

**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION**

**NASHVILLE, TENNESSEE**

**October 6, 2023**

**IN RE:**

**AUDIT OF PIEDMONT NATURAL GAS COMPANY'S  
WEATHER NORMALIZATION ADJUSTMENT FOR  
THE PERIOD OCTOBER 1, 2022 THROUGH APRIL 30,  
2023**

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**DOCKET NO.  
23-00044**

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**ORDER ADOPTING WNA COMPLIANCE AUDIT REPORT OF  
TENNESSEE PUBLIC UTILITY COMMISSION'S UTILITIES DIVISION**

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This matter came before Vice Chairman David F. Jones, Commissioner Clay R. Good, Commissioner Kenneth C. Hill, Commissioner David Crowell, and Commissioner John Hie of the Tennessee Public Utility Commission (the "Commission" or "TPUC"), the voting panel assigned to this docket, during a regularly scheduled Commission Conference held on August 14, 2023 to consider the report of the Commission's Utilities Division (the "Staff") resulting from the Staff's audit of Piedmont Natural Gas Company's ("Piedmont" or the "Company") Weather Normalization Adjustment ("WNA") for the year ended April 30, 2023. The WNA Audit Report (the "Report") is attached hereto as Exhibit 1 and incorporated by this reference.

The Company's WNA data was received for the period October 1, 2022 through April 30, 2023. The Staff completed its audit of the Company's filings on June 30, 2023, and filed its Report on July 3, 2023. The objective of the audit was to verify that the Company's calculations of the WNA adjustments were materially correct and that the Company has appropriately applied them to customers' bills during the period.

The WNA Audit Report contained one immaterial finding. The Company used an incorrect amount of the actual daily heating degree days for two days in the period to calculate the WNA factors. The error affected a total of twenty-nine (29) bill cycles. This billing error resulted in a \$38,548 under-collection in WNA revenues from Piedmont's customers.<sup>1</sup> Due to the immateriality of the under-collection on a per customer basis, Staff recommended that the under-collection be added to Piedmont's Actual Cost Adjustment ("ACA") account balance in its next ACA audit filing with the Commission.

The Company agreed with the Staff's recommendation. Except for the finding noted in the Report, the Staff concluded that Piedmont appears to be correctly implementing the mechanics of its WNA Rider.<sup>2</sup>

During the regularly scheduled Commission Conference held on August 14, 2023, the voting panel considered the Staff's WNA Audit Report. The panel unanimously approved the July 3, 2023, WNA Audit Report as filed.

**IT IS THEREFORE ORDERED THAT:**

1. The Weather Normalization Adjustment Audit Report relative to Piedmont Natural Gas Company's costs for the year ended April 30, 2023, a copy of which is attached to this Order as Exhibit 1, is approved and adopted and the conclusions and recommendations contained therein are incorporated in this Order as if fully rewritten herein.

2. Piedmont Natural Gas Company shall include the under-collected amount in its next Actual Cost Adjustment filing with the Tennessee Public Utility Commission.

3. Any person who is aggrieved by the Commission's decision in this matter may file a Petition for Reconsideration with the Commission within fifteen (15) days from the date of this

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<sup>1</sup>*Notice of Filing by the Utilities Division of the Tennessee Public Utility Commission*, Exhibit A, pp. 6-7 (July 3, 2023).

<sup>2</sup> *Id.* at 7.

Order.

4. Any person who is aggrieved by the Commission's decision in this matter has the right to judicial review by filing a Petition for Review in the Tennessee Court of Appeals, Middle Section, within sixty (60) days from the date of this Order.

**FOR THE TENNESSEE PUBLIC UTILITY COMMISSION:**

**Vice Chairman David F. Jones,  
Commissioner Clay R. Good,  
Commissioner Kenneth C. Hill,  
Commissioner David Crowell, and  
Commissioner John Hie concurring.**

None dissenting.

**ATTEST:**

A handwritten signature in dark ink, appearing to read "Earl Taylor" followed by a stylized monogram "abh".

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**Earl R. Taylor, Executive Director**

# EXHIBIT 1

**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION**

**NASHVILLE, TENNESSEE**

**July 3, 2023**

**IN RE:** )  
 )  
**PIEDMONT NATURAL GAS** ) **Docket No. 23-00044**  
**WEATHER NORMALIZATION ADJ. (WNA) AUDIT** )

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

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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 Public Utility Commission (“TPUC” or “Commission”) hereby gives notice of its filing of the Piedmont Natural Gas WNA Audit 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 Piedmont Natural Gas (the “Company”).
2. The Company’s WNA filings were received for the period October 1, 2022, through April 30, 2023, and the Staff completed its audit of same on June 30, 2023.
3. On June 15, 2023, the Utilities Division submitted its preliminary WNA audit finding to the Company via e-mail. The Company responded on June 20, 2023, via e-mail and this response has been incorporated into the final report. The Report is attached to this Notice as Exhibit A and is fully incorporated herein by this reference.

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

Respectfully Submitted:

A handwritten signature in cursive script that reads "Emily Qingshe".

Emily Qingshe, Audit Manager  
Utilities Division of the  
Tennessee Public Utility Commission

### **CERTIFICATE OF SERVICE**

I hereby certify that on this 3rd day of July 2023 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:

Herbert H. Hilliard  
Chair  
Tennessee Public Utility Commission  
502 Deaderick Street  
Nashville, TN 37243

Ms. Pia Powers  
Director – Regulatory Affairs  
Piedmont Natural Gas Company  
P.O. Box 33068  
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Ms. Kally Couzens  
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P. O. Box 20207  
Nashville, TN 37202



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Emily Qingshe

# **EXHIBIT A**

**COMPLIANCE AUDIT REPORT**

**OF**

**PIEDMONT NATURAL GAS**

**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**DOCKET NO. 23-00044**

**TENNESSEE PUBLIC UTILITY COMMISSION**

**UTILITIES DIVISION**

**July 2023**



**COMPLIANCE AUDIT OF**  
**Piedmont Natural Gas**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**Docket No. 23-00044**

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**COMPLIANCE AUDIT**  
**PIEDMONT NATURAL GAS**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**Docket No. 23-00044**

**I. INTRODUCTION AND AUDIT OPINION**

The subject of this compliance audit is the Weather Normalization Adjustment (“WNA”) Rider of Piedmont Natural Gas (“PNG,” “Piedmont” or the “Company”). The objective of this audit was to determine if the WNA adjustments were calculated correctly and applied to customers' bills appropriately between October 1, 2022 and April 30, 2023. As a result of the WNA Rider, the Company surcharged a net \$10,581,970.20 and \$5,167,459.16 to the residential and commercial customers respectively, during the period. The impact of WNA revenues on the Company’s total revenues is detailed in Section V, Table 1.

The audit produced one finding. Except for the finding reported in Section VII, Audit Staff (“Staff”) concludes that the Company correctly implemented the mechanics of the WNA Rider as specified by the Tennessee Public Utility Commission (“Commission”)<sup>1</sup> and included in the Company’s tariff (Attachment 1).

**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 in the last rate case; and
- (3) The Company's calculation of the WNA factors to Staff's independent calculation of the WNA factors for each billing cycle during the WNA period.

Staff also selected customer bill samples to verify that the WNA factor had been correctly applied to customer bills. In addition, Staff examined each sample bill to determine whether the Base Rates and Purchased Gas Adjustments and other billing adjustments were billed correctly. As a result of the bill audit, Staff maintains PNG is correctly billing its customers.

Grace Marek and Emily Qingshe of the Utilities Division conducted this audit.

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<sup>1</sup> Effective April 5, 2017, the name of Tennessee Regulatory Authority was changed to the Tennessee Public Utility Commission and board members of the agency are now known as Commissioners rather than Directors.

### **III. BACKGROUND INFORMATION ON PIEDMONT NATURAL GAS**

Piedmont Natural Gas Company corporate headquarters are located at 4720 Piedmont Row Drive, Charlotte, North Carolina. Local offices are located at 83 Century Blvd., Nashville, Tennessee. PNG is a natural gas distributor that provides service to Nashville and several other communities in the Middle Tennessee area, as well as service areas in North and South Carolina. The natural gas used to serve Tennessee is purchased from producers and marketers and transported to Nashville's city gate through the interstate transmission facilities of Tennessee Gas Pipeline (TGP), Columbia Gas Transmission Corporation (CGTC), Texas Eastern Gas Pipeline (TETCO), and Midwestern Gas Transmission Company (MGTC).

### **IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

In setting rates, the Tennessee Public Utility Commission 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>2</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>3</sup> ("TPSC") approved a three-year experimental Weather Normalization Adjustment Rider ("WNA Rider") to the tariffs of Chattanooga Gas Company, Nashville Gas Company, a division of Piedmont Natural Gas Company, Inc. and United Cities Gas

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<sup>2</sup> Weather data is published monthly by the National Oceanic and Atmospheric Administration ("NOAA").

<sup>3</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).

Company.<sup>4</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>5</sup>

Piedmont Natural Gas was authorized to calculate WNA adjustments during the months of November through March of each year until its last rate case in Docket No. 11-00144 when the WNA period was extended to October through April effective March 1, 2012.<sup>6</sup> The TPUC Staff audits these calculations annually.

## V. IMPACT OF WNA RIDER

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 during the audit period, the weather (overall) was warmer than normal, resulting in a net surcharge from Piedmont to its customers for the period. See also the graph on page 5 which visually compares the actual heating degree days to normal heating degree days for Piedmont during the 2022-2023 heating season.

<i>Month</i>	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2022	12	14.9	Warmer
October 2022	154	167.7	Warmer
November 2022	406	451.1	Warmer
December 2022	671	694.8	Warmer
January 2023	556	795.3	Warmer
February 2023	391	612.8	Warmer
March 2023	384	438.1	Warmer
April 2023	158	182.2	Warmer
<b>Total</b>	2,732	3,356.9	Warmer

Since the overall weather during the October 1, 2022 through April 30, 2023 period was warmer than normal, the net impact of the WNA Rider was that residential and

<sup>4</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>5</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>6</sup> See *In Re: Petition of Piedmont Natural Gas Company, Inc. for an Adjustment to Its Rates, Approval of Changes to its Rate Design, Amortization of Certain Deferred Assets, Approval of New Depreciation rates, Approval of Revised Tariffs and Service Regulations, and Approval of a New Energy Efficiency Program and GTI Funding*, Docket No. 11-00144, *Order*, p. 14.

commercial customers were **surcharged** \$10,581,970.20 and \$5,167,459.16 respectively. This equates to an increase to total residential and commercial sales revenues of 6.87% and 5.67%, respectively (See Table 1). This is an increase from the WNA surcharges in the previous year when the residential and commercial customers were **surcharged** a net of \$6,536,683.95 and \$3,148,366.31 respectively. Table 2 below compares the WNA charges/ (refunds) over the last three (3) winter heating seasons

Table 1

**Impact of WNA Rider on Residential & Commercial Revenues  
October 1, 2022 - April 30, 2023**

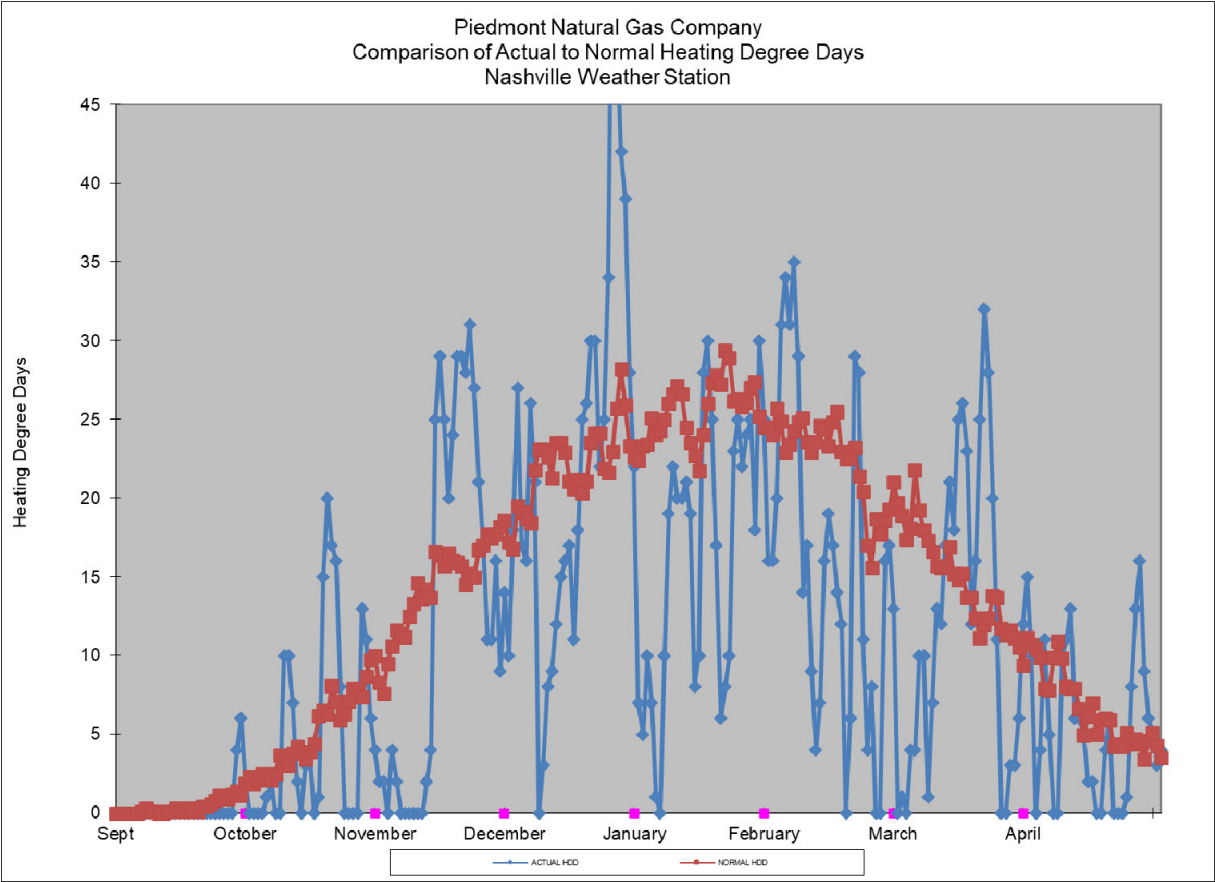
	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	Percentage Impact of WNA Rider on Revenue
Residential Sales	\$10,581,970	\$ 154,009,954	6.87%
Commercial Sales	<u>5,167,459</u>	<u>91,213,192</u>	5.67%
<b>Total</b>	<u>\$ 15,749,429</u>	<u>\$ 245,223,146</u>	6.42%

Table 2

**Amount Surcharged (Refunded)  
2020 - 2023**

	<u>Residential</u>	<u>Commercial</u>	Total <u>Surcharge/(Refund)</u>
10/22-4/23	\$10,581,970	\$5,167,459	\$15,749,429
10/21-4/22	6,536,684	3,148,366	9,685,050
10/20-4/21	<u>3,298,173</u>	<u>1,443,067</u>	<u>4,741,240</u>
<b>Total</b>	<u>\$20,416,827</u>	<u>\$9,758,892</u>	<u>\$30,175,719</u>

**VI. CHART COMPARING ACTUAL TO NORMAL HEATING DEGREE DAYS**



## VII. WNA FINDING

As noted in Section I of this report, Staff's audit resulted in one finding for the winter heating season of October 2022 through April 2023. This finding is described in detail below.

### FINDING #1:

#### Exception:

The Company used incorrect normal heating degree days on October 29, 2022 and November 15, 2022 in its weather normalization calculations.

#### Discussion:

The Company incorrectly used normal heating degree days for two days in the period, which resulted in inaccurate WNA factors being billed over twenty-nine (29) billing cycles. The error affects Cycle 2 in November through Cycle 11 in December.

This error is due to the difference in normal heating degree days as authorized in the Company's most recent rate case, Docket No. 20-00086, and the daily heating degree days that the Company used in calculating its WNA factors.<sup>7</sup>

Date	Commission Approved Normal Degree Days	Company Normal Degree Days	Difference
10/29/2022	10.0	10.4	0.4
11/15/2022	16.5	14.5	(-2.0)
		TOTAL	(-1.6)

The result of this error was a total **net under-collection** of WNA revenues from customers of **\$38,548**.

#### Recommendation:

Since the dollar amount of this finding is immaterial on a per customer basis, Staff recommends including the under-collection in the Company's next Actual Cost Adjustment filing, rather than identifying and refunding to specific customers.

#### Company Response:

Piedmont has no objection to Staff's recommendation.

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<sup>7</sup> See Table for detail of the differences.

## VIII. WNA CONCLUSIONS AND RECOMMENDATIONS

Based on Staff's review of the WNA adjustments during the period October 1, 2022 through April 30, 2023, as stated in its Audit Opinion in Section I, Staff found one immaterial finding and concludes that PNG is correctly implementing the mechanics of the WNA Rider to its tariff. Based on its analysis, Staff recommends that the Company include the **\$38,548 under-collection** in the next Actual Cost Adjustment filing, with the Tennessee Public Utility Commission. Piedmont has agreed to do so.

In general, WNA Audit filings historically have been immaterial when spread over the customer base that are subject to the weather adjustments. There is no mechanism within the Weather Normalization Adjustment Rider to true up any over- or under-recoveries. Since identifying and rebilling individual customers would be cost prohibitive, Staff recommends in those cases that the finding amounts be charged or credited to the Company's Actual Cost Adjustment (ACA) Account, which covers essentially the same customer base. Staff then reviews subsequent ACA filings to verify that this has been done.

Staff checked Piedmont's last ACA filings in Docket No. 22-00085, covering the period July 2021 to June 2022. In this ACA filing, the Company incorporated adjustments of \$34,962 and \$68,294, aligning with the findings identified in WNA Docket No. 21-00083 and No. 22-00053, respectively. Therefore, the findings identified in the previous audits have been appropriately remedied.

**Staff, therefore, recommends that the Commission approve Staff's Audit Report, the finding, and conclusions therein.**

Staff appreciates and thanks the Company staff for cooperating during this audit process.



# **ATTACHMENT 1**

## **SERVICE SCHEDULE NO. 315**

### **Weather Normalization Adjustment**

### **(WNA) Rider**

#### **I. Provision for Adjustment**

The base rates per 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".

The Weather Normalization Adjustment will be applicable for bills rendered on and after October 1 and continuing through the final billing cycle in April of each year. C

#### **II. Definitions**

For the purposes 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 the 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.

#### **III. Computation of Weather Normalization Adjustment**

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

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

Where:

- $I =$  any particular rate schedule or billing classification within any 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 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.

#### IV. 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 a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.