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BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE

May 1, 2018

IN RE:	)	
	)	
CHATTANOOGA GAS COMPANY	)	
PETITION FOR APPROVAL OF AN	)	
ADJUSTMENT IN RATES AND	)	**Docket No.**
TARIFF; THE TERMINATION OF	)	**18-00017**
THE AUA MECHANISM AND THE	)	
RELATED TARIFF CHANGES AND	)	
REVENUE DEFICIENCY	)	
RECOVERY; AND AN ANNUAL	)	
RATE REVIEW MECHANISM	)	

REVISED DIRECT TESTIMONY OF

ARCHIE R. HICKERSON

ON BEHALF OF

CHATTANOOGA GAS COMPANY

I. INTRODUCTION AND WITNESS QUALIFICATIONS

A. WITNESS IDENTIFICATION

Q. Please state your name and business address.

A. Archie R. Hickerson, Ten Peachtree Place, Atlanta, Georgia 30309.

Q. By whom and in what position are you employed?

A. I am Director of Rates and Tariff Administration at Southern Company Gas (formerly AGL Resources, Inc.). Southern Company Gas is the is the parent holding company for seven natural gas distribution companies, including Chattanooga Gas Company. The other companies are located in Florida, Georgia, Illinois, Maryland, New Jersey, and Virginia.

Q. What are your duties in your position as Director – Rates and Tariff Administration?

A. I am responsible for development, coordination, review and analytical activities related to rates and tariff administration for Chattanooga Gas Company and the other natural gas distribution companies that are subsidiaries of Southern Company Gas.

Q. For whom are you testifying?

A. I am testifying on behalf of Chattanooga Gas Company ("Company" or "CGC").

B. BACKGROUND AND EXPERIENCE

Q. Please summarize your education background and experience.

A. I received a Bachelor of Science degree with a major in mathematics and later accounting from Austin Peay State University in Clarksville, Tennessee. I am a

Chartered Global Management Accountant, and I am licensed as a Certified Public Accountant in the State of Tennessee.

I have over 41 years of experience with utility rates, utility accounting, and the regulation of public utilities. Over this period, I have worked for consumers of utilities and other services in addition to my work for Southern Company Gas. Prior to becoming Director – Rates and Tariff Administration in 2013, I served as Director – Regulatory Affairs and Planning for AGL Services Company from 2010-2013, Director – Regulatory Affairs for Chattanooga Gas Company and Virginia Natural Gas from 2004-2010, and Manager – Rates for AGL Services Company from 2000-2004.

Prior to joining AGL Resources, I was the Director of the Consumer Advocate Division Staff with the Tennessee Office of the Attorney General and Reporter (1994-2000), where I often appeared as an expert witness to present comments on utility cost of service, cost allocation and rate design, and to supervise the technical staff, notably in proceedings before the Tennessee Public Service Commission ("TPSC") and the Tennessee Regulatory Authority ("TRA"). I also served on the National Association of State Utility Consumer Advocates' ("NASUCA") Accounting and Tax Committee, and as an observer member of the National Association of Regulatory Utility Commissions' ("NARUC") Staff Subcommittee on Accounts. From 1976-1982, I was a financial Analyst for TPSC, then served as Assistant Director of the TPSC Accounting Division for four years (1982-1986), and later as the Deputy Director of the TPSC's Utility Rate Division for approximately seven years (1987-1994). While employed by the TPSC, I served on the NARUC Staff Subcommittee on Communications, the NARUC Staff Subcommittee on Accounts, and the NARUC's Southern Accounting Taskforce. My work at TPSC, like much of my later experience, included significant work with compliance and management audits, cost of service, rate design and earnings, and rate investigations of utilities.

Q. Have you previously testified before any state regulatory commission?

A. Yes. I have testified before the Tennessee Public Service Commission, the Tennessee Regulatory Authority, the Georgia Public Service Commission, the Virginia State Corporation Commission, and the Illinois Commerce Commission.

Q. Were you a witness in CGC's last rate case?

A. Yes. I was a witness in CGC's last rate case in Docket No. 09-00183.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. My testimony describes and supports certain tariff and rate schedule revisions that are appropriate to ensure that CGC's Tariffs reflect current customer and business needs and practices. In addition, I support the termination of the Alignment and Usage Adjustment ("AUA") that was placed into effect for three years on a trial basis in CGC's last rate case, the reactivation of the Weather Normalization Adjustment ("WNA"), the corresponding changes to Rate Schedules R-1 (Residential General Service) and C-1 (Commercial and Industrial Small General Service), and the recovery of the unrecovered AUA customer payments that have been deferred as a result of the 2% annual AUA cap.

Q. Are you including any exhibits in connection with your testimony?

A. Yes, the following exhibits have been included:

Exhibit ARH-1. Chattanooga Gas Company Tariff-Revised Effective September 1, 2018 (clean copy of proposed tariff).

Exhibit ARH-2. Chattanooga Gas Company Tariff-Revised Effective September 1, 2018 (proposed tariff with revisions marked).

Exhibit ARH-3. Chattanooga Gas Company's Report of Impact of Trial AUA on Chattanooga Gas Company and customers Served Under Rate Schedules R-1 (Residential General Service) and Rate Schedule C-1 (Small Commercial and Industrial General Service).

Exhibit ARH-4. Alignment and Usage Adjustment (AUA) Rider Tariff Sheets (revised AUA tariff if weather normalization handled by WNA).

Q. Will you please address the revisions to the tariff you are proposing to change?

Yes. I will summarize the tariff revisions that I am responsible for that I consider to be substantive rather than the stylistic or non-material. Other CGC witnesses shall support the specific policy or rate changes that are being proposed by those witnesses.

Line Extension:

The Company has proposed to simplify the wording of the standard line extension provision included in the tariff. Currently the tariff includes approximately 12 pages of the written description and a 28-page Appendix devoted to the line extension process. The Company proposes to replace these pages with a simpler provision like other gas distribution companies in Tennessee. The Company will continue to use economic analysis to determine the amount of the investment that can be justified based on the projected revenue that will be made without requiring a contribution in aid of construction from the customer(s) and the amount of any contribution in aid of construction that may be required. The tax gross-up factor has also been revised to reflect the new 21% federal income tax rates. The new factor of 17.25% is on TPUC No. 1 Tariff Sheets 51 and TPUC 2 No. Tariff Sheet No 8. Also as revised, a new residential customer using natural gas for central heat and water heating qualifies for up to 100 feet of service line installed at no charge. Please note that the tax gross-up factor for this section has been revised to reflect the new 21% federal income tax rates. The new factor of 17.25% is on TPUC No. 1 Tariff Sheet 51, and TPUC No. 2 Tariff Sheet 8.

Air Conditioning Rate

Currently Rate Schedule R-1 has a special summer air conditioning rate but doesn’t require the air conditioning equipment to be separately metered. Currently there are no Residential Air Conditioning customers. Since the air conditioning equipment isn’t metered, the customers’ total usage must be allocated, which creates a problem billing for the service. Due to the lack of residential customers utilizing the natural gas air conditioning schedule, the special R-1 Air Conditioning rate is being deleted.

Standby Demand Charge

There is a Standby Demand Charge that is applicable to customers served under Rates Schedules R-1, R-4, and C-1 when gas is supplied for use as standby service for a duel fuel heat pump or similar equipment. Currently there are only 11 customers being billed this charge. The Company has proposed to eliminate this charge. While there is merit in requiring such customers to pay the standby demand charge, it is administratively difficult to identify the type of heating equipment that each customer has installed.

Rate Schedule SF-1 Experimental Semi Firm Sales Service ("SFSS")

No customer has ever been provided service under this Rate Schedule. As a result it is proposed that this Rate Schedule be terminated.

Unauthorized Gas Use Penalty

In order to ensure that gas is available for firm customers, the Company, in accordance with its Tariff, may curtail the volume of gas to be taken by customers served under interruptible service Rate Schedules, require transportation customers to burn no more gas than the amount they have delivered to the Company on their behalf, or otherwise restrict the usage to contracted volumes. In order to ensure compliance with such restriction, the tariff has penalty provisions to encourage customers and their third party suppliers, where applicable, to meet the terms of such curtailment or balancing directives when issued by the Company. The current penalty provisions in the tariff are not sufficient to ensure such compliance. The decision to comply with a curtailment or balancing order or to ignore the directive and pay the penalty is an economic business decision on the part of the customer or a third party supplier. If the consequences of failing to comply are not material, the customer may continue to take gas in excess of the entitlement placing the Company's ability to continue to provide service to its firm customers at risk. The Company is proposing to increase the penalty rate to a level whereby violating a balancing or curtailment order would be uneconomic for the customer or a third party supplier. The revenue from such penalties is not retained by the Company, but is flowed to the Company's customers as a reduction in the cost of gas that is recovered through the PGA. The Company is also clarifying, in its tariff, that a customer's failure to curtail usages as directed may result in termination of service.

Determination of Eligible Receipt Point

Due to the configuration of its distribution system, CGC may not be able to redeliver gas delivered on behalf of a customer or third party supplier to a particular pipeline meter (receipt point) directly to a customer's premises in another area of its distribution system. Normally such a miss-match in the receipt and redelivery points is handled through displacement. However, if such a miss-match can't be resolved through displacement, it is necessary for the customer or third party supplier to have the gas delivered to an appropriate receipt point. CGC proposes to revise its tariff to clarify that it can determine eligible receipt point(s) for an individual transportation customer based on the relationship between a given receipt point and the customer's meter.

Performance Based Ratemaking ("PBR")

In the Triennial Review of CGC gas supply that was completed in 2017, Docket No. 07-00224, the independent reviewer recommended supply purchased at the NORA receipt point with a term of one month or greater be excluded from the calculation of the difference from the cost of gas purchased and the benchmarks and reported separately. Consistent with the recommendation, the PBR tariff provision is being revised to require such purchases to be reported separately. It is also proposed that if, in the future, CGC makes citygate purchases that such purchases be reported separately as well. It is also proposed to replace the Spot Purchase benchmark with First-of-the-Month ("FOM") Purchases benchmark consistent with CGC practice of purchasing gas, replace the Swing Purchases benchmark with the Daily Priced purchased benchmark, and delete the Long Term Purchases and the Citygate Purchase index that are not currently being used.

Employee Protection

In order to protect its employees, CGC proposes to revise its tariff to allow for termination of service if the Company has reasonable evidence that there is or may be a danger from the customer or any occupant and/or invitee on the customer's premise to Company personnel or agents who might be called to said premises in the course of their duties with the Company. This policy includes, but is not limited to, any direct or implied threats against the Company or its personnel or agents from said customer or occupant and/or invitee.

System Expansion and Economic Development-Tennessee Rider ("SEED-Tennessee")

In the filing made February 15, 2018, the Company proposed the System Expansion and Economic Development-Tennessee Rider ("SEED Tennessee"). This proposed rider has been withdrawn and will be filed in a future proceeding.

ALIGNMENT AND USAGE ADJUSTMENT ("AUA")

Q. You testified earlier that you were supporting the Company's proposal to terminate the Alignment and Usage Adjustment ("AUA") that was placed into effect for three years on a trial basis in CGC's last rate case, to reactivate the Weather Normalization Adjustment ("WNA") for Rate Schedules R-1 and C-1, and to recover the unrecovered AUA revenue that

has been deferred as a result of the 2% annual AUA cap. Will you explain the objective of the AUA?

A. The objective of the AUA is to provide CGC with the ability to meet its revenue requirements while encouraging customers to conserve gas usage consistent with Tenn. Code Ann.§ 65-4-126, which provides:

> The general assembly declares that the policy of this state is that the Tennessee regulatory authority will seek to implement, in appropriate proceedings for each electric and gas utility, with respect to which the authority has rate making authority, a general policy that ensures that utility financial incentives are aligned with helping their customers use energy more efficiently and that provides timely cost recovery and a timely earnings opportunity for utilities associated with cost-effective measurable and verifiable efficiency savings, in a way that sustains or enhances utility customers' incentives to use energy more efficiently.

In Docket No. 09-00183, the AUA was adopted for a three year trial basis in conjunction with the implementation of CGC's Residential Free Programmable Thermostat and customer Education and Community Outreach Programs aimed at promoting conservation and the efficient use of natural gas. While CGC sought to have the new AUA Mechanism replace the WNA for all customers, it was approved only for the R-1 and C-1 customers leaving the WNA in place for other customers. In addition, the Commission imposed a 2% margin cap on any refunds or surcharges that may be required.

Q. Can you explain how the AUA works?

A. The AUA as proposed was designed to protect CGC's revenue stream by having the Company collect the average revenue per Rate Schedule R-1 and C-1 customer based on the billing determinants and rate approved in the rate case. In order to implement the AUA, the average revenues per customer for the R-1 and C-1 Rate Schedules for each calendar month would be calculated using the approved rates and billing determinants. These monthly averages per customer are the benchmarks used for comparing the actual revenues per customer and the computation of any revenue excess or deficiency. Actual average revenue per customer in excess of the benchmark is subject to refund to the customers through the application of the AUA billing factor. When the actual revenue per customer is less than the benchmark, the deficiency is to be recovered through the application of the AUA billing factor or surcharge.

Q. Can you describe the monthly calculation?

A. Yes. Each month the actual billed non-gas revenue for Rate Schedules R-1 and C-1 are divided by the applicable number of customers billed for each rate schedule to determine the average billed revenue per customer. These actual billed averages are then compared to the monthly benchmarks to determine if the revenue per customer for the month is in excess of the level adopted in the rate case or if there is a revenue deficiency for the month. The difference in the revenue per customer is then multiplied by the number of customers for the respective rate schedules to determine the revenue excess or deficiency. This difference is recorded in a deferred AUA revenue account.

As of May 31 each year, the accumulated balance of the deferred AUA revenue (excess or deficiency) is determined for each of the applicable rate schedules. To the extent that the deferred amount (negative or positive) is less than or equal 2% of the revenues for the applicable rate schedules (the annual cap), the AUA factor is computed by dividing the accumulated deficiency or excess by the total therms of gas provided to the customers served under each applicable rate schedule. The resulting AUA factor is then applied over the 12 month recovery period. In accordance with the tariff, any accumulated balance in excess of the 2% annual cap is carried forward to be considered in the AUA factor calculation for the following year. The revenue collected from or credited to the customers as the result of the application of the AUA factor is credited or debited to the accumulated AUA balance each month.

Q. You stated that the AUA was implemented on a three year trial basis. Is the AUA still in effect on a trial basis?

A. Yes. At its May 24, 2010, Conference, the TRA authorized the AUA on a trial basis for three years and directed its Staff to work with the National Regulatory Research Institute ("NRRI") to develop a methodology to evaluate the energySmart conservation programs approved in the rate case. In April 2013, the methodology to evaluate the conservation programs had not been developed. As a result, CGC filed with the Authority to modify the AUA by changing the annual cap and requested that the AUA trial and the conservation programs be extended for three years. The request was denied, the conservation programs were terminated, and CGC was directed to make a tariff filing continuing the AUA in its then existing form until an evidentiary hearing could be held.

Q. Has the evidentiary hearing been held?

A. Not yet. In its Order authorizing the continuation of the AUA trial, the TRA appointed its General Counsel or her designee as Hearing Officer to prepare the matter for hearing. Subsequently the Hearing Officer issued an Order that established the following procedural schedule:

- The TRA Staff (now the TPUC Staff) was to issue its report addressing the methodology to evaluate the conservation programs;
- 45 days after the filing of the Staff Report, CGC was to file its report on the AUA Mechanism including its effect on both the customer Classes and a recommendation as to whether the AUA Mechanism should continue or be terminated.
- 30 days after CGC's filing of its report, the TRA Party Staff, the CAPD, and other Intervening Parties were to file position papers on CGC's Report and Recommendation.

On September 19, 2017, the TPUC Party Staff filed its report that included the testimony of Jerry Kettle, Director of Economic Analysis for the Tennessee Public Utility Commission, and the report prepared by the NRRI. On September 26, 2017, CGC filed its report and recommendations. On October 24, 2017, the Consumer Protection and Advocate Division filed its position in the form of testimony by Mr. Hal Novak. Based upon an agreement of the CPAD and CGC, the Hearing Officer on January 5, 2018, issued an order transferring the entire AUA matter to this docket for the conduct of the evidentiary hearing and a decision on CGC's request to terminate the AUA, reinstitute the WNA, and recover the outstanding AUA customer deficiency.

Q. Will you summarize the CGC September 2017 report and recommendation concerning the AUA Mechanism?

A. Yes. As explained in CGC's Report filed on September 26, 2017, which is attached to my testimony as Exhibit ARH-3, the AUA has not met its objectives or served the best interests of customers or the Company. This has occurred because the R-1 and C-1 customers have not fully paid for the gas they have consumed and the regulatory lag in the timing of CGC's recovery of such underpayments is getting longer and longer with each warm winter. Table 1 below provides a summary of the impact on customers and the Company for the period of June 1, 2010-May 31, 2017.

TABLE 1						
Row/ Column	A	B	C	D	E	F
1		R-1				
2	12 Months Ended May 31	Authorized Margin	Actual Margin	Revenue (Short Fall) or Excess	Amount (Refunded) or Surcharged	Net Revenue Cumulative (Short Fall) or Excess Excluding Interest
3	2011	$13,320,163	$13,600,123	$279,959	$0	$279,959
4	2012	13,380,512	12,713,076	(667,435)	(200,598)	(588,074)
5	2013	13,475,297	13,551,436	76,139	289,616	(222,318)
6	2014	13,591,063	14,161,261	570,198	306,014	653,893
7	2015	13,710,622	14,155,195	444,573	(249,135)	849,332
8	2016	13,858,617	13,288,363	(570,254)	(220,699)	58,379
9	2017	14,021,304	13,107,270	(914,033)	(39,404)	(895,059)
10		$95,357,578	$94,576,724	($780,853)		
11						
12		C-1				
13	12 Months Ended May 31	Authorized Margin	Actual Margin	Revenue (Short Fall) or Excess	Amount (Refunded) or Surcharged	Net Revenue Cumulative Short Fall Excluding Interest
14	2011	$3,507,637	$3,388,159	$119,478)	$0	$(119,478)
15	2012	3,521,635	3,092,573	(429,062)	48,492	(500,048)
16	2013	3,554,948	3,397,779	(157,170)	78,925	(578,293)
17	2014	3,599,156	3,800,877	201,721	87,213	(289,360)
18	2015	3,539,124	3,562,007	22,883	65,982	(200,495)
19	2016	3,519,032	3,150,069	(368,963)	52,687	(516,772)
20	2017	3,556,069	3,121,499	(434,570)	58,217	(893,125)
21		$24,797,601	$23,512,962	($1,284,639)		
22						
23	Grand Total, Cumulative R-1 and C-1 Net Revenue Short Fall Excluding Interest:					($1,788,184)

As this data shows, there are three fundamental problems with the AUA.

First, in general, as of May 31, 2017, the AUA has resulted in a significant cumulative short fall in revenue for both the R-1 and C-1 classes, $895,058 and

$893,125, respectively. In other words, after seven years, the revenues collected by the Company, in the aggregate, is $1,788,194 less than the required revenues established in the last rate case.

Second, for the R-1 customers, as is reflected in cells D3 to D9, the revenues collected are significantly out of synch each year with the authorized margin, and the order of magnitude for the short fall or excess each year has involved significant dollars. For example, the actual revenues for the 12 months ended May 2015 were $444,573 in excess of the authorized level. The following 12 months the actual revenues were $570,254 less than the authorized level. These two years represent a swing from excess to deficiency of approximately one million dollars. Worse still, the shortfall for the 12 months ended May 31, 2017, alone was nearly one million dollars. While R-1 customers have had four years of paying in excess of the target revenue, this has been more than offset by the three years where there were under payments. Given the substantial size of the $914,033 payment deficiency for 2017, only $262,145.41 can be surcharged to customers during the 2017-2018 recovery period due to the 2% cap. The bottom line is that net cumulatively, R-1 customers still have underpaid $895,058.92 due to the Company for gas consumed. This is unreasonable and unfair.

Third, the situation for the C-1 customers has been more consistent, but equally problematic. The cumulative under payments have resulted in a surcharge every year after the first year, even though two years (2014 and 2015, cells D17 and D18) CGC collected revenues in excess of the revenue requirement.

However, C-1 customers continued to be surcharged because the 2% cap that limits annual surcharges or refunds. Thus, as is reflected in cells E15 to E20, the carryover from prior years has resulted in a surcharge every year. Today, C-customers still owe CGC $893,125 for gas they have used.

In summary, the AUA has not protected CGC's revenue requirement by enabling the Company to collect the average revenue per Rate Schedule R-1 and C-1 as established in the rate case. Instead it has resulted in wide swings in the level of revenue collected by CGC leading to a net under payment by customers of almost $2 million.

Q. Has the Company taken any other action concerning the AUA?

A. Yes. In 2016 we contacted the Consumer Protection and Advocate Division to try to reach an agreement concerning the termination of the AUA and the reinstatement of the WNA. We met with members of the CPAD Staff and with a consultant that the CPAD engaged. We were unable to reach an agreement with the CPAD.

Q. Were the TPUC Staff designated as a party in Docket No. 09-00183 particpants in these discussions?

A. In a joint meeting with the TPUC and CPAD Staff members, the TPUC Staff took the position that they were going to address the methodology to be used to evaluate the conservation programs as they had been directed in the November 8, 2010, Order. They did not participate in the discussions concerning the termination of the AUA and the reinstatement of the WNA.

Q. What happened next?

A. In the absence of an agreement and in an effort to halt the escalating growth in the accumulated deferred AUA revenue, on October 20, 2017, CGC filed to terminate the AUA trial and reinstate the WNA for Rate Schedules R-1 and C-1 that had been in place prior to the AUA trial and which is still in effect for other customer classes. The filing included the tariff revisions for the deletion of the AUA Rider Tariff Sheets, the replacement of the references to the AUA with references to the WNA in Rate Schedules R-1 and C-1, and the insertion of the required WNA factors on Tariff Sheet 49A. Given the urgent need to stop the AUA revenue deficiency from getting bigger in the 2017-2018 winter, the Company proposed to immediately address only the termination of the AUA and the reinstatement of the WNA. As for the recovery of the deferred AUA deficiency balance, CGC stated it was willing to defer a decision on the customer underpayments to a later proceeding.

Q. Was the AUA terminated for customers served under Rate Schedules R-1 and C-1 and switched back to the WNA effective December first?

A. No. On November 2017, the Prehearing Officer suspended the tariff until February 1, 2018. Based upon further discussions with CPAD and the Prehearing Officer, we agreed to address the entire situation as a part of our rate case filing.

Q. What were the WNA factors included in the filing in Docket No. 09-00183?

A. For each Rate Schedule R-1 and C-1 there are three WNA factors. The "Weighted Base Rate," the "Heat Sensitive Factor, ("HSF")," and the "Base Load ("BL")" Factor.

The Weighted Base Rate factor is simply the approved volumetric rate $0.11591/Therm for Rate Schedules R-1, and $0.18581/Therm for Rate Schedule C-1. Since both of these Rate Schedules no longer have declining block rates, the stated rate is the weighted rate.

The Heat Sensitive Factor ("HSF") for Rate Schedule R-1 is 0.16990/Therm/Degree Day and 0.27570/Therm/Degree Day for Rate Schedule C-1, while the Base Load Factor (BL) is 9.309/Therm/Month for Rate Schedule R-1 and 28.058/Therm/Month for Rate Schedule C-1.

Q. What was the source of these factors?

A. These factors were products of the weather normalization process adopted in CGC's last rate case in Docket No. 09-00183 and based on the volumes and revenue forecast that was approved by the TRA.

Q. Was there support for these factors included in the record of CGC's last rate case?

A. Yes. The entire forecast model including the development of the weather normalized usage was included in Minimum Filing Guidelines 25 and 34.

Q. Were there disputes concerning weather normalization or these factors in the last rate case?

A. No. There were no disputes. CGC and the Consumer Advocate were the parties entering testimony addressing the forecast of usage and the resulting revenues in the case. Company witness Shields addressed the weather normalization methodology beginning on page 5 of her direct testimony. Consistent with CGC's position, the Consumer Advocate's witness Peters testified:

> . . . The Consumer Advocate adopted the forecasted residential usage by CGC. The blended billing determinants (i.e. number of bills and volumes) of actual amounts for the six fiscal years ended December 2009, and trended amounts for the attrition year were applied to present rates, which resulted in $13,416,903 in Residential Operating Revenues. The use of six historical winters or heating seasons in the development of weather normalized usage amounts is consistent with the forecasted Residential and Commercial usage amounts.
>
> . . .
>
> As a result, CGC is forecasting Residential Operating Revenues of $13,304,274 at present rates for the attrition year, which is a 1.87% decrease over the test period ended December 2009. However, the Consumer Advocate's attrition period Residential Operating Revenues increased by .85% over the test period ended December 2009. The Consumer Advocate's forecasted Residential Operating Revenue is approximately $.1M greater than the forecasted amount of Chattanooga Gas due to the use of more recent data from CGCs operations. [Docket No. 09-00183, Direct Testimony of Mr. Dave Peters, pages 4-5 (emphasis added).]

Mr. Peters' adjustment to the Company's forecast involved the projected number of customers and did not involve adjustment to the weather normalization process or the resulting WNA factors. The Company accepted Mr. Peters' adjustment and there was no dispute concerning the determinants and the weather normalization process or factors adopted in the rate case.

Q. What is the difference in the WNA and the AUA?

A. There are different objectives for the WNA and the AUA as well as differences in how the two mechanisms operate. As I explained earlier, the objective of the AUA was to encourage customers to conserve gas usage without adversely impacting the Company's ability to meet its revenue requirements consistent with Tenn. Code Ann. § 65-4-126. As initially proposed, the AUA was designed to adjust CGC's rates so that CGC would recover the same level of revenue per customer that was authorized in the rate case, Docket No. 09-00183. It was designed so that CGC would recover no more or no less than the revenue per customer found in the rate case. The AUA was to adjust for all factors that impacted the volumes and the resulting revenue collected, including weather and conservation. The WNA adjusts only for the impact of abnormal weather.

Q. Do both the WNA and the AUA have the same beginning point?

A. Yes. Both begin with the level of revenues approved in the rate case. The WNA factor, however, is designed only to adjust for the impact of weather, while the AUA is designed to adjust for weather, conservation, and other things that cause the revenue per customer to be different than the level adopted in the rate case.

Q. What do you mean by weather normalized volumes?

A. In a general rate case, the Commission determines the cost of service (revenue requirement) to be recovered through rates based on a normal or normalized year. Rates are then developed that will allow for the revenue requirement to be recovered assuming the volume of gas that would be delivered to customers in a year with normal weather. If rates were based on the level of sales in an abnormally cold year when the volumes were high, in a normal weather year the resulting rates would be insufficient for the Company to recover its cost of service because the volumes of gas delivered would be lower. Similarly, if the rates were based on the sales volumes in an abnormally warm year when the volume is low, in a normal year the rates would result in the Company recovering more than its cost of service. The use of normalized weather is the customary approach used in setting rates, and CGC's proposed rates in this case also recognize such normalization adjustments. The process of developing the normal or normalized volumes is addressed by Mr. Brooks in this proceeding and was addressed by Mrs. Shields in Docket No. 09-00183.

Q. Can you address other differences AUA and WNA?

A. Yes. The adjustment mechanisms are very different. The AUA rate factors are computed once a year based on the actual revenues for the 12 months ended May 31. This is why in Table 1 above the information is through May 31, 2017. For the WNA, rate factors are computed for each bill cycle based on the actual daily temperatures for the days included in the cycle. The weather impact is immediately reflected on the customer's bill. For example, under the WNA if the meter is read on January 15 and is next read on February 15, the customer will be billed on the next bill for the gas delivered from January 15 to February 15. If the weather during the period is colder than normal, the WNA Mechanism will reduce the bill to reflect the base volumetric charge that the customer would have been billed if the weather had been normal. On the other hand, if the weather is warmer than normal during the period, the bill will be increased to allow the Company to collect the level of base revenue for normal weather. With the AUA, the impact of abnormal weather (warmer or colder than the normalized standard) is not recognized at the time, but it will be encompassed in the calculation of the next year AUA factor based on the 12 months ended May 31. The new AUA adjustment will begin to appear on the customer's bill beginning in August. However, the full impact of the AUA adjustment may not be addressed in the next year's cycle. This is because in adopting the AUA as a trial, the TRA limited the amount that could be recovered to a maximum of 2% of the annual base revenue for the customers served under the applicable rate schedule. By accumulating revenue deficiencies or excesses over a year and then limiting the Company's recovery annually to only 2% of margin, the TRA unintentionally created a situation where more extreme warm weather periods have created significant total revenue under-recoveries.

Q. Are there periods when the weather has been more than 2% warmer than normal?

A. Yes. For the winter heating period of 2016-2017 (Oct. 2016-April 2017) it was 29.9% warmer than normal. For the previous year Oct 2015-April 2016 it was 21.9% warmer. (See the Orders and Reports in Docket Nos. 16-00061 and 17-00062). These differences in the actual and normal weather are reflected in the $570,254 and $914,033 Residential Revenue Short Falls for the 12 months ended May 31, 2016 and 2017, respectively, and the $368.963 and $484.570 C-1 Revenue Short Falls for 2016 and 2017 in the table above. If the WNA Mechanism had been in place during these heating seasons, adjustments would have been made monthly which would have corresponded to the customers' recent experiences with the warmer winter weather. Under the AUA, we're now in the position of recovering for weather from several years ago. This is a bad customer-experience situation.

Q. Do other natural gas distribution companies in Tennessee have Weather Normalization Adjustments?

A. Yes. Both Atmos and Nashville Gas (Piedmont Natural Gas) have WNA Mechanisms in place. CGC's has had a WNA Mechanism in place since 1991, which still exists for CGC's R-4 and C-2 rate classes.

Q. Returning then to your proposal in this case, have the WNA factors for Rate Schedules R-1 and C-1 been developed in this rate case?

A. Yes. In his testimony, Mr. Brooks has addressed the development of weather normalized volumes and the resulting weather normalization factors for the rates CGC is proposing. In my testimony supporting a return to the WNA Mechanism for R-1 and C-1 customers, the WNA rates in this case reflect the new factors Mr. Brooks describes. So our proposal now is for the Commission to adopt the WNA factors and resulting rates proposed in this docket, and not the factors and R-1/C-1 rates CGC proposed in the October 20, 2017, filing in Docket No. 09-00183. My exhibits ARH-1 and ARH-2 include the proposed elimination of the AUA, the replacement of the WNA, and the appropriate, new WNA factors.

Q. You have testified that there is nearly $2 million in accrued customer payment deficiencies under the AUA Mechanism because of the two percent cap on recoveries each year, and the Company has proposed to recover those underpayments through the use of the Interruptible Margin Credit Rider ("IMCR"). Why is the recovery of the AUA revenue deficiency through the IMCR a fair and reasonable approach?

A. CGC did not request a two percent cap in its original AUA request, but at the time it was added it did not seem unreasonable. However, the size of the unanticipated accumulated net revenue deficiencies has restricted the effectiveness of the AUA.

While the AUA was intended to address several potential impacts, because of the cap the AUA has been unable to reasonably balance rates and revenues over time due to extreme weather swings and, more recently, several years of warmer than anticipated winters, all of which are beyond the Company's ability to control. As a part of terminating the AUA and providing a mechanism that can redress the revenue deficiency without surcharges or increasing going forward rates, I have proposed using the IMCR.

The Commission has previously approved using the IMCR as a means of recovering the costs of the free thermostat and education components of the energySMART program, NRRI's cost to develop the conservation program measure, and the recovery of the Docket No. 07-00224 legal expenses. Using the IMCR again for the recovery of the AUA's accumulated net revenue deficiency will simply reduce the amount of the credits. Consistent with past practices, the AUA Mechanism provides the best means of efficiently and effectively recovering this deficit without directly impacting customer rates.

Q. And what if the Commission does not want to use the IMCR tariff as an offset?

A. The IMCR will have the least impact on customers since it offsets other revenues being shared with customers, so customers don't experience it the same way as a surcharge on rates. If the Commission does not utilize the IMCR Mechanism, then CGC would propose a special surcharge on the R-1 and C-1 customer bills, as applicable, spread out over two years until all the funds are recovered.

Q. Is there another option?

A. Yes. Another option would be to reinstate the WNA for the R-1 and C-2 Rate Schedules as proposed and retain the AUA for non-weather effects. Dr. Dismukes, testifying on behalf of the Consumer Advocate and Protection Division, in our 2009 rate case, supported the continuation of the WNA if the AUA Mechanism was adopted. See the pre-filed Direct Testimony of David E. Dismukes, Ph.D. in Docket No. 09-00183 beginning on page 69. Under this option, the weather normalization adjustment would be timely made to customer bills each month based on actual weather. The weather normalized average revenue per customer for the month would be compared to the benchmark. The difference in the actual and the benchmark would be accrued. As with the current AUA Mechanism, a factor would be developed each year to refund or collect the accrued AUA balance as of May 31. Exhibit ARH-4 is a revised Alignment and Usage Adjustment Rider that has been updated to reflect the proposed rates.

Q. Does this conclude your direct testimony?

A. Yes.

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE

May 1, 2018

IN RE:	)	
	)	
CHATTANOOGA GAS COMPANY	)	
PETITION FOR APPROVAL OF AN	)	
ADJUSTMENT IN RATES AND	)	Docket No.
TARIFF; THE TERMINATION OF	)	18-00017
THE AUA MECHANISM AND THE	)	
RELATED TARIFF CHANGES AND	)	
REVENUE DEFICIENCY	)	
RECOVERY; AND AN ANNUAL	)	
RATE REVIEW MECHANISM	)	

REDLINE VERSION OF REVISED DIRECT TESTIMONY OF ARCHIE HICKERSON COMPARED TO ORIGINAL VERSION OF DIRECT TESTIMONY OF ARCHIE HICKERSON FILED ON BEHALF OF CHATTANOOGA GAS COMPANY

I. INTRODUCTION AND WITNESS QUALIFICATIONS

A. WITNESS IDENTIFICATION

Q. Please state your name and business address.

A. Archie R. Hickerson, Ten Peachtree Place, Atlanta, Georgia 30309.

Q. By whom and in what position are you employed?

A. I am Director of Rates and Tariff Administration at Southern Company Gas (formerly AGL Resources, Inc.). Southern Company Gas is the is the parent holding company for seven natural gas distribution companies, including Chattanooga Gas Company. The other companies are located in Florida, Georgia, Illinois, Maryland, New Jersey, and Virginia.

Q. What are your duties in your position as Director – Rates and Tariff Administration?

A. I am responsible for development, coordination, review and analytical activities related to rates and tariff administration for Chattanooga Gas Company and the other natural gas distribution companies that are subsidiaries of Southern Company Gas.

Q. For whom are you testifying?

A. I am testifying on behalf of Chattanooga Gas Company ("Company" or "CGC").

B. BACKGROUND AND EXPERIENCE

Q. Please summarize your education background and experience.

A. I received a Bachelor of Science degree with a major in mathematics and later accounting from Austin Peay State University in Clarksville, Tennessee. I am a

Chartered Global Management Accountant, and I am licensed as a Certified Public Accountant in the State of Tennessee.

I have over 41 years of experience with utility rates, utility accounting, and the regulation of public utilities. Over this period, I have worked for consumers of utilities and other services in addition to my work for Southern Company Gas. Prior to becoming Director – Rates and Tariff Administration in 2013, I served as Director – Regulatory Affairs and Planning for AGL Services Company from 2010-2013, Director – Regulatory Affairs for Chattanooga Gas Company and Virginia Natural Gas from 2004-2010, and Manager – Rates for AGL Services Company from 2000-2004.

Prior to joining AGL Resources, I was the Director of the Consumer Advocate Division Staff with the Tennessee Office of the Attorney General and Reporter (1994-2000), where I often appeared as an expert witness to present comments on utility cost of service, cost allocation and rate design, and to supervise the technical staff, notably in proceedings before the Tennessee Public Service Commission ("TPSC") and the Tennessee Regulatory Authority ("TRA"). I also served on the National Association of State Utility Consumer Advocates' ("NASUCA") Accounting and Tax Committee, and as an observer member of the National Association of Regulatory Utility Commissions' ("NARUC") Staff Subcommittee on Accounts. From 1976-1982, I was a financial Analyst for TPSC, then served as Assistant Director of the TPSC Accounting Division for four years (1982-1986), and later as the Deputy Director of the TPSC's Utility Rate Division for approximately seven years (1987-1994). While employed by the TPSC, I served on the NARUC Staff Subcommittee on Communications, the NARUC Staff Subcommittee on Accounts, and the NARUC's Southern Accounting Taskforce. My work at TPSC, like much of my later experience, included significant work with compliance and management audits, cost of service, rate design and earnings, and rate investigations of utilities.

Q. Have you previously testified before any state regulatory commission?

A. Yes. I have testified before the Tennessee Public Service Commission, the Tennessee Regulatory Authority, the Georgia Public Service Commission, the Virginia State Corporation Commission, and the Illinois Commerce Commission.

Q. Were you a witness in CGC's last rate case?

A. Yes. I was a witness in CGC's last rate case in Docket No. 09-00183.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. My testimony describes and supports certain tariff and rate schedule revisions that are appropriate to ensure that CGC's Tariffs reflect current customer and business needs and practices. In addition, I support the termination of the Alignment and Usage Adjustment ("AUA") that was placed into effect for three years on a trial basis in CGC's last rate case, the reactivation of the Weather Normalization Adjustment ("WNA"), the corresponding changes to Rate Schedules R-1 (Residential General Service) and C-1 (Commercial and Industrial Small General Service), and the recovery of the unrecovered AUA customer payments that have been deferred as a result of the 2% annual AUA cap.

Q. Are you including any exhibits in connection with your testimony?

A. Yes, the following exhibits have been included:

Exhibit ARH-1. Chattanooga Gas Company Tariff-Revised Effective September 1, 2018 (clean copy of proposed tariff).

Exhibit ARH-2. Chattanooga Gas Company Tariff-Revised Effective September 1, 2018 (proposed tariff with revisions marked).

Exhibit ARH-3. Chattanooga Gas Company's Report of Impact of Trial AUA on Chattanooga Gas Company and customers Served Under Rate Schedules R-1 (Residential General Service) and Rate Schedule C-1 (Small Commercial and Industrial General Service).

Exhibit ARH-4. Alignment and Usage Adjustment (AUA) Rider Tariff Sheets (revised AUA tariff if weather normalization handled by WNA).

Q. Will you please address the revisions to the tariff you are proposing to change?

Yes. I will summarize the tariff revisions that I am responsible for that I consider to be substantive rather than the stylistic or non-material. Other CGC witnesses shall support the specific policy or rate changes that are being proposed by those witnesses.

Line Extension:

The Company has proposed to simplify the wording of the standard line extension provision included in the tariff. Currently the tariff includes approximately 12 pages of the written description and a 28-page Appendix devoted to the line extension process. The Company proposes to replace these pages with a simpler provision like other gas distribution companies in Tennessee. The Company will continue to use economic analysis to determine the amount of the investment that can be justified based on the projected revenue that will be made without requiring a contribution in aid of construction from the customer(s) and the amount of any contribution in aid of construction that may be required. The tax gross-up factor has also been revised to reflect the new 21% federal income tax rates. The new factor of 17.25% is on TPUC No. 1 Tariff Sheets 51 and TPUC 2 No. Tariff Sheet No 8. Also as revised, a new residential customer using natural gas for central heat and water heating qualifies for up to 100 feet of service line installed at no charge. Please note that the tax gross-up factor for this section has been revised to reflect the new 21% federal income tax rates. The new factor of 17.25% is on TPUC No. 1 Tariff Sheet 51, and TPUC No. 2 Tariff Sheet 8.

Air Conditioning Rate

Currently Rate Schedule R-1 has a special summer air conditioning rate but doesn't require the air conditioning equipment to be separately metered. Currently there are no Residential Air Conditioning customers. Since the air conditioning equipment isn't metered, the customers' total usage must be allocated, which creates a problem billing for the service. Due to the lack of residential customers utilizing the natural gas air conditioning schedule, the special R-1 Air Conditioning rate is being deleted.

Standby Demand Charge

There is a Standby Demand Charge that is applicable to customers served under Rates Schedules R-1, R-4, and C-1 when gas is supplied for use as standby service for a duel fuel heat pump or similar equipment. Currently there are only 11 customers being billed this charge. The Company has proposed to eliminate this charge. While there is merit in requiring such customers to pay the standby demand charge, it is administratively difficult to identify the type of heating equipment that each customer has installed.

Rate Schedule SF-1 Experimental Semi Firm Sales Service ("SFSS")

No customer has ever been provided service under this Rate Schedule. As a result it is proposed that this Rate Schedule be terminated.

Unauthorized Gas Use Penalty

In order to ensure that gas is available for firm customers, the Company, in accordance with its Tariff, may curtail the volume of gas to be taken by customers served under interruptible service Rate Schedules, require transportation customers to burn no more gas than the amount they have delivered to the Company on their behalf, or otherwise restrict the usage to contracted volumes. In order to ensure compliance with such restriction, the tariff has penalty provisions to encourage customers and their third party suppliers, where applicable, to meet the terms of such curtailment or balancing directives when issued by the Company. The current penalty provisions in the tariff are not sufficient to ensure such compliance. The decision to comply with a curtailment or balancing order or to ignore the directive and pay the penalty is an economic business decision on the part of the customer or a third party supplier. If the consequences of failing to comply are not material, the customer may continue to take gas in excess of the entitlement placing the Company's ability to continue to provide service to its firm customers at risk. The Company is proposing to increase the penalty rate to a level whereby violating a balancing or curtailment order would be uneconomic for the customer or a third party supplier. The revenue from such penalties is not retained by the Company, but is flowed to the Company's customers as a reduction in the cost of gas that is recovered through the PGA. The Company is also clarifying, in its tariff, that a customer's failure to curtail usages as directed may result in termination of service.

Determination of Eligible Receipt Point

Due to the configuration of its distribution system, CGC may not be able to redeliver gas delivered on behalf of a customer or third party supplier to a particular pipeline meter (receipt point) directly to a customer's premises in another area of its distribution system. Normally such a miss-match in the receipt and redelivery points is handled through displacement. However, if such a miss-match can't be resolved through displacement, it is necessary for the customer or third party supplier to have the gas delivered to an appropriate receipt point. CGC proposes to revise its tariff to clarify that it can determine eligible receipt point(s) for an individual transportation customer based on the relationship between a given receipt point and the customer's meter.

Performance Based Ratemaking ("PBR")

In the Triennial Review of CGC gas supply that was completed in 2017, Docket No. 07-00224, the independent reviewer recommended supply purchased at the NORA receipt point with a term of one month or greater be excluded from the calculation of the difference from the cost of gas purchased and the benchmarks and reported separately. Consistent with the recommendation, the PBR tariff provision is being revised to require such purchases to be reported separately. It is also proposed that if, in the future, CGC makes citygate purchases that such purchases be reported separately as well. It is also proposed to replace the Spot Purchase benchmark with First-of-the-Month ("FOM") Purchases benchmark consistent with CGC practice of purchasing gas, replace the Swing Purchases benchmark with the Daily Priced purchased benchmark, and delete the Long Term Purchases and the Citygate Purchase index that are not currently being used.

Employee Protection

In order to protect its employees, CGC proposes to revise its tariff to allow for termination of service if the Company has reasonable evidence that there is or may be a danger from the customer or any occupant and/or invitee on the customer's premise to Company personnel or agents who might be called to said premises in the course of their duties with the Company. This policy includes, but is not limited to, any direct or implied threats against the Company or its personnel or agents from said customer or occupant and/or invitee.

System Expansion and Economic Development-Tennessee Rider ("SEED-Tennessee")

~~Tenn. Code Ann §65-5-103 d (3) (A) provides:~~

> ~~A public utility may request and the commission may authorize a mechanism to recover the operational expenses, capital costs or both elated to the expansion of infrastructure for the purpose of economic development, if such expenses or costs are found by the commission to be in the public interest. Expansion of economic development infrastructure may include, but is not limited to, the following:~~
>
> > ~~(i) Infrastructure and equipment associated with alternative motor vehicle transportation fuel;~~
> >
> > ~~(ii) Infrastructure and equipment associated with combined heat and power installations in industrial or commercial sites; and~~
> >
> > ~~(iii) Infrastructure that will provide opportunities for economic development benefits in the area to be directly served by the infrastructure.~~

~~In accordance with this statutory authorization, CGC is proposing~~ In the filing made February 15, 2018, the Company proposed the System Expansion and Economic Development-Tennessee Rider (~~SEED-Tennessee).~~"SEED Tennessee"). This proposed rider has been withdrawn and will be filed in a future proceeding.

~~In accordance with the standard line expansion provision, the Company will conduct an economic analysis of a requested line extension. If the projected revenues are sufficient to economically justify the extension, the Company will install the facilities at no cost to the requesting customer(s). If the projected revenues are insufficient to economically justify the construction, the requesting customer(s) must make a contribution in aid of construction that will result in the project being economic. While this procedure protects existing customers from unfairly subsidizing the new customers, the up-front payment may be prohibitive for the new customer(s). Under the SEED-Tennessee Rider, if the extension is projected to promote economic development in the area, the new customer(s) will not be required to make the up-front payment to cover the cost that is in excess of the amount economically justified by the projected revenue. Instead the customer(s) who connect to the line extension will be billed a monthly SEED charge until the cost in excess of the amount that justified by the projected base revenues and the resulting revenue requirement are recovered. Each project and the resulting SEED charges will be submitted to the Commission for its prior approval. Once the excess cost and the resulting revenue requirement have been recovered, the SEED charge for the project will terminate.~~

ALIGNMENT AND USAGE ADJUSTMENT ("AUA")

Q. You testified earlier that you were supporting the Company's proposal to terminate the Alignment and Usage Adjustment ("AUA") that was placed into effect for three years on a trial basis in CGC's last rate case, to reactivate the Weather Normalization Adjustment ("WNA") for Rate Schedules R-1 and C-1, and to recover the unrecovered AUA revenue that has been deferred as a result of the 2% annual AUA cap. Will you explain the objective of the AUA?

A. The objective of the AUA is to provide CGC with the ability to meet its revenue requirements while encouraging customers to conserve gas usage consistent with Tenn. Code Ann.§ 65-4-126, which provides:

> The general assembly declares that the policy of this state is that the Tennessee regulatory authority will seek to implement, in appropriate proceedings for each electric and gas utility, with respect to which the authority has rate making authority, a general policy that ensures that utility financial incentives are aligned with helping their customers use energy more efficiently and that provides timely cost recovery and a timely earnings opportunity for utilities associated with cost-effective measurable and verifiable efficiency savings, in a way that sustains or enhances utility customers' incentives to use energy more efficiently.

In Docket No. 09-00183, the AUA was adopted for a three year trial basis in conjunction with the implementation of CGC's Residential Free Programmable Thermostat and customer Education and Community Outreach Programs aimed at promoting conservation and the efficient use of natural gas. While CGC sought to have the new AUA Mechanism replace the WNA for all customers, it was approved only for the R-1 and C-1 customers leaving the WNA in place for other customers. In addition, the Commission imposed a 2% margin cap on any refunds or surcharges that may be required.

Q. Can you explain how the AUA works?

A. The AUA as proposed was designed to protect CGC's revenue stream by having the Company collect the average revenue per Rate Schedule R-1 and C-1 customer based on the billing determinants and rate approved in the rate case. In order to implement the AUA, the average revenues per customer for the R-1 and C-1 Rate Schedules for each calendar month would be calculated using the approved rates and billing determinants. These monthly averages per customer are the benchmarks used for comparing the actual revenues per customer and the computation of any revenue excess or deficiency. Actual average revenue per customer in excess of the benchmark is subject to refund to the customers through the application of the AUA billing factor. When the actual revenue per customer is less than the benchmark, the deficiency is to be recovered through the application of the AUA billing factor or surcharge.

Q. Can you describe the monthly calculation?

A. Yes. Each month the actual billed non-gas revenue for Rate Schedules R-1 and C-1 are divided by the applicable number of customers billed for each rate schedule to determine the average billed revenue per customer. These actual billed averages are then compared to the monthly benchmarks to determine if the revenue per customer for the month is in excess of the level adopted in the rate case or if there is a revenue deficiency for the month. The difference in the revenue per customer is then multiplied by the number of customers for the respective rate schedules to determine the revenue excess or deficiency. This difference is recorded in a deferred AUA revenue account.

As of May 31 each year, the accumulated balance of the deferred AUA revenue (excess or deficiency) is determined for each of the applicable rate schedules. To the extent that the deferred amount (negative or positive) is less than or equal 2% of the revenues for the applicable rate schedules (the annual cap), the AUA factor is computed by dividing the accumulated deficiency or excess by the total therms of gas provided to the customers served under each applicable rate schedule. The resulting AUA factor is then applied over the 12 month recovery period. In accordance with the tariff, any accumulated balance in excess of the 2% annual cap is carried forward to be considered in the AUA factor calculation for the following year. The revenue collected from or credited to the customers as the result of the application of the AUA factor is credited or debited to the accumulated AUA balance each month.

Q. You stated that the AUA was implemented on a three year trial basis. Is the AUA still in effect on a trial basis?

A. Yes. At its May 24, 2010, Conference, the TRA authorized the AUA on a trial basis for three years and directed its Staff to work with the National Regulatory Research Institute ("NRRI") to develop a methodology to evaluate the energySmart conservation programs approved in the rate case. In April 2013, the methodology to evaluate the conservation programs had not been developed. As a result, CGC filed with the Authority to modify the AUA by changing the annual cap and requested that the AUA trial and the conservation programs be extended for three years. The request was denied, the conservation programs were terminated, and CGC was directed to make a tariff filing continuing the AUA in its then existing form until an evidentiary hearing could be held.

Q. Has the evidentiary hearing been held?

A. Not yet. In its Order authorizing the continuation of the AUA trial, the TRA appointed its General Counsel or her designee as Hearing Officer to prepare the matter for hearing. Subsequently the Hearing Officer issued an Order that established the following procedural schedule:

- The TRA Staff (now the TPUC Staff) was to issue its report addressing the methodology to evaluate the conservation programs;
- 45 days after the filing of the Staff Report, CGC was to file its report on the AUA Mechanism including its effect on both the customer Classes and a recommendation as to whether the AUA Mechanism should continue or be terminated.
- 30 days after CGC's filing of its report, the TRA Party Staff, the CAPD, and other Intervening Parties were to file position papers on CGC's Report and Recommendation.

On September 19, 2017, the TPUC Party Staff filed its report that included the testimony of Jerry Kettle, Director of Economic Analysis for the Tennessee Public Utility Commission, and the report prepared by the NRRI. On September 26, 2017, CGC filed its report and recommendations. On October 24, 2017, the Consumer Protection and Advocate Division filed its position in the form of testimony by Mr. Hal Novak. Based upon an agreement of the CPAD and CGC, the Hearing Officer on January 5, 2018, issued an order transferring the entire AUA matter to this docket for the conduct of the evidentiary hearing and a decision on CGC's request to terminate the AUA, reinstitute the WNA, and recover the outstanding AUA customer deficiency.

Q. Will you summarize the CGC September 2017 report and recommendation concerning the AUA Mechanism?

A. Yes. As explained in CGC's Report filed on September 26, 2017, which is attached to my testimony as Exhibit ARH-3, the AUA has not met its objectives or served the best interests of customers or the Company. This has occurred because the R-1 and C-1 customers have not fully paid for the gas they have consumed and the regulatory lag in the timing of CGC's recovery of such underpayments is getting longer and longer with each warm winter. Table 1 below provides a summary of the impact on customers and the Company for the period of June 1, 2010-May 31, 2017.

TABLE 1						
Row/ Column	A	B	C	D	E	F
1		R-1				
2	12 Months Ended May 31	Authorized Margin	Actual Margin	Revenue (Short Fall) or Excess	Amount (Refunded) or Surcharged	Net Revenue Cumulative (Short Fall) or Excess Excluding Interest
3	2011	$13,320,163	$13,600,123	$279,959	$0	$279,959
4	2012	13,380,512	12,713,076	(667,435)	(200,598)	(588,074)
5	2013	13,475,297	13,551,436	76,139	289,616	(222,318)
6	2014	13,591,063	14,161,261	570,198	306,014	653,893
7	2015	13,710,622	14,155,195	444,573	(249,135)	849,332
8	2016	13,858,617	13,288,363	(570,254)	(220,699)	58,379
9	2017	14,021,304	13,107,270	(914,033)	(39,404)	(895,059)
10		$95,357,578	$94,576,724	($780,853)		
11						
12		C-1				
13	12 Months Ended May 31	Authorized Margin	Actual Margin	Revenue (Short Fall) or Excess	Amount (Refunded) or Surcharged	Net Revenue Cumulative Short Fall Excluding Interest
14	2011	$3,507,637	$3,388,159	$119,478)	$0	$(119,478)
15	2012	3,521,635	3,092,573	(429,062)	48,492	(500,048)
16	2013	3,554,948	3,397,779	(157,170)	78,925	(578,293)
17	2014	3,599,156	3,800,877	201,721	87,213	(289,360)
18	2015	3,539,124	3,562,007	22,883	65,982	(200,495)
19	2016	3,519,032	3,150,069	(368,963)	52,687	(516,772)
20	2017	3,556,069	3,121,499	(434,570)	58,217	(893,125)
21		$24,797,601	$23,512,962	($1,284,639)		
22						
23	Grand Total, Cumulative R-1 and C-1 Net Revenue Short Fall Excluding Interest:					($1,788,184)

As this data shows, there are three fundamental problems with the AUA.

First, in general, as of May 31, 2017, the AUA has resulted in a significant cumulative short fall in revenue for both the R-1 and C-1 classes, $895,058 and

$893,125, respectively. In other words, after seven years, the revenues collected by the Company, in the aggregate, is $1,788,194 less than the required revenues established in the last rate case.

Second, for the R-1 customers, as is reflected in cells D3 to D9, the revenues collected are significantly out of synch each year with the authorized margin, and the order of magnitude for the short fall or excess each year has involved significant dollars. For example, the actual revenues for the 12 months ended May 2015 were $444,573 in excess of the authorized level. The following 12 months the actual revenues were $570,254 less than the authorized level. These two years represent a swing from excess to deficiency of approximately one million dollars. Worse still, the shortfall for the 12 months ended May 31, 2017, alone was nearly one million dollars. While R-1 customers have had four years of paying in excess of the target revenue, this has been more than offset by the three years where there were under payments. Given the substantial size of the $914,033 payment deficiency for 2017, only $262,145.41 can be surcharged to customers during the 2017-2018 recovery period due to the 2% cap. The bottom line is that net cumulatively, R-1 customers still have underpaid $895,058.92 due to the Company for gas consumed. This is unreasonable and unfair.

Third, the situation for the C-1 customers has been more consistent, but equally problematic. The cumulative under payments have resulted in a surcharge every year after the first year, even though two years (2014 and 2015, cells D17 and D18) CGC collected revenues in excess of the revenue requirement.

However, C-1 customers continued to be surcharged because the 2% cap that limits annual surcharges or refunds. Thus, as is reflected in cells E15 to E20, the carryover from prior years has resulted in a surcharge every year. Today, C-customers still owe CGC $893,125 for gas they have used.

In summary, the AUA has not protected CGC's revenue requirement by enabling the Company to collect the average revenue per Rate Schedule R-1 and C-1 as established in the rate case. Instead it has resulted in wide swings in the level of revenue collected by CGC leading to a net under payment by customers of almost $2 million.

Q. **Has the Company taken any other action concerning the AUA?**

A. Yes. In 2016 we contacted the Consumer Protection and Advocate Division to try to reach an agreement concerning the termination of the AUA and the reinstatement of the WNA. We met with members of the CPAD Staff and with a consultant that the CPAD engaged. We were unable to reach an agreement with the CPAD.

Q. **Were the TPUC Staff designated as a party in Docket No. 09-00183 particpants in these discussions?**

A. In a joint meeting with the TPUC and CPAD Staff members, the TPUC Staff took the position that they were going to address the methodology to be used to evaluate the conservation programs as they had been directed in the November 8, 2010, Order. They did not participate in the discussions concerning the termination of the AUA and the reinstatement of the WNA.

Q. What happened next?

A. In the absence of an agreement and in an effort to halt the escalating growth in the accumulated deferred AUA revenue, on October 20, 2017, CGC filed to terminate the AUA trial and reinstate the WNA for Rate Schedules R-1 and C-1 that had been in place prior to the AUA trial and which is still in effect for other customer classes. The filing included the tariff revisions for the deletion of the AUA Rider Tariff Sheets, the replacement of the references to the AUA with references to the WNA in Rate Schedules R-1 and C-1, and the insertion of the required WNA factors on Tariff Sheet 49A. Given the urgent need to stop the AUA revenue deficiency from getting bigger in the 2017-2018 winter, the Company proposed to immediately address only the termination of the AUA and the reinstatement of the WNA. As for the recovery of the deferred AUA deficiency balance, CGC stated it was willing to defer a decision on the customer underpayments to a later proceeding.

Q. Was the AUA terminated for customers served under Rate Schedules R-1 and C-1 and switched back to the WNA effective December first?

A. No. On November 2017, the Prehearing Officer suspended the tariff until February 1, 2018. Based upon further discussions with CPAD and the Prehearing Officer, we agreed to address the entire situation as a part of our rate case filing.

Q. What were the WNA factors included in the filing in Docket No. 09-00183?

A. For each Rate Schedule R-1 and C-1 there are three WNA factors. The "Weighted Base Rate," the "Heat Sensitive Factor, ("HSF")," and the "Base Load ("BL")" Factor.

The Weighted Base Rate factor is simply the approved volumetric rate \$0.11591/Therm for Rate Schedules R-1, and \$0.18581/Therm for Rate Schedule C-1. Since both of these Rate Schedules no longer have declining block rates, the stated rate is the weighted rate.

The Heat Sensitive Factor ("HSF") for Rate Schedule R-1 is 0.16990/Therm/Degree Day and 0.27570/Therm/Degree Day for Rate Schedule C-1, while the Base Load Factor (BL) is 9.309/Therm/Month for Rate Schedule R-1 and 28.058/Therm/Month for Rate Schedule C-1.

Q. What was the source of these factors?

A. These factors were products of the weather normalization process adopted in CGC's last rate case in Docket No. 09-00183 and based on the volumes and revenue forecast that was approved by the TRA.

Q. Was there support for these factors included in the record of CGC's last rate case?

A. Yes. The entire forecast model including the development of the weather normalized usage was included in Minimum Filing Guidelines 25 and 34.

Q. Were there disputes concerning weather normalization or these factors in the last rate case?

A. No. There were no disputes. CGC and the Consumer Advocate were the parties entering testimony addressing the forecast of usage and the resulting revenues in the case. Company witness Shields addressed the weather normalization methodology beginning on page 5 of her direct testimony. Consistent with CGC's position, the Consumer Advocate's witness Peters testified:

> . . . The Consumer Advocate adopted the forecasted residential usage by CGC. The blended billing determinants (i.e. number of bills and volumes) of actual amounts for the six fiscal years ended December 2009, and trended amounts for the attrition year were applied to present rates, which resulted in $13,416,903 in Residential Operating Revenues. The use of six historical winters or heating seasons in the development of weather normalized usage amounts is consistent with the forecasted Residential and Commercial usage amounts.
>
> . . .
>
> As a result, CGC is forecasting Residential Operating Revenues of $13,304,274 at present rates for the attrition year, which is a 1.87% decrease over the test period ended December 2009. However, the Consumer Advocate's attrition period Residential Operating Revenues increased by .85% over the test period ended December 2009. The Consumer Advocate's forecasted Residential Operating Revenue is approximately $.1M greater than the forecasted amount of Chattanooga Gas due to the use of more recent data from CGCs operations. [Docket No. 09-00183, Direct Testimony of Mr. Dave Peters, pages 4-5 (emphasis added).]

Mr. Peters' adjustment to the Company's forecast involved the projected number of customers and did not involve adjustment to the weather normalization process or the resulting WNA factors. The Company accepted Mr. Peters' adjustment and there was no dispute concerning the determinants and the weather normalization process or factors adopted in the rate case.

Q. What is the difference in the WNA and the AUA?

A. There are different objectives for the WNA and the AUA as well as differences in how the two mechanisms operate. As I explained earlier, the objective of the AUA was to encourage customers to conserve gas usage without adversely impacting the Company's ability to meet its revenue requirements consistent with Tenn. Code Ann. § 65-4-126. As initially proposed, the AUA was designed to adjust CGC's rates so that CGC would recover the same level of revenue per customer that was authorized in the rate case, Docket No. 09-00183. It was designed so that CGC would recover no more or no less than the revenue per customer found in the rate case. The AUA was to adjust for all factors that impacted the volumes and the resulting revenue collected, including weather and conservation. The WNA adjusts only for the impact of abnormal weather.

Q. Do both the WNA and the AUA have the same beginning point?

A. Yes. Both begin with the level of revenues approved in the rate case. The WNA factor, however, is designed only to adjust for the impact of weather, while the AUA is designed to adjust for weather, conservation, and other things that cause the revenue per customer to be different than the level adopted in the rate case.

Q. What do you mean by weather normalized volumes?

A. In a general rate case, the Commission determines the cost of service (revenue requirement) to be recovered through rates based on a normal or normalized year. Rates are then developed that will allow for the revenue requirement to be recovered assuming the volume of gas that would be delivered to customers in a year with normal weather. If rates were based on the level of sales in an abnormally cold year when the volumes were high, in a normal weather year the resulting rates would be insufficient for the Company to recover its cost of service because the volumes of gas delivered would be lower. Similarly, if the rates were based on the sales volumes in an abnormally warm year when the volume is low, in a normal year the rates would result in the Company recovering more than its cost of service. The use of normalized weather is the customary approach used in setting rates, and CGC's proposed rates in this case also recognize such normalization adjustments. The process of developing the normal or normalized volumes is addressed by Mr. Brooks in this proceeding and was addressed by Mrs. Shields in Docket No. 09-00183.

Q. Can you address other differences AUA and WNA?

A. Yes. The adjustment mechanisms are very different. The AUA rate factors are computed once a year based on the actual revenues for the 12 months ended May 31. This is why in Table 1 above the information is through May 31, 2017. For the WNA, rate factors are computed for each bill cycle based on the actual daily temperatures for the days included in the cycle. The weather impact is immediately reflected on the customer's bill. For example, under the WNA if the meter is read on January 15 and is next read on February 15, the customer will be billed on the next bill for the gas delivered from January 15 to February 15. If the weather during the period is colder than normal, the WNA Mechanism will reduce the bill to reflect the base volumetric charge that the customer would have been billed if the weather had been normal. On the other hand, if the weather is warmer than normal during the period, the bill will be increased to allow the Company to collect the level of base revenue for normal weather. With the AUA, the impact of abnormal weather (warmer or colder than the normalized standard) is not recognized at the time, but it will be encompassed in the calculation of the next year AUA factor based on the 12 months ended May 31. The new AUA adjustment will begin to appear on the customer's bill beginning in August. However, the full impact of the AUA adjustment may not be addressed in the next year's cycle. This is because in adopting the AUA as a trial, the TRA limited the amount that could be recovered to a maximum of 2% of the annual base revenue for the customers served under the applicable rate schedule. By accumulating revenue deficiencies or excesses over a year and then limiting the Company's recovery annually to only 2% of margin, the TRA unintentionally created a situation where more extreme warm weather periods have created significant total revenue under-recoveries.

Q. Are there periods when the weather has been more than 2% warmer than normal?

A. Yes. For the winter heating period of 2016-2017 (Oct. 2016-April 2017) it was 29.9% warmer than normal. For the previous year Oct 2015-April 2016 it was 21.9% warmer. (See the Orders and Reports in Docket Nos. 16-00061 and 17-00062). These differences in the actual and normal weather are reflected in the $570,254 and $914,033 Residential Revenue Short Falls for the 12 months ended May 31, 2016 and 2017, respectively, and the $368.963 and $484.570 C-1 Revenue Short Falls for 2016 and 2017 in the table above. If the WNA Mechanism had been in place during these heating seasons, adjustments would have been made monthly which would have corresponded to the customers' recent experiences with the warmer winter weather. Under the AUA, we're now in the position of recovering for weather from several years ago. This is a bad customer-experience situation.

Q. Do other natural gas distribution companies in Tennessee have Weather Normalization Adjustments?

A. Yes. Both Atmos and Nashville Gas (Piedmont Natural Gas) have WNA Mechanisms in place. CGC's has had a WNA Mechanism in place since 1991, which still exists for CGC's R-4 and C-2 rate classes.

Q. Returning then to your proposal in this case, have the WNA factors for Rate Schedules R-1 and C-1 been developed in this rate case?

A. Yes. In his testimony, Mr. Brooks has addressed the development of weather normalized volumes and the resulting weather normalization factors for the rates CGC is proposing. In my testimony supporting a return to the WNA Mechanism for R-1 and C-1 customers, the WNA rates in this case reflect the new factors Mr. Brooks describes. So our proposal now is for the Commission to adopt the WNA factors and resulting rates proposed in this docket, and not the factors and R-1/C-1 rates CGC proposed in the October 20, 2017, filing in Docket No. 09-00183. My exhibits ARH-1 and ARH-2 include the proposed elimination of the AUA, the replacement of the WNA, and the appropriate, new WNA factors.

Q. You have testified that there is nearly $2 million in accrued customer payment deficiencies under the AUA Mechanism because of the two percent cap on recoveries each year, and the Company has proposed to recover those underpayments through the use of the Interruptible Margin Credit Rider ("IMCR"). Why is the recovery of the AUA revenue deficiency through the IMCR a fair and reasonable approach?

A. CGC did not request a two percent cap in its original AUA request, but at the time it was added it did not seem unreasonable. However, the size of the unanticipated accumulated net revenue deficiencies has restricted the effectiveness of the AUA.

While the AUA was intended to address several potential impacts, because of the cap the AUA has been unable to reasonably balance rates and revenues over time due to extreme weather swings and, more recently, several years of warmer than anticipated winters, all of which are beyond the Company's ability to control. As a part of terminating the AUA and providing a mechanism that can redress the revenue deficiency without surcharges or increasing going forward rates, I have proposed using the IMCR.

The Commission has previously approved using the IMCR as a means of recovering the costs of the free thermostat and education components of the energySMART program, NRRI's cost to develop the conservation program measure, and the recovery of the Docket No. 07-00224 legal expenses. Using the IMCR again for the recovery of the AUA's accumulated net revenue deficiency will simply reduce the amount of the credits. Consistent with past practices, the AUA Mechanism provides the best means of efficiently and effectively recovering this deficit without directly impacting customer rates.

Q. And what if the Commission does not want to use the IMCR tariff as an offset?

A. The IMCR will have the least impact on customers since it offsets other revenues being shared with customers, so customers don't experience it the same way as a surcharge on rates. If the Commission does not utilize the IMCR Mechanism, then CGC would propose a special surcharge on the R-1 and C-1 customer bills, as applicable, spread out over two years until all the funds are recovered.

Q. Is there another option?

A. Yes. Another option would be to reinstate the WNA for the R-1 and C-2 Rate Schedules as proposed and retain the AUA for non-weather effects. Dr. Dismukes, testifying on behalf of the Consumer Advocate and Protection Division, in our 2009 rate case, supported the continuation of the WNA if the AUA Mechanism was adopted. See the pre-filed Direct Testimony of David E. Dismukes, Ph.D. in Docket No. 09-00183 beginning on page 69. Under this option, the weather normalization adjustment would be timely made to customer bills each month based on actual weather. The weather normalized average revenue per customer for the month would be compared to the benchmark. The difference in the actual and the benchmark would be accrued. As with the current AUA Mechanism, a factor would be developed each year to refund or collect the accrued AUA balance as of May 31. Exhibit ARH-4 is a revised Alignment and Usage Adjustment Rider that has been updated to reflect the proposed rates.

Q. Does this conclude your direct testimony?

A. Yes.