

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE**

IN RE:)	
)	
CHATTANOOGA GAS COMPANY)	
PETITION FOR APPROVAL OF ITS)	
2019 ANNUAL RATE REVIEW)	DOCKET NO. 20-00049
FILING PURSUANT TO)	
TENN. CODE ANN. § 65-5-103(d)(6))	

**DIRECT TESTIMONY OF
ALEX BRADLEY**

August 11, 2020

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I. OVERVIEW OF CONSUMER ADVOCATE REVENUE REQUIREMENT MODEL

II. RESULTS OF MY REVIEW

Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION FOR THE RECORD.

A1. My name is Alex Bradley. My business address is Office of the Tennessee Attorney General, War Memorial Building, 301 6th Ave. North, Nashville, TN 37243. I am an Accounting & Tariff Specialist employed by the Consumer Advocate Unit in the Financial Division of the Tennessee Attorney General's Office.

Q2. PLEASE PROVIDE A SUMMARY OF YOUR BACKGROUND AND PROFESSIONAL EXPERIENCE.

A2. I received a Bachelor of Science in Business Administration with a major in Accountancy along with a Bachelor of Arts with a major in Political Science from Auburn University in 2012. I have been employed by the Consumer Advocate Unit in the Financial Division of the Tennessee Attorney General's Office (Consumer Advocate) since 2013. My duties include reviewing utility regulatory filings and preparing analysis used to support Consumer Advocate testimony and exhibits. I have completed multiple regulatory trainings sponsored by the National Association of Regulatory Utility Commissions (NARUC) held by Michigan State University.

Q3. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION?

1 **A3.** Yes. I have previously testified in TPUC Docket Nos. 17-00108, 18-00009, 18-00107,
2 19-00010, 19-00034, 19-00042, 19-00043, and 19-00057, 19-00062, and 20-00008.

3 **Q4. ON WHOSE BEHALF ARE YOU TESTIFYING?**

4 **A4.** I am testifying on behalf of the Consumer Advocate Unit in the Financial Division
5 of the Tennessee Attorney General's Office.

6 **Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 **A5.** My testimony will discuss the Consumer Advocate's Exhibits supporting the Consumer
8 Advocate's Revenue Requirement and the specific results of the Consumer Advocate's
9 2019 review of the Company's Operation and Maintenance Expense.

10 **Q6. WHAT DOCUMENTS HAVE YOU REVIEWED IN PREPARATION FOR THIS**
11 **TESTIMONY?**

12 **A6.** I have reviewed the Company's Pre-Filed Testimony along with the exhibits and work
13 papers supporting CGC Tucker Exhibit GT-1 through GT-3 along with CGC Hickerson
14 Exhibit ARH-1 through ARH-9. Additionally, I participated in and reviewed the final
15 orders in Docket Nos. 18-00017 and 19-00047. Finally, I have reviewed the Company's
16 responses to the data requests submitted by the Consumer Advocate in this Docket.

17 **I. OVERVIEW OF THE CONSUMER ADVOCATE EXHIBITS.**

18 **Q8. DID YOU PREPARE THE EXHIBITS AND WORKPAPERS PROVIDED IN**
19 **EXHIBITS AB1 & AB2?**

20 **A8.** Yes, I did.

21 **Q9. WHAT IS THE PURPOSE OF THE CONSUMER ADVOCATE'S EXHIBITS?**

1 **A9.** The purpose of these exhibits is to provide support for the Consumer Advocate's
2 recommended revenue requirement along with supplying the Commission with a
3 detailed set of Excel spreadsheets (or "Model") supporting the Consumer Advocate's
4 position.

5 **Q10. HOW IS THE CONSUMER ADVOCATE'S MODEL CALCULATED AND**
6 **PRESENTED?**

7 **A10.** The starting point for the Consumer Advocate's model is the financial statements
8 provided by the Company and presented in a number of schedules.

9 **Q11. WHAT DATA IS SHOWN ON CONSUMER ADVOCATE EXHIBIT**
10 **SCHEDULE 1?**

11 **A11.** Schedule 1 shows the results of the Advocate's review of the historic period along with
12 the rate reset period. Schedule 1 also compares the Advocate's overall result with that
13 of the Company as shown on Response to Consumer Advocate Discovery Request 1-
14 022, Attachment A, Tab 1 (Alt Schedule 1).

15 **Q12. WHAT IS THE RESULTING REVENUE DEFICIENCY AS SHOWN ON**
16 **SCHEDULE 1?**

17 **A12.** The Advocate's resulting revenue deficiency is \$4,576,988, or \$611,107 less than the
18 Company's requested revenue deficiency of \$5,188,096.

19 **Q13. EARLIER, YOU REFERRED TO TWO SERPERATE PERIODS, THE**
20 **HISTORIC BASE PERIOD AND THE RATE RESET PERIOD, CAN YOU**
21 **DESCRIBE THESE?**

1 **A13.** Yes, I can. Briefly, the historic base period is the result of operations, after any
2 ratemaking adjustments, for the year ending 2019. The rate reset period includes the
3 level of expenditures established in the historic base period (plus or minus any
4 normalizing adjustments to account for non-recurring items as described in the
5 Settlement Agreement in Docket No. 19-00047) plus (or minus) the resulting revenue
6 deficiency (or sufficiency) from the historic base period.

7 **Q14. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 2?**

8 **A14.** Schedule 2 shows the results of the Advocate's review of the Company's rate base.
9 Specifically, the Advocate begins with the historic base period, which is used, in part,
10 to determine the revenue deficiency for the historic base period. The schedule continues
11 by showing the normalizing adjustments and the effect of the regulatory asset/liability
12 (determined by the revenue deficiency/sufficiency of the historic base period) to rate
13 base. The Consumer Advocate's resulting normalized rate base for the rate reset is
14 \$163,293,702.

15 **Q15. ARE THERE ANY ADJUSTMENTS PROPOSED BY THE CONSUMER**
16 **ADVOCATE SHOWN ON THIS SCHEDULE?**

17 **A15.** Yes, within the Normalization Adjustments column there are two adjustments that are
18 sponsored by witness David N. Dittmore. Those adjustments are to Excess
19 Accumulated Deferred Income Taxes (EADIT)¹ and the Regulatory Liability for the
20 Deferred Tax Savings.² For a detailed discussion of these adjustments, please see his

¹ Exhibit DND-3.

² Exhibit DND-4.

testimony. Additionally, there is an adjustment to Working Capital that occurs because of expense adjustments at other points within the model.

Q16. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 3?

A16. Schedule 3 shows a Comparative Normalized Rate Base as used for rates during the rate reset period. The results of the Advocate's adjustments on Schedule 2 show an increase of rate base by \$109,719 compared with the Company's requested \$163,183,983 in rate base for the rate reset period.

Q17. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 4?

A17. Schedule 4 shows the Advocate's Lead Lag Results for determination of the cash working capital requirement for both the revenue deficiency of the historic base period and for the setting of rates during the rate reset period.

Q18. WHAT ARE SHOWN ON CONSUMER ADVOCATE SCHEDULES 5A AND 5B?

A18. Schedules 5a and 5b are the Advocate's calculations of the daily cash working capital requirements and expense lags for use in the determination of both the revenue deficiency of the historic base period and for the revenue requirement during the rate reset period. Schedule 5a shows these calculations for the historic base period while 5b shows the calculations for the rate reset period.

Q19. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 6?

A19. Schedule 6 shows the Consumer Advocates calculation of the Company's utility operating income for both the historic base period and for the rate reset period.

Specifically, the Advocate began on Column J with the same base period revenues and expenses that are shown in the Company's Schedule 5. The Advocate then applied the Company's own adjustments along with any adjustments made by the Advocate's witnesses to arrive at our Adjusted Base Period as shown in Column P.

Q20. WHAT ADDITIONAL ADJUSTMENTS DID THE ADVOCATE MAKE IN ITS ADJUSTED BASE PERIOD?

A20. The Advocate adjusted the Non-Labor Operations and Maintenance ("Non-Labor O&M") expenses and Taxes other than Income Tax. For Non-Labor Operations and Maintenance Expense the Advocate removed [REDACTED] as discussed by Mr. Dittmore in his testimony and shown in Exhibit DND-5. For Taxes Other Than Income Taxes the Advocate increased other taxes by \$85,841 as discussed by Mr. Dittmore in his testimony and shown in Exhibit DND-4. Finally, the Advocate used these adjustments to recalculate State Excise and Federal Income Taxes in Schedule 8.

Q21. CONTINUE WITH YOUR DISCUSSION OF CONSUMER ADVOCATE SCHEDULE 6.

A21. After arriving at the adjusted base period, the Advocate proceeded to apply the Company's normalization adjustments along with the Advocate's own normalization adjustments to determine the normalized base period.

Q22. WHAT ADDITIONAL ADJUSTMENTS DID THE ADVOCATE MAKE TO ARRIVE AT THE NORMALIZED BASE PERIOD?

1 **A22.** The Advocate reduced normalized Nonlabor O&M, specifically, Administrative and
2 general expense by \$18,039 as discussed later in my testimony and shown on AB-2.
3 Finally, the Advocate used these adjustments to recalculate state excise taxes and federal
4 income taxes in Schedule 8.

5 **Q23. WHAT WAS THE NEXT STEP IN CREATING SCHEDULE 6?**

6 **A23.** After arriving at the normalized base period the final step is to add the asset/liability
7 balance established in the calculation of the revenue deficiency/sufficiency of the
8 adjusted historic base period ("ARM Recon Balance"), illustrated within Schedule 13,
9 and any additional taxes, to arrive at the period amounts for the rate reset.

10 **Q24. WERE THE RESULTS OF THE CONSUMER ADVOCATE'S ARM**
11 **RECONCONCILIATION BALANCE DIFFERENT FROM THAT PROPOSED**
12 **BY THE COMPANY'S?**

13 **A25.** Yes, due to some of the previously mentioned adjustments the total amount of the
14 regulatory asset created is less than the Company's. Additionally, the treatment of this
15 asset is different as well. As discussed in Mr. Dittmore's Direct Testimony and shown
16 on Schedule 6, the Advocate chose to create a regulatory liability with the remaining
17 Tax Cut and Jobs Act Tax ("TCJA") Reserves and Excess Deferred Income Taxes
18 ("EADIT").

19 **Q26. WHAT IS THE RESULTING OPERATING INCOME DETERMINED BY THE**
20 **CONSUMER ADVOCATE FOR THE RATE RESET PERIOD?**

21 **A26.** The Advocate arrived at an operating income of \$8,225,108 for the rate reset period.

Q27. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 7?

A27. Schedule 7 is a comparative income statement for the rate reset period. It shows the Company's proposed income statement for the rate reset as shown in Response to Consumer Advocate Discovery Request No. 1-22, Attachment A, Tab 3 (Alt Schedule 5) and the Advocate calculation as shown in Schedule 6, Column AB. The result of the Advocate's adjustments leads to an increase in utility operating income of \$461,433.

Q28. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 8?

A28. Schedule 8 shows the Advocate's calculation of State Excise and Federal Income Taxes for the same periods and results as shown on Schedule 6.

Q29. ARE THERE ANY ADDITIONAL ADJUSTMENTS MADE ON THIS SCHEDULE THAT ARE NOT SHOWN ELSEWHERE?

A29. Yes, in conjunction with Mr. Dittmore's recommended treatment of the Regulatory Liability using the TCJA Reserves and the EADIT, I have removed the Income Tax Expense Credit associated with the remaining TCJA EADIT amortization. This treatment is consistent with the calculation shown by the Company within the Income Tax Expense calculation as shown in response to Consumer Advocate Request No. 1-22.

Q30. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 9?

A30. Schedule 9 shows the Advocate's calculation of Interest Expense.

Q31. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 10?

1 **A31.** Schedule 10 shows a Comparative Revenue Summary by customer type. The increased
2 revenue was spread evenly across all customer classes; however, Mr. Dittmore
3 recommends that individual customer rates not be increased on a pro-rata basis. His
4 proposed rate design is set out in Exhibit DND-7 and discussed in his testimony.

5 **Q32. WHAT IS SHOWN ON CONSUMER ADVOCATE SCHEDULE 11?**

6 **A32.** Schedule 11 shows a comparative detailed summary of Operations and Maintenance
7 ("O&M") Expenses. The Schedule compares the Company's Normalized level of
8 O&M³ to that of the Consumer Advocate.

9 **Q33. WHAT IS THE DIFFERENCE BETWEEN THE CONSUMER ADVOCATE**
10 **NORMALIZED O&M COMPARED WITH THAT OF THE COMPANY?**

11 **A33.** Schedule 11 shows that the Consumer Advocate's Normalized O&M Expense for the
12 rate reset period is \$329,087 less than the Company's.

13 **Q34. WHAT IS SHOWN ON SCHEDULE 12?**

14 **A34.** Schedule 12 shows a comparative calculation of Taxes Other Than Income Taxes
15 ("TOTI") for the normalized rate reset.

16 **Q35. WHAT RESULT IS SHOWN ON SCHEDULE 12?**

17 **A35.** The Consumer Advocate's TOTI is \$3,614,504 as set forth within Schedule 12, or
18 \$85,840 higher than that proposed by the Company. For a thorough explanation on the

³ CGC Tucker Exhibit GT-1 (ARM Model).xlsx, Schedule 7, Column L

adjustment that causes this variance please see Mr. Dittmore's Testimony and his Exhibit DND-4.

Q36. WHAT IS SHOWN ON SCHEDULE 13?

A36. Schedule 13 shows the Consumer Advocate's calculation of the Annual Recognition Mechanism ("ARM") Asset or Liability. In this case both the Company and the Consumer Advocate have calculated an such an asset.

Q37. EXPLAIN HOW THE ANNUAL RECOGNITION MECHANISM ASSET IS CALCULATED?

A37. This asset is calculated based on the Historic Base Period values established in Schedules 2, 6, 15, and 16. Specifically, the ARM Asset takes the Adjusted Base Period Revenues and Operating Expenses from Schedule 6 to arrive at the Adjusted Base Period Operating Income. It then calculates Interest Expense and Required Return on Equity by taking the Rate Base from Schedule 2 and multiplying it the Cost of Equity and Cost of Debt established in Schedule 15. The Earning Deficiency - the amount of expenses not currently being recovered in rates - is calculated by reducing the Base Period Operating Income established earlier by both the Interest Expense and the Required Return on Equity. The resulting revenue deficiency for the base period calculated by the Consumer Advocate in this case was \$2,898,006. After being grossed up for carrying charges and taxes the resulting Annual Reconciliation Balance that is added into the calculation of the rate reset period is \$3,923,381.

Q38. IS THERE ANYTHING ELSE SHOWN ON SCHEDULE 13?

1 Expense Amortization was not consistent with the Commission's Order in Docket No.
2 19-00047.

3 **Q43. WHAT LANGUAGE WITHIN THE COMMISSION ORDER IN DOCKET NO.**
4 **19-00047 ARE YOU REFERING TO?**

5 **A43.** In the Commission's Final Order Approving Settlement Agreement in Docket No. 19-
6 00047 the Commission stated in subpart Q:

7 "q. Costs for this docket proceeding shall be treated as a rate case expense,
8 amortized over a three-year period beginning on September 1, 2020, coinciding
9 with the first annual rate reset"⁴

10 **Q44. HOW DOES THIS DIFFER FROM THE COMPANY'S CALCULATION?**

11 **A44.** The Company adds 1/3 of \$81,178 or \$27,059 to Administrative and General Expense
12 within its calculation of normalized base period O&M, year ending 2020 for this case.

13 **Q45. HOW DID YOU CALCULATE THE RATE CASE AMORTIZATION?**

14 **A45.** As shown in AB-2 I took the \$81,178 amount of costs and amortized it over 36 months
15 or a \$2,555 a month, beginning in September 2020 as specified by the Commission in
16 Docket No. 19-00047. For the normalized rate reset period of 2020 that equals \$9,020,
17 or a difference of \$18,039 in normalized Administrative and General period expenses
18 (see Exhibit AB-2).

19 **Q46. DOES THIS CONCLUDE YOUR TESTIMONY?**

⁴ Final Order Approving Settlement Agreement, p.8 TPUC Docket No. 19-00047.

1 **A46.** " Yes, however, I reserve the right to correct, amend or add to my testimony if new
2 information becomes available or if I identify an error.

IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE

IN RE:

CHATTANOOGA GAS COMPANY
PETITION FOR APPROVAL OF ITS
2019 ANNUAL RATE REVIEW
FILING PURSUANT TO
TENN. CODE ANN. § 65-5-103(d)(6)

Docket No. 20-00049

AFFIDVIT

I, Alex Bradley, on behalf of the Consumer Advocate Unit of the Attorney General's Office, hereby certify that the attached Direct Testimony represents my opinion in the above-referenced case and the opinion of the Consumer Advocate Unit.

Alex Bradley

Alex Bradley

Sworn to and subscribed before me

this 10th day of August, 2020.

Tiffany Hope Blackman

NOTARY PUBLIC



My commission expires: March 22, 2023

EXHIBIT AB-1

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION
ATNASHVILLE, TENNESSEE**

IN RE:)	
)	
CHATTANOOGA GAS COMPANY)	
PETITION FOR APPROVAL OF ITS)	Docket No. 20-00049
2019 ANNUAL RATE REVIEW)	
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EXHIBIT
OF
THE CONSUMER ADVOCATE UNIT
OF THE
OFFICE OF THE TENNESSEE ATTORNEY GENERAL

August 10, 2020

CHATTANOOGA GAS COMPANY
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For the 12 Months Ending December 31, 2019 & Rate Reset

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CHATTANOOGA GAS COMPANY
Results of Operations
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		CGC Filing E/	CA Adjusted A/	Normalized CA A/	With ARM CA A/	Difference
1	Rate Base	\$ 163,183,982	161,056,858 A/	161,844,699 A/	163,293,702 A/	109,719
2	Operating Income At Current Rates	7,763,675	8,664,969 B/	8,607,220 B/	8,225,108 B/	461,433
3	Earned Rate Of Return	4.76%	5.38%	5.32%	5.04%	0
4	Fair Rate Of Return	7.12%	7.12% C/	7.12% C/	7.12% C/	0
5	Required Operating Income	11,614,785	11,463,385	11,519,460	11,622,595	7,809
6	Operating Income Deficiency (Surplus)	3,851,110	2,798,416	2,912,241	3,397,486	-453,623
7	Gross Revenue Conversion Factor	1.347169	1.347169 D/	1.347169 D/	1.347169 D/	0
8	Revenue Deficiency (Surplus)	\$ 5,188,096	3,769,939	3,923,281	\$ 4,576,988	-611,107

A/ CA Exhibit, Schedule 2.

B/ CA Exhibit, Schedule 6.

C/ CA Exhibit, Schedule 13.

D/ CA Exhibit, Schedule 14.

E/ CA 1-022 Attachment A 2020-06-23.xlsx, Tab 1 (Alt Schedule 1).

CHATTANOOGA GAS COMPANY
Average Rate Base
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		Historic Base Period	Normalization Adjustments	ARM Asset/ Liab. Adj.	CA Adjusted Period
Additions:					
1	Utility Plant in Service	\$ 315,200,253 A/			315,200,253
2	Construction Work in Progress	19,004,354 A/			19,004,354
3	Pension & OPEB Assets	82,598 A/			82,598
4	Materials & Supplies	407,669 A/	-4,792 A/		402,877
5	Prepayments	48,334 A/	153 A/		48,487
6	Gas Inventory	8,871,344 A/	328,653 A/		9,199,997
7	Deferred Rate Case Expense	1,112,590 A/	31,938 A/		1,144,528
8	Working Capital	548,098 B/	46,172		594,270 B/
9	Unamortized ARM Reconciliation Balance	0		1,961,691 C/	1,961,691
10	Total Additions	\$ 345,275,240	\$ 402,124	1,961,691	\$ 347,639,055
Deductions:					
11	Accumulated Depreciation	\$ 132,712,912 A/			132,712,912
12	Accumulated Deferred Income Taxes	24,691,014 A/	389,401 D/		25,080,415
13	Regulatory Liability - Excess Deferrals	22,289,323 A/			22,289,323
14	Regulatory Liability - Deferred Tax Savings	1,844,710 A/	-744,152 D/		1,100,558
15	Deferred Income Tax-ARM Reconciliation Balance	0 A/		512,688	512,688
16	Customer Advances for Construction	0 A/			0
17	Reserve for Uncollectibles	210,505 A/	-9,090 A/		201,415
18	Reserve for Health Insurance	69,396 A/	-23,468 A/		45,928
19	Other Reserves	60,601 A/	1,593 A/		62,194
20	Customer Deposits	1,988,149 A/			1,988,149
21	Accrued Interest on Customer Deposits	351,772 A/			351,772
22	Total Deductions	\$ 184,218,382	\$ -385,717	512,688	\$ 184,345,353
23	Rate Base	\$ 161,056,858	\$ 787,841	1,449,003	\$ 163,293,702

A/ CA 1-022 Attachment A 2020-06-23.xlsx, Tab 2 (Alt Schedule 2).
B/ CA Exhibit, Schedule 4.
C/ CA Exhibit, Schedule 13.
D/ DND Exhibit 3

CHATTANOOGA GAS COMPANY
Comparative Normalized Annual Rate True-Up Rate Base
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		CGC Filing A/	CA B/	Difference
Additions:				
1	Utility Plant in Service	\$ 315,200,253	\$ 315,200,253	\$ 0
2	Construction Work in Progress	19,004,354	19,004,354	0
3	Pension & OPEB Assets	82,598	82,598	0
4	Materials & Supplies	402,877	402,877	0
5	Prepayments	48,487	48,487	0
6	Gas Inventory	9,199,996	9,199,997	1
7	Deferred Rate Case Expense	1,144,527	1,144,528	1
8	Working Capital	651,196	594,270	-56,926
9	Unamortized ARM Recon Balance	382,947	1,961,691	1,578,743
9	Total Additions	\$ 346,117,236	\$ 347,639,055	\$ 1,521,819
Deductions:				
10	Accumulated Depreciation	\$ 132,712,913	\$ 132,712,912	\$ 0
11	Accumulated Deferred Income Taxes	25,181,476	25,080,415	-101,062
12	Regulatory Liability - Excess Deferrals	22,289,323	22,289,323	0
13	Regulatory Liability - TCJA	0	1,100,558	1,100,558
14	Deferred Income Tax-ARM Reconciliation Balance	100,083	512,688	412,605
15	Customer Advances for Construction	0	0	0
16	Reserve for Uncollectibles	201,415	201,415	0
17	Reserve for Health Insurance	45,928	45,928	0
18	Other Reserves	62,194	62,194	0
19	Customer Deposits	1,988,149	1,988,149	0
20	Accrued Interest on Customer Deposits	351,772	351,772	0
21	Total Deductions	\$ 182,933,253	\$ 184,345,353	\$ 1,412,100
22	Rate Base	\$ 163,183,983	\$ 163,293,702	\$ 109,719

A/ CA 1-022 Attachment A 2020-06-23.xlsx, Tab 2 (Alt Schedule 2).

B/ CA Exhibit, Schedule 2.

CHATTANOOGA GAS COMPANY
Lead Lag Results
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		Base Period Per CA		Reset Per CA
1	Revenue Lag	43.76		43.76
2	Expense Lag	37.39	A/	37.14 B/
3	Net Lag	6.37		6.62
4	Daily Cost of Service	\$ 180,217	A/	180,632 B/
5	Cash Working Capital	\$ 1,148,763		1,194,935
6	Tax Collections Withheld	-600,665		-600,665
7	Net Cash Working Capital Provided	\$ 548,098		594,270

A/ CA Exhibit, Schedule 5a.
B/ CA Exhibit, Schedule 5b.

CHATTANOOGA GAS COMPANY
Working Capital Expense Lag (Deficiency)
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		Ordered Amount	Amount	Ordered Lag	Dollar Days
	Operating & Maintenance Expenses:				
1	Purchased Gas Expense	38,611,525	\$ 35,313,101 A/	40.94	\$ 1,445,718,373
2	O&M Labor	3,216,717	3,581,237 A/	14.01	50,173,130
3	Pension Expense	22,964	22,144 B/	0.00	0
4	Post-Retirement Benefits Other Than Pension	0	49,612 B/	0.00	0
5	Miscellaneous Employee Benefits	(312)	15,063 B/	4.47	67,330
6	401K Benefits	120,978	120,507 B/	12.07	1,454,519
7	Health/Life Insurance Expense	573,050	799,811 B/	8.98	7,182,307
8	Allocated Cost	3,371,863	5,383,103 B/	21.94	118,105,283
9	Uncollectible Expense	121,863	248,739 B/	43.76	10,884,834
10	Other Operating Expense	4,051,519	5,035,146 A/	31.49	158,556,736
	Taxes:				
11	Taxes Other Than Income Tax	3,488,071	3,614,505 A/	171.16	618,658,676
12	State Income Tax - Current	0	-255,141 C/	37.88	-9,664,726
13	State Income Tax Deferred	372,213	560,921 C/	0.00	0
14	Federal Income Tax - Current	0	-1,974,194 C/	37.88	-74,782,484
15	Federal Income Tax - Deferred	264,062	2,027,098 C/	0.00	0
	Other:				
16	Depreciation Expense	8,035,649	7,636,905 A/	0.00	0
17	Interest on Customer Deposits	96,740	79,570 A/	0.00	0
18	Interest Expense - Short Term Debt	283,951	291,172	-51.36	-14,954,597
19	Interest Expense - Long Term Debt	3,149,672	3,229,765	45.76	147,794,044
20	Total Working Capital Requirement	65,780,525	\$ 65,779,065	37.39	\$ 2,459,193,424
21	Daily Working Capital Requirement	\$ 180,217			
22	Return on Equity		7,770,253		
23	Total Cost of Service		\$ 73,549,317		

A/ CA Exhibit, Schedule 6.
B/ O&M Results.xlsx
C/ CA Exhibit, Schedule 8.
D/

CHATTANOOGA GAS COMPANY
Working Capital Expense Lag (Reset)
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		Ordered Amount	Amount	Ordered Lag	Dollar Days
	Operating & Maintenance Expenses:				
1	Purchased Gas Expense	38,611,525	\$ 35,313,101 A/	40.94	\$ 1,445,718,373
2	O&M Labor	3,216,717	3,581,237 A/	14.01	50,173,130
3	Pension Expense	22,964	22,144 B/	0.00	0
4	Post-Retirement Benefits Other Than Pension	0	49,612 B/	0.00	0
5	Miscellaneous Employee Benefits	(312)	15,063 B/	4.47	67,330
6	401K Benefits	120,978	120,507 B/	12.07	1,454,519
7	Health/Life Insurance Expense	573,050	574,377 B/	8.98	5,157,901
8	Allocated Cost	3,371,863	5,383,103 B/	21.94	118,105,283
9	Uncollectible Expense	121,863	191,881 B/	43.76	8,396,723
10	Other Operating Expense	4,051,519	4,864,425 A/	31.49	153,180,728
	Taxes:				
11	Taxes Other Than Income Tax	3,488,071	3,614,505 A/	171.16	618,658,676
12	State Income Tax - Current	0	-261,812 C/	37.88	-9,917,447
13	State Income Tax Deferred	372,213	560,921 C/	0.00	0
14	Federal Income Tax - Current	0	-1,994,348 C/	37.88	-75,545,895
15	Federal Income Tax - Deferred	264,062	2,027,098 C/	0.00	0
	Other:				
16	Depreciation Expense	8,035,649	8,246,593 A/	0.00	0
17	Interest on Customer Deposits	96,740	83,159 A/	0.00	0
18	Interest Expense - Short Term Debt	283,951	292,666	-51.36	-15,031,328
19	Interest Expense - Long Term Debt	3,149,672	3,246,337	45.76	148,552,364
20	Total Working Capital Requirement	65,780,525	\$ 65,930,569	37.14	\$ 2,448,970,358
21	Daily Working Capital Requirement	\$ 180,632			
22	Return on Equity		7,770,253		
23	Total Cost of Service		\$ 73,700,822		

A/ CA Exhibit, Schedule 6.
B/ O&M Results.xlsx
C/ CA Exhibit, Schedule 8.
D/

CHATTANOOGA GAS COMPANY

Income Statement at Current Rates

For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		CGC 1-22 Base Period	Rate Making Adjustments	Base Period w/ Adjustments	Normalization Adjustments	Normalized Base Period	Include ARM Asset/Liab.	Period Amount
Operating Revenues:								
1	Gas Sales & Transportation Revenues	\$ 69,171,028	\$ 205,659	\$ 69,376,687	\$ 226,100	\$ 69,602,787	\$	\$ 69,602,787
2	Other Revenues	3,805,170	(2,799,993)	1,005,177	-150,411	854,766		854,766
3	AFUDC-Interest	172,195	0	172,195		172,195		172,195
4	AFUDC-Equity	369,038	0	369,038		369,038		369,038
5	Total Operating Revenue	\$ 73,517,431	\$ -2,594,334	\$ 70,923,097	\$ 75,689	\$ 70,998,786	\$ 0	\$ 70,998,786
Operating & Maintenance Expenses:								
6	Purchased Gas Expense	\$ 35,345,234	\$ (32,133)	\$ 35,313,101	\$	\$ 35,313,101	\$	\$ 35,313,101
7	Operations & Maintenance - Labor	3,763,869	(182,633)	3,581,237 C/		3,581,237 C/		3,581,237 C/
8	Operations & Maintenance - NonLabor	16,288,675	(4,614,549)	11,674,126 C/	(453,014)	11,221,112 C/		11,221,112 C/
9	Total Operating & Maintenance Expenses	\$ 55,397,779	\$ -4,829,315	\$ 50,568,464	\$ -453,014	\$ 50,115,450	\$ 0	\$ 50,115,450
Other Expenses:								
10	Depreciation Expense	\$ 7,636,905	\$ 0	\$ 7,636,905 D/	\$ 609,689	\$ 8,246,593 D/	\$	\$ 8,246,593 D/
11	Amort - ARM Recon Balance		0			0	3,923,381	3,923,381
12	Amort- Regulatory Liability		(0)				-3,394,315	-3,394,315
13	Interest on Customer Deposits	79,570		79,570	3,589	83,159		83,159
14	General Taxes	3,541,299	73,206	3,614,505 D/		3,614,505 D/		3,614,505
15	State Excise Taxes	165,265	140,515	305,780 G/	(6,672)	299,109 G/	(36,549)	262,560 G/
16	Federal Income Taxes	(371,739)	424,643	52,904 G/	(20,153)	32,750 G/	(110,406)	-77,656 G/
17	Total Other Expenses	\$ 11,051,299	\$ 638,364	\$ 11,689,664	\$ 586,453	\$ 12,276,116	\$ 382,111	\$ 12,658,228
17	Total Operating Expenses	\$ 66,449,079	\$ -4,190,951	\$ 62,258,128	\$ 133,438	\$ 62,391,566	\$ 382,111	\$ 62,773,678
18	Utility Operating Income	\$ 7,068,352	\$ 1,596,617	\$ 8,664,969	\$ -57,749	\$ 8,607,220	\$ -382,111	\$ 8,225,108

A/ CA 1-022 Attachment A 2020-06-23.xlsx, Tab 1 (Alt Schedule 1).

B/ CA Exhibit, Schedule 9.

C/ O&M Results.xlsx,

D/ Exhibit, Schedule 12.

E/ Exhibit, DND-4.

F/ Exhibit, Schedule 13.

G/ Exhibit, Schedule 8.

H/

I/

J/

K/

L/

CHATTANOOGA GAS COMPANY
Comparative Income Statement at Current Rates
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		CGC Filing	B/	CA	C/	Difference
	Operating Revenues:					
1	Gas Sales & Transportation Revenues	\$ 69,602,788		\$ 69,602,787		-1
2	Other Revenues	854,766		854,766		0
3	AFUDC-Interest	172,195		172,195		0
4	AFUDC-Equity	369,038		369,038		0
5	Total Operating Revenue	\$ 70,998,787		\$ 70,998,786		-1
	Operating & Maintenance Expenses:					
6	Purchased Gas Expense	\$ 35,313,102		\$ 35,313,101		0
7	Operations & Maintenance - Labor	3,581,237		3,581,237		0
8	Operations & Maintenance - NonLabor	11,550,199		11,221,112		-329,087
9	Total Operating & Maintenance Exp.	50,444,538		50,115,450		-329,087
	Other Expenses:					
10	Depreciation Expense	\$ 8,390,328		\$ 8,246,593		-143,735
11	Amort - ARM Recon Balance			3,923,381		3,923,381
12	Amort- Regulatory Liability	765,894		-3,394,315		-4,160,209
13	Interest on Customer Deposits	83,159		83,159		0
14	General Taxes	3,528,664		3,614,505		85,841
15	State Excise Taxes	222,176		262,560		40,384
16	Federal Income Taxes	-199,647		-77,656		121,991
17	Total Other Expenses	12,790,574		12,658,228		-132,347
17	Total Operating Expenses	\$ 63,235,112		\$ 62,773,678		-461,434
18	Utility Operating Income	\$ 7,763,675		\$ 8,225,108		461,433

A/
B/ CGC Tucker Exhibit GT-1 (ARM Model).xlsx, Schedule 5
C/

CHATTANOOGA GAS COMPANY

Excise and Income Taxes
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.	18-00017 Ordered	CA Per Financials	Rate Making Adjustments	CA Adjusted Period	Normalization Adjustments	CA Normalized Period	Add ARM Asset/Liab.	CA w/ ARM
1	\$ 71,972,727	73,517,431	(2,544,334)	70,923,097	75,689	70,988,786		70,988,786 A/
2								
3	\$ 38,611,525	35,345,234	(32,133)	35,313,101	0	35,313,101		35,313,101 A/
4	\$ 11,478,640	20,052,545	(4,787,182)	15,255,363	(453,014)	14,802,349		14,802,349 A/
5	\$ 8,035,649	7,636,905	0	7,636,905	609,689	8,246,593		8,246,593 A/
6							3,923,381	3,923,381
7	\$ 96,740	79,570	(1)	79,570	3,589	83,159	(3,394,315)	(3,394,315) A/
8	\$ 3,488,071	3,541,299	73,205	3,614,505	0	3,614,505		3,614,505 A/
9	\$ 10,262,102	6,861,878	2,161,775	9,023,653	-84,575	8,939,078		8,939,078 A/
10	\$ -803,951	(369,038)	0	(369,038)	0	(369,038)		(369,038) A/
11	\$ -3,433,623	(3,693,132)	0	(3,693,132)	(18,066)	(3,711,198)		(3,711,198) B/
12		21,000		21,000		21,000		21,000
13	\$ 6,024,528	2,820,708	2,161,775	4,982,483	-102,640	4,879,843		4,879,843
14	\$ 6,024,528	2,820,708	2,161,775	4,982,483	-102,640	4,879,843		4,879,843
15	\$ 381,594	183,346	140,515	323,861	-6,507	317,354		317,354 C/
16		(18,081)	(18,081)	(18,081)		(18,081)		(18,081) C/
17	\$ 391,554	165,265	122,434	305,780	-6,872	298,908		298,908
18								
19	\$ 0	-395,656	122,434	-255,141	-6,872	-261,812		-261,812 D/
20	\$ 391,594	560,921		560,921		560,921		560,921 D/
21								
22	\$ 6,024,528	2,820,708	2,161,775	4,982,483	-102,640	4,879,843		4,879,843
23	\$ 391,594	165,265	122,434	305,780	-6,507	298,908		298,908
24	\$ 5,632,934	2,855,443	2,039,341	4,676,703	-85,969	4,590,734		4,590,734
25	\$ 1,182,916	557,643	428,262	982,108	-20,153	961,954		961,954
26		-893,619	-893,619	-893,619		-893,619		-893,619
27	\$ -21,351	-35,585	-35,585	-35,585		-35,585		-35,585 C/
28	\$ -897,373	-371,561	-500,942	-52,904	-20,153	32,750		32,750
29	\$ 264,192							
30	\$ 0	-2,398,659	-2,528,040	-1,974,194	-2,047,251	-1,984,348		-1,984,348 D/
31	\$ 264,192	2,027,098	2,027,098	2,027,098	2,027,098	2,027,098		2,027,098 D/

A/
B/
C/
D/

Chattanooga Gas Company
Annual Review Mechanism ("ARM")
Rate of Return Summary
Twelve Months Ending December 31, 2019
Schedule 11

20-00049
CA Exhibit
Schedule 9

Line No.	Class of Capital	Rate Case Capital Structure and Rate Case Costs Rate Case	Rate Case Capital Structure and Rate Case Costs Historic Base Period	Rate Case Capital Structure and Rate Case Costs Historic Base Period With Normalization Adjustments	Rate Case Capital Structure and Rate Case Costs Historic Base Period With Annual True-Up Revenue Requirement Rate Adjustment
1	Short-Term Debt	6.30%	6.30%	6.30%	6.30%
2	Long-Term Debt	44.47%	44.47%	44.47%	44.47%
3	Equity % of Total	49.23%	49.23%	49.23%	49.23%
	Cost Rate				
4	Short-Term Debt	3.01%	3.01%	3.01%	3.01%
5	Long-Term Debt	4.73%	4.73%	4.73%	4.73%
6	Equity Authorized Dkt 18-00017	9.80%	9.80%	9.80%	9.80%
	Weighted Cost				
12	Short-Term Debt	0.19%	0.19%	0.19%	0.19%
13	Long-Term Debt	2.10%	2.10%	2.10%	2.10%
14	Equity Authorized Dkt 18-00017	4.82%	4.82%	4.82%	4.82%
16	Overall Rate of Return	7.118%	7.118%	7.118%	7.118%
18	Average Rate Base	149,739,716	161,056,858	161,844,699	163,293,702 A/
	Interest Expense				
18	Short-term Debt-Interest	283,951	305,412	306,906	309,654
19	Long-Term Debt-Interest	3,149,672	3,387,720	3,404,292	3,434,770
20	Total Interest Expense	3,433,623	3,693,132	3,711,198	3,744,424
21	Required Equity	7,224,252	7,770,253	7,808,262	7,878,170
22	Total Return	10,657,876	11,463,385	11,519,460	11,622,594
	Short Term Debt Ratio		8.27%	8.27%	8.27%
	Long Term Debt Ratio		91.73%	91.73%	91.73%
23	Customer Deposit Balance	1,988,149			
24	Interest Rate -Customer Deposits				
	Annual CGC TPUC Tariff No. 2 Sheet No. 5	6.00%			
25	Interest-Customer Deposits	119,289			

A/ CA Exhibit, Schedule 1.

CHATTANOOGA GAS COMPANY
Comparative Revenue Summary
For the Rate Reset Period

<u>Line No.</u>	<u>Customer Class</u>	<u>18-00017 Ordered</u>	<u>CGC Filing</u> A/	<u>CA</u> B/	<u>Difference</u>
Sales & Transportation Margin:					
1	Residential (R-1)	\$ 14,945,883	\$ 17,318,873	\$ 17,055,584	\$ -263,289
2	Multi-Family Housing (R-4)	28,579	33,242	32,730	-512
3	Commercial (C-1)	3,648,001	4,114,977	4,051,062	-63,915
4	Commercial (C-2)	8,592,933	10,586,085	10,429,173	-156,912
5	Industrial (F-1/T-2)	2,114,123	2,672,774	2,633,856	-38,918
6	Industrial (I-1)	36,274	0	0	0
7	Industrial (T-1)	1,082,153	1,197,462	1,174,047	-23,415
8	Industrial(F-1/T-2+T-1)	1,333,342	1,684,100	1,655,654	-28,446
9	Industrial (T-3)	1,329,837	1,279,658	1,260,800	-18,858
10	Special Contract	<u>141,302</u>	<u>0</u>	<u>0</u>	<u>0</u>
11	Total Margin	\$ 33,252,426	\$ 38,887,171	\$ 38,292,907	\$ -594,264
12	Gas Cost	<u>38,611,525</u>	<u>35,313,101</u>	<u>35,313,101</u>	
13	Total Revenue	\$ <u>70,473,655</u>	\$ <u>74,200,272</u>	\$ <u>73,606,009</u>	\$ <u>-594,264</u>

A/ CA 1-022 Attachment A 2020-06-23.xlsx, Tab 6 (Alt Schedule 17).

B/ CA Exhibit, Schedule 18.

CHATTANOOGA GAS COMPANY
Comparative O&M Expense Summary Normalized For Rate Reset
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.	Expense	CGC Filing A/	CA B/	Difference
1	Payroll Expense	3,581,237	3,581,237	\$ 0
2	Employee Benefits	781,703	781,703	0
3	Benefits Capitalized	-111,850	-111,850	0
4	Fleet Services & Facilities Expense	607,162	607,162	0
5	Outside Services	2,990,175	2,679,127	-311,048
6	Bad Debt Expense	191,881	191,881	0
7	Sales Promotion Expense	879	879	0
8	Customer Service & Account Expense	8,526	8,526	0
9	Administrative & General Expense	912,450	894,411	-18,039
10	A&G Salaries Capitalized	-111,881	-111,881	0
11	Other Distribution & Storage Expense	898,051	898,051	0
12	AGL Service Company Allocations	5,383,103	5,383,103	0
13	Total O&M Expense	\$ 15,131,436	\$ 14,802,349	\$ -329,087

A/ CGC Tucket Exhibit GT-1 (ARM Model).xlsx, Schedule 7, Column L
B/ O&M Results.xlsx

CHATTANOOGA GAS COMPANY
Taxes Other than Income Taxes
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.		Ordered	CGC Filing A/	CA B/	Difference
1	Property Taxes	\$ 2,093,447	\$ 2,000,004	2,167,832	\$ 167,828
2	TPUC Inspection Fee	305,345	291,223	335,814	44,591
3	Payroll Taxes	383,805	219,683	219,683	0
4	Franchise Tax	136,334	507,527	521,000	13,473
5	Gross Receipts Tax	569,140	510,228	370,175	-140,053
6	Allocated & Other Taxes	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
7	Total	\$ 3,488,071	\$ 3,528,664	\$ 3,614,504	\$ 85,840

A/ CGC Tucket Exhibit GT-1 (ARM Model).xlsx, Schedule8, Column I
B/ Exhibit DND-4

Chattanooga Gas Company
Annual Review Mechanism ("ARM")
Carrying Charges and Average Balance ARM Asset/(Liability)
Twelve Months Ending December 31, 2019

20-00049
CA Exhibit
Schedule 13

Line No.	Description		Historic Base Period with Rate Making Adjustments	
1	Gas Sales & Transportation Revenues	c/	69,376,687	
2	AFUDC -Interest	c/	172,195	
3	AFUDC-Equity	c/	369,038	
4	Other Revenues	c/	1,005,177	
5	Total Operating Revenues [L1:L4]		70,923,097	
6	Purchased Gas Expense	c/	35,313,101	a/
7	Operating & Maintenance Expense-Labor	c/	3,581,237	a/
8	Operating & Maintenance Expense-Non Labor	c/	11,674,126	a/
9	Total Operating & Maintenance Expense [L6:L8]		50,568,464	
10	Depreciation Expense	c/	7,636,905	h/
11	Amortization -Prior Year Earnings Deficiency/(Surplus)	c/	-	
12	Interest on Customer Deposits	c/	79,570	
13	Taxes Other than Income	c/	3,614,505	
14	State Excise (Income) Tax	c/	305,780	b/
15	Federal Income Tax	c/	52,904	b/
16	Total Operating Expense [L9:L15]		62,258,128	
17	Utility Operating Income		8,664,969	
18	Interest Expense [L20 X L21]		3,693,132	
19	Net Income Equity-Earnings [L17-L18]		4,971,837	
20	Rate Base	d/	161,056,858	
21	Weighted Cost of Debt -Annual	e/	2.29%	
22	Weighted Cost of Equity -Annual	e/	4.82%	
23	Required Net Income [L20XL22]		\$ 7,770,253	
24	Earning Deficiency (Excess) [L23-L19]		2,798,415	
25	Overall ROR Annual	e/	7.12%	
26	Annual Carrying Charges [L25 XL24]		199,180	
28	1/2 Year		50%	
29	Carrying Charge [L26 X L28]		\$ 99,590	
30	Historic Period Earning Deficiency (Excess) + Carrying Charges [L24+L29]		\$ 2,898,006	
31	Tax Gross Up Factor	f/	1.35382116	
32	Annual Reconciliation Balance [L30 X L31]		\$ 3,923,381	
33	13Month Average Amortized over 12 Months		\$ 1,961,691	
CA Regulatory Liability				
	2018 (Jan-Oct) TCJA Tax Reserve	g/	(1,844,710)	
	2021 Amortization of unprotected EDITs	g/	(592,447)	
	Federal Basis Adjustments EDITs	g/	(957,157)	
			(3,394,315)	

a/ Excludes expenses disallowed for ratemaking

b/ Based on Revenues, ratemaking expense, and synchronized interest

c/ Consumer Advocate Exhibit, Schedule 6.

d/ Consumer Advocate Exhibit, Schedule 2.

e/ Consumer Advocate Exhibit, Schedule 15.

f/ Consumer Advocate Exhibit, Schedule 16.

g/ See Exhibit GT-3

CHATTANOOGA GAS COMPANY
Rate of Return Summary
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.	Class of Capital	18-00017 Ordered		
		Percent of Total	Cost Rate	Weighted Cost Rate
1	CGC Short-Term Debt	6.30%	3.01%	0.19%
2	CGC Long-Term Debt	44.47%	4.73%	2.10%
3	Parent Short-Term Debt	0.00%		0.00%
4	Parent Long-Term Debt	0.00%		0.00%
5	Common Equity	49.23%	9.80%	4.82%
6	Total	100.00%		7.118%
Interest Expense Short-Term Debt:				
7	Rate Base			\$ 163,293,702 B/
8	Short-Term Weighted Debt Cost			0.19%
9	Short-Term Debt Interest Expense			\$ 309,654
Interest Expense Long-Term Debt:				
10	Rate Base			\$ 163,293,702 B/
11	Long-Term Weighted Debt Cost			2.10%
12	Long-Term Debt Interest Expense			\$ 3,434,770
13	Total Interest Expense			\$ 3,744,424
14	18-00017 Ratio of Debt			
15	Total Interest Expense			3,537,014
16	Rate Case Short-Term Debt Ratio			8.27%
17	Short-Term Debt Interest Expense			292,502
18	Rate Case Long Term Debt Ratio			91.73%
19	Long-Term Debt Interest Expense			3,244,512

A/ Klein Exhibit, Page 2 of 17.
B/ CA Exhibit, Schedule 2.

CHATTANOOGA GAS COMPANY
Revenue Conversion Factor
For the 12 Months Ending December 31, 2019 & Rate Reset

Line No.	Ordered		
		<u>Amount</u>	<u>Balance</u>
1	Operating Revenues		1.000000
2	Add: Forfeited Discounts	0.008796	<u>0.008796</u>
3	Balance		1.008796
4	Uncollectible Ratio	0.003825	<u>0.003859</u>
5	Balance		1.004937
6	State Excise Tax	0.065000	<u>0.065321</u>
7	Balance		0.939616
8	Federal Income Tax	0.210000	<u>0.197319</u>
9	Balance		<u>0.742297</u>
10	Revenue Conversion Factor (Line 1 / Line 9)		<u>1.347169</u>
11	Effective Tax Rate		
12	Net Income	100%	
13	State Excise Rate	6.5%	6.50%
14	Subject to FIT		93.50%
15	FIT Rate	21.0%	<u>19.64%</u>
16	Composite Income Tax Rate	26.135%	
17	Income Tax Gross Up Factor	<u>1.3538212</u>	

Proposed Rate Design
Consumer Advocate

	1	2	3	4	5	6	7	8	9	10	11	12	13			
	Weather Normalized															
Description	Historic Base Period			Current Winter Rates		Current Summer Rates		Present Total Revenue	Proposed Winter Rates		Proposed Summer Rates		Proposed Total	Target Increase	Increase Exceed Target by	
	Winter Nov-Apr	Summer May-Oct	Total	Rate 8/1/2018	Revenue	Rate 8/1/2018	Revenue		Rate	Revenue	Rate	Revenue				
Residential R-1 Number of Bills	352,022	346,599	698,621	u/	\$ 17.00	\$ 5,984,374	\$ 14.00	\$ 4,852,386	\$ 10,836,760	\$ 17.00	\$ 5,984,374	\$ 14.00	\$ 4,852,386	\$		
Volumes Therms Weather Normalized			36,244,457	b/	\$ 0.11591	\$ 0	\$ 0.11591	\$ 4,201,065.1	\$ 0.17158	\$ 6,218,824	\$ 0.17158	\$ 6,218,824	\$			
Total Revenue								\$ 15,037,855					\$ 17,055,584			
Increase													\$ 2,017,729	\$2,017,893	(164)	
% Increase													13.42%			
Multi-Family R-4 Number of Units	1,110	1,110	2,220	u/	\$ 6.25	\$ 6,937.50	\$ 6.25	\$ 6,937.51	\$ 13,875	\$ 6.25	\$ 6,938	\$ 6.25	\$ 6,938	\$		
Volumes Therms Weather Normalized	53,902	16,794	70,696	b/	\$ 0.21768	\$ 11,733.30	\$ 0.19350	\$ 3,249.70	\$ 14,083	\$ 0.27394	\$ 14,750	\$ 0.24361	\$ 4,090	\$		
Total Revenue								\$ 28,858					\$ 32,730			
Increase													\$ 3,872	\$3,872	\$0	
% Increase													13.42%			
Commercial C-1 Number of Bills	38,919	38,509	78,428	u/	\$ 31.00	\$ 1,237,489	\$ 26.80	\$ 1,032,041	\$ 2,269,530	\$ 31.00	\$ 1,237,489	\$ 26.80	\$ 1,032,041	\$		
Volumes Therms Weather Normalized	6,321,007	675,420	7,196,487	b/	\$ 0.18581	\$ 1,174,517	\$ 0.14589	\$ 127,715	\$ 1,302,232	\$ 0.25420	\$ 1,606,815	\$ 0.19958	\$ 1,747,163	\$		
Total Revenue					\$ 2,412,006		\$ 1,150,766	\$ 3,571,763		\$ 2,844,304		\$ 1,206,788	\$ 4,051,062			
Increase													\$ 479,299	\$479,286	\$13	
% Increase													13.42%			
Commercial C-2 Number of Bills	11,821	11,557	23,378	u/	\$ 75.00	\$ 886,575	\$ 75.00	\$ 886,775	\$ 1,753,350	\$ 75.00	\$ 886,575	\$ 75.00	\$ 886,775	\$		
DDDC Firm Demand Dths	197,934	185,405	383,339	b/	\$ 6.35	\$ 6.35	\$ 6.35	\$ 2,509,101	\$ 7.40	\$ 2,925,117	\$ 7.40	\$ 2,925,117	\$			
Volumes Therms Weather Normalized																
0-3,000 Therms	18,230,469	5,874,308	22,104,777	b/	\$ 0.18744	\$ 3,042,239	\$ 0.14717	\$ 664,522	\$ 3,906,761	\$ 0.21853	\$ 3,546,651	\$ 0.17197	\$ 1,007,961.90	\$		
3,001-5,000 Therms	1,930,133	980,621	2,910,754	b/	\$ 0.17109	\$ 507,226	\$ 0.11693	\$ 81,820	\$ 1,011,552	\$ 0.10946	\$ 384,070	\$ 0.13670	\$ 65,152.64	\$		
5,001-15,000 Therms	2,520,710	912,310	3,433,020	b/	\$ 0.16666	\$ 420,102	\$ 0.10892	\$ 99,369	\$ 1,519,470	\$ 0.19429	\$ 489,756	\$ 0.12998	\$ 115,844.37	\$		
Over 15,000 Therms	806,783	292,045	1,098,828	b/	\$ 0.08623	\$ 69,569	\$ 0.08623	\$ 25,183	\$ 94,752	\$ 0.10053	\$ 81,104	\$ 0.10053	\$ 29,358.50	\$		
Total Revenue					\$ 4,748,711		\$ 1,337,469	\$ 6,195,281				\$ 2,114,992	\$ 10,429,173			
Increase													\$ 1,233,892	\$1,233,892	\$0	
% Increase													13.42%			
Commercial T-3 Number of Bills	273	271	544	u/	\$ 75.00	\$ 20,475	\$ 75.00	\$ 20,325	\$ 40,800	\$ 75.00	\$ 20,475	\$ 75.00	\$ 20,325	\$		
DDDC Firm Demand Dths	28,685	28,436	57,121	u/	\$ 6.35	\$ 6.35	\$ 6.35	\$ 337,319	\$ 7.23	\$ 384,308	\$ 7.23	\$ 384,308	\$			
Volumes Therms																
0-3,000 Therms	765,874	831,041	1,596,915	u/	\$ 0.18744	\$ 141,644	\$ 0.14717	\$ 62,870	\$ 234,514	\$ 0.21355	\$ 161,375	\$ 0.16767	\$ 106,807	\$		
3,001-5,000 Therms	402,050	280,449	682,499	u/	\$ 0.17109	\$ 68,787	\$ 0.11693	\$ 32,765	\$ 101,552	\$ 0.10942	\$ 79,369	\$ 0.13319	\$ 37,329	\$		
5,001-15,000 Therms	1,300,776	692,471	1,993,247	u/	\$ 0.16666	\$ 216,787	\$ 0.10892	\$ 75,424	\$ 292,211	\$ 0.18888	\$ 246,988	\$ 0.12499	\$ 85,931	\$		
Over 15,000 Therms	905,174	225,252	1,130,426	u/	\$ 0.08623	\$ 85,814	\$ 0.08623	\$ 19,423	\$ 105,237	\$ 0.09824	\$ 97,768	\$ 0.09824	\$ 22,129	\$		
Total Revenue								\$ 1,111,633					\$ 1,260,800			
Increase													\$ 149,167	\$149,167	\$0	
% Increase													13.42%			
Industrial F-1/T-2 Number of Bills	209	211	420	u/	\$ 300.00	\$ 62,700	\$ 300.00	\$ 63,300	\$ 126,000	\$ 300.00	\$ 62,700	\$ 300.00	\$ 63,300	\$		
DDDC Firm Demand Dths	80,411	78,886	159,297	u/	\$ 6.35	\$ 6.35	\$ 6.35	\$ 1,011,537	\$ 7.25	\$ 1,155,059	\$ 7.25	\$ 1,155,059	\$			
Volumes Therms																
0-15,000 Therms	2,984,819	2,827,591	5,812,410	u/	\$ 0.08064	\$ 240,680	\$ 0.08064	\$ 211,889	\$ 437,488	\$ 0.09208	\$ 274,829	\$ 0.09208	\$ 241,803.01	\$		
15,001-40,000 Therms	3,845,969	3,224,536	7,070,505	u/	\$ 0.06891	\$ 265,026	\$ 0.06891	\$ 222,203	\$ 420,882	\$ 0.07869	\$ 302,629	\$ 0.07869	\$ 253,730.24	\$		
40,001-150,000 Therms	6,461,360	5,102,982	11,564,342	u/	\$ 0.03908	\$ 253,292	\$ 0.03908	\$ 199,425	\$ 283,348	\$ 0.04462	\$ 289,230	\$ 0.04462	\$ 227,720.09	\$		
Over 150,000 Therms	1,068,992	850,460	1,919,452	u/	\$ 0.02402	\$ 25,877	\$ 0.02402	\$ 20,428	\$ 43,198	\$ 0.02743	\$ 28,320	\$ 0.02743	\$ 23,358.50	\$		
Total Revenue								\$ 2,322,241					\$ 2,633,858			
Increase													\$ 311,616	\$311,616	\$0	
% Increase													13.42%			
Industrial F-1/T-2-T-1 Number of Bills	84	84	168	u/	\$ 300.00	\$ 25,200	\$ 300.00	\$ 25,200	\$ 50,400	\$ 300.00	\$ 25,200	\$ 300.00	\$ 25,200	\$		
DDDC Firm Demand Dths	32,404	32,364	64,768	u/	\$ 6.35	\$ 6.35	\$ 6.35	\$ 411,467	\$ 7.23	\$ 468,656	\$ 7.23	\$ 468,656	\$			
Capacity (Non-Firm) Demand (T-1)	38,132	36,925	75,057	u/	\$ 1.35	\$ 1.35	\$ 1.35	\$ 101,326	\$ 1.54	\$ 115,409	\$ 1.54	\$ 115,409	\$			
Volumes Therms																
0-15,000 Therms	1,258,974	1,232,317	2,491,291	u/	\$ 0.08064	\$ 101,524	\$ 0.08064	\$ 99,374	\$ 199,508	\$ 0.09185	\$ 115,634	\$ 0.09185	\$ 113,188.65	\$		
15,001-40,000 Therms	1,944,103	1,668,851	3,612,954	u/	\$ 0.06891	\$ 127,077	\$ 0.06891	\$ 114,560	\$ 236,635	\$ 0.07849	\$ 144,739	\$ 0.07849	\$ 130,960.46	\$		
40,001-150,000 Therms	4,447,743	3,985,629	8,433,372	u/	\$ 0.03908	\$ 173,816	\$ 0.03908	\$ 155,793	\$ 309,780	\$ 0.04451	\$ 197,976	\$ 0.04451	\$ 177,486.64	\$		
Over 150,000 Therms	7,329,896	7,178,786	14,508,682	u/	\$ 0.02402	\$ 176,064	\$ 0.02402	\$ 172,434	\$ 150,655	\$ 0.02736	\$ 200,535	\$ 0.02736	\$ 195,399.00	\$		
Total Revenue								\$ 1,458,771					\$ 1,655,654			
Increase													\$ 196,883	\$196,883	(50)	
% Increase													13.42%			
Interruptible Industrial Transportation (T-1) Number of Bills	102	102	204	u/	\$ 300.00	\$ 30,600	\$ 300.00	\$ 30,600	\$ 61,200	\$ 300.00	\$ 30,600	\$ 300.00	\$ 30,600	\$		
Capacity (Non-Firm) Demand (T-1)	53,925	53,923	107,848	u/	\$ 1.35	\$ 1.35	\$ 1.35	\$ 145,595	\$ 1.54	\$ 166,359	\$ 1.54	\$ 166,359	\$			
Volumes Therms																
0-15,000 Therms	1,389,842	1,503,658	2,893,500	u/	\$ 0.08064	\$ 112,077	\$ 0.08064	\$ 121,255	\$ 233,332	\$ 0.09214	\$ 128,061	\$ 0.09214	\$ 138,548.31	\$		
15,001-40,000 Therms	1,924,834	2,105,555	4,030,389	u/	\$ 0.06891	\$ 132,840	\$ 0.06891	\$ 145,094	\$ 277,734	\$ 0.07878	\$ 151,567	\$ 0.07878	\$ 165,787.08	\$		
40,001-150,000 Therms	2,272,880	2,009,063	4,281,943	u/	\$ 0.03908	\$ 88,834	\$ 0.03908	\$ 75,514	\$ 167,338	\$ 0.04465	\$ 101,492	\$ 0.04465	\$ 89,711.84	\$		
Over 150,000 Therms	3,100,757	3,141,740	6,242,497	u/	\$ 0.02402	\$ 74,480	\$ 0.02402	\$ 75,465	\$ 149,945	\$ 0.02745	\$ 85,103	\$ 0.02745	\$ 86,227.32	\$		
Total Revenue								\$ 1,035,144					\$ 1,174,047			
Increase													\$ 138,903	\$138,903	\$0	
% Increase													13.42%			

Total Sales and Transport Margin-All Rates Schedules

Revenue Requirement Deficiency
Loss: Increase in
Miscellaneous Revenue
Total Rate Increase
Annual Revenue of Present Rates
Targeted Revenue
Overall Percentage Increase

at Non Gas Revenue Schedule 15

at Weather Normalized Usage Schedule 16.1

at Customers, Volume, & Base Revenue Schedule 16.4

\$ 33,762,545
\$ 4,530,362
\$ 38,292,907
\$4,530,513
(\$46,475)
\$4,530,513
\$ 33,762,545
\$38,292,907
13.42%

(515)

EXHIBIT AB-2

**Consumer Advocate
Proposed Adjustments to CGC ARM
Docket No. 20-00049**

Exhibit-AB2

Regulatory Costs Docket No. 19-00047

Annual Amount included as a Normalization Adjustment by CGC	a/	\$	27,059
3 year Amortization to begin September, 2020 per Stipulation	b/	\$	81,178
Divided by 36 Months	c/		<u>36</u>
Monthly Amortization		\$	2,255
Amortization Period - September - December, 2020			<u>4</u>
Amortization Expense 2020		\$	<u>9,020</u>
Adjustment to Reduce Amortization Expense in 2020		\$	<u><u>18,039</u></u>

a/ Exhibit GTC-1, Schedule 28, cell E 99

b/ Exhibit GTC-1, Schedule 28, cell E 97

c/ Settlement in Docket 19-00047, paragraph 17