BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION NASHVILLE, TENNESSEE

February 15, 2018

| IN RE: |) | |
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| |) | |
| 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 | ĺ | |

JOHN M. COGBURN ON BEHALF OF CHATTANOOGA GAS COMPANY

I. WITNESS INTRODUCTION

- 2 Q. Please state your name, title, and business address.
- 3 A. I am John Cogburn, Director of Regulatory Reporting and Strategic Planning for
- 4 Southern Company Gas. My business address is Ten Peachtree Place NE,
- 5 Atlanta, GA 30309.

- 6 Q. On whose behalf are you testifying in this case?
- 7 A. I am testifying on behalf of Chattanooga Gas Company ("Company" or "CGC").
- 8 Q. Please describe your duties as they relate to CGC.
- 9 A. I am responsible for management and regulatory planning and internal
- management and regulatory reporting for all of the Southern Company Gas
- distribution utilities, including CGC.
- 12 Q. What is the purpose of your testimony?
- 13 A. My testimony provides support for the annual rate review tariff CGC is
- submitting pursuant to the alternative regulatory methods ("ARM") statute. I am
- also sponsoring the Company's proposed ARM Tariff that will implement our
- annual rate review process, which is attached as Exhibit JMC-1.
- 17 Q. Please describe your duties that are relevant to the Company's proposed
- 18 **ARM Tariff.**
- 19 A. I am responsible for the regulatory filings and business planning associated with
- 20 the Atlanta Gas Light Company annual rate review tariff, known as the Georgia
- 21 Rate Adjustment Mechanism ("GRAM"). Atlanta Gas Light is another natural
- 22 gas distribution utility of Southern Company Gas. The GRAM annual review
- tariff shares certain similarities with the proposed CGC ARM Tariff.

II. PROPOSED ARM TARIFF

- 2 O. Please describe the CGC ARM Tariff.
- 3 A. The Company's proposed ARM Tariff is based upon the annual rate review tariff 4 adopted by this Commission in Docket No. 14-00146, Atmos Energy Corporation 5 General Rate Case and Petition to Adopt Annual Review Mechanism and ARM Tariff. Similar to the Atmos tariff, CGC's ARM Tariff will use the 6 7 methodologies adopted in this proceeding for calculating an annual revenue requirement and new customer billing rates to be made effective pursuant to the 8 9 tariff.
- 10 Q. When does the Company propose to begin its ARM program?
- The Company requests that the Commission adopt the ARM Tariff in the current 11 A. 12 proceeding. The first annual review and new rates under the ARM Tariff will 13 become effective approximately one year after the rates established in this docket. 14 The Company proposes the Commission set rates in accordance with a traditional 15 revenue requirement approach in this proceeding in order to establish a clear 16 record regarding the appropriate rate making methodologies to be used in future 17 annual ARM filings. By setting rates pursuant to the ARM Tariff in the year 18 following the conclusion of this rate case, we can ensure that we are compliant 19 with the legislative direction for an annual review utilizing the rate making 20 methodologies established within the last five years.
- 21 Q. What will the Company file pursuant to the ARM Tariff?
- 22 A. On an annual basis, the Company will make an Annual Rate Filing ("ARF")
 23 utilizing the following methodologies to be established in this docket:

- 1. **Historic Base Period**. The Historic Base Year is the source of actual
 2 historic financial and rate making information. It shall consist of the
 3 depreciation, capital structure and cost of capital, rate of return, sales and
 4 transportation volumes, bills, and billing demand units.
 - 2. Forward Looking Test Period, Billing Determinants. Adjustments will be made to the Historic Base Year billing determinants for normal weather, annualized customer usage, and projected customer growth to arrive at the Forward Looking Test Year Billing Determinants. For industrial and transportation customers the Company shall analyze the sales volumes and adjust volumes accordingly based on any known and measurable changes expected for each Forward Looking Test Year. For residential and commercial customers the Company shall use a two year average, with the last year being the Historic Base Period, to calculate customer growth adjustments. The customer change shall then be multiplied by annualized normal usage per customer to arrive at the adjustment to volumes consistent with the applicable tariffs, rules and regulations.
 - 3. **Forward Looking Test Year Revenues**. The Forward Looking Test Year Revenues shall be calculated by multiplying the Forward Looking Test Year Billing Determinants by the rates effective at the end of the Historic Base Period that are set in this docket.
 - 4. **Other Revenues**. The Company shall calculate Other Revenues, consisting primarily of forfeited discounts and miscellaneous service

| 1 | charges, by calculating a two year average of these amounts up to the end |
|---|---|
| 2 | of each Historic Base Period. |

- 5. **Cost of Gas**. The Company shall calculate Cost of Gas by using the Historic Base Period per books cost of gas to arrive at the Forward Looking Test Year Cost of Gas.
- 6. Rate Design and Rates. Utilizing these factors, the Company shall calculate new rates utilizing the Rate Design approved in this case. In other words, the Forward Looking Test Year Revenues shall be allocated to customer classes utilizing the same rate design and allocation methodology used to establish rates in this case. Rates will become effective on the first day of the Forward Looking Rate Year for a period of twelve months.

Q. Since rates shall be set based upon Forward Looking Test Year Revenues, will there be any reconciliation or true up?

Yes. In addition to the ARF filing, each year following the conclusion of the Rate Effective Period, the Company will file the Annual Reconciliation Filing in which the Company will demonstrate—using the same rate setting methodologies established in this case—whether or not the Company achieved its allowed rate of return on equity during the Rate Effective Period. To the extent that the Company achieved a return different than the allowed rate of return a Reconciliation Rate will be proposed to collect or refund the difference in the allowed recoveries and the actual recoveries.

Α.

Q. Please describe the filing schedule under the ARM Tariff.

As described above, the Company proposes to initiate the first ARF under the ARM Tariff approximately one year after rates become effective in the current rate case. Operating under the assumption that rates become effective September 1, 2018, the Company would adhere to the schedule set forth in Table 1 below.

| TABLE 1 | | |
|--|-------------------------------------|--|
| Action | Date | |
| 1 st Annual ARF Filing | May 1, 2019 | |
| 1 st Annual ARM Rate Effective Date | September 1, 2019 | |
| 1 st Rate Effective Period | September 1, 2019 – August 31, 2020 | |
| 1 st Annual Reconciliation Filing | December 1, 2020 | |
| 1 st Annual Reconciliation Rate Effective | September 1, 2021 | |

Subsequent years will follow the same pattern. Additionally, if the first anniversary of the Rate Effective Date from the instant rate case is some date other than September 1, the Company would propose to use the first day of the anniversary month of the rate becoming effective as the ARM's first rate implementation date. The ARF would be filed not less than 120 days prior to the rate implementation date and the first Annual Reconciliation Filing would be filed approximately 120 days following the conclusion of the Rate Effective Period with the Reconciliation Rate itself being applied in the following annual rate implementation.

Q. What Historic Base Period and Forward Looking Rate Year are proposed for the ARM?

A. Based on a May 1, 2019, ARF filing, the Company proposes to use the twelve months ending December 31, 2018, as its Historic Base Period and September 1, 2019, through August 31, 2020, as its Forward Looking Rate Year. As described

| 1 | | above, if the rate implementation date is changed, then the Forward Looking Rate |
|----|----|---|
| 2 | | Year would be the twelve months following the rate implementation date. The |
| 3 | | Historic Base Period would be set to the quarter ending at least 60 days prior to |
| 4 | | the filing of the ARF. |
| 5 | Q. | Please describe the specific schedules that will be filed with the ARF. |
| 6 | A. | Pursuant to the ARM Tariff, the Company will file the following schedules with |
| 7 | | each ARF filing: |
| 8 | | Schedule-1: Cost of Service |
| 9 | | Summarizes the elements of the cost of service, including gas cost |
| 10 | | expense, operation and maintenance expense, depreciation expense, tax |
| 11 | | other than income tax, return on rate base, income tax, allowance for funds |
| 12 | | used during construction ("AFUDC"), and interest on customer deposits. |
| 13 | | This compares the total cost of service to revenues at present rates in order |
| 14 | | to calculate a net revenue deficiency or sufficiency. |
| 15 | | Schedule-2: Summary of Revenue at Present Rates |
| 16 | | Presents per book revenue for the Historic Base Period and projected |
| 17 | | Forward Looking Test year Revenue. |
| 18 | | Schedule-3: Cost of Gas |
| 19 | | Presents Historic Base Period per books gas cost and the projected |
| 20 | | Forward Looking Test Year cost of gas. This includes rate making |
| 21 | | adjustments consistent with the Approved Methodologies. |
| 22 | | |

Schedule-4: Operation and Maintenance Expense

Presents Historic Base Period per books operation and maintenance expenses, and the projected Forward Looking Test Year operations and maintenance expense. This includes rate making adjustments consistent with the Approved Methodologies.

Schedule-5: Taxes Other than Income

Presents Historic Base Period per books taxes other than income tax expense, and the projected Forward Looking Test Year taxes other than income tax expense. This includes the rate making adjustments consistent with the Approved Methodologies.

<u>Schedule-6: Depreciation Expense and Amortization Expense</u>

Presents Historic Base Period per books depreciation and amortization expense, and the projected Forward Looking Test Year depreciation and amortization expense. This includes rate making adjustments consistent with the Approved Methodologies and adjustments to reflect the impact of proposed depreciation rates, if any.

Schedule-7: Rate Base and Return

Presents the calculation of the Historic Base Period rate base, and projected Forward Looking Test Year rate base. The rate base includes the projected thirteen month average of the original cost of plant, accumulated depreciation, construction work in progress ("CWIP"), stored gas investment, materials and supplies, cash working capital, accumulated deferred income tax ("ADIT"), customer advances, customer deposits, and

| 1 | accumulated interest on customer deposits. This includes rate making |
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| 2 | adjustments consistent with the Approved Methodologies. |
| 3 | Schedule-8: Computation of State Excise and Income Tax |
| 4 | Presents the calculation of state excise tax and Federal income taxes on the |
| 5 | required return on rate base for the Historic Base Period and Forward |
| 6 | Looking Test Year. |
| 7 | Schedule-9: Overall Cost of Capital |
| 8 | Presents the calculation of the overall cost of capital based on the capital |
| 9 | structure, debt cost rates, and the required rate of return on equity. |
| 0 | Schedule-10: Rate of Return |
| 1 | Presents the calculation of a rate of return on rate base and a return on the |
| 2 | equity financed portion of the rate base for the Base Period and the |
| 13 | Forward Looking Test Year, utilizing costs and revenues as presented in |
| 4 | Schedules 2 through 9. |
| 15 | Schedule-11: Proof of Revenues and Calculation of Rates |
| 16 | Presents the forecasted billing determinants and the calculation of new |
| 17 | tariff rates for customer class and schedules for the Forward Looking Test |
| 18 | Year consistent with the cost of service and net revenue deficiency or |
| 19 | sufficiency presented in Schedule 1. |
| | |
| 20 | 1. Schedule 11-1: Proof of Revenues and Calculation of |
| 21 22 23 24 25 | Rates, Historic Period Margin at Present Rates. 2. Schedule 11-2: Proof of Revenues and Calculation of |
| 23 | Rates, Forward Looking Test Year Margin at Present Rates. |
| 24 | 3. Schedule 11-3: Proof of Revenues and Calculation of |
| 25 | Rates, Rate Design. |
| 26 | 4. Schedule 11-4: Proof of Revenues and Calculation of |
| 27 | Rates Summary of Present and Proposed Rates |

1 Schedule-12: Calculation of Annual Reconciliation Revenue Requirement 2 Calculates the Annual Reconciliation Revenue Requirements. 3 0. Will the Company provide additional information as needed by the 4 Commission, its staff, or interveners? 5 Yes, the Company will provide the following additional documentation at the Α. 6 time of filing: 7 ADIT Projections work papers. a. 8 Cash Working Capital work papers. b. Depreciation work papers. 9 C 10 Ad Valorem Budget work papers. d. Gas Storage Forecast work papers. 11 e. f. Income Statement. 12 Inflation adjustment work papers. 13 g. Plant Balances. 14 h. Forward Looking Test Period Taxes Other than Income Forecast work 15 i. 16 papers. 17 Taxes Other than Income historical. j. Depreciation rates. 18 k. 19 1 Customer Deposit Rate. 20 Historic Base Period and Forward Looking Test Period Billing m. 21 Determinants. 22 Weather Normalization, including 30 Year Smoothed Normal n. 23 Chattanooga Weather. 24 Minimum Filing Guideline 38. o. 25 Trial Balance. p. 26 General Ledger. q. 27 In addition to the items listed above, nothing with respect to the Company's 28 request alters the rights of participants for discovery and access to the books and 29 records of the Company as provided for under existing Tennessee law. 30 0. As a part of each annual filing will the Company also file a Variance Report? 31 A. Yes. The Variance Report will identify and explain each and every CGC revenue

and operating expense account and/or subaccount for which the amount either

exceeded the prior year's amounts (based on amounts either as filed by the

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| 1 | Company in the Annual ARM Filing or as adjusted by the Commission under |
|---|---|
| 2 | Tenn. Code Ann. § 65-5-103(d)(6)(C)) by 5% and \$30,000; or exceeds the |
| 3 | amount (based on amounts either filed by the Company in the Annual ARM |
| 4 | Filing or as adjusted by the Commission under Tenn. Code Ann. § 65-5- |
| 5 | 103(d)(6)(C)) in the third preceding year by 10% or \$60,000; or has been added |
| 6 | or deleted or modified in form or substance in any way. |

- Q. You have mentioned several times that the Company will use the rate calculation methodologies established by the Commission in this proceeding in the calculation of the ARM rate. Will you please expand on that?
- 10 Yes. The Company is obligated to use the methodologies established by the Α. Commission in its most recent rate proceeding in calculating its annual rate 11 12 adjustment. To that end, in the instant proceeding the Company requests that the 13 Commission confirm that it has applied the Company's described methodology as it relates to rendering the approved revenue requirement and rates related to the 14 15 items enumerated below. To the extent that the Commission applies a methodology other than that proposed by the Company, the Company requests 16 that the Commission describe it's methodology in its Final Order in a manner 17 18 sufficient for the Company to apply the same methodology in future ARM filings.
 - a. Rate of Return, including the allowed return on equity and methodology for establishing equity to debt capitalization ratios and cost of debt.
 - b. Normalized billing units and revenues to be used in the proof of revenue for the Historic Base Period.
 - c. Billing unit and revenue forecast methodology for the Forward Looking Rate Year.
 - d. Weather normalization methodology.
- e. Method for forecasting other revenues.
- f. Method for forecasting O&M expenses including labor and non-labor expense, including pension and other benefit related expenses.

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- 1 g. Methodology for calculating any disallowed expenses and other regulatory adjustments.
- 3 h. Methodology for calculating bad debt expense.
 - i. Methodology for amortizing rate case expenses.
- 5 j. Methodologies for calculating taxes including taxes other than income taxes and income taxes.
 - k. Methodologies for calculating depreciation and amortization expenses.
 - 1. Methodologies for calculating rate base and the components of rate base including: gross plant in service, accumulated depreciation and amortization, construction work in progress, stored gas inventory, cash working capital, materials and supplies, regulatory assets, deferred pension regulatory asset balance, accumulated deferred income tax, customer contributions in aid of construction, customer deposits, accumulated interest on customer deposits, operating reserves, and any other components included by the Commission in the calculation of rate base applicable to the Commission Final Order.
- m. Any other methodologies related to establishing the revenue requirement or rates of the Company in the instant proceeding.
- 19 Q. Do the rate calculation methodologies used in the ARM filings apply to both
- 20 the ARF and Annual Reconciliation Filing?
- 21 A. Yes. Both filings will be completed using the approved methodologies.
- 22 Q. Does this conclude your direct testimony?
- 23 A. Yes.

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ORIGINAL SHEET NO.59 A

Annual Rate Adjustment Mechanism (ARM)

I. **Applicable**

To all gas sold, distributed or transported under tariff services excluding special contracts.

II Purpose

This Chattanooga Gas Company Annual Review Mechanism ("CGC ARM") is implemented under the provision of Tennessee Code Annotated § 65-5-103(d)(6) which authorizes the Company to opt for an annual review of the Company's rates. Pursuant to this ARM and the annual filing described here in the Company's tariffed rates (excluding approved special contract rates) shall be adjusted to provide that the Company earns its Authorized Rate of return The rate adjustments implemented under this mechanism will reflect changes in the Company's base rate revenues, cost of service, and rate base.

III. **Definitions**

- **Annual Filing Date** shall be the date the Company will make its ARM Annual A) Rate Filing ("ARF"). The Annual Filling Date shall be no later than May 1, 2019 of each year, unless: (a) the Company files either a comprehensive rate case prior to the Annual Filing Date or (b) the Company files a notice with the Commission of its intent to file a comprehensive rate case prior to the Annual Filing Date. The annual filing under this mechanism shall be made in electronic form where practicable.
- Historic Base Period is defined as the twelve-month period ending December 31st of each calendar year in which an Annual Filing Date occurs.
- Forward Looking Test Year is defined as the twelve-month period ending August 31st of each year in which an Annual Filing Date occurs during the preceding 12month period.
- **Authorized Rate of Return** on Equity is defined as the return established by the TPUC in Docket No.18-____ or in any subsequent general rate case, whichever is more recent.
- E) Annual Reconciliation Revenue Requirement is the revenue requirement necessary to adjust the actual return to the Authorized Return for the Forward Looking Test Year immediately completed, all determined in accordance with the Approved Methodologies.

ISSUED: FEBRUARY 15, 2018 EFFECTIVE: SEPTEMBER 1, 2018

ISSUED BY: WENDELL DALLAS, VP

ORIGINAL SHEET NO.59 A

Annual Rate Adjustment Mechanism (ARM) (Continued)

- F) **Rate Effective Period** is defined as the twelve-month period in which base rates determined under this mechanism ("**Effective Rates**") shall be in effect. The first Rate Effective Period shall apply to bills rendered from September 1st to August 31st of each year.
- G) Reconciliation Adjustment Date shall be the date the Company will define an adjustment ("Reconciliation Adjustment") to effective rates to compensate for any over or under collection of base rate revenues during a Forward Looking Test Year. The Reconciliation Adjustment Date shall be no later than December 1st of each year. The Reconciliation Adjustment shall apply to bills rendered during the next Rate Effective Period.
- H) **Final Order** as referenced in this tariff shall initially be the final order issued in Docket No. 18-____. In the event there is a subsequent comprehensive rate proceeding establishing new base rates for the Company, then the final order of the Commission in such subsequent comprehensive rate proceeding shall be the **Final Order** for purposes of administering this mechanism.
- I) **New Matters** refers to new issues, adjustments and/or ambiguity in or for any account, method of accounting or estimations or ratemaking topics that would directly or indirectly affect the Annual ARM Filing for which there is no explicit prior determination regarding the Company by the Commission.
- J) Approved Methodologies are defined as the methodologies approved and adopted by the Commission in Docket No. 18-____ or any subsequent general rate case, whichever is more recent, or as modified following a determination on a New Matter.

IV. ARM Filing

- A) On the Annual Filing Date each year the Company shall file with the Commission schedules that reflect the actual annual amounts as reflected on the books and records of the Company for the Historic Test Period as well as the projected amounts expected during the Forward Looking Test Year.
- B) Contents of the Annual Filing. The Annual Filling shall include:

ISSUED: FEBRUARY 15, 2018 ISSUED BY: WENDELL DALLAS, VP EFFECTIVE: SEPTEMBER 1, 2018

ORIGINALSHEET NO.59 B

Annual Rate Adjustment Mechanism (ARM) (Continued)

Schedule-1: Cost of Service

Summarizes the elements of the cost of service, including gas cost expense, operation and maintenance expense, depreciation expense, tax other than income tax, return on rate base, income tax, allowance for funds used during construction ("AFUDC"), and interest on customer deposits. This compares the total cost of service to revenues at present rates in order to calculate a net revenue deficiency or sufficiency.

Schedule-2: Summary of Revenue at Present Rates

Presents per book revenue for the Historic Base Period and projected Forward Looking Test year Revenue.

Schedule-3: Cost of Gas

Presents Historic Base Period per books gas cost and the projected Forward Looking Test Year cost of gas. This includes rate making adjustments consistent with the Approved Methodologies.

Schedule-4: Operation and Maintenance Expense

Presents Historic Base Period per books operation and maintenance expenses, and the projected Forward Looking Test Year operations and maintenance expense. This includes rate making adjustments consistent with the Approved Methodologies.

Schedule-5: Taxes Other than Income

Presents Historic Base Period per books taxes other than income tax expense, and the projected Forward Looking Test Year taxes other than income tax expense. This includes the rate making adjustments consistent with the Approved Methodologies.

Schedule-6: Depreciation Expense and Amortization Expense

Presents Historic Base Period per books depreciation and amortization expense, and the projected Forward Looking Test Year depreciation and amortization expense. This includes rate making adjustments consistent with the Approved Methodologies and adjustments to reflect the impact of proposed depreciation rates, if any.

Schedule-7: Rate Base and Return

Presents the calculation of the Historic Base Period rate base, and projected Forward Looking Test Year rate base. The rate base includes the projected thirteen month average of the original cost of plant, accumulated depreciation,

ORIGINAL SHEET NO.59 C

Annual Rate Adjustment Mechanism (ARM) (Continued)

construction work in progress ("CWIP"), stored gas investment, materials and supplies, cash working capital, accumulated deferred income tax ("ADIT"), customer advances, customer deposits, and accumulated interest on customer deposits. This includes rate making adjustments consistent with the Approved Methodologies.

Schedule-8: Computation of State Excise and Income Tax

Presents the calculation of state excise tax and Federal income taxes on the required return on rate base for the Historic Base Period and Forward Looking Test Year.

Schedule-9: Overall Cost of Capital

Presents the calculation of the overall cost of capital based on the capital structure, debt cost rates, and the required rate of return on equity.

Schedule-10: Rate of Return

Presents the calculation of a rate of return on rate base and a return of return on the equity financed portion of the rate base for the Base Period and the Forward Looking Test Year, utilizing costs and revenues as presented in Schedules 2 through 9.

Schedule-11: Proof of Revenues and Calculation of Rates

Presents the forecasted billing determinants and the calculation of new tariff rates for customer class and schedules for the Forward Looking Test Year consistent with the cost of service and net revenue deficiency or sufficiency presented in Schedule 1.

- 1. Schedule 11-1: Proof of Revenues and Calculation of Rates, Historic Period Margin at Present Rates.
- 2. Schedule 11-2: Proof of Revenues and Calculation of Rates, Forward Looking Test Year Margin at Present Rates.
- 3. Schedule 11-3: Proof of Revenues and Calculation of Rates, Rate Design.
- 4. Schedule 11-4: Proof of Revenues and Calculation of Rates, Summary of Present and Proposed Rates.

ORIGINAL SHEET NO.59 D

Annual Rate Adjustment Mechanism (ARM) (Continued)

<u>Schedule-12: Calculation of Annual Reconciliation Revenue Requirement</u> Calculates the Annual Reconciliation Revenue Requirements.

- C) Additional support documentation. The Company will provide the following additional documentation at the time of filing:
 - a. ADIT Projections work papers
 - b. Cash Working Capital work papers
 - c. Depreciation work papers.
 - d. Ad Valorem Budget work papers.
 - e. Gas Storage Forecast work papers.
 - f. Income Statement.
 - g. Inflation adjustment work papers.
 - h. Plant Balances.
 - i. Forward Looking Test Period Taxes Other than Income Forecast work papers.
 - j. Taxes Other than Income historical.
 - k. Depreciation rates.
 - 1. Customer Deposit Rate.
 - m. Historic Base Period and Forward Looking Test Period Billing Determinants.
 - n. Weather Normalization, including 30 Year Smoothed Normal Chattanooga Weather.
 - o. Minimum Filing Guideline 38.
 - p. Trial Balance.
 - q. General Ledger.

In addition to the items listed above, nothing with respect to the Company's request alters the rights of participants for discovery and access to the books and records of the Company as provided for under existing Tennessee law.

- D) Revenue Requirements. In presenting data that demonstrates the Forward Looking Test Year revenue requirements:
 - a. Rate Base and Cash working Capital requirements will be determined in accordance with the Approved Methodologies. The Company will use the factors derived from the Lead/Lag study preformed in the most recent rate case in calculating cash working capital requirements.

ORIGINAL SHEET NO.59 E

EFFECTIVE: SEPTEMBER 1, 2018

Annual Rate Adjustment Mechanism (ARM) (Continued)

- b. Depreciation expenses shall reflect the depreciation rates most recently approved by the Commission in the Company's most recent general rate case. If and when the Company performs a new depreciation study, the new study will be filed with the Commission, and update depreciation rates will be utilized in the next annual review under this tariff.
- c. Forward Looking Test Year Operating Expense (O&M, Taxes other than Income Tax, and Income Tax will be projected using the Approved Methodologies.
- d. The Historic Base Period data shall include actual base rate revenues by billing component, and the Forward Looking Test Year data shall reflect adjustments to forecast base rate revenue billing determinants based on the base rate revenue forecasting methodologies in the Approved Methodologies for projecting the number of customers and average customer use.
- e. Cost of Capital will be calculated using the Authorized Return on Equity. The Company's cost of debt and capital structure will be calculated using the Approved Methodologies.
- f. All schedules filed pursuant to this mechanism will utilize the Approved Methodologies as well as other adjustments required to account properly for atypical, unusual, or nonrecurring events
- E) New Matters. If New Matters arise, the Company, the Commission Staff, and the Consumer Advocate will endeavor to reach a resolution of the issue, or if necessary, will seek a ruling from the Commission.

V Attestation

With each Annual ARM Filing, a Company officer, as of the date of Annual ARM Filing, affirmatively represent and warrant, upon information and beliefs formed after reasonable inquiry, by signing a certificate ("Certificate") under oath: (1) That the Company's Annual ARM Filing has been prepared in accordance with the Approved Methodologies, or that any deviation from the resolution of any ambiguities in the Approved Methodologies have been affirmatively disclosed and explained in a document attached to such affidavit. (2) That all New Matters have been affirmatively disclosed and explained in a document attached to such affidavit. (3) That the Variance Report (as defined in section IX) includes all matters that are required. (4) That no

ORIGINAL SHEET NO.59 F

EFFECTIVE: SEPTEMBER 1, 2018

Annual Rate Adjustment Mechanism (ARM) (Continued)

Disallowed Items have been included in the Company's Annual ARM Filing. (5) That, except as expressly disclosed in a separate schedule dedicated to such disclosures, there have been no additions, deletions, or modifications to the accounts or subaccounts used by the Company as such accounts have been provided to the Commission and Consumer Advocate. (6) That there have been no changes in the method of accounting or estimation in any account or subaccount referenced and described in the immediately preceding subsection (5).

VI. Rate Adjustments

Pursuant to the provision of Tennessee Code Annotated 65-5-103(d)(6)(c), based upon the Forward Looking Test Years and the Approved Methodologies, the Company's tariff rates shall be adjusted to provide for the Company to earn the Authorized Return on Equity. Anything else to the contrary notwithstanding, in the determining the annual rate adjustment specified by this paragraph, calculations shall include the Annual Reconciliation Revenue Requirement adjustment discussed in section VII below. All tariff rates shall be adjusted in proportion to the relative adjusted Historic Base Period revenue shard of each class and rate, as specified in the Approved Methodologies. The Company shall file revised tariffs reflecting the new rates. The revised tariff and new rates shall be effective for bills rendered on or after September 1st immediately following the Annual Filing Date. Approved special contracts rates shall be exempt from the ARM and shall not be adjusted hereunder.

VII. Annual Reconciliation to Authorized Return on Equity

On or before December 1st of each year, the Company shall file with the Commission, and shall provide a copy to the Consumer Advocate, a reconciliation of actual results ("Annual Reconciliation") to the Authorized Return on Equity for the Forward Looking Test Year immediately completed. The annual reconciliation shall include a calculation of the actual cost of service, determined in accordance with the Approved Methodologies, for the Forward Looking Test Year immediately completed: using the same revenue requirement model used in each Annual Filing, substituting actual results in place of previously forecasted data for all aspect of cost of service, excluding revenue calculations. Actual cost of service shall be compared with actual booked revenue, ignoring the revenue impact of any prior year reconciliation, to determine the revenue requirement ("Annual Reconciliation Revenue Requirement") necessary to adjust the actual return on equity to the Authorized Return on Equity for the Forward Looking Test Year immediately completed, all determined in accordance with the Approved Methodologies. Interest shall be added to the "Annual Reconciliation Revenue Requirement" (whether positive or negative). The interest rate shall be the Overall Cost

ORIGINAL SHEET NO.59 H

Annual Rate Adjustment Mechanism (ARM) (Continued)

of Capital as stated on Schedule 9 of the Annual ARM Filing compounded for 2 years. New rates shall be calculated to produce a net rate adjustment comprised of the Annual Reconciliation Revenue Requirement from the most recent completed Forward Looking Test Year and the revenue sufficiency / deficiency for the ensuring Forward Looking Test Year, all determined in accordance with the Approved Methodologies. The resulting rates shall be effective on bill rendered on or after September 1st of each year. All tariff rates (except Special Contract rates, which shall not be affected) shall be adjusted in proportion to the relative base revenue share of each class as specified in the Approved Methodologies.

VIII. The Company will simultaneously copy the Consumer Advocate on all filing made pursuant to this ARM tariff.

IX. Variance Reporting and CPAD Authority to Petition

A) Variance Reporting – As part of its Annual ARM Filing, the Company shall prepare and file with the Commission with a copy to the Consumer Advocate, a Variance Report that identifies and explains each and every Chattanooga Gas Company revenue and operating expense account and/or subaccount for which the amount either exceed the prior year's amounts (based on amounts either as filed by the Company in the Annual ARM Filing or as adjusted by the Commission under Tenn. Code Ann. § 65-5-103(d)(6)(C)) by 5% and \$30,000; or exceeds the amount (based on amounts either filed by the Company in the Annual ARM Filing or as adjusted by the Commission under Tenn. Code Ann. § 65-5-103(d)(6)(C)) in the third preceding year by 10% or \$60,000; or has been added or deleted or modified in form or substance in any way. As to any account and/or subaccount (and including without limitation any process related directly or indirectly to any such account or subaccount) included on a Variance Report, the Commission and/or the Consumer Advocate shall have the right in its discretion to request additional information and an explanation from the Company. The Company will provide any such information requested within ten business days of such request. The Consumer Advocate, further, has the right in its discretion to bring such accounts and/or subaccounts (or related process) to the attention of the Commission and to request the Commission to and consider such accounts and/or subaccounts (or related process). Without limiting the Commission's discretion, the Consumer Advocate may recommend any form or process of review it deems appropriate, including without limitation a review that would include the appointment of a third party to review and report on such of the amounts and/or subaccounts (or related process).

ISSUED: FEBRUARY 15, 2018 ISSUED BY: WENDELL DALLAS, VP EFFECTIVE: SEPTEMBER 1, 2018

ORIGINAL SHEET NO.59 H

Annual Rate Adjustment Mechanism (ARM) (Continued)

B) CPAD Authority to Petition. The CPAD shall have the right in its sole discretion to file a petition or complaint asking the Commission to terminate or modify the ARM Tariff resulting from the Docket or any directly or indirectly related docket or to take any other action contemplated by Tenn. Code Ann. § 65-5-103(d)(6). The Company shall not oppose the CPAD's petition or complaint filed under this Section on the grounds that such a proceeding is not statutorily authorized or the CPAD is not authorized to bring such a proceeding; provided, however that Chattanooga Gas Company reserves all rights with regard to the merit of any termination or modification or other relief that the CPAD may request or position that the CPAD may assert in any such proceeding.

ISSUED: FEBRUARY 15, 2018 EFFECTIVE: SEPTEMBER 1, 2018

ISSUED BY: WENDELL DALLAS, VP