

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

NASHVILLE, TENNESSEE

October 1, 2018

IN RE:

**AUDIT OF CHATTANOOGA GAS COMPANY'S
WEATHER NORMALIZATION ADJUSTMENT
FOR THE PERIOD NOVEMBER 1, 2017
THROUGH APRIL 30, 2018**

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**DOCKET NO.
18-00076**

**ORDER ADOPTING WNA AUDIT REPORT OF THE UTILITIES DIVISION
OF THE TENNESSEE PUBLIC UTILITY COMMISSION**

This matter came before Chair Robin L. Morrison, Vice Chair Kenneth C. Hill, and Commissioner David F. Jones of the Tennessee Public Utility Commission (the "Commission" or "TPUC"), the voting panel assigned to this docket, at a regularly scheduled Commission Conference held on September 21, 2018 for consideration of the Weather Normalization Adjustment Audit Report ("Audit Report") of the Commission's Utilities Division (the "Staff") resulting from the Staff's audit of Chattanooga Gas Company's ("CGC" or the "Company") Weather Normalization Adjustment ("WNA") for the period November 1, 2017 through April 30, 2018. The Audit Report, which was filed on September 5, 2018, is attached hereto as Exhibit 1 and incorporated by reference in this Order.

The Audit Report contained the following immaterial findings as follows: (1) The Company used incorrect actual heating degree days ("ADD") in November and December resulting in errors to twenty-three (23) Bill Cycles in December 2017 and January 2018, and (2) The Company made an error on its reporting of the ADD for March 16, 2018. The result of these errors resulted in an over-collection from customers of \$11,903.51, which will be added to

the Company's Actual Cost Adjustment ("ACA") Account Balance in the next ACA audit. The Staff confirmed through examination of a sample of customer bills that WNA factors were correctly billed to customers and the correct Base Rates and Purchased Gas Adjustment rates were billed.

At the regularly scheduled Commission Conference held on September 21, 2018, the panel considered the Staff's Audit Report. Thereafter, the panel voted unanimously to approve the September 5, 2018, Staff Audit Report as filed, including the findings and recommendations contained therein.

IT IS THEREFORE ORDERED THAT:

The Audit Report, a copy of which is attached to this Order as Exhibit 1, is approved and adopted and incorporated in this Order as if fully rewritten herein.

Chair Robin L. Morrison, Vice Chair Kenneth C. Hill, and Commissioner David F. Jones concur.

ATTEST:



Earl R. Taylor, Executive Director

EXHIBIT 1

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

NASHVILLE, TENNESSEE

September 5, 2018

IN RE:

CHATTANOOGA GAS COMPANY

WEATHER NORMALIZATION ADJ. (WNA) AUDIT)

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) Docket No. 18-00076

NOTICE OF FILING BY THE UTILITIES DIVISION OF THE TENNESSEE
PUBLIC UTILITY COMMISSION

Pursuant to Tenn. Code Ann. §§ 65-4-104, 65-4-111 and 65-3-108, the Utilities Division of the Tennessee Public Utility Commission ("TPUC" or the "Commission") hereby gives notice of its filing of the Chattanooga Gas Company WNA Audit Report (the "Report") in this docket and would respectfully state as follows:

1. The present docket was opened by the Commission to hear matters arising out of the audit of Chattanooga Gas Company (the "Company").
2. The Company's WNA filings were received on November 1, 2017 through April 30, 2018, and the Staff completed its audit of same on July 19, 2018.
3. The Report is attached hereto as EXHIBIT A and is fully incorporated herein by this reference.
3. The Utilities Division hereby files its Report with the Tennessee Public Utility Commission for deposit as a public record and approval of the findings and recommendations contained therein.

Respectfully Submitted:


Pat Murphy
Utilities Division
Tennessee Public Utility Commission

CERTIFICATE OF SERVICE

I hereby certify that on this 5th day of September 2018, a true and exact copy of the foregoing has been either hand-delivered or delivered via U.S. Mail, postage pre-paid, to the following persons:

Earl Taylor
Executive Director
Tennessee Public Utility Commission
Andrew Jackson Building
502 Deaderick Street
Nashville, TN 37243

Robin Morrison
Chair
Tennessee Public Utility Commission
Andrew Jackson Building
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Mr. Archie Hickerson
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Suebrina King-Cofer,
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Pat Murphy

EXHIBIT A

COMPLIANCE AUDIT REPORT

OF

CHATTANOOGA GAS COMPANY

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

DOCKET NO. 18-00076

TENNESSEE PUBLIC UTILITY COMMISSION

UTILITIES DIVISION

September 2018

COMPLIANCE AUDIT
CHATTANOOGA GAS COMPANY
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
Docket No. 18-00076

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COMPLIANCE AUDIT
CHATTANOOGA GAS COMPANY
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
DOCKET NO. 18-00076

I. INTRODUCTION AND AUDIT OPINION

The subject of this compliance audit is the Weather Normalization Adjustment (“WNA”) Rider of Chattanooga Gas Company (“CGC” or “Company”), a wholly owned subsidiary of Southern Company Gas.¹ The objective of this audit was to determine if the WNA adjustments were calculated correctly and applied to customers’ bills appropriately between November 2017 and April 2018 for CGC. As a result of the WNA Rider, the Company surcharged a net **\$119,395.19** to Medium Commercial and Industrial (C-2) customers and Multi-family Housing (R-4) customers during the period. The impact of WNA revenues on the Company’s total revenues for the period is detailed in Section V.

The audit produced one finding. The finding resulted primarily through no fault of the Company and is immaterial on a per customer basis. Therefore, Staff concludes that the Company is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Public Utility Commission and included in the Company’s tariff (see Attachment 1).

There were no material findings reported in the last WNA audit report (Docket No. 17-00062).

II. SCOPE OF AUDIT

In meeting the objective of the audit, the Staff compared the following on a daily basis:

- (1) the Company's actual heating degree days (ADD) to National Oceanic and Atmospheric Administration (“NOAA”) actual heating degree days;
- (2) the Company's normal heating degree days (NDD) to the normal heating degree days calculated and approved in CGC’s last rate case;² and
- (3) the Company's calculation of the WNA factors to Staff's independent calculation for each billing cycle during the WNA period.

In addition, Staff audited a sample of customer bills to verify that the WNA factors had been correctly applied to the bills. Staff also examined each sample bill to determine whether the Base Rates, Purchased Gas Adjustments and other billing components were billed correctly. During this examination, Staff confirmed that Chattanooga appears to have correctly billed its customers during this review period.

¹ Southern Company Gas, formerly known as AGL Resources, was acquired by Southern Company in 2016.

² *In Re: Petition of Chattanooga Gas Company for a General Rate Increase, Implementation of the Energy Smart Conservation Programs and Implementation of a Revenue Decoupling Mechanism*, Docket No. 09-00183.

Pat Murphy and Lisa Faust of the Utilities Division conducted this audit.

III. BACKGROUND INFORMATION ON THE COMPANY

Chattanooga Gas Company, located at 6125 Preservation Drive in Chattanooga, Tennessee, is a wholly owned subsidiary of Southern Company Gas, formerly known as AGL Resources, Inc. a holding company formed in 2000 in response to the Public Utility Holding Company Act (PUCHA) of 1935. Southern Company Gas is located at Ten Peachtree Place, Atlanta, Georgia. As a local distribution company ("LDC"), Chattanooga provides service to customers in Chattanooga and Cleveland, Tennessee, and surrounding environs in Hamilton and Bradley counties, all located in Southeast Tennessee. The natural gas used to serve these areas is purchased from various suppliers and transported via three natural gas pipelines in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission ("FERC"). The three interstate pipelines are Tennessee Natural Gas Pipeline (TGP), East Tennessee Natural Gas (ETNG) and Southern Natural Gas (SNG).

IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT RIDER

In setting rates, the Tennessee Public Utility Commission ("TPUC" or "Commission")³ uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are in effect. Use of normalized operating levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low.

Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years' weather data.⁴

Normal weather rarely occurs. This has two impacts:

- (1) The customers' bills fluctuate dramatically due to changes in weather from month to month; and
- (2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and over-earnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will under-earn.

In recognition of this fact, on September 26, 1991, the Tennessee Public Service Commission⁵ ("TPSC") approved a three-year experimental Weather Normalization Adjustment Rider ("WNA

³ As of April 5, 2017, the name of Tennessee Regulatory Authority has changed to the Tennessee Public Utility Commission and board members of the agency will be known as Commissioners rather than Directors.

⁴ Weather data is published monthly by the National Oceanic and Atmospheric Administration ("NOAA").

⁵ By legislative action, the Public Service Commission was replaced on July 1, 1996 by the Tennessee Regulatory Authority. See Act of May 24, 1995, ch. 305, 1995 Tenn. Pub. Acts 450. The TRA retains jurisdiction over the

Rider”) to the tariffs of Chattanooga Gas Company, Nashville Gas Company, a division of Piedmont Natural Gas Company, Inc. and United Cities Gas Company.⁶ In periods of colder than normal weather, the customer receives a credit on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return. The WNA Rider was to be applied to residential and commercial customers' bills during the months of October through May of each year. On June 21, 1994, the TPSC issued an Order authorizing the above mentioned gas companies to permanently implement an amended version of the WNA Rider.⁷

As a result of the Company's last rate case before this Commission, CGC's WNA Rider tariff was amended to apply to only medium commercial and industrial (C-2) and multi-family (R-4) rate schedules, as revenues billed to residential (R-1) and small commercial customers (C-1) are governed under the Company's Alignment and Usage Adjustment (“AUA”).⁸ The AUA mechanism takes into consideration all effects on revenue recovery associated with usage. CGC's current WNA Rider tariff accompanies this Report as Attachment 1. The TPUC Staff audits these WNA calculations annually.

Note:

On February 15, 2018, Chattanooga Gas filed a Petition⁹ with the Commission requesting an increase to its rates and charges. As part of this rate case filing, the Company also requested the following:

1. Termination of the AUA mechanism and
2. Reinstatement of the WNA for the Residential (R-1) and Small Commercial (C-1) customers.

This Petition was heard by the Commission on August 20 through August 22, 2018. Deliberations are tentatively set for the October 15, 2018 Commission Conference.

above named gas companies. See Tenn. Code Ann. § 65-4-104; see also Tenn. Code Ann. § 65-4-101 (a) (defining public utility).

⁶ See petition of Chattanooga Gas Company, Nashville Gas Company, a Division of Piedmont Natural Gas Company, Inc. and United Cities Gas Company for a Rulemaking Hearing to Adopt a Weather Normalization Adjustment (WNA) Rider, Docket No. 91-01712, Order (September 26, 1991).

⁷ The amendment directed Chattanooga Gas Company and United Cities Gas Company to eliminate from their WNA Rider the shoulder months of October and May, and Nashville Gas Company to eliminate the shoulder months of October, April and May.

⁸ In Re: *Petition of Chattanooga Gas Company for a General Rate Increase, Implementation of the EnergySmart Conservation Programs and Implementation of a Revenue Decoupling Mechanism*, Docket No. 09-00183, Order, page 57 (November 8, 2010).

⁹ In Re: *Petition of Chattanooga Gas Company for Approval of An Adjustment in Rates and Tariff; the Termination of the AUA Mechanism and the Related Tariff Changes and Revenue Deficiency Recovery; and An Annual Rate Review Mechanism*, Docket No. 18-00017 (February 15, 2018).

V. IMPACT OF WNA RIDER

The Graph appearing on page 6 visually compares the actual heating degree days to normal heating degree days for Chattanooga Gas during the 2017 – 2018 winter heating season. The table below quantifies the number of actual heating degree days by month as compared to the normal heating degree days for that month. It shows that overall, during the winter heating season, the weather was 2.62% warmer than normal, resulting in a net surcharge to CGC's customers for the period.

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
October 2017	143	156	Warmer
November 2017	359	409	Warmer
December 2017	681	667	Colder
January 2018	870	757	Colder
February 2018	336	564	Warmer
March 2018	422	399	Colder
April 2018	232	173	Colder
Total	3043	3125	2.62 % Warmer

The net impact of the WNA Rider during the November 2017 through April 2018 WNA period was that R-4 and C-2 customers were **surcharged a net \$119,395.19**. The percentage of total revenue derived from the WNA Rider was 0.2% (See Table 1). Table 2 compares the amount surcharged (refunded) during the past three (3) heating seasons.¹⁰

Table 1

Impact of WNA Rider on Residential & Commercial Revenues November 2017 – April 2018

	WNA Rider Revenues	Total Revenues	Percentage Impact of WNA Rider on R&C Revenues
Multi-Family (R-4) and Medium Commercial Sales (C-2)	<u>\$119,395.19</u>	<u>\$52,154,415.32</u>	0.2%

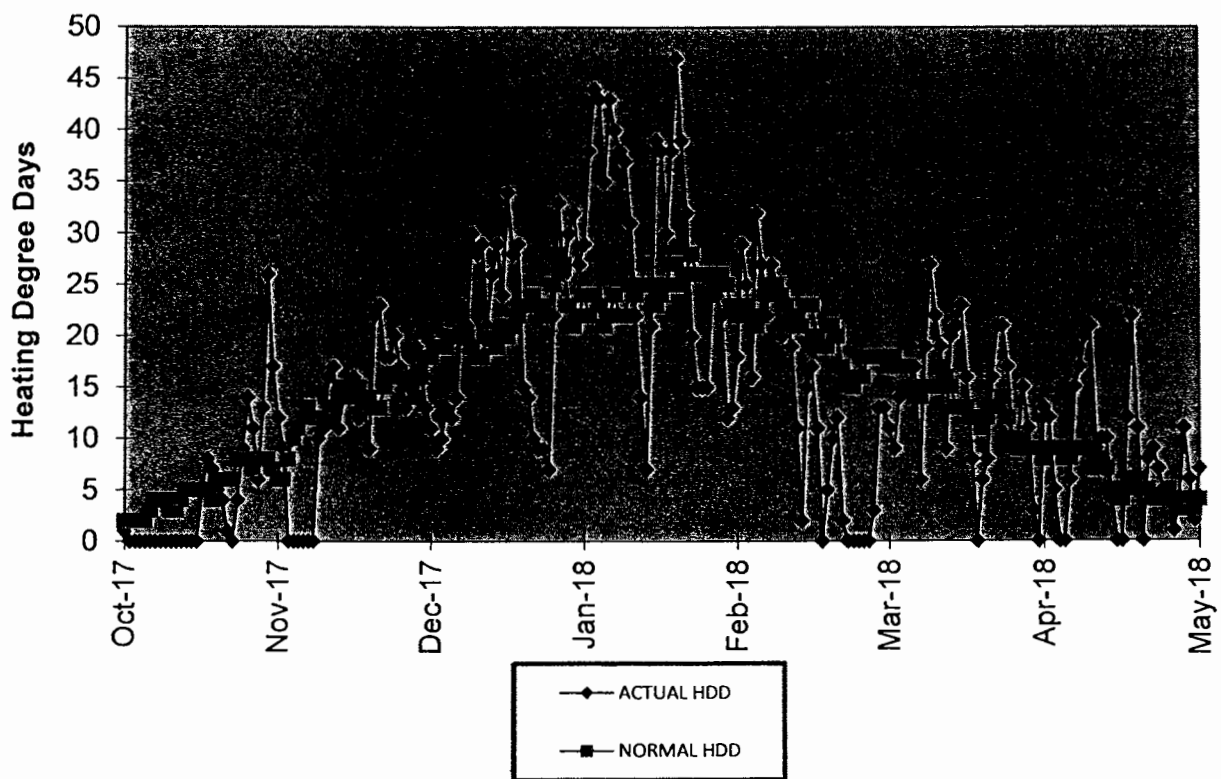
¹⁰ As explained in Section IV, the WNA was discontinued in Docket No. 09-00183 for all customer classes except R-4 and C-2 customers.

Table 2

**Total WNA Amount Surcharged (Refunded)
2015- 2018**

11/2015-4/2016	\$ 557,287.32
11/2016-4/2017	695,268.06
11/2017-4/2018	<u>119,395.19</u>
Total	<u>\$ 1,371,950.57</u>

Chattanooga Gas Company Comparison of Actual to Normal Heating Degree Days



VI. WNA FINDINGS

As noted in Section I of this report, Staff's WNA audit resulted in one Finding.

SUMMARY OF FINDINGS:

FINDING #1	Actual Degree Day Differences	\$11,903.51	Over-recovery
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FINDING #1:

Exception

The Company used incorrect daily actual heating degree days (ADD) in its weather normalization adjustment factor calculations.

Discussion

The Company used incorrect actual heating degree days (ADD) in November and December 2017. These errors affected 23 Bill Cycles in December 2017 and January 2018. Since WNA factors are calculated on a real time basis for billing purposes, Chattanooga receives its daily heating degree day information from a weather service provider. These are preliminary data that have not been finalized by the National Oceanic and Atmospheric Administration ("NOAA").¹¹ According to the Company, the number of heating degree days calculated from the observed high and low temperatures for the following dates are as follows. The final NOAA report, which is released after the fact, corrected the heating degree days as noted.

Date	Company	NOAA	Difference
11/04/17	1	0	-1
12/05/17	13	14	1
12/06/17	19	23	4
12/20/17	11	10	-1
12/27/17	11	30	19

The result of these errors was an **over-collection of \$4,582.73** in WNA revenues from CGC's customers.

Additionally, the Company made an error on its reporting of the actual heating degree days for March 16, 2018. CGC reported that the ADD for March 16, 2018 was 8, which agreed with NOAA's report. Staff, however, found that there were WNA factor calculation differences for Bill Cycle 13 in March through Bill Cycle 12 in April 2018. After investigating these differences, Staff discovered that although 8 ADD were reported for March 16, the Company actually used 0 ADD for that date in calculating the WNA factors that included that date. Staff confirmed this conclusion during its bill audit by observation of the WNA factor actually billed to a customer. The result of this error was an **over-collection of \$7,320.78** in WNA revenues from CGC's customers.

Total finding was an **over-collection of \$11,903.51**.

Recommendation

Based on the immaterial amount of over-collection, Staff recommends this over-collection be added to the Company's Actual Cost Adjustment (ACA) Account Balance in the next ACA audit filed with the Commission.

Company Response

¹¹ NOAA is the official standard used by Staff to audit the WNA adjustments.

Chattanooga Gas Company concurs with the finding. The heating degree days reported on the NOAA web site for March 16, 2018 were 0, while the average temperature was reported correctly as 57. The web site error was not discovered, and the incorrect heating degree days were entered into the billing system.

VII. CONCLUSIONS AND RECOMMENDATIONS

Based on Staff's review of the WNA adjustments during the period November 2017 through April 2018, as stated in its Audit Opinion in Section I, Staff found one immaterial error and concludes that CGC is correctly implementing the mechanics of the WNA Rider to its tariff. There were no findings from the previous audit (Docket No. 17-00062) to remedy. Therefore, **Staff recommends that the Commissioners of the TPUC approve Staff's Audit Report.**

We appreciate the full cooperation extended by Company personnel during this process.

ATTACHMENT 1

WEATHER NORMALIZATION ADJUSTMENT

(WNA) RIDER

PROVISION FOR ADJUSTMENT

The base rate per CCF/therm (100,000 Btu) for gas service set forth in any rate schedules utilized by the Authority in determining normalized test period revenues shall be adjusted by an amount hereinafter described, which amount is referred to as the "Weather Normalization Adjustment."

DEFINITIONS

For Purpose of this Rider:

"Authority" means the Tennessee Regulatory Authority.

"Relevant Rate Order" means the final order of the Authority in the most recent litigated rate case of Chattanooga Gas Company (Company) fixing the rates of the Company or the most recent final order of the Authority Specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

COMPUTATION OF WEATHER NORMALIZATION ADJUSTMENT

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth cent per CCF/therm by the following formula:

$$WNA_i = R_i \frac{HSF_i(NDD-ADD)}{(BL_i + (HSF_i \times ADD))}$$

Where

i	=	any particular Rate Schedule or billing classification within any such particular Rate Schedule that contains more than one billing classification
WNA _i	=	Weather Normalization Adjustment Factor for the i th Rate Schedule or classification expressed in cents per CCF/therm
R _i	=	weighted average base rate (base rate less any embedded gas cost) of temperature sensitive sales for the i th schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
HSF _i	=	heat sensitive factor for the i th schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
NDD	=	normal billing cycle heating degree days utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
ADD	=	actual billing cycle heating degree days
BL _i	=	base load sales for the i th schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

FILING WITH AUTHORITY

The Company will file as directed by the Authority (a) a copy of each computation of the Weather Normalization Adjustment, (b) a schedule showing the effective date of each such Weather Normalization Adjustment, and (c) a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.

WEATHER NORMALIZATION ADJUSTMENT

(WNA) RIDER COMPONENTS

<u>RATE SCHEDULE</u>	WEIGHTED BASE RATE <u>(\$THERM)</u>	HEAT SENSITIVE FACTOR - HSF <u>(THERM)</u>	BASE LOAD - BL <u>(THERM)</u>	
<u>(R-4) MULTI-FAMILY HOUSING SERVICE</u> Winter (November - April)	.217669	.084580	14.628	<div>C</div> <div>C</div>
<u>(C-2) MEDIUM COMMERCIAL AND INDUSTRIAL GENERAL SERVICE</u> Winter (November - April)	.176772	2.5160	471.807	