

**BEFORE
THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE**

Chattanooga Gas Company Petition for
Approval of its 2022 Annual Rate Review
Filing Pursuant to Tenn. Code Ann. § 65-
5-103 (d)(6)

Docket No. 23-00029

DIRECT TESTIMONY
of
WILLIAM H. NOVAK

ON BEHALF OF

**THE CONSUMER ADVOCATE DIVISION
OF THE
OFFICE OF THE TENNESSEE ATTORNEY GENERAL**

June 28, 2023

TABLE OF CONTENTS

I.	ARM ADJUSTMENT PROPOSED BY CHATTANOOGA GAS COMPANY ...	4
II.	RATE ALLOCATION AND RATE DESIGN.....	11
III.	RECOMMENDATIONS	14

ATTACHMENTS

Attachment WHN-1 Consumer Advocate Revenue Deficiency Calculation

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

3 A1. My name is William H. Novak. My business address is 19 Morning Arbor Place,
4 The Woodlands, TX, 77381. I am the President of WHN Consulting, a utility
5 consulting and expert witness services company.¹
6

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

9 A2. Briefly, I have both a Bachelor's degree in Business Administration with a major
10 in Accounting, and a Master's degree in Business Administration from Middle
11 Tennessee State University. I am a Certified Management Accountant and am
12 also licensed to practice as a Certified Public Accountant.
13

14 My work experience has centered on regulated utilities for over 40 years. Before
15 establishing WHN Consulting, I was Chief of the Energy & Water Division of the
16 Tennessee Public Utility Commission (the "Commission") where I had either
17 presented testimony or advised the Commission on a host of regulatory issues for
18 over 19 years. In addition, I was previously the Director of Rates & Regulatory
19 Analysis for two years with Atlanta Gas Light Company, a natural gas
20 distribution utility with operations in Georgia and Tennessee. I also served for
21 two years as the Vice President of Regulatory Compliance for Sequent Energy
22 Management, a natural gas trading and optimization entity in Texas, where I was

¹ State of Tennessee, Registered Accounting Firm ID 3682.

1 responsible for ensuring the firm's compliance with state and federal regulatory
2 requirements.

3

4 In 2004, I established WHN Consulting as a utility consulting and expert witness
5 services company. Since 2004, WHN Consulting has provided testimony or
6 consulting services to state public utility commissions and state consumer
7 advocates in at least ten state jurisdictions.

8

9 ***Q3. ON WHOSE BEHALF ARE YOU TESTIFYING?***

10 A3. I am testifying on behalf of the Consumer Advocate Division ("Consumer
11 Advocate" or the "CA") of the Office of the Tennessee Attorney General.

12

13 ***Q4. HAVE YOU PRESENTED TESTIMONY IN ANY PREVIOUS DOCKETS***
14 ***REGARDING CHATTANOOGA GAS COMPANY?***

15 A4. Yes. I've presented testimony in TPUC Docket Nos. U-85-7382, 88-01363, 90-
16 08876, 91-03765, 93-06946, and 18-00017 concerning rate cases involving
17 Chattanooga Gas Company ("CGC" or the "Company") as well as dockets for
18 other generic tariff and rulemaking matters. In addition, I previously presented
19 testimony concerning CGC's Annual Review Mechanism (ARM) in Docket Nos.
20 21-00048 and 22-00032 that are the subject of this proceeding.

21

22 ***Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS***
23 ***PROCEEDING?***

1 A5. My testimony will support and address the Consumer Advocate's concerns,
2 positions and recommendations with respect to the Petition filed by CGC to adjust
3 its rates and charges. Specifically, I will address the following:

- 4 1. The overall adjustment to the ARM proposed in the Company's filing
5 including the impact of specific errors and miscalculations contained in
6 the filing that were discovered during the Consumer Advocate's review;
- 7 2. The Consumer Advocate's proposed Rate Design for the ARM revenue
8 deficiency; and
- 9 3. Other regulatory and accounting adjustments.

10
11 ***Q6. WHAT DOCUMENTS HAVE YOU REVIEWED IN PREPARATION OF***
12 ***YOUR TESTIMONY?***

13 A6. I have reviewed the Company's Petition filed on April 20, 2023, along with the
14 testimony and exhibits presented with its filing. In addition, I have reviewed the
15 Company's workpapers supporting its proposed revenue adjustment calculations.
16 I have also reviewed the Company's responses to the Consumer Advocate's
17 discovery requests. Finally, I reviewed previous Commission's Orders associated
18 with the Company's ARM mechanism in TPUC Docket Nos. 19-00047, 20-
19 00049, 21-00048 and 22-00032.

I. ARM ADJUSTMENT PROPOSED BY CHATTANOOGA GAS
COMPANY

***Q7. MR. NOVAK, PLEASE EXPLAIN THE OVERALL PURPOSE AND
STRUCTURE OF THE ARM AND THE RELIEF THAT CGC IS ASKING
FROM THE COMMISSION THROUGH ITS PETITION.***

A7. The overall purpose of the ARM is to allow the Company to adjust its rates on a timely basis outside of the traditional rate case process. The structure for the ARM was agreed to by CGC, Party Staff, the Chattanooga Regional Manufacturer's Association, and the Consumer Advocate in TPUC Docket No. 19-00047² and then incorporated into the Commission's Order³ in that docket. Since the establishment of the ARM structure, the Commission has approved the rate adjustments shown below on Table 1.

Table 1 – Prior ARM Approvals		
Docket Number	Approved Increase	Rate Cap Increase
20-00049 ⁴	\$4,758,576	N/A
21-00048 ⁵	11,545,439	\$6,800,000
22-00032 ⁶	7,911,764	6,800,000

² *Stipulation and Settlement Agreement by and Among Chattanooga Gas Company, the Consumer Advocate Unit of the Attorney General, the Chattanooga Regional Manufacturer's Association, and Party Staff*, TPUC Docket No. 19-00047 (July 26, 2019).

³ *Order Approving Settlement Agreement*, TPUC Docket No. 19-00047 (October 7, 2019).

⁴ *Order Approving 2019 ARM Filing*, TPUC Docket No. 20-00049 (October 27, 2020).

⁵ *Order Approving Settlement Agreement on Chattanooga Gas Company's 2020 Annual Rate Review Filing Pursuant to Tenn. Code Ann. § 65-5-103(d)(6)*, TPUC Docket No. 21-00048 (November 1, 2021).

⁶ *Order Approving Chattanooga Gas Company's 2021 Annual Rate Review Filing Pursuant to Tenn. Code Ann. § 65-5-103(d)(6)*, TPUC Docket No. 22-00032 (October 28, 2022).

1 ***Q8. HOW MUCH OF AN ARM ADJUSTMENT HAS THE COMPANY***
2 ***REQUESTED IN THIS DOCKET?***

3 A8. In the current Docket, the Company has requested a revenue adjustment of
4 \$11,917,087 limited to a rate cap of \$6.8 million.⁷ This revenue adjustment
5 represents the 4th ARM filing made by CGC.

6
7 ***Q9. HOW IS THE COMPANY’S \$11,917,087 RATE ADJUSTMENT***
8 ***CALCULATED?***

9 A9. CGC’s proposed rate adjustment of \$11,917,087 is calculated in accordance with
10 the terms of the Commission Order in TPUC Docket No. 19-00047. The overall
11 methodology for the rate adjustment calculation is shown below in Table 2 which
12 provides a comparison of the current ARM proposal along with the revenue
13 deficiency approved by the Commission in the Company’s prior ARM dockets.
14

⁷ Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule I”, TPUC Docket No. 23-00029 (April 20, 2023).

Table 2 – ARM Revenue Deficiency Calculations				
Item	20-00049 ARM Filing⁸	21-00048 ARM Filing⁹	22-00032 ARM Filing¹⁰	23-00029 ARM Filing¹¹
Rate Base	\$163,379,679	\$190,129,250	\$210,018,272	\$246,518,095
Operating Income at Present Rates	8,096,435	4,962,492	9,075,381	8,700,152
Earned Rate of Return	4.96%	2.61%	4.32%	3.53%
Fair Rate of Return	7.12%	7.12%	7.12%	7.12%
Required Operating Income	11,628,714	13,532,641	14,948,263	17,546,174
Operating Income Deficiency	3,532,279	8,570,149	5,872,882	8,846,022
Gross Revenue Conversion Factor	1.347169	1.347169	1.347169	1.347169
Revenue Deficiency	\$4,758,576	\$11,545,439	\$7,911,764	\$11,917,087

Q10. HAS CGC ADJUSTED THE RECONCILIATION AMOUNT CONTAINED IN ITS INITIAL FILING?

A10. Yes. As mentioned previously, CGC originally requested the Commission to approve an ARM revenue deficiency of \$11,917,087 that has since been revised to \$12,044,393 to correct 30 errors that were discovered during the Consumer Advocate’s review and analysis.¹²

Q11. HOW IS THE REVISED RECONCILIATION AMOUNT OF \$12,044,393 CALCULATED?

A11. CGC’s revised revenue deficiency of \$12,044,393 is still calculated in accordance with the terms of TPUC Docket No. 19-00047 and reflects updated and corrected

⁸ Rebuttal Testimony of Gary Tucker, p. 5, TPUC Docket No. 20-00049 (August 25, 2020). *See Order Approving 2019 ARM Filing*, TPUC Docket No. 20-00049 (October 27, 2020).

⁹ *Direct Testimony of Gary Tucker*, File <CGC Tucker Supplemental Exhibit GT-4>, Tab “Schedule 1”, TPUC Docket No. 21-00048 (July 14, 2021). *See Order Approving Settlement Agreement on Chattanooga Gas Company’s 2020 Annual Rate Review Filing Pursuant to Tenn. Code Ann. § 65-5-103(d)(6)*, TPUC Docket No. 21-00048 (November 1, 2021).

¹⁰ Supplemental Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule 1”, TPUC Docket No. 22-00032 (July 14, 2022).

¹¹ Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule 1”, TPUC Docket No. 23-00029 (April 20, 2023).

¹² Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule 1”, TPUC Docket No. 23-00029 (June 23, 2023).

1 data to the initial filing. A comparison of the initial and revised revenue
2 deficiency calculations is shown below in Table 3.

3

Table 3 – Revised Revenue Deficiency Comparison		
Item	Initial ARM Filing¹³	Revised ARM Filing¹⁴
Rate Base	\$246,518,095	\$245,514,760
Operating Income at Present Rates	8,700,152	8,534,240
Earned Rate of Return	3.53%	3.48%
Fair Rate of Return	7.12%	7.12%
Required Operating Income	17,546,174	17,474,761
Operating Income Deficiency	8,846,022	8,940,521
Gross Revenue Conversion Factor	1.347169	1.347169
Revenue Deficiency	\$11,917,087	\$12,044,393

4

5 ***Q12. HAVE YOU REVIEWED THE CALCULATIONS SUPPORTING THE***
6 ***REVISED ARM FILING?***

7 A12. Yes. I reviewed both the Company’s original and revised filings. I also prepared
8 discovery requests for supplemental supporting information that was not
9 contained in the original filing. In addition, I have had continuing discussions
10 with CGC regarding both filings. The purpose of my review was to determine
11 whether CGC’s ARM calculation was based on actual amounts recorded in its
12 books.

13

14 ***Q12. WHAT WERE THE RESULTS OF YOUR REVIEW?***

15 A12. Overall, I found that CGC’s revised filing appropriately reflected the actual
16 revenues, expenses and net investment recorded on the Company’s ledger.

¹³ Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule 1”, TPUC Docket No. 23-00029 (April 20, 2023).

¹⁴ Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule 1”, TPUC Docket No. 23-00029 (June 23, 2023).

1 Likewise, I also found that the reconciliation generally reflected the
2 methodologies established in TPUC Docket No. 19-00047.

3

4 ***Q13. HAS THE COMPANY ADDRESSED YOUR AREAS OF CONCERN IN***
5 ***THE REVISED FILING?***

6 A13. Yes. The Company’s revised filing results in a revenue deficiency of
7 \$12,044,393 and corrects the 30 errors that I discovered during the Consumer
8 Advocate’s investigation. This revision fully addresses my particular areas of
9 concern in the revenue deficiency calculation. However, Consumer Advocate
10 witness Bradley proposes additional adjustments to Operation & Maintenance
11 Expense that total to \$-167,069 as shown below in Table 4.

12

Table 4 – Consumer Advocate O&M Expense Adjustments			
O&M Expense	CGC Amount¹⁵	CA Adjustment¹⁶	Adjusted Amount
Payroll	\$5,013,279	\$-114,908	\$4,898,371
Post-Retirement Benefits	97,975	-51	97,924
AGL Allocations	6,156,539	-52,110	6,104,429
Total	\$11,267,793	\$-167,069	\$11,100,724

13

14 The details for these O&M Expense adjustments are discussed more fully in Mr.
15 Bradley’s testimony.

16

17 ***Q14. HOW DOES THE \$-167,069 REDUCTION IN O&M EXPENSES IMPACT***
18 ***THE REVENUE DEFICIENCY CALCULATION?***

¹⁵ Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab “Schedule 7”, TPUC Docket No. 23-00029 (June 23, 2023).

¹⁶ Exhibit AB-1 included with Consumer Advocate witness Bradley’s testimony.

A14. The Consumer Advocate's proposed reduction of \$-167,069 to O&M Expense reduces the revenue deficiency to \$11,698,227 as shown on Attachment WHN-1. A comparison of CGC's revised revenue deficiency and the Consumer Advocate's revenue deficiency that takes these O&M adjustments into account is shown below in Table 5.

Table 5 – Revised Revenue Deficiency Comparison		
Item	CGC Revised ARM Filing¹⁷	CA Calculation¹⁸
Rate Base	\$245,514,760	\$245,438,676
Operating Income at Present Rates	8,534,240	8,785,783
Earned Rate of Return	3.48%	3.58%
Fair Rate of Return	7.12%	7.12%
Required Operating Income	17,474,761	17,469,346
Operating Income Deficiency	8,940,521	8,683,563
Gross Revenue Conversion Factor	1.347169	1.347169
Revenue Deficiency	\$12,044,393	11,698,227

Q15. HAS THE COMPANY LIMITED THE REVENUE INCREASE IN THIS DOCKET?

A15. Yes. In Docket No. 21-00048, the Commission approved a 4-year annual rate cap of \$6.8 million from ARM filings.¹⁹ As a result, the Company has limited the revenue increase in this Docket to \$6.8 million instead of the revised \$12,044,393 calculated amount.²⁰ My recommendation for the allocation of this \$6.8 million

¹⁷ Direct Testimony of Tiffani Weems, File <CGC Weems Exhibit TW-1>, Tab "Schedule 1", TPUC Docket No. 23-00029 (June 23, 2023).

¹⁸ Attachment WHN-1.

¹⁹ *Order Approving Settlement Agreement on Chattanooga Gas Company's 2020 Annual Rate Review Filing Pursuant to Tenn. Code Ann. § 65-5-103(d)(6)*, p. 14, TPUC Docket No. 21-00048 (November 1, 2021).

²⁰ Direct Testimony of Tiffani Weems at 2:20 to 2:22.

1 revenue deficiency to the different customer classes is discussed in the next
2 section of my testimony.

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12 *[Testimony continues on next page]*

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1 **II. RATE ALLOCATION AND RATE DESIGN**

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3 ***Q16. MR. NOVAK, HOW DID THE COMPANY PROPOSE TO ALLOCATE***

4 ***THE \$6.8 MILLION ARM REVENUE DEFICIENCY TO THE***

5 ***DIFFERENT CUSTOMER CLASSES?***

6 A16. To recover the \$6.8 million ARM Revenue Deficiency, the Company has

7 proposed a 5.00% increase in rates to the Kordsa special contract with the balance

8 applied evenly to all other customers with the exception of Volkswagen.²¹ The

9 Company has proposed no change (0.00%) in rates to the Volkswagen special

10 contract resulting from the ARM Revenue Deficiency. This methodology is

11 consistent with the Commission's previous decision on the ARM rate change

12 allocation approved in Docket No. 22-00032.²² The calculation of the Company's

13 proposed customer class allocation of the ARM Revenue Deficiency is presented

14 below in Table 6.

15

16

17 *[Testimony continues on next page]*

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²¹ Direct Testimony of Ashley K. Vette at 3:1 to 3:14.

²² *Order Approving Chattanooga Gas Company's 2021 Annual Rate Review Filing Pursuant to Tenn. Code Ann. § 65-5-103(d)(6)*, TPUC Docket No. 22-00032 (October 28, 2022), Page No. 17.

Table 6 – Company Proposed Revenue Allocation²³			
Rate Schedule	Normalized Revenue	Percentage Increase	Revenue Increase
Residential R1	\$23,999,098	12.78%	\$3,066,765
Multi-Family R4	44,046	12.78%	5,628
Commercial C1	5,583,268	12.78%	713,467
Commercial C2	14,046,066	12.78%	1,794,900
Industrial F1/T2	4,074,220	12.78%	520,631
Industrial I1	0	12.78%	0
Industrial T1	1,568,118	12.78%	200,384
Industrial F1/T2/T2	2,110,692	12.78%	269,718
Industrial T3	1,711,511	12.78%	218,708
Contract-VW ²⁴	86,516	0.00%	0
Contract-Kordsa	195,974	5.00%	9,799
Total	\$53,419,509	12.75%	\$6,800,000

1 In order to be consistent with prior Commission decisions on rate increase
2 allocations, I recommend that the Commission adopt the Company’s proposed
3 methodology shown in Table 6 to allocate the \$6.8 million ARM revenue
4 deficiency to the different customer classes.

5 ***Q17. WHAT SPECIFIC RATE DESIGN HAS THE COMPANY PROPOSED?***

6 A17. As to specific tariff rates, the Company has proposed a change in all billing items
7 (customers charges, usage charges, billing demand charges and capacity charges)
8 in order to achieve appropriate tariff rates that reflect the Commission’s decision
9 in this docket.²⁵ This approach appears reasonable to me and is likely to result in
10 the most equitable overall impact to customers. I therefore recommend that the
11 Commission adopt the Company’s proposed rate design for this docket.

²³ Direct Testimony of Ashley K. Vette, File <Exhibit AV-4>, Tab “Schedule 17.1”, TPUC Docket No. 23-00029 (April 20, 2023).

²⁴ Company Filing, Schedule 35.14, TPUC Docket No. 23-00029 (April 20, 2023) (CONFIDENTIAL).

²⁵ Direct Testimony of Ashley K. Vette, File <Exhibit AV-4>, Tab “Schedule 17”, TPUC Docket No. 23-00029 (April 20, 2023).

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***Q18. DO YOU HAVE ANY CLOSING COMMENTS ON THE COMPANY'S
ARM FILING?***

A18. Yes. The Company changed its accounting system during the ARM review period. This change proved to be a challenge for both the Company and the Consumer Advocate to navigate through two accounting systems simultaneously in a single ARM review period. As a result, there were more changes to this ARM filing than what we have previously experienced. To avoid a repeat of these errors and to streamline the ARM filing process, the Company and the Consumer Advocate have agreed to meet and discuss these topics after this current filing has completed.

[Testimony continues on next page]

1 **III. RECOMMENDATIONS**

2

3 ***Q19. MR. NOVAK, COULD YOU PLEASE SUMMARIZE YOUR***

4 ***RECOMMENDATIONS TO THE COMMISSION.***

5 A19. My recommendations are as follows:

- 6 • I recommend the Commission accept the Company's proposed methodology
- 7 to allocate the ARM Revenue Deficiency cap of \$6.8 million evenly across-
- 8 the-board to all customer classes, with the exception of Special Contract
- 9 customers, based upon the margin ratio of each customer class. As to Special
- 10 Contract customers, consistent with past Commission practice, I recommend
- 11 that the Commission approve rate increases of 5.00% to Kordsa and 0.00% to
- 12 Volkswagen.
- 13 • I recommend that the Commission approve the Company's proposed increase
- 14 to all rate components (customers charges, usage charges, billing demand
- 15 charges and capacity charges) to achieve the \$6.8 million ARM Revenue
- 16 Deficiency cap.

17

18 ***Q20. DOES THIS COMPLETE YOUR TESTIMONY?***

19 A20. Yes, it does. However, I reserve the right to incorporate any new information that

20 may subsequently become available.

IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE

IN RE:

CHATTANOOGA GAS COMPANY'S
PETITION FOR APPROVAL OF ITS 2022
ANNUAL RATE REVIEW FILING
PURSUANT TO TENN. CODE ANN. § 65-5-
103(D)(6)

DOCKET NO. 23-00029

AFFIDAVIT

I, William H. Novak, on behalf of the Consumer Advocate Division 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 Division.

William H. Novak

WILLIAM H. NOVAK



Sworn to and subscribed before me
This 26th day of June, 2023.

Terra Allen

NOTARY PUBLIC

My Commission Expires: January 31, 2027

ATTACHMENT WHN-1

Consumer Advocate

Revenue Deficiency Calculation

CHATTANOOGA GAS COMPANY
INDEX TO SCHEDULES
For the 12 Months Ending December 31, 2022

	<u>Schedule</u>
Results of Operations	1
Average Rate Base	2
Lead Lag Results	3
Working Capital Expense Lag	4
Income Statement at Current Rates	5
Comparative O&M Expense Summary	6
Taxes Other than Income Income Taxes	7
Excise and Income Taxes	8
Rate of Return Summary	9
Revenue Conversion Factor	10

CHATTANOOGA GAS COMPANY
Results of Operations
For the 12 Months Ending December 31, 2022

Line No.		CGC Revised Filing A/	Adjustments	Consumer Advocate B/	
1	Rate Base	\$ 245,514,760	\$ -76,083	\$ 245,438,677	B/
2	Operating Income At Current Rates	8,534,240	251,543	8,785,783	C/
3	Earned Rate Of Return	3.48%	0.10%	3.58%	
4	Fair Rate Of Return	7.12%	7.12%	7.12%	D/
5	Required Operating Income	17,474,761	-5,415	17,469,346	
6	Operating Income Deficiency (Surplus)	8,940,521	-256,958	8,683,563	
7	Gross Revenue Conversion Factor	<u>1.347169</u>	<u>1.347169</u>	<u>1.347169</u>	E/
8	Revenue Deficiency (Surplus)	\$ <u>12,044,393</u>	\$ <u>-346,166</u>	\$ <u>11,698,227</u>	

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 1.
B/ Schedule 2.
C/ Schedule 5.
D/ Schedule 9.
E/ Schedule 10.

CHATTANOOGA GAS COMPANY
Average Rate Base
For the 12 Months Ending December 31, 2022

Line No.		CGC Revised Filing A/	Adjustments	Consumer Advocate	
	Additions:				
1	Utility Plant in Service	\$ 396,985,306	\$ 0	\$ 396,985,306	
2	Construction Work in Progress	29,507,408	0	29,507,408	
3	Deferred LNG Maintenance (Net of ADIT)	256,983	0	256,983	
4	Incremental ARM Reg Asset (Net of ADIT)	0	0	0	
5	Materials & Supplies	498,326	0	498,326	
6	Prepayments	-2,981	0	-2,981	
7	Gas Inventory	10,949,088	0	10,949,088	
8	Deferred Rate Case Expense	434,025	0	434,025	
9	Working Capital	913,424	-11,787	901,637	B/
10	Unamortized ARM Reconciliation Balance	6,282,995	-87,046	6,195,949	C/
11	Deferred Pension Contribution	297,427	0	297,427	
12	Total Additions	\$ 446,122,002	\$ -98,833	\$ 446,023,169	
	Deductions:				
13	Removal of Non-Allocable Net AGSC Plant	\$ -133,155	\$ 0	\$ -133,155	
14	Accumulated Depreciation	149,854,725	0	149,854,725	
15	Accumulated Deferred Income Taxes	28,655,888	0	28,655,888	
16	Regulatory Liability - Excess Deferrals	18,171,063	0	18,171,063	
17	Deferred Income Tax - ARM Reconciliation Balance	1,642,061	-22,750	1,619,311	C/
18	Customer Advances for Construction	0	0	0	
19	Reserve for Uncollectibles	339,904	0	339,904	
20	Reserve for Health Insurance	85,281	0	85,281	
21	Other Reserves	108,174	0	108,174	
22	Customer Deposits	1,866,307	0	1,866,307	
23	Accrued Interest on Customer Deposits	16,994	0	16,994	
24	Total Deductions	\$ 200,607,242	\$ -22,750	\$ 200,584,492	
25	Rate Base	\$ 245,514,760	\$ -76,083	\$ 245,438,677	

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 2.

B/ Schedule 3.

C/ Consumer Advocate Workpapers.

CHATTANOOGA GAS COMPANY
Lead Lag Results
For the 12 Months Ending December 31, 2022

Line No.		CGC Revised Filing A/	Adjustments	Consumer Advocate
1	Revenue Lag	43.76	0.00	43.76
2	Expense Lag	38.39	0.03	38.42
3	Net Lag	5.37	-0.03	5.34 B/
4	Daily Cost of Service	\$ 304,920	\$ -339	304,581 B/
5	Lead Lag Study	\$ 1,637,055	\$ -10,593	1,626,462
6	Tax Collections Withheld	-723,631	0	-723,631
7	Manual Adjustment to Match Company Calculation	0	-1,194	-1,194 C/
8	Net Cash Working Capital Provided	\$ 913,424	\$ -11,787	901,637

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 3.
B/ Schedule 4.
C/ Consumer Advocate Workpapers.

CHATTANOOGA GAS COMPANY
Working Capital Expense Lag
For the 12 Months Ending December 31, 2022

Line No.		Amount	A/	Lag	A/	Dollar Days
	Operating & Maintenance Expenses:					
1	Purchased Gas Expense	\$ 68,201,348		40.94		\$ 2,792,163,187
2	O&M Labor	5,013,279		14.01		70,236,039
3	Pension Expense	22,144		0.00		0
4	Post-Retirement Benefits Other Than Pension	97,975		0.00		0
5	Miscellaneous Employee Benefits	774		4.47		3,460
6	401K Benefits	181,797		12.07		2,194,290
7	Health/Life Insurance Expense	591,590		8.98		5,312,478
8	Allocated Cost	6,156,539		21.94		135,074,466
9	Uncollectible Expense	346,178		43.76		15,148,749
10	Other Operating Expense	7,879,534		31.49		248,126,526
	Taxes:					
11	Taxes Other Than Income Tax	4,496,191		171.16		769,568,052
12	State Income Tax - Current	223,780		37.88		8,476,786
13	State Income Tax Deferred	716,868		0.00		0
14	Federal Income Tax - Current	905,514		37.88		34,300,870
15	Federal Income Tax - Deferred	1,484,203		0.00		0
	Other:					
16	Depreciation Expense	9,813,336		0.00		0
17	Interest on Customer Deposits	71,140		0.00		0
18	Interest Expense - Short Term Debt	421,227		-51.36		-21,634,219
19	Interest Expense - Long Term Debt	4,672,372		45.76		213,807,743
20	Total Working Capital Requirement	\$ 111,295,789		38.39		\$ 4,272,778,427
21	Daily Working Capital Requirement	\$ 304,920				
22	Return on Equity	12,196,018				
23	Total Cost of Service	\$ 123,491,807				
24	Consumer Advocate Calculations	\$ 304,581	B/	38.42	B/	

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 4 (Reset).

B/ Consumer Advocate Workpapers.

CHATTANOOGA GAS COMPANY
Income Statement at Current Rates
For the 12 Months Ending December 31, 2022

Line No.		CGC Revised Filing	A/ Adjustments	Consumer Advocate
	Operating Revenues:			
1	Gas Sales & Transportation Revenues	\$ 121,530,693	\$ 0	\$ 121,530,693
2	AFUDC - Interest	429,785	0	429,785
3	AFUDC - Equity	907,147	0	907,147
4	Other Revenues	1,122,858	0	1,122,858
5	Total Operating Revenue	\$ 123,990,484	\$ 0	\$ 123,990,484
	Operating & Maintenance Expenses:			
6	Purchased Gas Expense	\$ 68,201,348	\$ 0	\$ 68,201,348
7	Operations & Maintenance - Labor	5,013,279	-114,909	4,898,370 B/
8	Operations & Maintenance - NonLabor	15,276,530	-52,161	15,224,369 B/
9	Total Operating & Maintenance Expenses	\$ 88,491,157	\$ -167,069	\$ 88,324,088
	Other Expenses:			
10	Depreciation Expense	\$ 9,813,336	\$ 0	\$ 9,813,336
11	Amortization - ARM Reconciliation Balance	12,565,990	-174,092	12,391,898 C/
12	Interest on Customer Deposits	71,140	0	71,140
13	General Taxes	4,496,191	0	4,496,191
14	State Excise Taxes	116,941	22,289	139,230
15	Federal Income Taxes	-98,511	67,330	-31,181
16	Total Other Expenses	\$ 26,965,087	\$ -84,474	\$ 26,880,613
17	Total Operating Expenses	\$ 115,456,244	\$ -251,543	\$ 115,204,701
18	Utility Operating Income	\$ 8,534,240	\$ 251,543	\$ 8,785,783

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 5.

B/ Schedule 6.

C/ Consumer Advocate Workpapers.

CHATTANOOGA GAS COMPANY
Comparative O&M Expense Summary
For the 12 Months Ending December 31, 2022

Line No.	Expense	CGC Revised Filing A/	Adjustments	Consumer Advocate B/
1	Payroll Expense	\$ 5,013,279	\$ -114,909	\$ 4,898,370 B/
2	Pension	22,144	0	22,144
3	Post-Retirement Benefits	97,975	-51	97,924 B/
4	Miscellaneous Employee Benefits	774	0	774
5	Employee Savings Plan (401K Benefits)	181,797	0	181,797
6	Health/Life Insurance Expense	591,590	0	591,590
7	Benefits Capitalized	0	0	0
8	Fleet Services & Facilities Expense	560,776	0	560,776
9	Outside Services	1,150,091	0	1,150,091
10	Bad Debt Expense	346,178	0	346,178
11	Sales Promotion Expense	-49,365	0	-49,365
12	Customer Service & Account Expense	10,930	0	10,930
13	Franchise and Riders	0	0	0
14	Administrative & General Expense	1,720,541	0	1,720,541
15	A&G Salaries Capitalized	0	0	0
16	Other Distribution & Storage Expense	4,486,560	0	4,486,560
17	AGL Service Company Allocations	6,156,539	-52,110	6,104,429 B/
18	Total O&M Expense	\$ 20,289,809	\$ -167,069	\$ 20,122,740

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 7.

B/ Consumer Advocate Exhibit AB-1.

CHATTANOOGA GAS COMPANY
Taxes Other than Income Taxes
For the 12 Months Ending December 31, 2022

Line No.		CGC Revised Filing <i>A/</i>	Adjustments <i>C/</i>	Consumer Advocate
1	Property Taxes	\$ 2,501,579	\$ 0	\$ 2,501,579
2	TPUC Inspection Fee	247,164	0	247,164
3	Payroll Taxes	357,738	0	357,738
4	Franchise Tax	793,703	0	793,703
5	Gross Receipts Tax	579,660	0	579,660
6	Allocated & Other Taxes	<u>16,346</u>	<u>0</u>	<u>16,346</u>
7	Total	\$ <u>4,496,191</u>	\$ <u>0</u>	\$ <u>4,496,191</u>

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 8.

CHATTANOOGA GAS COMPANY
Excise and Income Taxes
For the 12 Months Ending December 31, 2022

Line No.		CGC Revised Filing A/	Adjustments	Consumer Advocate
1	Operating Revenues	\$ <u>123,990,484</u>	\$ <u>0</u>	\$ <u>123,990,484</u>
	Operating Expenses:			
2	Purchased Gas Expense	\$ 68,201,348	\$ 0	\$ 68,201,348
3	O&M Expenses	20,289,809	-167,069	20,122,740 B/
4	Depreciation Expense	9,813,336	0	9,813,336
5	Amortization - ARM Reconciliation Balance	12,565,990	-174,092	12,391,898 B/
6	Interest on Customer Deposits	71,140	0	71,140
7	General Taxes	4,496,191	0	4,496,191
8	Total Operating Expenses	\$ <u>115,437,814</u>	\$ <u>-341,161</u>	\$ <u>115,096,653</u>
	NOI Before Excise and Income Taxes	\$ <u>8,552,670</u>	\$ <u>341,161</u>	\$ <u>8,893,831</u>
9	AFUDC - Equity	-907,147	0	-907,147
10	Interest Expense	-5,629,803	1,745	-5,628,059 C/
11	Permanent Tax Differences	61,537	0	61,537
12	Net Income Before Income Taxes	\$ <u>2,077,257</u>	\$ <u>342,906</u>	\$ <u>2,420,163</u>
	Tennessee Excise Tax Calculation:			
13	Net Income Before Income Taxes	\$ 2,077,257	\$ 342,906	\$ 2,420,163
14	Excise Tax Rate	6.50%	6.50%	6.50%
15	Excise Tax Expense	\$ <u>135,022</u>	\$ <u>22,289</u>	\$ <u>157,311</u>
16	Less After-Tax Excess Deferred Tax Liability Amortization	18,081	0	18,081
17	Net Excise Tax Expense	\$ <u>116,941</u>	\$ <u>22,289</u>	\$ <u>139,230</u>
18	Excise Tax - Current	\$ <u>599,927</u>	\$ <u>-22,289</u>	\$ <u>577,638</u>
19	Excise Tax - Deferred	\$ <u>716,868</u>	\$ <u>0</u>	\$ <u>716,868</u>
	Federal Income Tax Calculation:			
20	Net Income Before Income Taxes	\$ 2,077,257	\$ 342,906	\$ 2,420,163
21	Net Excise Tax Expense	116,941	22,289	139,230
22	Net Income Before Federal Income Tax	\$ <u>1,960,316</u>	\$ <u>320,617</u>	\$ <u>2,280,933</u>
23	FIT Rate	21.00%	21.00%	21.00%
24	Federal Income Tax Expense	\$ <u>411,666</u>	\$ <u>67,330</u>	\$ <u>478,996</u>
25	Less After-Tax Excess Deferred Tax Liability Amortization	-510,177	0	-510,177
26	Net Federal Income Tax Expense	\$ <u>-98,511</u>	\$ <u>67,330</u>	\$ <u>-31,181</u>
27	Federal Income Tax - Current	\$ <u>-1,582,714</u>	\$ <u>67,330</u>	\$ <u>-1,515,384</u>
28	Federal Income Tax - Deferred	\$ <u>1,484,203</u>	\$ <u>0</u>	\$ <u>1,484,203</u>

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 9.

B/ Schedule 5.

C/ Schedule 9.

CHATTANOOGA GAS COMPANY
Rate of Return Summary
For the 12 Months Ending December 31, 2022

Line No.	Class of Capital	CGC		
		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	Common Equity	49.23%	9.80%	4.82%
4	Total	100.00%		7.12%
		CGC Revised Filing ^{A/}	Adjustments	Consumer Advocate
Interest Expense Short-Term Debt:				
5	Rate Base	\$ 245,514,760	\$ -76,083	\$ 245,438,677
6	Short-Term Weighted Debt Cost	0.19%	0.19%	0.19%
7	Short-Term Debt Interest Expense	\$ 465,570	\$ -144	\$ 465,425
Interest Expense Long-Term Debt:				
8	Rate Base	\$ 245,514,760	\$ -76,083	\$ 245,438,677
9	Long-Term Weighted Debt Cost	2.10%	2.10%	2.10%
10	Long-Term Debt Interest Expense	\$ 5,164,234	\$ -1,600	\$ 5,162,633
11	Total Interest Expense	\$ 5,629,803	\$ -1,745	\$ 5,628,059

^{A/} CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 11.

CHATTANOOGA GAS COMPANY
Revenue Conversion Factor
For the 12 Months Ending December 31, 2022

Line No.		<u>Amount</u>	<u>Balance</u>	A/
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>0.003858</u>	
5	Balance		1.004938	
6	State Excise Tax	0.065000	<u>0.065321</u>	
7	Balance		0.939617	
8	Federal Income Tax	0.210000	<u>0.197320</u>	
9	Balance		<u>0.742297</u>	
10	Revenue Conversion Factor (Line 1 / Line 9)		<u><u>1.347169</u></u>	

A/ CGC Weems Exhibit TW-1 (Updated 6-23-2023), Schedule 12.