

**BEFORE THE TENNESSEE REGULATORY AUTHORITY**

**NASHVILLE, TENNESSEE**

**July 14, 2015**

**IN RE:**

**AUDIT OF CHATTANOOGA GAS COMPANY'S  
WEATHER NORMALIZATION ADJUSTMENT  
FOR THE PERIOD NOVEMBER 1, 2014 TO  
APRIL 30, 2015**

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**DOCKET NO.  
15-00061**

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**ORDER ADOPTING WNA AUDIT REPORT OF THE UTILITIES DIVISION  
OF THE TENNESSEE REGULATORY AUTHORITY**

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This matter came before Chairman Herbert H. Hilliard, Director Kenneth C. Hill, and Director Robin Bennett of the Tennessee Regulatory Authority (the "Authority" or "TRA"), the voting panel assigned to this docket, at a regularly scheduled Authority Conference held on June 29, 2015, for consideration of the Weather Normalization Adjustment Audit Report ("Audit Report") of the Authority'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, 2014 through April 30, 2015. The Audit Report, which was filed on June 9, 2015, is attached hereto as Exhibit 1 and incorporated by reference in this Order.

The Audit Report contained two findings. The Company used incorrect actual heating degree days for three months in the period, which resulted in customers being over-billed by a total of \$5,279.56. The Staff recommended that the net over-recovery be included in the Company's next Actual Cost Adjustment ("ACA") filing with the Authority. CGC concurred with the findings and recommendations. Except for the findings noted, the Staff concluded

that it appears CGC is correctly implementing the mechanics of its WNA Rider in all material aspects.

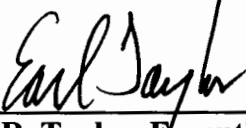
At the regularly scheduled Authority Conference held on June 29, 2015, the panel considered the Audit Report and voted unanimously to approve the findings and recommendations contained therein.

**IT IS THEREFORE ORDERED THAT:**

1. 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.
2. Chattanooga Gas Company shall include the over-collected amount in its next Actual Cost Adjustment filing with the TRA.

**Chairman Herbert H. Hilliard, Director Kenneth C. Hill, and Director Robin Bennett concur.**

**ATTEST:**

  
\_\_\_\_\_  
**Earl R. Taylor, Executive Director**

# **EXHIBIT 1**

**BEFORE THE TENNESSEE REGULATORY AUTHORITY**

**NASHVILLE, TENNESSEE**

**June 9, 2015**

**IN RE:** )  
 )  
**CHATTANOOGA GAS COMPANY** ) **Docket No. 15-00061**  
**WEATHER NORMALIZATION ADJ. (WNA) AUDIT** )

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**NOTICE OF FILING BY THE UTILITIES DIVISION OF THE TENNESSEE  
REGULATORY AUTHORITY**

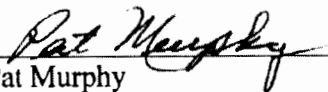
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Pursuant to Tenn. Code Ann. §§ 65-4-104, 65-4-111 and 65-3-108, the Utilities Division of the Tennessee Regulatory Authority (the "Utilities Division") hereby gives notice of its filing of the Chattanooga Gas Company WNA Audit Report in this docket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

1. The present docket was opened by the Authority 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, 2014 through April 30, 2015, and the Staff completed its audit of same on June 1, 2015.
3. On June 1, 2015, the Utilities Division submitted its preliminary WNA audit findings to the Company via e-mail. The Company responded on June 1, 2015 and these responses have been incorporated into the final report. The Report is attached hereto as Exhibit A and is fully incorporated herein by this reference.

4. The Utilities Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the findings and recommendations contained therein.

Respectfully Submitted:

  
Pat Murphy  
Utilities Division  
Tennessee Regulatory Authority

**CERTIFICATE OF SERVICE**

I hereby certify that on this 9th day of June 2015, 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:

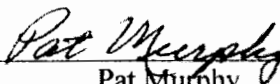
Earl Taylor  
Executive Director  
Andrew Jackson Building  
502 Deaderick Street  
Nashville, TN 37243

Herbert H. Hilliard  
Chairman  
Tennessee Regulatory Authority  
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Wayne M. Irvin  
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Consumer Advocate and Protection Division  
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Pat Murphy

# **EXHIBIT A**

## **COMPLIANCE AUDIT REPORT**

**OF**

**CHATTANOOGA GAS COMPANY**

**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**DOCKET NO. 15-00061**

**TENNESSEE REGULATORY AUTHORITY**

**UTILITIES DIVISION**

**June 2015**

**COMPLIANCE AUDIT**  
**CHATTANOOGA GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**Docket No. 15-00061**

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**COMPLIANCE AUDIT**  
**CHATTANOOGA GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**DOCKET NO. 15-00061**

**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 AGL Resources, Inc. The objective of this audit was to determine if the WNA adjustments were calculated correctly and applied to customers’ bills appropriately between November 2014 and April 2015 for CGC. As a result of the WNA Rider, the Company refunded a net \$137,709.95 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 these classes is detailed in Section V.

The Audit Staff’s (“Staff”) audit of the calculation of the WNA factors produced two findings that resulted in the **over-collection of a net \$5,279.56** in WNA revenue from customers during the audit period. See Section VI for a description of Staff’s findings. Except for these findings, Staff concludes that CGC is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Regulatory Authority (“TRA” or the “Authority”) and included in the Company’s tariff (See Attachment 1). Staff confirmed that the Findings reported in the last audit report (Docket No. 14-00064) were corrected in the current ACA filing with the Authority (See Audit Conclusions on page 8).

**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;<sup>1</sup> 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. Based on the results of this sample, Staff concludes that CGC is correctly billing its customers.

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<sup>1</sup> *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 of the Utilities Division conducted this audit.

### **III. BACKGROUND INFORMATION ON THE COMPANY**

Chattanooga Gas Company, with its headquarters at 6125 Preservation Drive, Chattanooga, Tennessee, is a wholly owned subsidiary of AGL Resources, Inc., which has its headquarters at Ten Peachtree Place, Atlanta, Georgia. CGC is a natural gas distributor, which provides service to the cities of Chattanooga and Cleveland and surrounding environs in Hamilton and Bradley counties, all located in Southeast Tennessee. The natural gas used to serve these areas is purchased by Sequent Energy Management ("Sequent" or "SEM")<sup>2</sup> from various suppliers and transported by Tennessee Gas Pipeline ("TGP"), East Tennessee Natural Gas ("ETNG") and Southern Natural Gas ("SNG") under tariffs approved by the Federal Energy Regulatory Commission ("FERC").

### **IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT RIDER**

In setting rates, the Tennessee Regulatory Authority 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 to be 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.<sup>3</sup>

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 Commission<sup>4</sup> ("TPSC") approved a three-year experimental Weather Normalization Adjustment Rider ("WNA

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<sup>2</sup> Sequent is a marketing affiliate of CGC and Asset Manager for CGC. See *In Re: Request of Chattanooga Gas Company for Approval of an RFP For an Asset Management Agreement and a Gas Purchase and Sales Agreement*, Docket No. 10-00049.

<sup>3</sup> Weather data is published monthly by the National Oceanic and Atmospheric Administration ("NOAA").

<sup>4</sup> 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 above named gas companies. See Tenn. Code Ann. § 65-4-104: see also Tenn. Code Ann. § 65-4-101 (a) (defining public utility).

Rider”) to the tariffs of Chattanooga Gas Company, Nashville Gas Company, a division of Piedmont Natural Gas Company, Inc. and United Cities Gas Company.<sup>5</sup> In periods of weather colder than normal, 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.<sup>6</sup>

As a result of the Company’s last rate case before this Authority, 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”).<sup>7</sup> 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 TRA Staff audits these WNA calculations annually.

## V. IMPACT OF WNA RIDER

The graph appearing at the end of this section compares the actual heating degree days to normal heating degree days for Chattanooga Gas during the 2014 – 2015 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 colder than normal, resulting in a net refund to CGC’s customers for the period.

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
October 2014	120	156	Warmer
November 2014	556	409	Colder
December 2014	586	667	Warmer
January 2015	774	757	Colder
February 2015	797	564	Colder
March 2015	319	399	Warmer
April 2015	96	173	Warmer
Total	3248	3125	Colder

<sup>5</sup> 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).

<sup>6</sup> 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.

<sup>7</sup> 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).

The net impact of the WNA Rider during the November 2014 through April 2015 WNA period was that R-4 and C-2 customers were **refunded** a net \$137,709.95. 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.<sup>8</sup>

Table 1

**Impact of WNA Rider on Residential & Commercial Revenues  
November 2014 – April 2015**

	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider on R&amp;C Revenues</u>
Multi-Family (R-4) and Medium Commercial Sales (C-2)	<u>\$(137,709.95)</u>	<u>\$56,069,614</u>	<u>-0.2%</u>

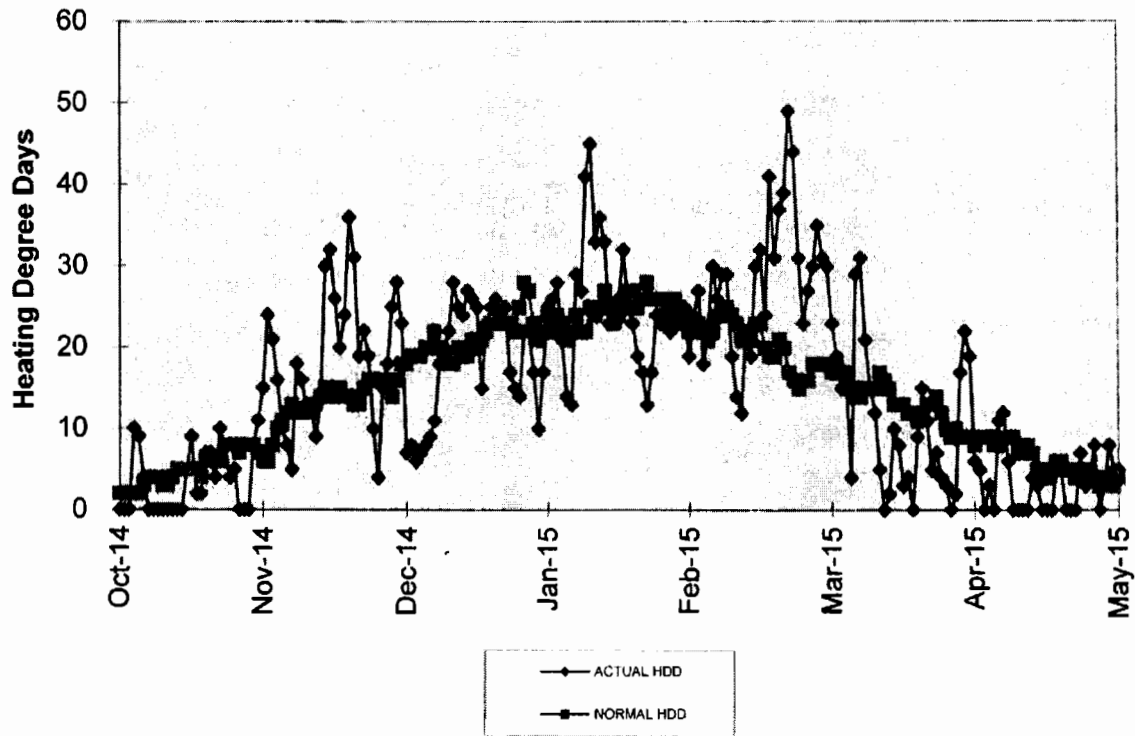
Table 2

**Total WNA Amount Surcharged (Refunded)  
2012 - 2015**

11/2012-4/2013	\$ 75,561
11/2013-4/2014	(228,754.67)
11/2014-4/2015	<u>(137,709.95)</u>
Total	<u>\$ (290,903.62)</u>

<sup>8</sup> 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.

**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 two WNA findings.

### **FINDING #1:**

#### **Exception**

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

#### **Discussion**

The Company used incorrect actual heating degree days (ADD) in November 2014 (Bill Cycles 1 - 12) and in January 2015 in its calculation of the WNA factors for Bill Cycles 3 - 20. 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").<sup>9</sup> According to the Company, the number of heating degree days observed and reported for October 16, 2014 was 2. The final NOAA report which is released after the fact, corrected the heating degree days to 9. On December 29, 2014, the number of heating degree days observed and reported was 16. The final NOAA report corrected the heating degree days to 17. These differences led to an understatement of the ADD for the ensuing cycles noted above. The result of these errors was an **over-collection of \$4,275.68** in WNA revenues from its customers.

#### **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 Authority.

#### **Company Response**

Chattanooga Gas Company Concur

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<sup>9</sup> NOAA is the official standard used by Staff to audit the WNA adjustments.

## **FINDING #2:**

### **Exception**

The Company used incorrect actual heating degree days (ADD) in its weather normalization adjustment factor calculations for December 2014 Bill Cycle 21 and January 2015 Bill Cycle1.

### **Discussion**

In addition to the one heating degree day error between Company reported ADD and the NOAA ADD for December 29, 2014, Staff discovered that the accumulated total heating degree days used in the calculation of the WNA factor for Bill Cycle 21 in December and Bill Cycle 1 in January was a difference of 4 heating degree days. Based on the reported degree days, the difference should have been only 1 degree day. This is an unexplained difference. The result of this error is an additional **over-collection of \$1,003.88** in WNA revenues from the Company's customers.

### **Recommendation**

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

### **Company Response**

Chattanooga Gas Company Concur

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on Staff's review of the WNA adjustments during the period November 2014 through April 2015 and the immaterial amount of the two WNA findings, Staff concludes that Chattanooga Gas Company is correctly implementing the mechanics of the Weather Normalization (WNA) Rider as approved by the Tennessee Regulatory Authority and included in the Company's tariff (see Attachment 1). The \$5,279.56 over-collection from customers is immaterial on a per customer basis.<sup>10</sup> **Staff, therefore, recommends that the Company record the over-collection in the ACA Account Balance in its next Actual Cost Adjustment (ACA) filing. CGC has agreed to do so.**

In the last WNA audit covering the 2013-2014 (Docket No. 14-00064), Staff reported that the WNA audit adjustment and several billing error adjustments discovered in the prior WNA audit (Docket No. 13-00091) were incorrectly recorded in the following ACA filing. Therefore, these incorrect postings were reported as Findings #2 and #3 in the last report. In the current audit, Staff reviewed the current ACA filing (Docket No. 14-00084) to ensure that the proper corrections were made and is satisfied that the Company has made the appropriate adjustments to the ACA Account.

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

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<sup>10</sup> Approximately \$0.05 per month, based on approximately 8,604 affected customers.



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 <sub>i</sub> | = | Weather Normalization Adjustment Factor for the i th Rate Schedule or classification expressed in cents per CCF/therm  |
| R <sub>i</sub>   | = | 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 <sub>i</sub> | = | 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 <sub>i</sub>  | = | 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.

ISSUED: OCTOBER 11, 2004  
ISSUED BY: STEVE LINDSEY, VP

EFFECTIVE: OCTOBER 1, 2004

*ATTACHMENT 1*

CHATTANOOGA GAS COMPANY  
GAS TARIFF  
TRA NO. 1

SEVENTH REVISED SHEET NO.49A

**WEATHER NORMALIZATION ADJUSTMENT  
(WNA) RIDER COMPONENTS**

RATE SCHEDULE	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
<u>(C-2) MEDIUM COMMERCIAL AND INDUSTRIAL GENERAL SERVICE</u> Winter (November - April)	.176772	2.5160	471.807

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ISSUED: OCTOBER 20, 2010:  
ISSUED BY: STEVE LINDSEY, VP

EFFECTIVE: JUNE 1, 2010