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October 16, 2006

Sara Kyle, Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, Tennessee 37243

filed electronically in docket office on 10/16/06

Re.

Petition of Chattanooga Gas Company for Approval of Adjustment of Its Rates

and Charges, Comprehensive Rate Design Proposal, and Revised Tariff

Docket Number: 06-00175

Dear Chairman Kyle:

Attached is the Direct Testimony of Alan Chalfant, Dan Nuckolls and Tim Spires in behalf of Chattanooga Manufacturers Association.

Very truly yours,

BOULT, CUMMINGS, CONNERS & BERRY, PLC

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By:

Henry Walker

HW/djc Enclosures

Before the Tennessee Regulatory Authority Docket No. 06-00175

Chattanooga Gas Company

Direct Testimony and Exhibits of

Alan Chalfant

On Behalf of

Chattanooga Manufacturers Association

October 16, 2006



Chattanooga Gas Company

Before the

Tennessee Regulatory Authority

Docket No. 06-00175

Direct Testimony of Alan Chalfant

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.					
2	Α	Alan Chalfant; 1215 Fern Ridge Parkway, Suite 208; St. Louis, Missouri 63141-2000.					
3	Q	WHAT IS YOUR OCCUPATION?					
4	Α	I am a consultant in the field of public utility regulation with Brubaker & Associates,					
5		Inc., energy, economic and regulatory consultants.					
6	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND					
7		EXPERIENCE.					
8	Α	My qualifications are stated in Appendix A to this testimony.					
9	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?					
10	Α	I am appearing on behalf of the Chattanooga Manufacturers Association (CMA).					
11	,	Members of CMA include customers of Chattanooga Gas Company (CGC or					
12		Company).					

1 Q WHAT IS THE SUBJECT OF YOUR DIRECT TESTIMONY?

A I will address the Company's cost of service study, the allocation of revenues to the classes and the proposed rate design applicable to industrial users. I will also address allocation of revenue responsibility under the proposed Bare Steel and Cast Iron Pipeline Replacement Program (PRP) tracker and certain tariff changes.

COST OF SERVICE STUDY

7 Q HAVE YOU REVIEWED THE COMPANY'S COST OF SERVICE STUDY IN THIS

8 **PROCEEDING?**

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Yes. In its prior case (Docket 04-00034) the Company agreed with CMA to file a cost of service study in its next rate case. The Company has filed such a study which is supported by the Direct Testimony of Mr. David Heintz. I have reviewed Mr. Heintz's cost of service study and found that it follows generally accepted cost allocation methods and produces results that reasonably reflect the causation of costs on the CGC system.

15 Q WHAT IS THE LARGEST COST COMPONENT IN THE COMPANY'S COST OF 16 SERVICE STUDY?

17 A The largest cost component is distribution mains.

18 Q HOW DID THE COMPANY ALLOCATE RESPONSIBILITY FOR THE COSTS OF

19 **DISTRIBUTION MAINS?**

First, Mr. Heintz properly recognizes at page 5, lines 25-27 that "distribution mains are installed to meet both system peak load requirements and to connect customers to the Company's system". He used the widely accepted minimum system approach to estimate the portion of distribution mains costs that are customer-related, rather

than demand-related. With respect to the allocation of the demand-related portion of distribution mains he allocates these costs on the basis of Dedicated Design Day Capacity (DDDC) and contract demand levels.

Q PLEASE DESCRIBE THE MINIMUM SYSTEM APPROACH IN GREATER DETAIL.

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The critical factor to consider in allocating mains is that a large part of the investment in mains is to interconnect customers with the system, which is independent of a customer's annual or peak day usage. This split between the component of mains that is related to the number of customers must be estimated and allocated based on the number of customers rather than the peak demand. There are two generally accepted methods of estimating the size of the customer related portion of mains. These are the minimum size approach and the zero-intercept approach. The minimum size approach attempts to determine the costs of installing only the minimum practical size of pipe. The zero-intercept approach attempts to statistically determine the costs of installing pipes of zero diameter.

The Company has used the minimum size approach and has determined that the customer component of mains represents approximately 36% of total mains investment.

Q PLEASE DESCRIBE THE USE OF THE DDDC AND CONTRACT DEMANDS TO ALLOCATE THE DEMAND RELATED PORTION OF COSTS.

For large customers, the Company uses the contract demands. These customers must specify a contract demand level that reflects the peak demand that these customers can place on the system. For customers without contract demands the Company relies on its design day demands which represents the demands these customers are expected to place on the system on a day when the system

experiences peak demand conditions. The Company uses the ratio of each class peak demand to the total design day demand based on these measures to allocate the costs of mains to each class. This reflects the portion of the total cost of mains for which each class is responsible. This is the proper way to allocate the demand related portion of mains costs.

Q PLEASE SUMMARIZE THE RESULTS OF THE COST OF SERVICE STUDY.

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The results of the Company's filed cost of service study are summarized on Exhibit ____(AC-1), Schedule 1. As shown on line 2, the rate of return earned by CGC from the major classes ranges from 2.09% for Residential to 12.49% for service to the Large C & I General class. Line 3 shows the revenue that each class would need to produce in order to cover its costs at the Company's proposed revenue level. Line 4 shows the percentage increases that would be required for each class to move from present rates to full cost of service rates. This shows that the residential and C & I General classes require increases to move to cost based rates while the remaining classes would receive decreases because their present rates exceed the overall cost level CGC is requesting.

17 Q WHAT DO THE RATES OF RETURN PRODUCED BY THE COST OF SERVICE 18 STUDY TELL US?

When rates are set so that the utility earns different rates of return from different customer classes the customers in the classes with the higher than average rates of return will be subsidizing customers in those classes with lower than average rates of return. The widely divergent rates of return in the Company's study clearly indicate that there is a large amount of cross-subsidization between CGC's rate classes.

7	Q	IS THERE A WAY TO MEASURE INTERCLASS SUBSIDIZATION?			
2	Α	Yes. The amount of the subsidy is the difference between the revenue being			
3		provided by a customer class and the cost of serving that same class at the system's			
4		average rate of return.			
5	Q	ARE THERE SUBSIDIES REMAINING UNDER THE COMPANY'S PROPOSED			
6		RATES?			
7	Α	Yes. Exhibit(AC-1), Schedule 1, shows the subsidies at proposed rates paid or			
8		received by each customer class on line 6. This shows that the Residential class			
9		would continue to receive a large subsidy under proposed rates supported by the			
10		Large C & I General and Large Volume Firm classes.			
11		REVENUE ALLOCATION			
12	Q	HAVE YOU REVIEWED THE COMPANY'S PROPOSED ALLOCATION OF			
13		REVENUE RESPONSIBILITY BETWEEN CLASSES?			
14	Α	Yes, I have. In general, the Company's proposal moves class revenue responsibility			
15		toward correcting for the subsidies described above.			
16	Q	DOES THE COMPANY'S PROPOSAL TOTALLY REMOVE ALL INTERCLASS			
17		SUBSIDIES FROM CLASS REVENUES?			
18	Α	No, it doesn't, as discussed above and shown on Exhibit(AC-1), Schedule 1.			
19	Q	WOULD IT BE PROPER TO MOVE ALL THE WAY TO COST IN THIS			
20		PROCEEDING?			
21	Α	No. Any allowed increase should be spread so that the rates charged to each			
22		customer class reflect the actual cost of providing service as closely as practicable.			

1 However, the movement to cost should be constrained to some extent by gradualism. 2 Gradualism means that no class should receive an overly large increase or decrease 3 in its rates relative to the overall average percentage change. This is particularly 4 important in this case since, for a number of years, there has not been a cost of 5

service study to use as a guide to rate setting.

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WHY SHOULD THE RESULTS OF THE COST OF SERVICE STUDY BE THE PRIMARY FACTOR IN DETERMINING CLASS REVENUE REQUIREMENTS?

Cost-based rates will send the proper price signals to customers. Sending proper price signals is especially important in a competitive environment, where customers can choose their commodity supplier. Cost-based rates are essential for the development of competitive retail markets because such rates eliminate cross-subsidies and provide unfettered access to competitive suppliers. The other reasons for adhering to cost of service principles are equity, engineering efficiency (cost-minimization), stability, and conservation.

15 Q WHY ARE COST-BASED RATES EQUITABLE?

Rates which reflect primary cost of service considerations are equitable because Α each customer pays what it costs the utility to serve them, no more and no less. If rates are not based on cost, then some customers must pay part of the cost of providing service to other customers, which is inequitable.

20 HOW DO COST-BASED RATES PROMOTE ENGINEERING EFFICIENCY? Q

21 Α With respect to engineering efficiency, when class revenues are established reflective 22 of the demand and commodity cost components, customers are provided with the

1		proper incentive to minimize their costs, which will, in turn, minimize the costs to the
2		utility.
3	Q	HOW CAN COST-BASED RATES PROVIDE STABILITY?
4	Α	When rates are closely tied to cost, the utility's earnings are stabilized because
5		changes in customer use patterns would result in parallel changes in revenues and
6		expenses.
7	Q	DO COST-BASED RATES ENCOURAGE CONSERVATION?
8	Α	Yes. By providing balanced price signals against which to make consumption
9		decisions, cost-based rates encourage conservation (of both capacity and
10		commodity), which is properly defined as the avoidance of wasteful or inefficient use
11		(and not just less use). If rates are not based on costs, then the choices are
12		distorted.
13		
14	Q	DOES THE COMPANY'S PROPOSED REVENUE ALLOCATION IN THIS CASE
15		PROVIDE A MEANINGFUL MOVEMENT TOWARD COST?
16	Α	Yes.
17		DESIGN OF LARGE USER RATES
18	Q	HAVE YOU REVIEWED THE COMPANY'S PROPOSAL FOR INDUSTRIAL
19		RATES?
20	Α	Yes. The Company is proposing to increase the demand charge in its firm industrial
21		transportation rates from \$3.00 to \$7.00 per Dth. It is also seeking to eliminate the
22		declining block charges from its commodity rates.
23	Q	IS THIS A REASONABLE PROPOSAL?

1 A No. While it does move the demand charge in the appropriate direction, it does not
2 give proper recognition of gradualism in doing so. Similarly, the combination of these
3 two changes could result in dramatic increases for some customers even though the
4 total class revenues are essentially unchanged.

5 Q WHY IS THE COMPANY PROPOSING TO ELIMINATE THE DECLINING BLOCKS 6 IN THE COMMODITY CHARGES?

7 A Mr. Nikolich states at page 16, lines 3-7 of his testimony that:

The existing multi-step declining block rate, while providing customers incentive to use more gas, does not encourage customers to use gas in a system-beneficial manner. Rather, it rewards high volume customers who can maximize the monthly loads at the expense of lower volume customers. In addition, it would simplify the rate.

13 Q DO YOU AGREE WITH MR. NIKOLICH?

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No. First, the existing rate does not encourage customers to use more gas. The fact is that a customer does not consume more just to enjoy consumption in a lower priced distribution rate block. This is particularly true considering that the customer is also faced with a market price of \$6.00 per Dth or more for additional gas commodity purchases. The amount of gas a customer uses will be determined by its needs and the total of distribution costs plus market price of the commodity, not simply the tail block of the transportation rate.

As I will show below, the Company's proposal to eliminate the declining block charges is inconsistent with the Company's own cost of service study and the principles it claims to support.

1	Q	ARE YOU SAYING THAT THE TRANSPORTATION RATE MAKES NO				
2		DIFFERENCE TO THE CUSTOMER?				
3	Α	Certainly not. The transportation rate makes an important difference concerning a				
4		customer's decisions as to location of facilities, which facility in which service area				
5		expands and, ultimately, if an operation remains in business. It does not, however,				
6		affect a customer's decision in a given month as to how much to purchase.				
7	Q	ARE THERE ANY OTHER PROBLEMS WITH MR. NIKOLICH'S STATEMENT?				
8	Α	While it is not entirely clear what he means by a customer maximizing monthly loads,				
9 .		the purpose of the declining blocks is not to "reward" or to penalize customers but to				
10		track costs as closely as possible in recognition of the fact that the commodity				
11		charges continue to recover a large portion of demand related costs and some				
12		customer related costs.				
13	Q	WITH THE PROPOSED \$7.00 PER DTH DEMAND CHARGE, DO THE				
14		COMMODITY CHARGES CONTINUE TO RECOVER A LARGE AMOUNT OF				
15		DEMAND RELATED COSTS?				
16	Α	Yes. Based on the cost of service study, Exhibit(DAH-1), page 5 of 5, the				
17		demand related cost is about \$128 per Dth per year, or more than \$10.50 per Dth per				
18		month and the commodity cost is zero.				
19	Q	DOES THE PROPOSED CUSTOMER CHARGE FULLY RECOVER CUSTOMER				
20		RELATED COSTS?				
21	Α	No. The customer related costs exceed the proposed customer charge by about				
22		10%.				

1	Q	IN GENERAL TERMS, WHAT IS THE PURPOSE OF THE DECLINING BLOCK
2		STRUCTURE OF VOLUMETRIC CHARGES IN INDUSTRIAL TRANSPORTATION
3		RATES?

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Declining blocks are a standard structure in industrial transportation rates because they typically apply to a wide range of customers. These customers have differing loads which vary by size, load factor and the size of mains required to provide service. A declining block volumetric rate structure is a reasonable method of reflecting these differences. Typically, large transportation customers take service at higher load factors and can take service off larger diameter mains than smaller customers within a particular rate class.

PLEASE EXPLAIN HOW THE PRESENT DECLINING BLOCK RATE STRUCTURE APPROPRIATELY REFLECTS COSTS IN THE CIRCUMSTANCES YOU HAVE JUST DESCRIBED.

First, in order to fully recover customer costs from each customer, the first block needs to be high enough to recover those customer costs not covered by the monthly customer charge. Second, the blocks need to be differentiated to reflect the fact that larger customers tend to have higher load factors which means that the demand costs are spread over greater volumes. Since, with the exception of the residual customer costs included in the first block, all the costs recovered by the volumetric transportation charges are demand related it is critical to reflect this difference in rates. Finally, as noted above, the tail blocks need to be lower to reflect the fact that large customers are served off larger diameter mains.

I believe it is these reasons that explain why the TRA has consistently found the declining block structure to be reasonable, not because it "rewards" large customers as claimed by the Company.

1	Q	ARE THERE ANY OTHER REASONS THE TRA SHOULD REJECT THE				
2		COMPANY'S PROPOSAL TO ELIMINATE THE DECLINING BLOCKS IN THE				
3		INDUSTRIAL TRANSPORTATION RATES?				
4	Α	Yes. The Company's proposal would result in increases to individual customers in				
5		excess of 35% despite the fact that the overall class would experience a slight				
6		decrease. This is inappropriate and unnecessary rate shock.				
7	Q	SINCE THE DEMAND RELATED COST IS \$10.50 PER DTH ISN'T THE MOVE TO				
8		\$7.00 PER DTH REASONABLE?				
9	Α	Not in one step as the Company proposes. The increase to \$7.00 per Dth represents				
10		an increase of 133% in the demand charge. This could also result in rate shock for				
11		some customers.				
12	Q	WHAT INCREASE WOULD YOU SUGGEST?				
13	Α	I would recommend an increase of no more than \$2.50 per Dth in this case and in				
14		each subsequent rate case subject to modification depending on the circumstances				
15		at the time subsequent cases are filed. This process should continue until the				
16		demand charge fully recovers the demand related costs of firm transportation				
17		customers.				
18	Q	WHAT IS YOUR RECOMMENDATION WITH RESPECT TO COMMODITY				
19		CHARGES?				
20	Α	I recommend that these charges be set to recover the remaining class revenue				
21		requirement after demand charges are established with the existing relationships				
22		between the blocks maintained.				

7	Q	HAVE YOU CALCULATED THE HATES THAT WOULD RESULT FROM
2		IMPLEMENTING YOUR RECOMMENDATIONS CONCERNING RATE DESIGN?
3	Α	Yes. My recommended rates are developed on Exhibit(AC-1), Schedule 2. This
4		Exhibit reflects the Company's proposed revenue levels for firm customers.
5		BARE STEEL AND CAST IRON PIPELINE REPLACEMENT RIDER
6	Q	PLEASE DESCRIBE THE PROPOSED BARE STEEL AND CAST IRON PIPELINE
7		REPLACEMENT PROGRAM (PRP) TRACKER.
8	Α	The PRP tracker is designed to recover the costs that the Company will incur over the
9		next eight years to replace 82 miles of bare steel and cast iron main and related
0		services with new pipe.
1	Q	DID THE COMPANY MAKE A SIMILAR PROPOSAL IN ITS PRIOR CASE?
2	Α	Yes, it did.
3	Q	DID YOU FILE TESTIMONY CONCERNING THE PROPOSED PRP RIDER IN
14		THAT CASE?
15	Α	Yes. In my testimony I objected to the Company's proposed method of recovering
16		the costs of the program. In short, the Company had proposed to recover these fixed
7		costs on a volumetric basis, i.e., it would charge all customers an equal amount per
8		therm of throughput. The Company's proposed recovery mechanism was contrary to
9		cost incurrence and contrary to the Company's goal of revenue stability in that case.

1	Q	DOES THE COMPANY PROPOSE TO RECOVER THESE PRP COSTS FROM
2		CUSTOMERS IN THE SAME WAY IN THIS CASE AS IT DID IN 2004?
3	Α	No. In this case it proposes to recover these costs from all customers through a per
4		customer charge.
5	Q	IS THIS A FAIR WAY TO RECOVER THESE COSTS?
6	Α	Yes. This proposal is a meaningful response to the arguments we offered in the prior
7		proceeding.
8		TARIFF ISSUES
9	Q	HAS THE COMPANY PROPOSED ANY TARIFF CHANGES IN THIS CASE?
10	Α	Yes. The Company's proposed Tariff removes the Experimental Semi-Firm Sales
11		Service Rate (SFSS) and the Company is proposing to increase the unauthorized use
12		penalty from \$15 to \$25 per Dth.
13	<u>Expe</u>	rimental Semi-Firm Sales Service Rate (SFSS)
14	Q	WHAT IS RATE SFSS?
15	Α	This is a rate option presented to and approved by the Tennessee Regulatory
16		Authority (TRA) in the last CGC proceeding under which the Company allows its
17		customers to bid on the rights to use its storage gas that is not required to serve its
18		sales customers.
19	Q	WHY HAS THE COMPANY ELIMINATED THIS RATE OPTION?
20	Α	That is not clear. To the best of my knowledge, the Company did not offer any
21		testimony that discussed the removal of this rate option.

1 Q HAVE CUSTOMERS MADE USE OF THIS OPTION SINCE IT WAS FILED?

- 2 A They have not yet made use of the option. This may be related to the minimum bids
- 3 imposed or other factors that can be corrected with more experience. I believe that
- 4 this rate option, if properly applied, could provide a meaningful alternative gas supply
- 5 for customers and should be continued.

6 **Unauthorized Overrun Penalty**

7 Q IS THE COMPANY PROPOSING ANY CHANGE TO THE UNAUTHORIZED

8 **OVERRUN PENALTY?**

- 9 A Yes. The Company is proposing to increase the overrun penalty from \$15 per Dth to
- 10 \$25 per Dth. The present penalty is the higher of \$15 per Dth or the average daily
- index on curtailment days plus \$5 per Dth and all applicable pipeline and/or gas
- supplier penalties and/or charges. The proposed rate would maintain the alternative
- of \$5 per Dth plus penalty charges from the pipeline.

14 Q WHAT CAUSES A CUSTOMER TO INCUR THE OVERRUN PENALTY?

- 15 A An overrun is defined as a situation in which a customer takes gas in excess of its
- daily contract amount or does not comply with a curtailment order.

17 Q WHY DOES THE COMPANY ISSUE A CURTAILMENT ORDER?

- 18 A It does so when it determines that the supply and capacity services contracted by the
- 19 Company are not sufficient to meet the full requirements of Customers.

20 Q HAS THE COMPANY EXPLAINED WHY IT IS PROPOSING TO INCREASE THIS

- 21 **PENALTY?**
- 22 A No. Mr. Nikolich's testimony simply states that it is doing so.

1	Q	IS A \$25 PER DTH PENALTY LIKELY TO DISCOURAGE OPERATIONS ON THE				
2		PART OF CUSTOMERS THAT WERE NOT DISCOURAGED BY A \$15 PER DTH				
3		PENALTY?				
4	Α	No. If a customer was unable to correct the situation leading to an overrun at a cost				
5		of \$15 per Dth, it is not likely that it could do so for \$25 per Dth. Incurring such a				
6		punitive penalty suggests that the customer, like CGC, was encountering serious				
7		operating problems at the time.				
8	Q	IS IT POSSIBLE THAT THE COMPANY COULD INCUR COSTS IN EXCESS OF				
9		\$15 PER DTH TO PROVIDE GAS TO A CUSTOMER IN AN OVERRUN				
0		SITUATION?				
11	Α	Yes. Although such circumstances would be rare it is possible that the costs, which				
12		include the cost of gas, could exceed \$15 per Dth for short periods of time.				
13	Q	WILL THE COMPANY LOSE MONEY IN SUCH CIRCUMSTANCES?				
14	Α	No. The customer would be required to pay the full cost in those circumstances plus				
15		\$5 per Dth.				
16	Q	WHAT IS YOUR RECOMMENDATION CONCERNING THE PENALTY				
17		PROVISION?				
8	Α	I do not believe the Company has justified a change from the present level of \$15 per				
19		Dth.				

1 **Balancing Provisions**

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2 Q DO YOU HAVE ANY CONCERNS ABOUT THE COMPANY'S BALANCING

3 PROVISIONS FOR TRANSPORTATION CUSTOMERS?

- 4 A Yes. As I discussed in my testimony in CGC's prior case, the Company's imbalance
- 5 penalties are based on the individual imbalances of customers without any provision
- to allow customers to take advantage of diversity, (i.e., of the fact that they will not all
- 7 be out of balance in the same direction at the same time).

8 Q CAN YOU EXPLAIN THIS WITH AN EXAMPLE?

A Yes. The only imbalances that can have any effect on the Company's gas supply management are the <u>net</u> imbalance of all transportation customers, not the sum of individual imbalances. For example, consider two customers that each nominate 500 Dth per day. Customer A may actually use 550 Dth on a particular day while Customer B uses only 450 Dth. Both customers have 10% imbalances but the Company sees no imbalance whatever on its pipeline deliveries as a result of these imbalances. Nevertheless, CGC would charge each customer penalties based on 10% imbalances. Moreover, even if there is a net imbalance on the part of transportation customers it might be used by the Company to offset an opposite imbalance caused by a difference between the Company's pipeline nomination for sales customers and the actual usage of sales customers.

20 Q HOW SHOULD THIS CUSTOMER DIVERSITY BE RECOGNIZED IN THE

21 **COMPANY'S TARIFFS?**

- 22 A This can be accomplished in a number of ways. One method is to let customers
- trade imbalances. Under this approach, at the end of the month customers could be

given a period of time to trade imbalances with other customers. At the very least, this could be done between customers purchasing gas from the same supplier.

A better method would be for the Company to establish a balancing pool of its transportation customers that opt to be included. Under such an arrangement, imbalance charges would be determined for the entire pool and then apportioned to the members of the pool.

7 Q DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

8 A Yes, it does.

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Qualifications of Alan Chalfant

1	Q	PLEASE	STATE YOUR	NAME AND	BUSINESS	ADDRESS.
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- 2 A Alan Chalfant. My business address is 1215 Fern Ridge Parkway, Suite 208,
- 3 St. Louis, Missouri 63141.

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4 Q WHAT IS YOUR OCCUPATION?

- 5 A I am a consultant in the field of public utility regulation and am a principal with the firm
- of Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.

7 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

I hold a Bachelor's Degree in Mathematics from Northern Illinois University and the degree of Master of Arts in Economics from Washington University. From 1968 to 1973, I was Assistant Professor of Economics at California State University at Northridge, California. Among other courses in economics and statistics, I taught courses in the economics of antitrust and regulation at both the graduate and undergraduate levels. I have also taught courses at both graduate and undergraduate levels at California Lutheran College.

In 1973, I accepted a position with the Public Service Commission of Wisconsin in the Utility Rates Division. While at the Commission, I designed the rates for electric and natural gas utilities and aided in the preparation for cross-examination of witnesses representing utilities and intervenors before the Commission.

I joined the firm of Drazen-Brubaker & Associates, Inc. in September 1974 and became a Principal in that firm in 1988. In April 1995 the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff

and currently has its principal office in St. Louis, Missouri, with branch offices in Phoenix, Arizona; Corpus Christi, Texas; and Plano, Texas.

Since 1974, I have been engaged in the preparation of studies relating to utility rate matters and have participated in numerous electric and gas rate cases. In total, I have participated in cases involving more than 60 electric utilities, 30 gas distribution utilities and 20 interstate pipelines.

7 Q HAVE YOU PREVIOUSLY TESTIFIED BEFORE A REGULATORY COMMISSION 8 OR A PUBLIC AUTHORITY?

I have testified before the Federal Energy Regulatory Commission and more than
 30 state public utility regulatory commissions. In addition, I have appeared before a
 number of municipal regulatory bodies and courts.

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Chattanooga Gas Company

Summary of Cost of Service Results

			Multi-Family		Large	Large	Total
Line	Description	Residential (1)	Heating (2)	<u>C&I General</u> (3)	C&I General (4)	Volume Firm (5)	System (6)
~	Revenue at Present Rates (000)	\$ 14,445	\$ 31	\$ 3,367	\$ 9,036	\$ 1,916	\$ 28,796
8	Rate of Return at Present Rates	2.09%	10.66%	4.59%	12.49%	9.88%	5.37%
က	Cost of Service at Proposed Rates (000)	\$ 21,269	\$ 28	\$ 4,193	\$ 7,361	\$ 1,789	\$ 34,640
4	Percent Increase to Cost of Service	47.24%	-10.41%	24.55%	-18.54%	-6.66%	20.30%
2	Revenue at Proposed Rates (000)	\$ 17,906	\$ 30	\$ 4,172	\$ 10,583	\$ 1,949	\$ 34,640
9	Subsidies Paid (Received) at Proposed Rates (000)	\$ (3,364)	\$	\$ (21)	\$ 3,222	\$ 161	ı ده

CHATTANOOGA GAS COMPANY

Development of Recommended Rate

<u>Line</u>	<u>Description</u>	Billing <u>Units</u> (1)	Recommended Rate (2)	Revenue (3)
1	Number of Bills	456	\$ 300.00	\$ 136,800
2	Demand (Dth)	12,754	\$ 4.50	\$ 688,716
3 4 5 6	Distribution 0 - 15,000 therms 15,001 - 40,000 therms 40,001 - 150,000 therms over 150,000	6,714,632 8,717,871 11,931,262 7,573,056	\$ 0.07321 \$ 0.06256 \$ 0.03548 \$ 0.02180	\$ 491,575 \$ 545,404 \$ 423,314 \$ 165,117
7	Total	34,936,821		\$ 2,450,925
8	Target Revenue			\$ 2,450,922

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing is being forwarded via email and U.S. mail, postage prepaid, to:

Steve L. Lindsey Chattanooga Gas Company 2207 Olan Mills Drive Chattanooga, TN 37421

Archie Hickerson AGL Resources, Inc. 150 W. Main Street, Ste. 1510 Norfolk, VA 23510

J. W. Luna Jennifer L. Brundige Farmer & Luna, PLC 333 Union Street, Ste. 300 Nashville, TN 37201

Elizabeth Wade AGL Resources, Inc. Ten Peachtree Pl., NW 15th Floor Atlanta, GA 30309

Timothy C. Phillips Consumer Advocate and Protection Division P.O. Box 20207 Nashville, TN 37202

on this the \(\frac{1}{\sqrt{0}} \) day of October, 2006.

Henry M. Walker