IN THE TENNESSEE PUBLIC UTILITY COMMISSION AT NASHVILLE, TENNESSEE

IN RE:)			
CHATTANOOGA GAS COMPANY'S PETITION FOR APPROVAL OF ITS 2021 ANNUAL RATE REVIEW FILING PURSUANT TO TENN. CODE ANN. § 65-5-103(d)(6))) DOCKET NO. 22-00032)))			
DIRECT TESTIMONY				
OF				
ALEX BRADLEY				

June 17, 2022

- 1 Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION FOR
- THE RECORD.
- 3 A1. My name is Alex Bradley. My business address is Office of the Tennessee Attorney
- General, John Sevier State Office Building, 500 Dr. Martin L. King Jr. Blvd, Nashville,
- 5 Tennessee 37243. I am an Accounting & Tariff Specialist employed by the Consumer
- Advocate Unit in the Financial Division of the Tennessee Attorney General's Office
- 7 ("Consumer Advocate").
- 8 Q2. PLEASE PROVIDE A SUMMARY OF YOUR BACKGROUND AND
- 9 **PROFESSIONAL EXPERIENCE.**
- 10 **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
- 12 2012. I have been employed by the Consumer Advocate since 2013. My duties include
- 13 reviewing utility regulatory filings, preparing analysis used to support Consumer Advocate
- testimony and exhibits, and preparing my own testimony and supporting exhibits. I have
- 15 completed multiple regulatory trainings, including those sponsored by the National
- Association of Regulatory Utility Commissions ("NARUC") held by Michigan State
- 17 University.
- 18 Q3. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE
- 19 TENNESSEE PUBLIC UTILITY COMMISSION ("TPUC" OR THE
- 20 "COMMISSION")?
- 21 **A3.** Yes. I have previously testified in TPUC Docket Nos. 17-00108, 18-00009, 18-00107,
- 22 19-00010, 19-00034, 19-00042, 19-00043, 19-00057, 19-00062, 20-00028, 20-00049, 20-
- 23 00086, 21-00006, 21-00107, and 22-00005.

1 Q4. ON WHOSE BEHALF ARE YOU TESTIFYING?

2 **A4.** I am testifying on behalf of the Consumer Advocate.

3 Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

4 **A5.** The purpose of my testimony is to provide a discussion on the future affordability of natural gas service.

6 Q6. WHAT DOCUMENTS HAVE YOU REVIEWED IN PREPARATION FOR THIS

7 TESTIMONY?

8 **A6.** I have reviewed the Pre-Filed Testimony and Exhibits filed with Chattanooga Gas
9 Company's ("CGC" or the "Company") Petition. Additionally, I have reviewed the
10 Company's discovery responses regarding the topics discussed in my testimony.

11 Q7. WHAT PROMPTED YOUR DECISION TO DISCUSS THE FUTURE 12 AFFORABILITY OF NATURAL GAS SERVICE?

During the discovery process the Consumer Advocate asked, and the Company produced, a historical and forecasted average residential bill from 2020-2023. The results are shown below:

Average Yearly Bill				
2020	2021	2022	2023	
\$ 534.29	\$ 706.79	\$ 850.49	\$ 1,042.22	

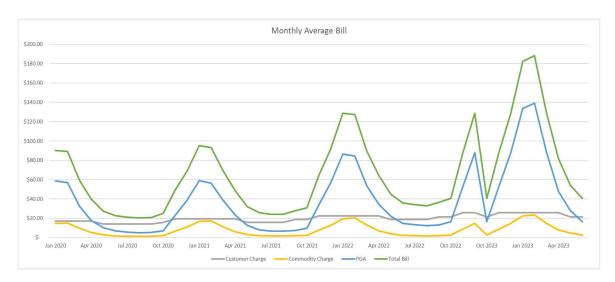
¹⁶

¹ CGC's Response to the Consumer Advocate DR No. 2-21.

1 Q8. CAN YOU SHOW THE INFORMATION WITH A BREAKDOWN OF THE BILL

2 **COMPONENTS?**

- 3 **A8.** Yes. The Company's analysis provided a breakdown by bill component. I have presented
- 4 the information below.²



6 Q9. WHAT DOES THIS INFORMATION SHOW?

- 7 **A9.** This information demonstrates that rising natural gas prices are the primary driver of bill
- 8 increases.

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9 Q10. DID THE COMPANY FULLY PROJECT THE PRICE OF NATURAL GAS FOR

10 THEIR RESPONSE?

- 11 **A10.** No. The Company stated in its discovery response:
- For the period of July 2022-September 2023 the Purchased Gas Adjustment
- proposed to be effective July 1, 2022, is used. This PGA is based on the
- NYMEX Henry Hub prices for each of the months June 2022-May 2023 as
- 15 published for May 26, 2022.³

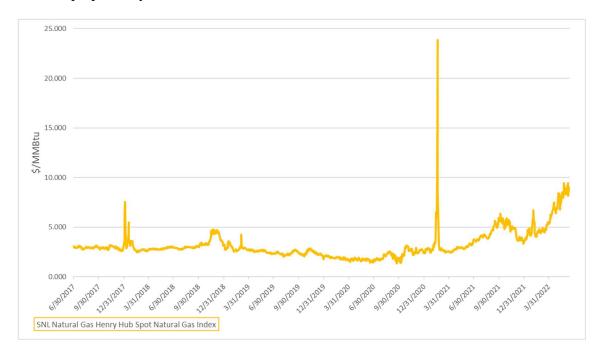
² *Id*.

³ *Id*.

1 Q11. CAN YOU PROVIDE A HISTORICAL REVIEW OF THE NYMEX HENRY HUB

2 **SPOT PRICING?**

- 3 A11. Yes. Below is a chart showing the NYMEX Henry Hub spot pricing for the period 2017-
- 4 2022 as prepared by S&P Global.⁴



6 Q12. WHAT IS THE MOST NOTICEABLE ASPECT OF THE HENRY HUB SPOT

7 PRICE INFORMATION?

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- 8 **A12.** Beyond the massive price spike in February 2021 that correlates with the Winter Storm
- 9 URI⁵, natural gas prices have consistently trended upward in the last two years.

 $[\]begin{array}{l} {}^4 \quad S\&P \; Capital \; IQ, \; Commodity \; Charting, \\ \underline{www.capitaliq.spglobal.com/web/client?auth=inherit\#markets/commoditiesChart?SerType=0\&Source=11\&AsOf=2022-06-14\&Period=30\&Fill=Monthly\&selectedseries=0|s=11|l=15387|i=15|m=0,0|s=11|l=15449|i=15|m=0,0|s=11|l=15461|i=15|m=0,0|s=11|l=15463|i=15|m=0,0|s=11|l=15464|i=15|m=0,0|s=11|l=20501|i=15|m=0,0|s=11|l=20507|i=15|m=0,0|s=11|l=20523|i=15|m=0,0|s=11|l=20557|i=15|m=0,0|s=11|l=20558|i=15|m=0,0|s=11|l=20560|i=15|m=0,0|s=11|l=20563|i=15|m=0,0|s=11|l=20564|i=15|m=0,0|s=11|l=20567|i=15|m=0,0|s=11|l=20567|i=15|m=0,0|s=11|l=20570|i=15|m=0,0|s=11|l=20570|i=15|m=0,0|s=11|l=20570|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=20571|i=15|m=0,0|s=11|l=$

⁵ Largue, Pamela. *Texas Freeze Caused Record Gas Spot Price and Outages*, Power Engineering International, March 8, 2021, https://www.power-eng.com/gas/texas-freeze-caused-record-gas-spot-prices-and-outages/#gref.

1 Q13. WHAT DOES THIS INFORMATION MEAN FOR THE AVERAGE

2 RESIDENTIAL NATURAL GAS CUSTOMER OF THE COMPANY?

- 3 **A13.** For an average residential customer, they can expect to pay \$1,042 for natural gas services
- in 2023. In 2020 the average residential customer paid \$534 for using the same amount of
- 5 natural gas. This is an increase of \$508, or 95%.

6 Q14. IS THE COST OF NATURAL GAS RECOVERED IN THIS PROCEEDING?

- 7 A14. No. The purchased gas costs incurred by the Company are recovered by the Actual Cost
- 8 Adjustment ("ACA") component of a customer's bill. The Company makes an Annual
- ACA filing to recover the natural gas costs for the previous period covering July through
- June. The ACA filing compares the actual gas costs, as invoiced by the Company's natural
- gas suppliers and interstate transportation providers plus margin loss (if allowable), to the
- gas/transport costs recovered from customers through the Gas Charge Adjustment
- surcharge.

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14 Q15. WHAT IS THE COMPANY REQUESTING IN THIS PROCEEDING?

- 15 **A15.** The Company is requesting an operating income of \$14,948,653.⁶ This is an increase of
- \$4,290,777 since the Company's last Base Rate Case. For context, this represents a 40%
- increase in operating income since the Commission's Order in 2019.

Q16. CAN YOU PROVIDE SOME BACKGROUND INFORMATION ON THE

19 **COMPANY'S CUSTOMERS?**

⁶ Direct Testimony of Tiffani Weems, File <2022-06-13 CGC Weems Exhibit TW-1 (ARM Model Rev. 6-13-2022)>, Tab "Schedule 1", TPUC Docket No. 22-00032 (June 13, 2022).

⁷ Amended Order, Commission Exhibit, Schedule 1, Line 5, TPUC Docket No. 18-00017 (January 15, 2019). In TPUC Docket No. 18-00017, The Company's Required Operating Income amounted to \$10,657,877. *Id.*

1 **A16.** Yes. Below is an income estimate summary of the Chattanooga area from the 2020 Census Dataset. This dataset is from Data.census.gov which is the data dissemination platform to access demographic and economic data from the U.S. Census Bureau.⁸ As shown below, over half of households have incomes lower than \$50,000.⁹

			_	
	Households	Families	Married- couple families	Nonfamily Househoulds
	Estimate	Estimate	Estimate	Estimate
Total	77,179	39,940	26,084	37,239
Less than \$10,000	7.60%	5.00%	0.90%	11.10%
\$10,000 to \$14,999	5.70%	3.30%	2.20%	8.50%
\$15,000 to \$24,999	11.80%	8.10%	4.00%	16.40%
\$25,000 to \$34,999	12.00%	8.40%	6.10%	15.70%
\$35,000 to \$49,999	15.10%	13.00%	10.20%	17.30%
\$50,000 to \$74,999	16.60%	17.80%	18.30%	14.90%
\$75,000 to \$99,999	10.40%	13.90%	16.80%	6.60%
\$100,000 to \$149,999	11.80%	16.50%	21.80%	6.20%
\$150,000 to \$199,999	3.90%	5.50%	7.50%	2.20%
\$200,000 or more	5.10%	8.60%	12.10%	1.10%
Median income (dollars)	47,165	65,462	85,564	33,688
Mean income (dollars)	72,306	94,404	118,553	46,696

Using the Company's projected average yearly natural gas bill, a typical Chattanooga household earning at a median income of \$47,165 would spend approximately 1.8% and 2.21% of their incomes to cover natural gas bills in 2022 and 2023, respectively.

Q17. ARE THERE ANY OTHER ECONOMIC ASPECTS OF THE SERVICE TERRITORY THAT YOU WOULD LIKE TO DISCUSS?

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⁸ United States Census Bureau, *What is data.census.gov*?, https://www.census.gov/data/what-is-data-census-gov.html (last visited June 16, 2022).

⁹ United States Census Bureau, S19-1: Income in the Past 12 Months (in 202 Inflation- Adjusted Dollars), https://data.census.gov/cedsci/table?q=S1901%3A%20INCOME%20IN%20THE%20PAST%2012%20MONTHS% 20%28IN%202020%20INFLATION-

ADJUSTED%20DOLLARS%29&g=1600000US4714000&tid=ACSST5Y2020.S1901 (last visited June 16, 2022).

1 **A17.** Yes. A recent U.S. Energy Information Administration ("EIA") survey regarding energy insecurity shows approximately 2,380,000 households in the East South Central Census district, which includes Chattanooga, reported energy insecurity.¹⁰

Table HC11.1 Household energy insecurity, 2020

	Number of housing units (million)						
		Households reporting					
	Total U.S. [®]	house hold	to pay energy	Leaving home		Unable to use heating	conditioning
All homes	123.53	33.58	24.61	12.20	12.36	5.08	6.35
Census region and division							
Northeast	21.92	5.54	3.82	2.38	1.84	0.82	0.84
New England	5.88	1.36	0.93	0.57	0.42	0.27	0.19
Middle Atlantic	16.04	4.17	2.89	1.81	1.43	0.55	0.65
Midwest	27.04	6.58	4.87	2.01	2.80	0.94	1.04
East North Central	18.55	4.78	3.52	1.46	2.01	0.63	0.74
West North Central	8.50	1.80	1.35	0.55	0.79	0.31	0.30
South	46.84	14.00	10.66	4.65	5.69	2.19	3.11
South Atlantic	24.84	6.58	4.99	2.26	2.68	1.03	1.50
East South Central	7.38	2.38	1.85	0.85	0.98	0.39	0.58
West South Central	14.62	5.03	3.83	1.53	2.03	0.77	1.03
West	27.72	7.47	5.25	3.16	2.02	1.14	1.36
Mountain	9.22	2.26	1.65	0.86	0.75	0.40	0.45
Mountain North	4.62	1.01	0.74	0.32	0.38	0.16	0.18
Mountain South	4.60	1.25	0.91	0.54	0.37	0.24	0.28
Pacific	18.51	5.21	3.60	2.30	1.27	0.74	0.90

Q18. CAN YOU DESCRIBE ENERGY INSECURITY?

A18. The EIA describes energy insecurity as a household that reports "facing a challenge in paying energy bills or sustaining adequate heating and cooling in their homes." Energy insecurity can be many things, but generally it is when a household is unable to use the energy it needs for basic needs or has reduce other necessary expenditures, like food or medications, to retain their typical level of energy service.

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U.S. Energy Information Administration, Table HC11.1 Household Energy Insecurity, 2020, May 2022, https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.eia.gov%2Fconsumption%2Fresidentia 1%2Fdata%2F2020%2Fhc%2Fxls%2FHC%252011.1.xlsx&wdOrigin=BROWSELINK.

U.S. Energy Information Administration, *One in Three U.S. Households Faces a Challenge in Meeting Energy Needs*, September 19, 2018, https://www.eia.gov/todayinenergy/detail.php?id=37072.

Q19. CAN YOU DESCRIBE WHY THIS INFORMATION IS IMPORTANT IN THE

2 CONTEXT OF THIS REQUEST?

- 3 A19. These anticipated increases in customer energy bills are important to recognize in these
- 4 uncertain economic times. 12 As discussed, in the cited report for the Federal Reserve Bank
- 5 of St. Louis:

1

- 6 [T]he biggest headwind facing the U.S. economy over the past year or so has
- been the exceptionally high rate of consumer price inflation, which hits a 40-
- 8 year high in March 2022. Inflation is a tax on household cash balances.
- 9 Moreover, if household nominal incomes do not increase as fast as inflation,
- then households' real standard of living declines. This called a loss in
- purchasing power.
- 12 If trends continue, consumers of regulated natural gas services could be put in the untenable
- position of having to choose to pay for energy services or pay for other necessities.

14 O20. WITH THIS INFORMATION IN MIND DO YOU HAVE ANY

15 **RECOMMENDATIONS?**

- 16 **A20.** I recommend the Commission require the Company to communicate, through a bill insert and a
- media release, the estimated increase in the average residential bill for the period December 2022
- through February 2023 compared with the same period from the previous year. Winter heating
- bills are a major expenditure for residential customers, and the Commission should ensure that
- 20 customers are informed of what they may anticipate in light of the significant increase in the market
- 21 price of gas.

22 Q21. DOES THIS COMPLETE YOUR TESTIMONY?

- 23 **A21.** Yes, it does. However, I reserve the right to incorporate any new information that may
- subsequently become available.

¹² Kliesen, Kevin L. *GDP Decline, Inflation Heighten Uncertainty in U.S. Economic Outlook*, Federal Reserve Bank of St. Louis, May 25, 2022, https://www.stlouisfed.org/publications/regional-economist/2022/may/gdp-decline-inflation-heighten-uncertainty-us-economic-outlook.

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AFFI	IDAVIT
I, Alex Bradley, on beh	nalf of the Consumer Advocate Unit of the
Attorney General's Office, hereby cert	tify that the attached Direct Testimony
represents my opinion in the above-refere	enced case and the opinion of the Consumer
Advocate Unit.	
	ALEX BRADLEY

Sworn to and subscribed before me this 17th day of June, 2022.

NOTARY PUBLIC

My commission expires: September 28, 2000.