical basis of inclusion for each component/item, and how it is calculated or treated in the model
- B. If any of those components are part of a settlement,
  1. please explain why it is reasonable to include it in the model
  2. please explain how it is treated in the model and why.

**RESPONSE:**

Liberty has approximately two dozen regulated affiliates that employ a variety of methodologies to address recovery of capital beyond a rate year. As it would be unduly burdensome, and likely not helpful, to provide spreadsheets for those mechanisms that are not similar to step adjustments, Liberty is providing a list of the various mechanisms used by these Liberty affiliates to address capital recovery for the Commission to review. Please see Attachment RR 8. Liberty is willing to provide the models of those mechanisms or methodologies that the Commission finds would be most helpful and relevant to this docket.

- A. See the response above. It would be unduly burdensome, and likely unhelpful, for Liberty to explain each component of the dozens of mechanisms employed by Liberty’s affiliates. In addition, providing “explanations” and “the theoretical basis” of the components of the step adjustment models would require Liberty to disclose the settlement conversations that gave rise to the various methodologies and their bargaining, give-and-take, and negotiations between parties with different and competing interests. Disclosure of the substance of those settlement discussions is inappropriate, a violation of Puc 203.20(a) (“All participants in settlement conferences shall treat discussions at settlement conferences as confidential and shall not disclose the contents of such discussions to third parties or seek to introduce them into evidence”) and of similar rules in the respective

jurisdictions of the other Liberty affiliates. With respect, Liberty thus declines to answer this question.

B. See the response to A. above.

Liberty's regulatory mechanisms for the accelerated recovery of capital investments				
Region	State	Utility	Regulatory mechanisms available in the state	Timing of capital investment recovery
East	NH	Energy North and Granite State	(1) Multiyear Rate Plan ("MYRP") (2) Step Adjustments	(1) MYRP- Approves the utility to file for recovery of future capital spending once the project and in-service (same as step adjustments). (2) Step Adjustments: Addressed in a rate case. A step adjustment filing approves the actual capital spending in between rate cases
	MA	New England Gas	Gas System Enhancement Plan ("GSEP")	Approves future capital spending with yearly reconciliation to actual spending.
	NB	Gas New Brunswick	(1) Forward-Looking Test-Year (2) Separate Capital Recovery Filings	Approves future capital spending with no reconciliation to actuals.
	NY	NY Water	(1) Multiyear Rate Plan ("MYRP") (2) System Improvement Charge ("SIC")	(1) Approves future capital spending with adjustments based on any shortfall in utility plant in service. (2) The SIC allows for the yearly recovery of actual costs between rate years and rate cases.
	NY	NY Gas	(1) Multiyear Rate Plan ("MYRP") (2) Extension Capital Recovery Mechanism (New mechanism being Proposed)	(1) Approves future capital spending with downward only reconciliation (2) New Mechanism is being developed, reconciliation TBD
	GA	Peach State	Georgia Rate Adjustment Mechanism ("GRAM"):	Approves future capital spending with no reconciliation to actuals.
Central	IL	Midstates Gas - Illinois	Forward-Looking Test-Year	Approves future capital spending.
	MO	Midstates Gas - Missouri & Empire Gas	Infrastructure System Replacement Surcharge ("ISRS")	Approves historical actual capital spending between rate cases.
	MO	Empire Electric - Missouri	Plant In Service Accounting ("PISA")	Approves future capital spending that will be recovered in rates set in a future rate case.
	KA	Empire Electric - KA	(1) Abbreviated Rate Case (2) Environmental Compliance/ Transmission Cost Riders	(1 & 2) Approves historical capital spending between rate cases.
	OK	Empire Electric - OK	Environmental Compliance/ Transmission/ Security & Safety Riders	Approves historical capital spending in between rate cases.
	AR	Empire Electric - AR	(1) Annual Adjusted Formula Rate Plan/Formula Rate Plan (FRP) (2) Environmental Compliance /Transmission Compliance Riders	(1) Approves future capital spending (2) Approves historical capital spend
West	CA	CalPeco	(1) Forward Looking Test-Year (2) Post Test-Year Adjustment Mechanism ("PTAM")	(1) Rate Case: Approves future capital spend with no reconciliation. (2) PTAM: Allows for rate changes to take effect between rate cases on capital projects approved in a rate case.
	CA	Apple Valley/Park	(1) Forward Test-Year (2) Yearly Escalation Filing.	Approves future capital spend, a reconciliation takes place if the actual capital spend is underbudget from the projected spending.
	AZ	All utilities	(1) Post Test-Year ("PTY") (2) System Improvement Benefits ("SIB")	(1) Approves future capital spend (2) Approves historical capital spend between rate cases. Liberty, to-date, has not made a SIBs filing.
	TX	All utilities	System Improvement Charge ("SIC")	Approves historical capital spending between rate cases.
Int'l	Bermuda	BELCO	(1) Multiyear Rate Plan (2) Mid-Review Adjustments and Capital Re-Opener Mechanism	(1) Approves future capital spending, which is reconciled to actuals in the next rate case. (2) Pre-approves capital spending for recovery in the next rate case, just to criteria.
	Chile	ESSAL	Tariff Adjustments -12A Application	Approves historical capital spending between rate cases.

Line No

	EnergyNorth Natural Gas					Granite State Electric											
	<a href="#">DG 14-180 Settlement Agreement Attachments</a>	<a href="#">DG 17-048</a>	<a href="#">DG 17-048 (Step 1)</a>	<a href="#">DG 20-105</a>	<a href="#">DG 20-105 (Step 1)</a>	<a href="#">DG 22-028 (Step 2)</a>	<a href="#">DE 13-063</a>	<a href="#">DE 13-063 (Step 1)</a>	<a href="#">DE 16-383</a>	<a href="#">DE 16-383 (Step 2)</a>	<a href="#">DE 16-383 (Step 3)</a>	<a href="#">DE 19-064</a>	<a href="#">DE 19-064 (Step 1)</a>	<a href="#">DE 19-064 (Step 2)</a>	<a href="#">DE 19-064 (Battery)</a>	<a href="#">DE 22-035 (Step 3)</a>	
	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	Order	
1																	
2																	
3																	
4																	
5	Rate Case Order																
6	Step Adjustment Order																
7	A. Total Rate Base	Not Stated	\$244.39		Not Stated		\$68.06		\$97.50			\$103.02					
8	B. Total Revenue Requirement	Not Stated	\$80.72		\$96.18		\$36.30		\$40.63			\$48.30					
9	WACC	Not Stated	6.80%		6.96%		7.92%		7.64%			7.64%					
10	B.1. Total Return on Rate Base	Not Stated	\$16.62		Not Stated		\$5.39		\$8.10			\$9.94					
11	B.2. Total Expenses	Not Stated	\$61.16		Not Stated		\$30.87		\$32.52			\$38.36					
12	C. Gross Rate Base Increase in Each Step Adjustment	Not Stated		\$27.95		\$36.00		\$4.80		\$17.69	\$2.40	\$1.25		\$8.58	\$9.97	\$1.23	\$6.54
13	D. Net Rate Base Increase in Each Step Adjustment	Not Stated		\$26.59		Not Stated		\$4.69		\$14.18	\$1.90	\$1.14		\$8.29	\$9.55	\$1.18	\$6.18
14	E.1 Revenue Requirement Increase (\$M)	\$1.40		\$5.04 (cap)		\$4.00 (cap)		\$0.72		\$2.47	\$0.29	\$0.18		\$1.32	\$1.53	\$0.26	\$1.18
15	E.2 Revenue Requirement Increase Basis (ROR, Net or Gross Rate Base)	ROR, Net Rate Base, Incr. in Operating Costs		ROR, Net Rate Base, Pension/OPEB, Degradation Fees, Capped		ROR, Net Rate Base, Project List, Capped		ROR, Net Rate Base, Project List		ROR, Net Rate Base, Project List		ROR, Net Rate Base, Project List		ROR, Net Rate Base, Project List	ROR, Net Rate Base, Project List	ROR, Net Rate Base, Battery Pilot	ROR, Net Rate Base, Project List
16	F. Mechanisms Implemented (LRAM, Decoupling)	N/A	Decoupling		Decoupling, PTAM		N/A		LRAM			Decoupling, PTAM					
17	G. Other Adjustments in RR between Rate Cases	Step Adjustment, CIBS	Step Adjustment, CIBS		Step Adjustment		Step adjustment, REP		Steps			Steps					

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty**  
**Project List**  
**In Service as of December 31, 2021**

Line No	Att #	2021 Project #	Project Description	Priority	Budget	Total In Service \$	Revisions	Revised Step	FERC	Book Rate	Book Amt	MACRS	Tax Amt
								Amount					
1	2	8830-1958	Install Service to Tuscan Village South	3. Growth	\$1,000,000	\$1,235,243	(\$1,235,243)	\$0	364	3.64%	\$0	3.75%	\$0
2	3	8830-2069	Golden Rock Feeder 19L2	3. Growth	\$2,100,000	\$1,523,493	(\$1,523,493)	\$0	364	3.64%	\$0	3.75%	\$0
3	4	8830-2086	Lebanon Pole Pile	5. Mandated	\$652,750	\$345,099	(\$345,099)	\$0	361	2.39%	\$0	3.75%	\$0
4	5	8830-2107	General Equipment Blanket	5. Discretionary	\$50,000	\$188,456		\$188,456	394	4.17%	\$7,859	3.75%	\$7,067
5	6	8830-2110	Street Light Blanket	2. Mandated	\$125,000	\$98,979		\$98,979	373	3.67%	\$3,633	3.75%	\$3,712
6	7	8830-2111	Public Requirements Blanket	2. Mandated	\$520,000	\$308,503		\$308,503	364	3.64%	\$11,230	3.75%	\$11,569
7	8	8830-2112	Damage/Failure Blanket	2. Mandated	\$1,500,000	\$2,022,586		\$2,022,586	364	3.64%	\$73,622	3.75%	\$75,847
8	9	8830-2113	Distribution Asset Replacement Blanket	2. Mandated	\$200,000	\$296,406		\$296,406	364	3.64%	\$10,789	3.75%	\$11,115
9	10	8830-2114	Third Party Attachment Blanket	2. Mandated	\$125,000	\$164,315		\$164,315	364	3.64%	\$5,981	3.75%	\$6,162
10	11	8830-2121	Distribution Reliability Blanket	2. Mandated	\$161,000	\$174,854		\$174,854	364	3.64%	\$6,365	3.75%	\$6,557
11	12	8830-2124	LED Street Light Conversion	2. Mandated	\$125,000	\$387,666	(\$342,937)	\$44,729	373	3.67%	\$1,642	3.75%	\$1,677
12	13	8830-2125	IT Systems & Equipment Blanket	5. Discretionary	\$3,329,840	\$379,187		\$379,187	303	33.00%	\$125,132	3.75%	\$14,219
13	14	8830-2146	Bare Conductor Replacement Program	4. Regulatory Programs	\$1,000,000	\$691,575		\$691,575	364	3.64%	\$25,173	3.75%	\$25,934
14	15	8830-2180	DTN Weather Upgrade	5. Discretionary	\$226,250	\$182,483		\$182,483	303	33.00%	\$60,219	3.75%	\$6,843
15	16	8830-2185	Meter Test Board	5. Discretionary	\$300,000	\$248,313		\$248,313	370	5.00%	\$12,416	3.75%	\$9,312
16	17	8830-2190	Transportation	5. Discretionary	\$1,000,000	\$253,649	(\$203,823)	\$49,827	392	7.50%	\$3,737	3.75%	\$1,869
17	18	8830-2191	Meter Purchases	5. Discretionary	\$250,000	\$379,368		\$379,368	370	5.00%	\$18,968	3.75%	\$14,226
18	19	8830-2192	Transformer Purchases	2. Mandated	\$420,000	\$639,262		\$639,262	368	3.51%	\$22,438	3.75%	\$23,972
19	20	8830-2197	Salem Garage	5. Discretionary	\$700,000	\$667,641		\$667,641	361	2.39%	\$15,957	3.75%	\$25,037
20			Total			\$10,187,080	(\$3,650,594)	\$6,536,485			\$405,159		\$245,118



**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty  
Revenue Requirement Calculation**

Line	Description	Software	Structures/ Improvements	Poles, Towers, and Fixtures	Line Transformers	Meters	Street Lighting	Transportation	Tools, Shop and Garage Equip	Total
	<i>FERC Account</i>	303	361	364	368	370	373	392	394	
1	Capital Spending	\$ 561,669	\$ 667,641	\$ 3,658,240	\$ 639,262	\$ 627,681	\$ 143,709	\$ 49,827	\$ 188,456	\$ 6,536,485
2										
3	Deferred Tax Calculation									
4	Tax Method	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	
5	Tax Depreciation Rate	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	
6										
7	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8										
9	Tax Basis	\$ 561,669	\$ 667,641	\$ 3,658,240	\$ 639,262	\$ 627,681	\$ 143,709	\$ 49,827	\$ 188,456	\$ 6,536,485
10	MACRS Depreciation	\$ 21,063	\$ 25,037	\$ 137,184	\$ 23,972	\$ 23,538	\$ 5,389	\$ 1,869	\$ 7,067	\$ 245,118
11										
12	Tax Depreciation - Federal	\$ 21,063	\$ 25,037	\$ 137,184	\$ 23,972	\$ 23,538	\$ 5,389	\$ 1,869	\$ 7,067	\$ 245,118
13	Tax Depreciation - State	\$ 21,063	\$ 25,037	\$ 137,184	\$ 23,972	\$ 23,538	\$ 5,389	\$ 1,869	\$ 7,067	
14										
15	Book Depreciation Rate	33.33%	2.39%	3.64%	3.51%	5.00%	3.67%	7.50%	4.17%	
16	Book Depreciation	\$ 187,204	\$ 15,957	\$ 133,160	\$ 22,438	\$ 31,384	\$ 5,274	\$ 3,737	\$ 7,859	\$ 407,013
17										
18	Tax over (under) Book - Federal	\$ (166,142)	\$ 9,080	\$ 4,024	\$ 1,534	\$ (7,846)	\$ 115	\$ (1,869)	\$ (792)	\$ (161,895)
19	Tax over (under) Book - State	(166,142)	9,080	4,024	1,534	(7,846)	115	(1,869)	(792)	(161,895)
20	Deferred Taxes - Federal @ 21.00%	(34,890)	1,907	845	322	(1,648)	24	(392)	(166)	(33,998)
21	Deferred Taxes - State @ 7.70%	(12,793)	699	310	118	(604)	9	(144)	(61)	(12,466)
22	Deferred Tax Balance @ 0.00%	\$ (47,683)	\$ 2,606	\$ 1,155	\$ 440	\$ (2,252)	\$ 33	\$ (536)	\$ (227)	\$ (46,464)
23										
24	Rate Base Calculation									
25	Plant in Service	\$ 561,669	\$ 667,641	\$ 3,658,240	\$ 639,262	\$ 627,681	\$ 143,709	\$ 49,827	\$ 188,456	\$ 6,536,485
26	Accumulated Depreciation	(187,204)	(15,957)	(133,160)	(22,438)	(31,384)	(5,274)	(3,737)	(7,859)	(407,013)
27	Deferred Tax Balance	47,683	(2,606)	(1,155)	(440)	2,252	(33)	536	227	46,464
28	<b>Rate Base</b>	<b>\$ 422,148</b>	<b>\$ 649,079</b>	<b>\$ 3,523,925</b>	<b>\$ 616,384</b>	<b>\$ 598,548</b>	<b>\$ 138,401</b>	<b>\$ 46,626</b>	<b>\$ 180,825</b>	<b>\$ 6,175,936</b>
29										
30	Revenue Requirement Calculation									
31	Return on Rate Base @ 9.36%	\$ 39,513	\$ 60,754	\$ 329,839	\$ 57,694	\$ 56,024	\$ 12,954	\$ 4,364	\$ 16,925	\$ 578,068
32	Property Taxes @3.12%	\$ 11,683	\$ 20,333	\$ 109,983	\$ 19,245	\$ 18,604	\$ 4,319	\$ 1,438	\$ 5,635	\$ 191,240
33	Book Depreciation Expense	187,204	15,957	133,160	22,438	31,384	5,274	3,737	7,859	407,013
34	<b>Annual Revenue Requirement</b>	<b>\$ 238,401</b>	<b>\$ 97,043</b>	<b>\$ 572,982</b>	<b>\$ 99,377</b>	<b>\$ 106,013</b>	<b>\$ 22,548</b>	<b>\$ 9,539</b>	<b>\$ 30,419</b>	<b>\$ 1,176,320</b>

**Capped at \$1,800,000**

Rate of Return Calculation	Portion	After-Tax Cost	Pre-Tax WACC
Equity	52.0%	9.10%	6.49%
Debt	48.0%	5.97%	2.87%
	100.0%		9.36%

Tax
27.08%

Original	1,751,403
Reduction	(575,083)
Total	1,176,320

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty**  
**Distribution Rate Adjustment for 2021 Step Adjustment**  
**Effective March 1, 2023**  
**Revenue Requirement Calculation**

	November 18, 2022			
	Effective August 1, 2022 (a)	PUC Letter August 1, 2022 (b)	Effective March 1, 2023 (c)	Effective August 1, 2023 (d)
1 Distribution Revenues per Settlement Agreement in Docket No. DE 19-064	\$48,394,903	\$48,394,903	\$20,164,543	\$46,857,738
2 April 6, 2022, Request to Increase Annual Revenue Requirement	\$1,751,403	\$1,176,320		\$0
3 Change in Annual Revenue Requirement due to full recovery of recoupment	(\$1,939,679)	(\$1,939,679)		\$0
4 Change in Annual Revenue Requirement due to full recovery of rate case expense	(\$565,077)	(\$565,077)		\$0
5 Total change in annual revenue requirement effective July 1, 2022	(\$753,353)	(\$1,328,436)		\$0
6 Addition of July 2022 recoupment collected to be refunded	(\$161,640)	(\$161,640)		\$161,640
7 Addition of July 2022 rate case expenses collected to be refunded	(\$47,090)	(\$47,090)		\$47,090
8 Total July 2022 Refund	(\$208,730)	(\$208,730)		\$208,730
9 Change in annual revenue requirement effective August 1, 2022	(\$962,083)	(\$1,537,165)		\$208,730
10 DOE Recommendations and Audit findings revision			(575,083)	\$0
11 August 1, 2022 through February 28, 2023, Refund (Estimate)			(575,083)	\$0
12 Total Revenues	\$47,432,820	\$46,857,738	\$19,589,460	\$47,066,468
13 Percentage of Adjustment to Distribution Rates	-1.99%	-3.18%	-2.94%	0.45%

1 Total rev req calculation based on rates effective 7/1/2020 of \$46,590,130, plus approved rev req in DE 21-049 effective 5/1/2021 of \$213,246, plus approved rev req in DE 19-064 effective 11/1/2021 of \$94,064

2 Attachment HMT-1 Page 1

3 Recoupment amount of \$1,835,991 per 5/26/20 Settlement Agreement, Bates page 032 and \$103,688 per 4/1/21 Step Adjustment filing Bates page 031

4 Rate case expense of \$553,642 per 5/26/20 Settlement Agreement, Bates pages 032 and \$11,435

5 Sum of lines 2 +3 + 4

6 1/12 of annual recoupment collected in July 2022

7 1/12 of annual rate case expenses collected in July 2022

8 Sum of lines 6 + 7

9 Sum of lines 5 + 8

10 Per Audit Report

11 Per Procedural Order Re: November 22, 2022 Hearing dated November 18, 2022

12 Sum of lines 1 + 9

13 (Line 11 - line 9) / line 9

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty**  
**Distribution Rate Adjustment for 2021 Step Adjustment**  
**Effective March 1, 2023**  
**Revenue Requirement Calculation**

1 Annual Refund Effective August 1, 2022	(\$962,083)
2 Monthly Refund Effective August 1, 2022	(\$80,174)
3 Annual Revenue Requirement	\$47,432,820
4 Incremental Annual Refund Effective March 1, 2023	(\$575,083)
5 Incremental Monthly Refund Effective March 1, 2023	(\$115,017)
6 Total Annual Refund	(\$1,537,165)
7 Combined Annual Revenue Requirement	\$46,857,738

Calculation of Refund Against Revenue Requirement

Refund Effective August 1, 2022			Incremental Refund Effective March 1, 2023		
(a)	(b)	(c)	(a)	(b)	(c)
Month	Refund	Rev Req	Month	Refund	Refund
Aug-22	(\$80,174)	\$48,314,729	Aug-22	\$0	\$0
Sep-22	(\$80,174)	\$48,234,556	Sep-22	\$0	\$0
Oct-22	(\$80,174)	\$48,154,382	Oct-22	\$0	\$0
Nov-22	(\$80,174)	\$48,074,209	Nov-22	\$0	\$0
Dec-22	(\$80,174)	\$47,994,035	Dec-22	\$0	\$0
Jan-23	(\$80,174)	\$47,913,862	Jan-23	\$0	\$0
Feb-23	(\$80,174)	\$47,833,688	Feb-23	\$0	\$0
Mar-23	(\$80,174)	\$47,753,515	Mar-23	(\$115,017)	(\$115,017)
Apr-23	(\$80,174)	\$47,673,341	Apr-23	(\$115,017)	(\$230,033)
May-23	(\$80,174)	\$47,593,168	May-23	(\$115,017)	(\$345,050)
Jun-23	(\$80,174)	\$47,512,994	Jun-23	(\$115,017)	(\$460,066)
Jul-23	(\$80,174)	\$47,432,820	Jul-23	(\$115,017)	(\$575,083)
Total	(\$962,083)				

Combined Refund Effective March 1, 2023		
(a)	(b)	(c)
Month	Refund	Rev Req
Aug-22	(\$80,174)	\$48,314,729
Sep-22	(\$80,174)	\$48,234,556
Oct-22	(\$80,174)	\$48,154,382
Nov-22	(\$80,174)	\$48,074,209
Dec-22	(\$80,174)	\$47,994,035
Jan-23	(\$80,174)	\$47,913,862
Feb-23	(\$80,174)	\$47,833,688
Mar-23	(\$195,190)	\$47,638,498
Apr-23	(\$195,190)	\$47,443,308
May-23	(\$195,190)	\$47,248,118
Jun-23	(\$195,190)	\$47,052,928
Jul-23	(\$195,190)	\$46,857,738
Total	(\$1,537,165)	

- 1 Attachment HMT-1 Page 3 Line 9
- 2 Line 1 ÷ Line 12
- 3 Attachment HMT-1 Page 3 Line 12 Column (a)
- 4 Attachment HMT-1 Page 3 Line 11 Column (c)
- 5 Line 4 ÷ Line 5
- 6 Line 1 + Line 4
- 7 Line 3 + Line 4

- (a) Month refund is applicable
- (b) Amount of monthly refund applied
- (c) Total revenue requirement after refund is provided; Current Month Col(b) minus Previous Month Col (c.)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities

Permanent Rate Design 2021 Step Adjustment  
Rates Effective March 1, 2023

Rate Class	Distribution Rate Component	Current Rates (a)	2021 Capital Expenditures Step Adjustment % Increase/ % (Decrease) (b)	Proposed March 1, 2023 Base Distribution Charges (c)	Current REP/VMP Adjustment Factor (d)	Current RDAF (e)	March 1, 2023 Rates (f)
D	Customer Charge	\$14.74	0.00%	\$14.74			\$14.74
	All kWh	\$0.05856	-3.90%	\$0.05627	0.00001	0.00281	\$0.05909
	16 Hour Off Peak kWh	\$0.05056	-3.90%	\$0.04858	0.00001	0.00281	\$0.05140
	Farm kWh	\$0.05527	-3.90%	\$0.05311	0.00001	0.00281	\$0.05593
	D-6 kWh	\$0.05150	-3.90%	\$0.04949	0.00001	0.00281	\$0.05231
D-10	Customer Charge	\$14.74	0.00%	\$14.74			\$14.74
	On Peak kWh	\$0.12447	-3.66%	\$0.11990	0.00001	0.0018	\$0.12171
	Off Peak kWh	\$0.00167	-3.66%	\$0.00160	0.00001	0.0018	\$0.00341
D-11	Customer Charge	\$14.74		\$14.74			\$14.74
	Off Peak	\$0.03948		\$0.03878	0.00001		\$0.03879
	Mid Peak	\$0.05918		\$0.05813	0.00001		\$0.05814
	Critical Peak	\$0.08426		\$0.08277	0.00001		\$0.08278
EV	Customer Charge	\$11.35		\$11.35			\$11.35
	Off Peak	\$0.03948		\$0.03878	0.00001		\$0.03879
	Mid Peak	\$0.05918		\$0.05813	0.00001		\$0.05814
	Critical Peak	\$0.08426		\$0.08277	0.00001		\$0.08278
EV-L	Customer Charge	\$435.18		\$422.90			\$422.90
	Demand	\$4.61		\$4.48			\$4.48
	Off Peak	\$0.02732		\$0.02462	0.00001		\$0.02463
	Mid Peak	\$0.02936		\$0.02647	0.00001		\$0.02648
	Critical Peak	\$0.03419		\$0.03081	0.00001		\$0.03082
EV-M	Customer Charge	\$72.52		\$70.47			\$70.47
	Demand	\$4.64		\$4.50			\$4.50
	Off Peak	\$0.03879		\$0.03830	0.00001		\$0.03831
	Mid Peak	\$0.04010		\$0.03960	0.00001		\$0.03961
	Critical Peak	\$0.04590		\$0.04532	0.00001		\$0.04533
G-1	Customer Charge	\$435.18	-2.82%	\$422.90			\$422.90
	Demand Charge	\$9.22	-2.82%	\$8.96			\$8.96
	On Peak kWh	\$0.00590	-2.82%	\$0.00573	0.00001	0.00104	\$0.00678
	Off Peak kWh	\$0.00174	-2.82%	\$0.00169	0.00001	0.00104	\$0.00274
	Credit for High Voltage Delivery >	(\$0.49)	-2.82%	(\$0.48)			(\$0.48)
G-2	Customer Charge	\$72.52	-2.82%	\$70.47			\$70.47
	Demand Charge	\$9.27	-2.82%	\$9.00			\$9.00
	All kWh	\$0.00233	-2.82%	\$0.00226	0.00001	0.00151	\$0.00378
	Credit for High Voltage Delivery >	(\$0.49)	-2.82%	(\$0.48)			(\$0.48)
G-3	Customer Charge	\$16.66	-2.82%	\$16.19			\$16.19
	All kWh	\$0.05282	-2.82%	\$0.05133	0.00001	0.00253	\$0.05387

Rate Class	Distribution Rate Component	2021 Capital Expenditures Step Adjustment		Proposed March 1, 2023	REP/VMP	March 1, 2023	
		Current Rates (c)	% (Decrease) (b)	Base Distribution Charges (c)	Adjustment Factor (d)		
M	Luminaire Charge						
	<u>Description</u>						
	HPS 4,000	\$8.53	-2.82%	\$8.28		\$8.28	
	HPS 9,600	\$9.86	-2.82%	\$9.58		\$9.58	
	HPS 27,500	\$16.37	-2.82%	\$15.90		\$15.90	
	HPS 50,000	\$20.36	-2.82%	\$19.78		\$19.78	
	HPS 9,600 (Post Top)	\$11.57	-2.82%	\$11.24		\$11.24	
	HPS 27,500 Flood	\$16.54	-2.82%	\$16.07		\$16.07	
	HPS 50,000 Flood	\$22.09	-2.82%	\$21.46		\$21.46	
	Incandescent 1,000	\$10.95	-2.82%	\$10.64		\$10.64	
	Mercury Vapor 4,000	\$7.57	-2.82%	\$7.35		\$7.35	
	Mercury Vapor 8,000	\$8.50	-2.82%	\$8.26		\$8.26	
	Mercury Vapor 22,000	\$15.20	-2.82%	\$14.77		\$14.77	
	Mercury Vapor 63,000	\$25.69	-2.82%	\$24.96		\$24.96	
	Mercury Vapor 22,000 Flood	\$17.39	-2.82%	\$16.89		\$16.89	
	Mercury Vapor 63,000 Flood	\$33.70	-2.82%	\$32.74		\$32.74	
LED-1	LED-1 Fixtures						
	30 Watt Pole Top	\$5.53	-2.82%	\$5.37		\$5.37	
	50 Watt Pole Top	\$5.77	-2.82%	\$5.60		\$5.60	
	130 Watt Pole Top	\$8.90	-2.82%	\$8.64		\$8.64	
	190 Watt Pole Top	\$17.06	-2.82%	\$16.57		\$16.57	
	30 Watt URD	\$12.89	-2.82%	\$12.52		\$12.52	
	90 Watt Flood	\$8.76	-2.82%	\$8.51		\$8.51	
	130 Watt Flood	\$10.08	-2.82%	\$9.79		\$9.79	
	30 Watt Caretaker	\$4.96	-2.82%	\$4.82		\$4.82	
	<u>Rates M, LED-1 &amp; LED-2 Pole Accessory Charge</u>						
	Pole -Wood	\$9.66	-2.82%	\$9.39		\$9.39	
	Fiberglass - Direct Embedded	\$10.06	-2.82%	\$9.78		\$9.78	
	Fiberglass w/Foundation <25 ft	\$16.98	-2.82%	\$16.50		\$16.50	
	Fiberglass w/Foundation >=25 ft	\$28.39	-2.82%	\$27.59		\$27.59	
	Metal Poles - Direct Embedded	\$20.24	-2.82%	\$19.67		\$19.67	
	Metal Poles with Foundation	\$24.42	-2.82%	\$23.73		\$23.73	
	<u>Rate M, LED-1</u>						
	All kWh	\$0.04063	-2.82%	\$0.03948	0.00001	\$0.03949	
	<u>Rate LED-2</u>	\$0.04063	-2.82%	\$0.03948	0.00001	\$0.03949	
T	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74	
	All kWh	\$0.04743	-3.48%	\$0.04577	0.00001	0.00285	\$0.04863
V	Minimum Charge	\$16.66	-2.82%	\$16.19		\$16.19	
	All kWh	\$0.05433	-2.82%	\$0.05279	0.00001	0.00291	\$0.05571

Rates D-11 & EV are calculated through the TOU model approved in Docket DE 17-189 and current rates in effect were effective 11/1/2022.

Rates EV-L & EV-M are calculated through the TOU model approved in Docket DE 20-170 and current rates in effect were effective 11/1/2022.

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty**  
**Bill Calculation March 1, 2023, Rates Compared to Current Rates in Effect**

Usage	650	kWh	Current Rates	March 1, 2023 Proposed Rates	Current Bill	March 1, 2023 Proposed Bill
Customer Charge			\$14.74	\$14.74	\$14.74	\$14.74
Distribution Charge						
All kWh (1)			\$0.06138	\$0.05909	\$39.90	\$38.41
Storm Recovery Adjustment (4)			\$0.00000	\$0.00000	\$0.00	\$0.00
Transmission Charge			\$0.03635	\$0.03635	\$23.63	\$23.63
Stranded Cost Charge			(\$0.00051)	(\$0.00051)	(\$0.33)	(\$0.33)
System Benefits Charge (2)			\$0.00792	\$0.00700	\$5.15	\$4.55
Electricity Consumption Tax			\$0.00000	\$0.00000	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Retail Delivery Services					\$83.08	\$80.99
Energy Service Charge (3)			\$0.22007	\$0.22007	<u>\$143.05</u>	<u>\$143.05</u>
				Total Bill	\$226.13	\$224.04
						<b>(\$2.09)</b>
						<b>-0.92%</b>

(1) Distribution Charge reflects the approved \$0.00281/kWh increase effective January 1, 2023,

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

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

22 \*Keene Phase I CNG expansion costs are recovered according to a risk sharing mechanism.  
23 The \$660K includes investment made in 2017-2019 related to installation of the temporary CNG facility, but deferred for recovery  
24 purposes until the second step adjustment.

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

Line	Description	IT	Transmission Mains	Distribution Mains	Services	Meters	Transportation	GEN-Tools-Shop-Garage Equip	Total
	FERC Account	303	367	376	380	381	392	394	
1	Capital Spending	\$ 63,515	\$ 22,551,295	\$ 511,291	\$ 605,038	\$ 2,097,505	\$ 970,393	\$ 247,679	\$ 27,046,715
2									
3	Deferred Tax Calculation								
4	Tax Method	MACRS5	MACRS20	MACRS20	MACRS20	MACRS20	MACRS5	MACRS7	
5	Tax Depreciation Rate	20.00%	3.75%	3.75%	3.75%	3.75%	20.00%	14.29%	
6									
7	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8									
9	Tax Basis	\$ 63,515	\$ 22,551,295	\$ 511,291	\$ 605,038	\$ 2,097,505	\$ 970,393	\$ 247,679	\$ 27,046,715
10	MACRS Depreciation	\$ 12,703	\$ 845,674	\$ 19,173	\$ 22,689	\$ 78,656	\$ 194,079	\$ 35,393	\$ 1,208,367
11									
12	Tax Depreciation - Federal	\$ 12,703	\$ 845,674	\$ 19,173	\$ 22,689	\$ 78,656	\$ 194,079	\$ 35,393	\$ 1,208,367
13	Tax Depreciation - State	\$ 12,703	\$ 845,674	\$ 19,173	\$ 22,689	\$ 78,656	\$ 194,079	\$ 35,393	\$ 1,208,367
14									
15	Book Depreciation Rate	20.00%	1.92%	1.92%	3.20%	3.33%	20.00%	5.26%	
16	Book Depreciation	\$ 12,703	\$ 432,985	\$ 9,817	\$ 19,361	\$ 69,847	\$ 194,079	\$ 13,028	\$ 751,819
17									
18	Tax over (under) Book - Federal	\$ -	\$ 412,689	\$ 9,357	\$ 3,328	\$ 8,810	\$ -	\$ 22,365	\$ 456,548
19	Tax over (under) Book - State	0	412,689	9,357	3,328	8,810	0	22,365	456,548
20	Deferred Taxes - Federal @ 21.00%	0	86,665	1,965	699	1,850	0	4,697	95,875
21	Deferred Taxes - State @ 7.60%	0	31,364	711	253	670	0	1,700	34,698
22	Deferred Tax Balance @ 0.00%	\$ -	\$ 118,029	\$ 2,676	\$ 952	\$ 2,520	\$ -	\$ 6,397	\$ 130,573
23									
24	Rate Base Calculation								
25	Plant in Service	\$ 63,515	\$ 22,551,295	\$ 511,291	\$ 605,038	\$ 2,097,505	\$ 970,393	\$ 247,679	\$ 27,046,715
26	Accumulated Depreciation	(12,703)	(432,985)	(9,817)	(19,361)	(69,847)	(194,079)	(13,028)	(751,819)
27	Deferred Tax Balance	0	(118,029)	(2,676)	(952)	(2,520)	0	(6,397)	(130,573)
28	<b>Rate Base</b>	<b>\$ 50,812</b>	<b>\$ 22,000,281</b>	<b>\$ 498,798</b>	<b>\$ 584,725</b>	<b>\$ 2,025,139</b>	<b>\$ 776,314</b>	<b>\$ 228,254</b>	<b>\$ 26,164,323</b>
29									
30	Revenue Requirement Calculation								
31	Return on Rate Base @ 8.76%	\$ 4,451	\$ 1,927,335	\$ 43,697	\$ 51,225	\$ 177,412	\$ 68,009	\$ 19,996	\$ 2,292,126
32	Depreciation Expense	12,703	432,985	9,817	19,361	69,847	194,079	13,028	751,819
33	Property Tax @ \$6.60 per \$1000	419	148,839	3,375	3,993	13,844	6,405	1,635	178,508
34	<b>Annual Revenue Requirement</b>	<b>\$ 17,574</b>	<b>\$ 2,509,158</b>	<b>\$ 56,888</b>	<b>\$ 74,579</b>	<b>\$ 261,103</b>	<b>\$ 268,492</b>	<b>\$ 34,659</b>	<b>\$ 3,222,453</b>
35									
36	Keene CNG Phase I Expansion Revenue Requirement Adjustment (per risk sharing calculation)								(21,962)
37	Total Annual Revenue Requirement Related 2021 Plant Additions								3,200,491
	Cap to Revenue Requirement per Settlement Agreement in DG 20-105								3,200,000
	Adjustment to Depreciation Expense Schedule A page 2								(660,216)
38	<b>Resulting Total Annual Revenue Requirement</b>								<b>\$ 2,539,784</b>
39									
40									
41									<b>Capped at \$3,200,000</b>
42	Rate of Return Calculation*	Capital Structure	Cost of Capital	Weighted Cost of Capital	Tax Rate	Pre-Tax WACC			
43	Equity	52.0%	9.30%	4.84%	27.004%	6.63%			
44	Debt	48.0%	4.42%	2.12%					
45		100.0%	13.72%	6.96%		8.76%			

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





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

**Base Rates**

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

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

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

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

**Base Rates**

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

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

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

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

**Base Rates**

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

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

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

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

Base Rates

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

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

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

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

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

Summer Season (May - Oct.)

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

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

Summer Season (May - Oct.)

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

62 DIFFERENCE:

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

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

Summer Season (May - Oct.)

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

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

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

102 Residential Heating (R3)

103 CURRENT

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

Summer Season (May - Oct.)

	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
33	33	18	13	14	18	38	134	791
127 LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
128 LDAC amount	\$4.36	\$2.35	\$1.76	\$1.80	\$2.33	\$5.07	\$17.67	\$104.26
130 <b>Total Bill</b>	<b>\$81.40</b>	<b>\$51.01</b>	<b>\$42.09</b>	<b>\$42.58</b>	<b>\$50.66</b>	<b>\$92.08</b>	<b>\$359.82</b>	<b>\$1,762.80</b>

132 DIFFERENCE:

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter
133 Total Bill	\$1.87	\$2.73	\$3.26	\$3.10	\$2.36	\$1.40	\$14.72
134 % Change	1.03%	1.06%	1.07%	1.06%	1.05%	1.00%	1.05%
136 Base Rate	\$1.87	\$2.73	\$3.26	\$3.10	\$2.36	\$1.40	\$14.72
137 % Change	2.74%	2.95%	3.03%	3.01%	2.87%	2.55%	2.89%
139 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
140 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
133 Total Bill	\$1.03	\$0.69	\$0.59	\$0.60	\$0.69	\$1.15	\$4.75	\$19.47
134 % Change	1.27%	1.36%	1.41%	1.40%	1.36%	1.25%	1.32%	1.10%
136 Base Rate	\$1.03	\$0.69	\$0.59	\$0.60	\$0.69	\$1.15	\$4.75	\$19.47
137 % Change	2.84%	2.59%	2.48%	2.48%	2.59%	2.90%	2.68%	2.84%
139 COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
140 % Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

142 Low Income Residential Heating (R4)

143 PROPOSED

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

Summer Season (May - Oct.)

	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
33	33	18	14	14	18	38	134	770
167 LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
168 LDAC amount	\$4.33	\$2.43	\$1.82	\$1.85	\$2.32	\$4.95	\$17.70	\$101.54
170 <b>Total Bill</b>	<b>\$74.68</b>	<b>\$45.60</b>	<b>\$36.36</b>	<b>\$36.79</b>	<b>\$44.05</b>	<b>\$84.19</b>	<b>\$321.68</b>	<b>\$1,460.15</b>

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

172 Low Income Residential Heating (R4)

173 CURRENT

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

Summer Season (May - Oct.)

	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
33	33	18	14	14	18	38	134	770
197 LDAC	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318
198 LDAC amount	\$4.33	\$2.43	\$1.82	\$1.85	\$2.32	\$4.95	\$17.70	\$101.54
200 <b>Total Bill</b>	<b>\$80.87</b>	<b>\$52.11</b>	<b>\$42.97</b>	<b>\$43.40</b>	<b>\$50.57</b>	<b>\$90.27</b>	<b>\$360.19</b>	<b>\$1,721.60</b>

201





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

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

Summer Season (May - Oct.)

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

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

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

Summer Season (May - Oct.)

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

313	<b>CURRENT</b>															
314	average Usage (Therms)	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
315		2,568	3,796	4,442	4,284	3,296	2,004	20,390	1,039	507	350	368	548	1,203	4,014	24,404
316	<b>Winter:</b>															
318	Cust. Chg	\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$1,116.18								
319	Headblock	\$455.76	\$455.76	\$455.76	\$455.76	\$455.76	\$455.76	\$2,734.55								
320	Tailblock	\$491.71	\$877.05	\$1,079.70	\$1,029.89	\$719.99	\$315.05	\$4,513.38								
321	HB Threshold															
322	<b>Summer:</b>															
324	Cust. Chg								\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$186.03	\$1,116.18	\$2,232.36
325	Headblock								\$182.30	\$182.30	\$159.30	\$167.82	\$182.30	\$182.30	\$1,056.34	\$3,790.89
326	Tailblock								\$200.44	\$33.45	\$0.00	\$0.00	\$46.27	\$251.84	\$532.00	\$5,045.38
327	HB Threshold															
328																
329	Total Base Rate Amount	\$1,133.49	\$1,518.84	\$1,721.49	\$1,671.68	\$1,361.77	\$956.84	\$8,364.11	\$568.77	\$401.78	\$345.33	\$353.85	\$414.60	\$620.17	\$2,704.52	\$11,068.63
330																
331	COG Rate - (Winter)	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303								
332	COG amount - Winter	\$3,159.08	\$4,670.66	\$5,465.55	\$5,270.16	\$4,054.53	\$2,466.14	\$25,086.12								
333																
334	COG Rate - (Summer)								\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303	\$1.2303
335	COG amount - Summer								\$1,278.36	\$623.33	\$430.03	\$1,230.03	\$673.62	\$1,480.00	\$4,938.37	\$30,024.49
336																
337	LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
338	LDAC amount	\$254.46	\$376.22	\$440.25	\$424.51	\$326.59	\$198.65	\$2,020.67	\$102.97	\$50.21	\$34.64	\$36.49	\$54.26	\$119.21	\$397.78	\$2,418.46
339																
340	<b>Total Bill</b>	<b>\$4,547.03</b>	<b>\$6,565.72</b>	<b>\$7,627.29</b>	<b>\$7,366.35</b>	<b>\$5,742.90</b>	<b>\$3,621.62</b>	<b>\$35,470.91</b>	<b>\$1,950.10</b>	<b>\$1,075.32</b>	<b>\$810.00</b>	<b>\$843.37</b>	<b>\$1,142.49</b>	<b>\$2,219.39</b>	<b>\$8,040.66</b>	<b>\$43,511.57</b>
341	<b>DIFFERENCE:</b>															
342	Total Bill	(\$99.35)	(\$87.93)	(\$81.92)	(\$83.40)	(\$92.58)	(\$104.59)	(\$549.76)	\$14.34	\$9.39	\$7.93	\$8.10	\$9.77	\$15.86	\$65.39	(\$484.38)
343	% Change	-2.18%	-1.34%	-1.07%	-1.13%	-1.61%	-2.89%	-1.55%	0.74%	0.87%	0.98%	0.96%	0.86%	0.71%	0.81%	-1.11%
344																
345	Base Rate	(\$99.35)	(\$87.93)	(\$81.92)	(\$83.40)	(\$92.58)	(\$104.59)	(\$549.76)	\$14.34	\$9.39	\$7.93	\$8.10	\$9.77	\$15.86	\$65.39	(\$484.38)
346	% Change	-8.77%	-5.79%	-4.76%	-4.99%	-6.80%	-10.93%	-6.57%	2.52%	2.34%	2.30%	2.29%	2.36%	2.56%	2.42%	-4.38%
347																
348	COG & LDAC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$0.00)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
349	% Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

Summer Season (May - Oct.)

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

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

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

Summer Season (May - Oct.)

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

382	<b>CURRENT</b>															
383	average Usage (Therms)	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
384		23,661	31,955	31,276	29,903	24,765	17,078	158,638	11,030	6,524	5,278	6,059	7,044	12,595	48,531	207,169
385	<b>Winter:</b>															
387	Cust. Chg	\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$4,777.92								
388	Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00								
389	Tailblock	\$3,293.63	\$4,448.16	\$4,353.60	\$4,162.44	\$3,447.29	\$2,377.26	\$22,082.38								
390	HB Threshold															
391	<b>Summer:</b>															
393	Cust. Chg								\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$796.32	\$4,777.92	\$9,555.84
394	Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
395	Tailblock								\$1,535.33	\$908.19	\$734.71	\$843.44	\$980.59			



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

Winter Season (Jan. - Apr., Nov. - Dec.)								Summer Season (May - Oct.)							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
514 LDAC	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091	\$0.0091
515 LDAC amount	\$0.18	\$0.23	\$0.25	\$0.24	\$0.21	\$0.17	\$1.28	\$0.13	\$0.10	\$0.08	\$0.09	\$0.10	\$0.12	\$0.62	\$1.90
517															
518 <b>Total Bill</b>	<b>\$219.93</b>	<b>\$228.95</b>	<b>\$231.37</b>	<b>\$229.63</b>	<b>\$224.91</b>	<b>\$218.54</b>	<b>\$1,353.33</b>	<b>\$211.22</b>	<b>\$206.83</b>	<b>\$203.73</b>	<b>\$204.05</b>	<b>\$205.60</b>	<b>\$209.64</b>	<b>\$1,241.07</b>	<b>\$2,594.40</b>

Winter Season (Jan. - Apr., Nov. - Dec.)								Summer Season (May - Oct.)							
Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)								CURRENT							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
521															
522 <b>average Usage (Therms)</b>	20	26	27	26	23	19	140	14	11	9	9	11	13	69	209
524															
525 <b>Winter:</b>															
526 Cust. Chg	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$1,114.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$1,114.80	\$2,229.60
527 Headblock	\$3.79	\$4.95	\$5.27	\$5.04	\$4.43	\$3.61	\$27.10	\$2.80	\$2.21	\$1.79	\$1.83	\$2.04	\$2.59	\$13.26	\$40.36
528 Tailblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
529 HB Threshold															
530															
531 <b>Summer:</b>															
532 Cust. Chg								\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$185.80	\$1,114.80	\$2,229.60
533 Headblock								\$2.80	\$2.21	\$1.79	\$1.83	\$2.04	\$2.59	\$13.26	\$40.36
534 Tailblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
535 HB Threshold															
536															
537 <b>Total Base Rate Amount</b>	\$189.59	\$190.75	\$191.07	\$190.84	\$190.23	\$189.41	\$1,141.90	\$188.60	\$188.01	\$187.59	\$187.63	\$187.84	\$188.39	\$1,128.06	\$2,269.96
538															
539 COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
540 COG amount - Winter	\$24.11	\$31.48	\$33.46	\$32.03	\$28.18	\$22.97	\$172.24	\$17.78	\$14.03	\$11.38	\$11.65	\$12.98	\$16.43	\$84.25	\$256.49
541															
542 COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
543 COG amount - Summer								\$17.78	\$14.03	\$11.38	\$11.65	\$12.98	\$16.43	\$84.25	\$256.49
544															
545 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
546 LDAC amount	\$1.95	\$2.54	\$2.70	\$2.58	\$2.27	\$1.85	\$13.90	\$1.43	\$1.13	\$0.92	\$0.94	\$1.05	\$1.33	\$6.80	\$20.69
547															
548 <b>Total Bill</b>	<b>\$215.65</b>	<b>\$224.78</b>	<b>\$227.22</b>	<b>\$225.46</b>	<b>\$220.69</b>	<b>\$214.24</b>	<b>\$1,328.04</b>	<b>\$207.81</b>	<b>\$203.17</b>	<b>\$199.89</b>	<b>\$200.22</b>	<b>\$201.87</b>	<b>\$206.14</b>	<b>\$1,219.10</b>	<b>\$2,547.14</b>
549															

DIFFERENCE:															
551 <b>Total Bill</b>	<b>\$4.28</b>	<b>\$4.18</b>	<b>\$4.15</b>	<b>\$4.17</b>	<b>\$4.22</b>	<b>\$4.30</b>	<b>\$25.30</b>	<b>\$3.40</b>	<b>\$3.66</b>	<b>\$3.84</b>	<b>\$3.82</b>	<b>\$3.73</b>	<b>\$3.50</b>	<b>\$21.96</b>	<b>\$47.26</b>
552 % Change	1.99%	1.86%	1.83%	1.85%	1.91%	2.01%	1.90%	1.64%	1.80%	1.92%	1.91%	1.85%	1.70%	1.80%	1.86%
553															
554 <b>Base Rate</b>	\$6.05	\$6.48	\$6.60	\$6.52	\$6.29	\$5.98	\$37.92	\$4.71	\$4.69	\$4.68	\$4.68	\$4.68	\$4.70	\$28.13	\$66.05
555 % Change	3.19%	3.40%	3.45%	3.41%	3.31%	3.16%	3.32%	2.50%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.91%
556															
557 <b>COG &amp; LDAC</b>	(\$1.77)	(\$2.31)	(\$2.45)	(\$2.35)	(\$2.06)	(\$1.68)	(\$12.62)	(\$1.30)	(\$1.03)	(\$0.83)	(\$0.85)	(\$0.95)	(\$1.20)	(\$6.17)	(\$18.79)
558 % Change	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%	-6.78%

Winter Season (Jan. - Apr., Nov. - Dec.)								Summer Season (May - Oct.)							
Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)								PROPOSED							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
561															
562 <b>average Usage (Therms)</b>	83	122	145	139	105	62	657	33	18	13	14	18	38	134	791
564															
565 <b>Winter:</b>															
566 Cust. Chg	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$5,054.36	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$5,054.36	\$10,108.73
567 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
568 Tailblock	\$15.48	\$22.66	\$27.02	\$25.74	\$19.59	\$11.61	\$122.09	\$3.23	\$1.74	\$1.31	\$1.33	\$1.72	\$3.75	\$13.08	\$135.17
569 HB Threshold															
570															
571 <b>Summer:</b>															
572 Cust. Chg								\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$842.39	\$5,054.36	\$10,108.73
573 Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
574 Tailblock								\$3.23	\$1.74	\$1.31	\$1.33	\$1.72	\$3.75	\$13.08	\$135.17
575 HB Threshold															
576															
577 <b>Total Base Rate Amount</b>	\$857.87	\$865.05	\$869.41	\$868.14	\$861.98	\$854.00	\$5,176.46	\$845.62	\$844.14	\$843.70	\$843.72	\$844.12	\$846.14	\$5,067.44	\$10,243.90
578															
579 COG Rate - (Winter)	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
580 COG amount - Winter	\$102.29	\$149.77	\$178.59	\$170.16	\$129.49	\$76.71	\$807.02	\$40.65	\$21.93	\$16.44	\$16.74	\$21.72	\$47.22	\$164.70	\$971.72
581															
582 COG Rate - (Summer)								\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
583 COG amount - Summer								\$40.65	\$21.93	\$16.44	\$16.74	\$21.72	\$47.22	\$164.70	\$971.72
584															
585 LDAC	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
586 LDAC amount	\$8.25	\$12.08	\$14.41	\$13.73	\$10.45	\$6.19	\$65.11	\$3.28	\$1.77	\$1.33	\$1.35	\$1.75	\$3.81	\$13.29	\$78.39
587															
588 <b>Total Bill</b>	<b>\$968.41</b>	<b>\$1,026.90</b>	<b>\$1,062.41</b>	<b>\$1,052.03</b>	<b>\$1,001.92</b>	<b>\$936.90</b>	<b>\$6,048.58</b>	<b>\$889.55</b>	<b>\$867.84</b>	<b>\$861.46</b>	<b>\$861.81</b>	<b>\$867.59</b>	<b>\$897.17</b>	<b>\$5,245.43</b>	<b>\$11,294.01</b>

Winter Season (Jan. - Apr., Nov. - Dec.)								Summer Season (May - Oct.)							
Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)								CURRENT							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
591															
592 <b>average Usage (Therms)</b>	83	122	145	139	105	62	657	33	18	13	14	18	38	134	791
594															
595 <b>Winter:</b>															
596 Cust. Chg	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
597 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
598 Tailblock	\$7.79	\$11.41	\$13.61	\$12.97	\$9.87	\$5.85	\$61.49	\$3.10	\$1.67	\$1.25	\$1.28	\$1.65	\$3.60	\$12.55	\$74.04
599 HB Threshold															
600															
601 <b>Summer:</b>															
602 Cust. Chg								\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
603 Headblock				</											

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

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

Winter Season (Jan. - Apr., Nov. - Dec.)								Summer Season (May - Oct.)							
Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)															
PROPOSED															
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
630 <b>average Usage (Therms)</b>	81	118	140	133	103	62	636	58,766	61,809	64,600	68,379	65,031	64,466	383,051	383,687
631															
632 <b>Winter:</b>															
633 Cust. Chg	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$5,059.32	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$5,059.32	\$10,118.63
634 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
635 Tailblock	\$5.69	\$8.34	\$9.93	\$9.40	\$7.25	\$4.36	\$44.99	\$2,417.13	\$2,542.32	\$2,657.10	\$2,812.55	\$2,674.82	\$2,651.60	\$15,755.54	\$15,800.53
636 HB Threshold															
637															
638 <b>Summer:</b>															
639 Cust. Chg								\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$843.22	\$5,059.32	\$10,118.63
640 Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
641 Tailblock								\$2,417.13	\$2,542.32	\$2,657.10	\$2,812.55	\$2,674.82	\$2,651.60	\$15,755.54	\$15,800.53
642 HB Threshold															
643															
644 <b>Total Base Rate Amount</b>	\$848.91	\$851.56	\$853.15	\$852.62	\$850.47	\$847.58	\$5,104.31	\$3,260.35	\$3,385.54	\$3,500.32	\$3,655.77	\$3,518.04	\$3,494.82	\$20,814.86	\$25,919.16
645															
646 <b>COG Rate - (Winter)</b>	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
647 <b>COG amount - Winter</b>	\$98.91	\$144.86	\$172.54	\$163.34	\$125.99	\$75.79	\$781.42	\$1,228.40	\$1,228.40	\$1,228.40	\$1,228.40	\$1,228.40	\$1,228.40	\$5,059.32	\$10,118.63
648															
649 <b>COG Rate - (Summer)</b>	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
650 <b>COG amount - Summer</b>	\$72,187.66	\$75,926.55	\$79,354.45	\$83,996.98	\$83,996.98	\$79,190.23	\$470,539.54	\$72,187.66	\$75,926.55	\$79,354.45	\$83,996.98	\$79,190.23	\$79,190.23	\$470,539.54	\$471,320.96
651															
652 <b>LDAC</b>	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
653 <b>LDAC amount</b>	\$7.98	\$11.69	\$13.92	\$13.18	\$10.16	\$6.11	\$63.04	\$5,823.67	\$6,125.30	\$6,401.84	\$6,776.38	\$6,444.54	\$6,388.60	\$37,960.33	\$38,023.37
654															
655 <b>Total Bill</b>	<b>\$955.80</b>	<b>\$1,008.11</b>	<b>\$1,039.61</b>	<b>\$1,029.14</b>	<b>\$986.62</b>	<b>\$929.49</b>	<b>\$5,948.77</b>	<b>\$81,271.68</b>	<b>\$85,437.40</b>	<b>\$89,256.62</b>	<b>\$94,429.13</b>	<b>\$89,846.24</b>	<b>\$89,073.65</b>	<b>\$529,314.72</b>	<b>\$535,263.49</b>
656															
657															

Winter Season (Jan. - Apr., Nov. - Dec.)								Summer Season (May - Oct.)							
Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)															
CURRENT															
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-22	Summer	Total
660 <b>average Usage (Therms)</b>	81	118	140	133	103	62	636	58,766	61,809	64,600	68,379	65,031	64,466	383,051	383,687
661															
662 <b>Winter:</b>															
663 Cust. Chg	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
664 Headblock	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
665 Tailblock	\$98.91	\$144.86	\$172.54	\$163.34	\$125.99	\$75.79	\$781.42	\$2,417.13	\$2,542.32	\$2,657.10	\$2,812.55	\$2,674.82	\$2,651.60	\$15,755.54	\$15,800.53
666 HB Threshold															
667															
668 <b>Summer:</b>															
669 Cust. Chg								\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$821.64	\$4,929.84	\$9,859.68
670 Headblock								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
671 Tailblock								\$2,417.13	\$2,542.32	\$2,657.10	\$2,812.55	\$2,674.82	\$2,651.60	\$15,755.54	\$15,800.53
672 HB Threshold															
673															
674 <b>Total Base Rate Amount</b>	\$920.55	\$966.50	\$994.18	\$984.98	\$947.63	\$897.43	\$5,711.26	\$73,009.30	\$76,748.19	\$80,176.09	\$84,818.62	\$80,705.30	\$80,011.87	\$475,469.38	\$481,180.64
675															
676 <b>COG Rate - (Winter)</b>	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
677 <b>COG amount - Winter</b>	\$98.91	\$144.86	\$172.54	\$163.34	\$125.99	\$75.79	\$781.42	\$1,228.40	\$1,228.40	\$1,228.40	\$1,228.40	\$1,228.40	\$1,228.40	\$5,059.32	\$10,118.63
678															
679 <b>COG Rate - (Summer)</b>	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284	\$1.2284
680 <b>COG amount - Summer</b>	\$72,187.66	\$75,926.55	\$79,354.45	\$83,996.98	\$83,996.98	\$79,190.23	\$470,539.54	\$72,187.66	\$75,926.55	\$79,354.45	\$83,996.98	\$79,190.23	\$79,190.23	\$470,539.54	\$471,320.96
681															
682 <b>LDAC</b>	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
683 <b>LDAC amount</b>	\$7.98	\$11.69	\$13.92	\$13.18	\$10.16	\$6.11	\$63.04	\$5,823.67	\$6,125.30	\$6,401.84	\$6,776.38	\$6,444.54	\$6,388.60	\$37,960.33	\$38,023.37
684															
685 <b>Total Bill</b>	<b>\$1,027.43</b>	<b>\$1,123.05</b>	<b>\$1,180.63</b>	<b>\$1,161.50</b>	<b>\$1,083.77</b>	<b>\$979.33</b>	<b>\$6,555.72</b>	<b>\$151,020.63</b>	<b>\$158,800.05</b>	<b>\$165,932.39</b>	<b>\$175,591.98</b>	<b>\$167,033.49</b>	<b>\$165,590.70</b>	<b>\$983,969.24</b>	<b>\$990,524.97</b>
686															
687															
688 <b>DIFFERENCE:</b>															
689 <b>Total Bill</b>	<b>(\$71.63)</b>	<b>(\$114.94)</b>	<b>(\$141.02)</b>	<b>(\$132.36)</b>	<b>(\$97.15)</b>	<b>(\$49.85)</b>	<b>(\$606.96)</b>	<b>(\$69,748.95)</b>	<b>(\$73,362.65)</b>	<b>(\$76,675.77)</b>	<b>(\$81,162.85)</b>	<b>(\$77,187.26)</b>	<b>(\$76,517.05)</b>	<b>(\$454,654.52)</b>	<b>(\$455,261.48)</b>
690 % Change	-6.97%	-10.23%	-11.94%	-11.40%	-8.96%	-5.09%	-9.26%	-46.19%	-46.20%	-46.21%	-46.22%	-46.21%	-46.21%	-46.21%	-45.96%
691															
692 <b>Base Rate</b>	(\$71.63)	(\$114.94)	(\$141.02												