

**BEFORE THE TENNESSEE REGULATORY AUTHORITY**

**NASHVILLE, TENNESSEE**

**August 14, 2000**

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REGULATORY AUTH.

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EXECUTIVE SECRETARY

**IN RE:**

**CHATTANOOGA GAS COMPANY**

**WEATHER NORMALIZATION ADJ. (WNA) AUDIT )**

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) **Docket No. 00-00618**

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**NOTICE OF FILING BY THE ENERGY AND WATER 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 Energy and Water Division of the Tennessee Regulatory Authority (the "Energy and Water 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, 1999, through April 30, 2000, and the Staff completed its audit of same on July 14, 2000.
3. On July 17, 2000, the Energy and Water Division issued its preliminary WNA audit findings to the Company, and on August 1, 2000, the Company responded thereto.
4. The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report (the "Report") resulted therefrom. The Report is attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report

**POSTED**  
8/14/00

contains the audit findings of the Energy and Water Division, the Company's responses thereto and the recommendations of the Energy and Water Division in connection therewith.

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

Respectfully Submitted:

  
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Pat Murphy  
Energy and Water Division of the  
Tennessee Regulatory Authority

**CERTIFICATE OF SERVICE**

I hereby certify that on this 14th day of August, 2000, 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:

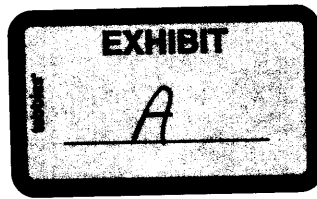
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COMPLIANCE AUDIT REPORT

OF

**CHATTANOOGA GAS COMPANY**

**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**DOCKET NO. 00-00618**

PREPARED BY

**TENNESSEE REGULATORY AUTHORITY**

ENERGY AND WATER DIVISION

AUGUST, 2000

**COMPLIANCE AUDIT**  
**CHATTANOOGA GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

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**COMPLIANCE AUDIT**  
**CHATTANOOGA GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**I. OBJECTIVE OF AUDIT**

In its September 26, 1991 Order in Docket 91-01712, the Tennessee Regulatory Authority (TRA), formerly the Tennessee Public Service Commission, approved a three year experimental Weather Normalization Adjustment (WNA) Rider to be applied to residential and commercial customers' bills during the months of October through May of each year (See Attachment 1). In its June 21, 1994 order, the TRA adopted the WNA Rider as a permanent rule, to be applied November through April of each year for Chattanooga Gas Company. The purpose of this audit is to determine if the WNA rider was calculated and applied to customers' bills correctly between November 1, 1999 and April 30, 2000.

**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 to National Oceanic and Atmospheric Administration (NOAA) actual heating degree days; 2) the Company's normal heating degree days to the normal heating degree days calculated in the last rate case; and 3) the Company's calculation of the WNA factor to Staff's calculation. The Staff also audited a sample of customers' bills during the WNA period to verify that the WNA factor had been correctly applied to the bills.

Pat Murphy and Butch Phillips of the Energy and Water Division conducted this audit.

**III. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT (WNA) 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.

However, normal weather rarely occurs. This has two impacts:

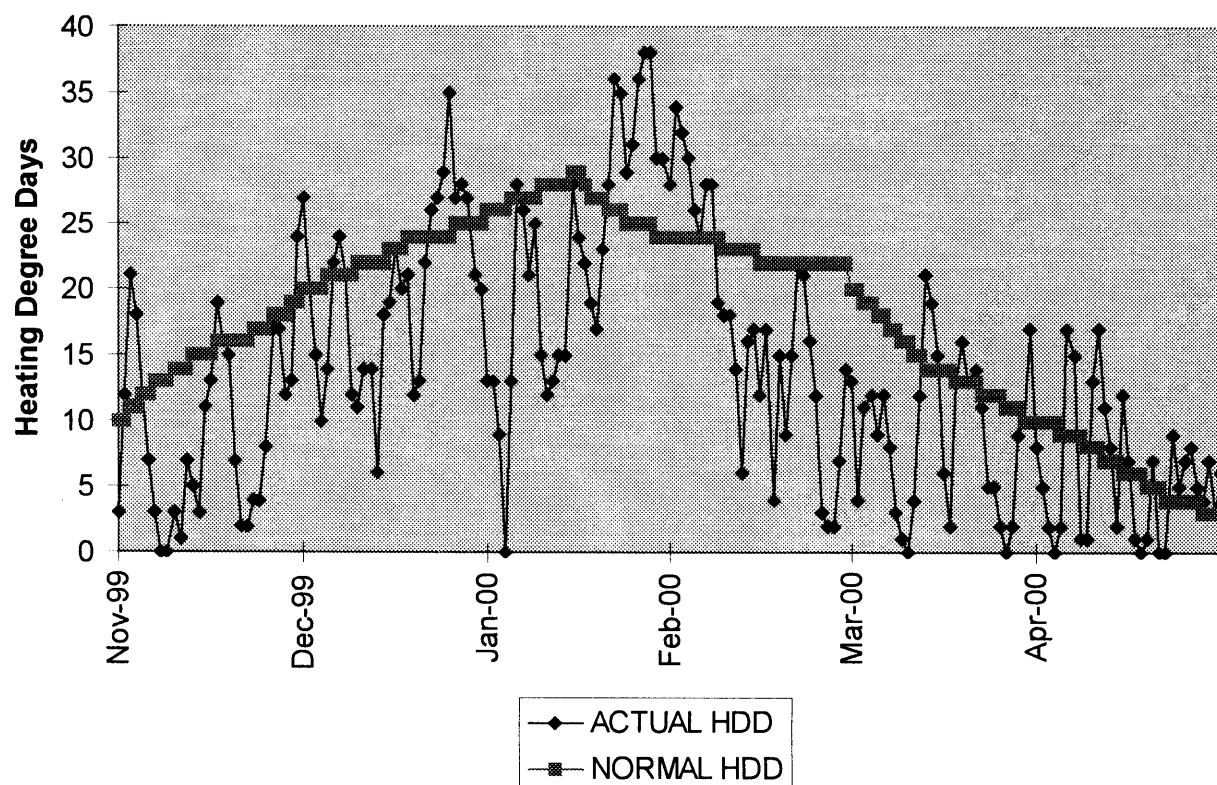
- 1) The customers' bills fluctuate dramatically due to changes in weather from month to month; and
- 2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings 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 underearn.

In recognition of this fact, the TRA approved an experimental WNA mechanism, which became permanent on June 21, 1994, to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. 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 following graph is a comparison of actual heating degree days to normal heating degree days for Chattanooga Gas during the 1999 - 2000 heating season.

# Chattanooga Gas Company

## Comparison of Actual to Normal Heating Degree Days





#### IV. IMPACT OF WNA RIDER

The net impact of the WNA Rider during the November 1, 1999 through April 30, 2000 period was that residential and commercial customers were **surcharged** an additional \$1,463,046 and \$1,315,218 respectively. This equates to increases in revenues from residential and commercial sales of 6.13% and 7.30% respectively. (See Table 1) This is an increase from the previous year when the residential and commercial customers were **surcharged** \$1,348,285 and \$1,179,083 respectively (See Table 2).

Table 1

##### **Impact of WNA Rider on Residential & Commercial Revenues November 1, 1999 - April 30, 2000**

	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider on Revenues</u>
Residential Sales	\$ 1,463,046	\$ 23,854,695	6.13%
Commercial Sales	<u>1,315,218</u>	<u>18,009,987</u>	7.30%
Total	<u>\$ 2,778,264</u>	<u>\$ 41,864,682</u>	6.64%

Table 2

##### **Amount Surcharged (Refunded) 1997 - 2000**

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/Refund</u>
11/97-4/98	\$ 189,761	\$ 214,149	\$ 403,910
11/98-4/99	1,348,285	1,179,083	2,527,368
11/99-4/00	<u>1,463,046</u>	<u>1,315,218</u>	<u>2,778,264</u>
Total	<u>\$ 3,001,092</u>	<u>\$ 2,708,450</u>	<u>\$ 5,709,542</u>

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

Chattanooga Gas Company (CGC), with its headquarters at 6125 Preservation Drive, Chattanooga, Tennessee, is a wholly owned subsidiary of Atlanta Gas & Light Company, which has its headquarters at 235 Peachtree Street, Atlanta, Georgia. CGC is a 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 either purchased from or transported by East Tennessee Natural Gas and Southern Natural Gas. The purchases are made in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission, while the transportation is for gas purchased on the spot market.

## VI. WNA FINDINGS

The Staff's audit results showed a net **under-collection** from CGC's ratepayers in the amount of **\$8,828**.

Month	Residential	Multi-Family	Commercial	Total
November 1999	\$ 3,786	\$ 0	\$ 3,525	\$ 7,311
December 1999	0	0	0	0
January 2000	0	0	0	0
February 2000	1,833	38	1,264	3,135
March 2000	-311	0	-1,307	-1,618
April 2000	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b><u>\$ 5,308</u></b>	<b><u>\$ 38</u></b>	<b><u>\$ 3,482</u></b>	<b><u>\$ 8,828</u></b>

This underrecovery resulted from findings, which are detailed below.

## **FINDING #1:**

### **Exception**

The Company used inaccurate actual heating degree days in the calculation of the WNA factor.

### **Discussion**

The audit indicates that on three (3) days out of 213 days of weather observations in the WNA period, the Company used inaccurate actual heating degree days in the calculation of the WNA factor.

A summary of the days involved follows:

Date	Daily Degree Days Used By Company	Daily Degree Days As Published by NOAA	Degree Day Difference
10/23/1999	16	15	-1
10/27/1999	7	6	-1
02/01/2000	33	32	-1

The Company states that the differences between the Company's actual degree days and the degree days published by NOAA is the result of rounding the degree day data to determine heating degree days.

The net result of the Company's use of this inaccurate information is that the customers were **undercharged \$11,009**.

### **Company Response**

The Company agrees.

## **FINDING #2:**

### **Exception**

The actual heating degree days for bill group (cycle) 1 in March 2000 do not agree with the actual heating degree days filed by the Company.

### **Discussion**

The Company supplies the TRA with its calculation of the WNA factors for each bill group (cycle) during the heating season. Part of that calculation is the total actual heating degree days in that cycle. For bill group 1 in March 2000, the Company reported 549 actual heating degree days in the calculation of the WNA factors. According to the daily actual heating degree days reported by the Company, the total actual heating degree days for that cycle should have been 556. This resulted in a 7 degree day difference.

After looking at actual customers' bills for this cycle, we determined that the Company did bill the customers based on factors that did not agree with the Company's own data. The Company states that apparently bill group (cycle) 1 accounts did not pick up the heating degree days for February 27, which was 7 degree days.

The net result of the 7 degree day difference for bill group (cycle) 1 was that the customers were **overcharged \$2,181**.

### **Company Response**

The Company agrees.

## **VII. RECOMMENDATIONS AND CONCLUSIONS**

The Staff concludes that, except for the above findings, the Company is correctly implementing the mechanics of the WNA Rider as specified by the TRA and included in the Company's tariff. (See Attachment 1) The **\$8,828 under-collection** is immaterial (less than \$0.01 per customer). Therefore, the Company has stated they propose to include this amount in a PGA filing that will include supplier refunds. We accept the Company's method of recovery.

## WEATHER NORMALIZATION ADJUSTMENT

(WNA) RIDERPROVISION FOR ADJUSTMENT

The base rate per CCF/therm (100,000 Btu) for gas service set forth in any rate schedules utilized by the Commission 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:

"Commission" means the Tennessee Public Service Commission.

"Relevant Rate Order" means the final order of the Commission in the most recent litigated rate case of the Company fixing the rates of the Company or the most recent final order of the Commission 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 Commission 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 Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues
- $NDD$  = normal billing cycle heating degree days utilized by the Commission 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 Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

FILING WITH COMMISSION

The Company will file as directed by the Commission (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>	<u>WEIGHTED BASE RATE (\$CCF)</u>	<u>HEAT SENSITIVE FACTOR - HSF (CCF)</u>	<u>BASE LOAD - BL (CCF)</u>
<u>(R-1) RESIDENTIAL GENERAL SERVICE</u>			
Winter (November - April)	.203346	.208678	17.224
<u>(R-4) MULTI-FAMILY HOUSING SERVICE</u>			
Winter (November - April)	.208600	.119141	25.044
<u>(C-1) COMMERCIAL AND INDUSTRIAL GENERAL SERVICE</u>			
Winter (November - April)	.257377	.987685	221.606