

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

NASHVILLE, TENNESSEE

November 13, 2018

IN RE:

**AUDIT OF ATMOS ENERGY CORPORATION'S
WEATHER NORMALIZATION ADJUSTMENT FOR THE
PERIOD OCTOBER 1, 2017 TO APRIL 30, 2018**

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**DOCKET NO.
18-00077**

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

This matter came before Chair Robin Morrison, Commissioner John Hie, and Commissioner David F. Jones, of the Tennessee Public Utility Commission, 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 "Audit Staff" or "Staff") resulting from the Staff's audit of Atmos Energy Corporation's ("Atmos" or the "Company") Weather Normalization Adjustment ("WNA") for the period October 1, 2017 through April 30, 2018. The Audit Report, which was filed on September 6, 2018 is attached hereto as Exhibit 1 and incorporated by reference in this Order.

The Audit Report contained one finding. The Company used incorrect actual daily heating degree days for eighteen (18) days in the period to calculate the WNA factor. The result was that customers were over-billed a net total of \$12,283.05 in WNA revenues.¹ Audit Staff recommended that this over-collection be added to Atmos' Actual Cost Adjustment (ACA) balance in the next ACA audit. Atmos agreed with Staff's finding and recommendation.

¹ Audit Report, p. 1 (September 6, 2018).

The Staff concluded that, except for the reported finding, the Company is correctly implementing the mechanics of the WNA Rider as specified by the Commission and the WNA appears to be working properly and in accordance with the TPUC rules for Atmos.²

At the regularly scheduled Commission Conference held on September 21, 2018, the panel considered the Audit Report. Thereafter, the panel voted unanimously to approve the September 6, 2018, Staff Audit Report as filed, including 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. Atmos Energy Corporation shall include the over-collected amount in its next Actual Cost Adjustment filing with the Tennessee Public Utility Commission.

Chair Robin Morrison, Commissioner John Hie and Commissioner David F. Jones concur.

ATTEST:



Earl R. Taylor, Executive Director

² Audit Report, p. 1 (September 6, 2018).

EXHIBIT 1

EXHIBIT A

COMPLIANCE AUDIT REPORT

OF

ATMOS ENERGY CORPORATION

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

Docket No. 18-00077

TENNESSEE PUBLIC UTILITY COMISSION

UTILITIES DIVISION

September 2018

COMPLIANCE AUDIT
ATMOS ENERGY CORPORATION
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
DOCKET NO. 18-00077

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COMPLIANCE AUDIT
ATMOS ENERGY CORPORATION
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
DOCKET NO. 18-00077

I. INTRODUCTION AND AUDIT OPINION

The subject of this compliance audit is the Weather Normalization Adjustment ("WNA") Rider of Atmos Energy Corporation ("Atmos" or "Company"). The objective of this audit is to determine if the WNA adjustments were calculated correctly and applied to customers' bills appropriately between October 2017 and April 2018. As a result of the WNA Rider, the Company **surcharged a net \$183,995** to the residential customers and **surcharged a net \$178,165 to the commercial customers** during the period. The impact of WNA revenues on the Company's total revenues is detailed in Section V.

The Audit Staff's ("Staff") audit resulted in one (1) finding regarding the WNA, showing that the Company **over-collected \$12,283.05** from customers. See Section VI for a description of the Staff's finding. Except for the findings noted in this report, Staff concludes that Atmos is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Public Utility Commission ("TPUC" or the "Commission") and included in the Company's tariff (See 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 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 factors to Staff's calculations.

The Staff also selected a sample of customer bills to verify that the WNA factor had been correctly applied to the bills. The Staff also examined each sample bill to determine whether the Base Rates and Purchased Gas Adjustments were billed correctly. Staff found no discrepancies.

The Utilities Division of TPUC is responsible for compliance audits of the regulated gas companies. Daniel Ray of the Utilities Division conducted this audit.

III. BACKGROUND INFORMATION ON THE COMPANY

Atmos, with its principal office at 810 Crescent Centre Drive, Franklin, Tennessee, is a wholly owned subsidiary of its parent company Atmos Energy Corporation, located in Dallas, Texas. Atmos Energy Corporation is a multi-state gas distributor, providing service to multiple communities in Tennessee. The gas to serve these areas is obtained from Atmos Energy Marketing ("AEM")^{1 2} and other suppliers, and delivered by four natural gas pipelines in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission ("FERC"). The four interstate pipelines are East Tennessee Natural Gas ("ETNG"), Texas Eastern Transmission Corporation ("TETC"), Columbia Gulf Transmission Corporation ("CGTC") and Texas Gas Transmission Corporation ("TGTC").

ETNG provides service to Atmos in Tennessee for the Columbia, Shelbyville, Lynchburg, Maryville-Alcoa, Morristown, Bristol, Elizabethton, Gray, Greeneville, Johnson City and Kingsport areas.

TETC and CGTC provide service to Atmos in Tennessee for Murfreesboro, Nolensville, Franklin and adjacent areas in Rutherford and Williamson Counties.

TGTC provides service to Atmos in Union City, Tennessee and adjacent areas in Obion County.

IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT 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.³

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.

¹ Atmos Energy Marketing is the wholly owned marketing arm of Atmos Energy Corporation.

² *In Re: Petition of Atmos Energy Corporation for Approval of Contract Regarding Gas Commodity Requirements and Management of Transportation/Storage.*, Docket No. 14-00009.

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

In recognition of this fact, on September 26, 1991, the Tennessee Public Service Commission⁴ ("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 Company.⁵ 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.⁶ As a result of the Company's rate case in Docket No. 12-00064 before the Tennessee Regulatory Authority⁷, Atmos's WNA Rider tariff was amended effective December 1, 2012 to include the months of October through April in the WNA adjustment period.⁸

Subsequently, Atmos petitioned the Commission for an Annual Rate Review Mechanism (ARM), which was approved in Atmos Rate Case Docket No. 14-00146.⁹ The Terms of the Stipulation and Settlement Agreement require the WNA Factors used to calculate the WNA adjustments to be updated annually in the Company's annual ARM filing. The Commission Staff continues to audit these Calculations as part of its annual WNA audit. The current Atmos WNA Rider tariff that governs this audit period was approved as part of the Company's 2017 ARM filing in Docket No. 17-00012. A copy of the tariff is attached to Staff's Report as Attachment 1.

⁴ 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).

⁵ 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).

⁶ 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.

⁷ Tennessee Regulatory Authority is the predecessor to the Tennessee Public Utility Commission.

⁸ *In re: Atmos Energy Corporation for a General Rate Increase*, Docket 12-00064, *Ordering Approving Settlement Agreement*, page 3 (December 4, 2012).

⁹ *In re: Atmos Energy General Rate Case and petition to adopt Annual Review Mechanism and ARM Tariff*, Docket 14-00146, *Stipulation and Settlement Agreement* (April 29, 2015).

V. IMPACT OF WEATHER NORMALIZATION ADJUSTMENT RIDER

The following tables summarize a comparison of actual heating degree days (“ADD”) to normal heating degree days (“NDD”) by month for Atmos Energy Corporation during the 2017– 2018 heating season, in each of its four service areas.¹⁰ During the past winter, overall, weather was 1.10% warmer in the Bristol area, 2.6% colder in the Knoxville area, 1.7% warmer in the Nashville area, and 4.3% colder in the Paducah area compared to normal weather.

Bristol:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2017	37	36	Colder
October 2017	229	282	Warmer
November 2017	513	551	Warmer
December 2017	813	802	Colder
January 2018	1021	894	Colder
February 2018	441	700	Warmer
March 2018	602	537	Colder
April 2018	375	274	Colder
Total	4031	4076	Warmer

Knoxville:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2017	15	17	Warmer
October 2017	173	196	Warmer
November 2017	430	462	Warmer

¹⁰ Atmos’ service territory is divided into four (4) service areas for WNA calculation purposes. Each area’s WNA factors are calculated separately based on the actual degree days calculated from daily weather observations as reported by Tri-Cities Regional TN/VA Airport (KTRI) for the Bristol area, McGhee Tyson Airport (KTYN) for Knoxville area, Nashville International Airport (KBNA) for Nashville area and Barkley Regional Airport (KPAH) for the Paducah area. The weather observations from these locations are reported to NOAA and the daily actual degree days are published by NOAA monthly in its *Local Climatological Data* report.

December 2017	746	721	Colder
January 2018	958	798	Colder
February 2018	411	606	Warmer
March 2018	505	437	Colder
April 2018	289	200	Colder
Total	<u>3527</u>	<u>3437</u>	Colder

Nashville:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2017	12	17	Warmer
October 2017	163	191	Warmer
November 2017	399	447	Warmer
December 2017	758	714	Colder
January 2018	886	817	Colder
February 2018	429	625	Warmer
March 2018	444	442	Colder
April 2018	<u>295</u>	<u>191</u>	Colder
Total	<u>3386</u>	<u>3444</u>	Warmer

Paducah:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2017	11	32	Warmer
October 2017	198	228	Warmer
November 2017	474	510	Warmer
December 2017	851	810	Colder
January 2018	1040	911	Colder
February 2018	581	695	Warmer
March 2018	545	510	Colder
April 2018	<u>386</u>	<u>221</u>	Colder
Total	<u>4086</u>	<u>3917</u>	Colder

Note: Charts showing a comparison of actual degree days compared to normal degree days can be found at the end of this Section (pages 7-10).

The net impact of the WNA Rider on the Company's revenues was that residential customers were **surcharged** \$183,995 and commercial customers were **surcharged** \$178,165. This equates

to a decrease in residential sales revenues of 91.76% and a decrease in commercial sales revenues of 92.22% (See Table 1). This surcharge is a decrease from the amount surcharged during the previous year, when residential and commercial customers were surcharged \$2,232,586 and \$2,290,753 respectively. (See Table 2 for a comparison of the last three heating seasons.)

Table 1

**Impact of WNA Rider on Residential & Commercial Revenues
October 2017- April 2018**

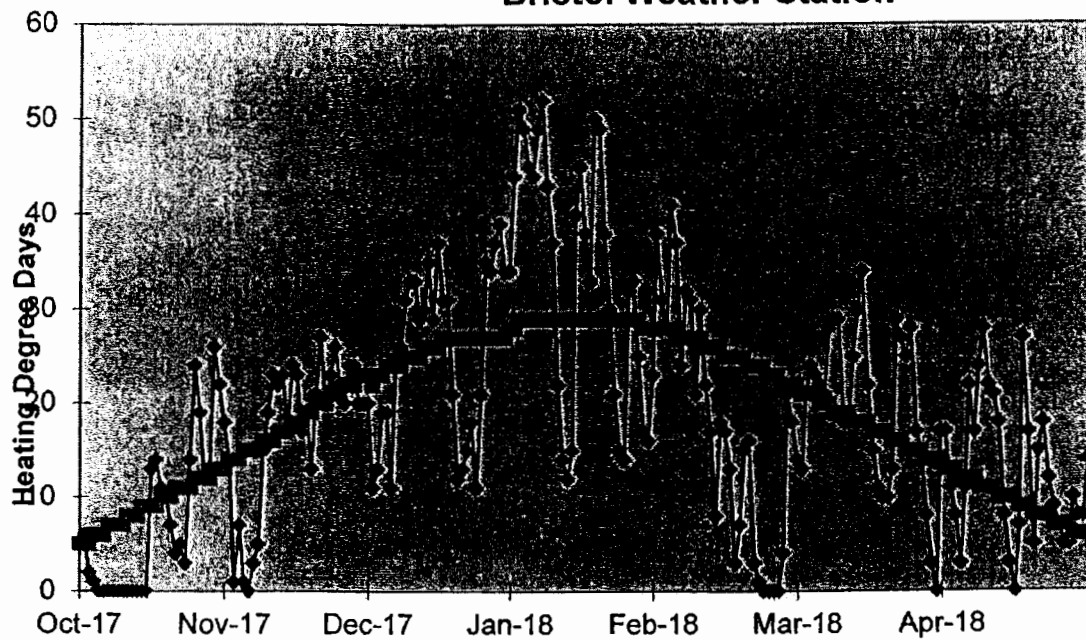
	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider On Revenues</u>
Residential Sales	\$183,995	62,691,080	.29%
Commercial Sales	<u>\$178,165</u>	<u>39,158,310</u>	<u>.45%</u>
Total	<u>\$362,160</u>	<u>101,849,391</u>	<u>.36%</u>

Table 2

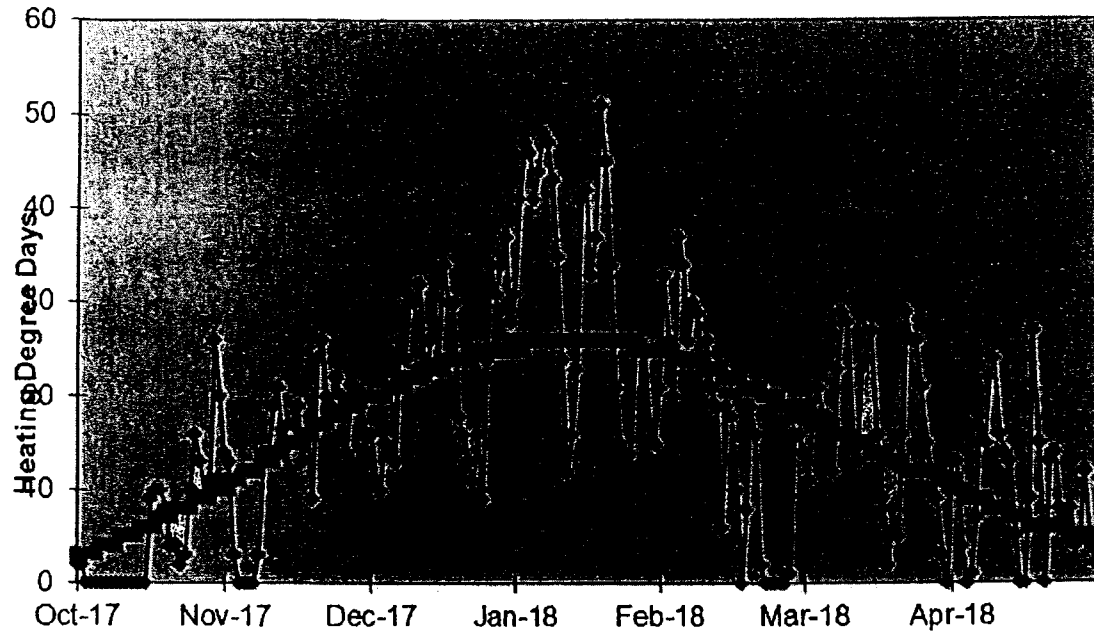
**Amount Surcharged (Refunded)
2015 - 2018**

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/(Refund)</u>
10/15-4/16	1,436,969	1,478,862	2,915,831
10/16-4/17	2,232,586	2,290,753	4,523,339
10/17-4/18	<u>183,995</u>	<u>178,165</u>	<u>362,160</u>
Total	<u>\$ 3,853,550</u>	<u>\$ 3,947,780</u>	<u>\$ 7,801,330</u>

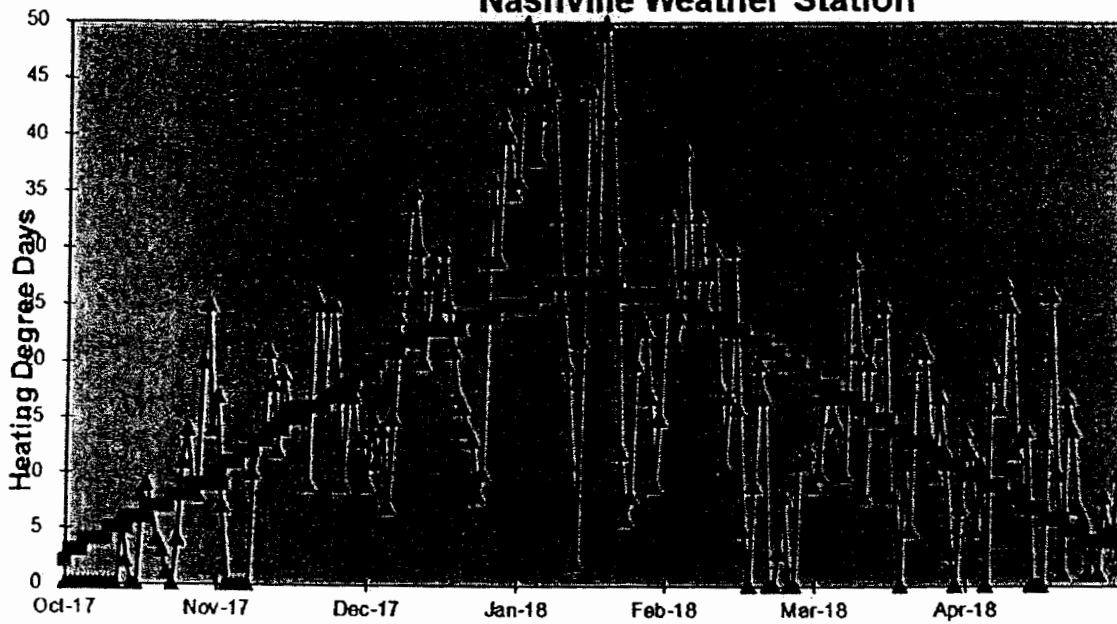
**Atmos Energy Corporation
Comparison of Actual to Normal Heating Degree Days
Bristol Weather Station**



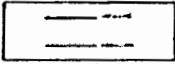
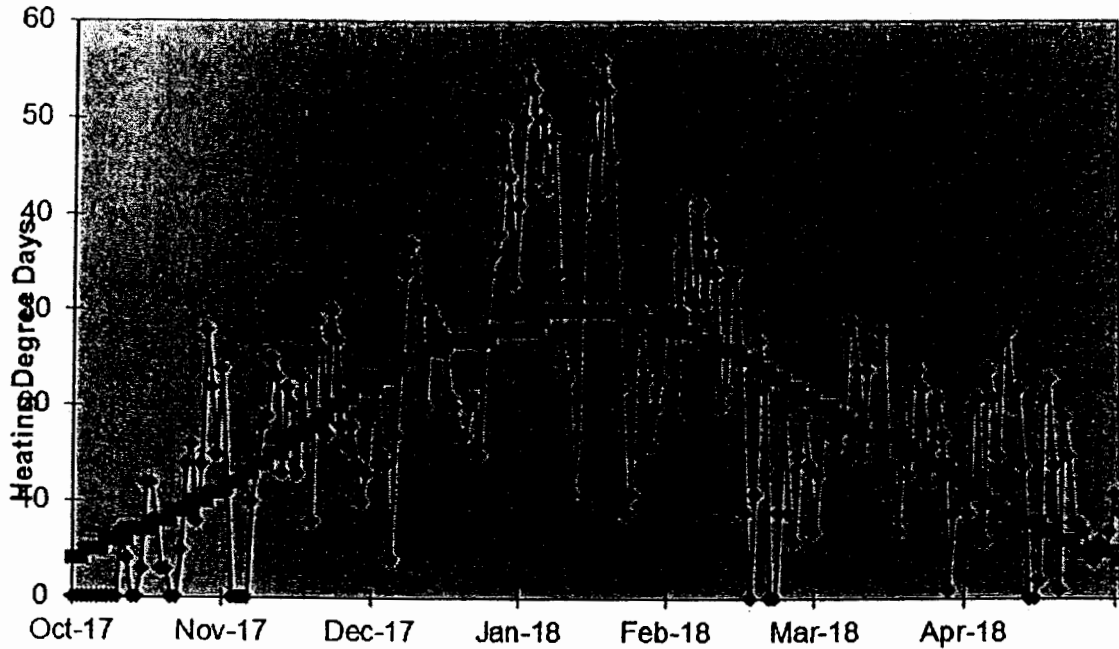
**Atmos Energy Corporation
Comparison of Actual to Normal Heating Degree Days
Knoxville Weather Station**



**Atmos Energy Corporation
Comparison of Actual to Normal Heating Degree Days
Nashville Weather Station**



Atmos Energy Corporation
Comparison of Actual to Normal Heating Degree Days
Paducah Weather Station



VI. WNA AUDIT FINDINGS

FINDING #1:

Exception

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

Discussion

The audit period consisted of 972 weather observations (243 days in the period times four weather stations). Audit results indicate that the Company used inaccurate actual daily heating degree days in the calculation of the WNA factor on two (2) days for the Bristol weather station, five (5) days for the Knoxville weather station, three (3) days for the Nashville weather station, and eight (8) days for the Paducah weather station for a total of eighteen (18) weather observations. These inaccuracies are due to differences in daily heating degree days published in NOAA's Local Climatological Data report¹¹ and the daily heating degree days that the Company used in calculating its WNA factors.¹² In order to timely bill its customers, the Company must obtain actual degree day information from its weather information source(s) on a real time basis. The WNA Rider and the Staff's audit of this Rider are based on the official NOAA publication. Therefore, Staff recognizes that discrepancies can be caused by the Company's weather information source through no fault of the Company.

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Bristol:</u>			
12/5/2017	11	12	1
12/23/2017	11	12	1
		Total	<u>2</u>

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Knoxville:</u>			
1/11/2018	16	13	-3
2/10/2018	19	18	-1
2/11/2018	6	7	1
3/20/2018	16	17	1
4/4/2018	7	8	1
		Total	<u>-1</u>

¹¹ This published report is the official data supplied by NOAA and is the standard that the Staff uses to audit the Weather Normalization Adjustment Rider.

¹² See Table below for detail of the differences.

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Nashville:</u>			
10/12/2017	6	7	1
11/25/2017	9	10	1
3/7/2018	26	27	1
		Total	<u>3</u>

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Paducah:</u>			
11/17/2017	17	16	-1
11/22/2017	30	31	1
11/28/2017	10	11	1
3/1/2018	13	14	1
3/27/2018	1	2	1
4/6/2018	15	16	1
4/10/2018	22	23	1
4/22/2018	8	9	1
		Total	<u>6</u>

Recommendation

These heating degree day differences resulted in a **net over-recovery of \$12,283.05** in WNA revenues.¹³ Since the dollar amount of this finding is immaterial on a per customer basis, Staff recommends that the Company include the over-recovery in its next Actual Cost Adjustment filing, as has been its custom.

Company Response

Atmos Energy acknowledges use of preliminary data for its monthly billing of WNA when actual NOAA data was not yet available. The Company agrees that \$12,283.05 net over-recovery is a reasonable assessment of the impact of these billing inaccuracies for the 2017-2018 heating season. We agree to include this correction in the next ACA filing as recommended.

¹³ The net over-recovery is comprised of \$2,463.07 over-recovery for Bristol, \$324.10 under-recovery for Knoxville, \$9,468.70 over-recovery for Nashville, and \$675.38 over-recovery for Paducah.

VII. CONCLUSIONS AND RECOMMENDATIONS

The Company has satisfactorily responded to Staff's Findings #1. As stated in Section I, except for the findings noted, Staff concludes that it appears that Atmos is correctly implementing the mechanics of its WNA Rider in all material respects. **Staff recommends that the Company include the net over-collection of \$12,283.05 in its next Actual Cost Adjustment filing with the Commission. Atmos has agreed to do so.**

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

ATTACHMENT 1

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDERProvisions for Adjustment

The base rate per therm/Ccf (100,000 Btu) for gas service set forth in any Rate Schedules utilized by the Tennessee Regulatory 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 shall apply to all residential, commercial, and small industrial bills based on meters read during the revenue months of October through April.

Definitions

For purpose of this Rider:

"Regulatory Authority" means the Tennessee Regulatory Authority

"Relevant Rate Order" means the final order of the Regulatory 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 Regulatory 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 therm/Ccf by the following formula:

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

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 therm/Ccf
- R_i = weighted average base rate of temperature sensitive sales for the i^{th} schedule or classification utilized by the Tennessee Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER (Continued)

- HSF_i = heat sensitive factor for the ith schedule or classification utilized by the Regulatory 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 Regulatory 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 ith schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

Filing with Regulatory Authority

The Company will file as directed by the Regulatory 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.

Heat Use/Base Use Factors

<u>Town</u>	<u>Residential/PA</u>		<u>Commercial / Small Industrial</u>	
	<u>Base use</u> <u>Ccf</u>	<u>Heat use</u> <u>Ccf/HDD</u>	<u>Base use</u> <u>Ccf</u>	<u>Heat use</u> <u>Ccf/HDD</u>
Union City	7.50	.138992	63.69	.512233
Columbia	12.11	.142452	125.17	.528293
Shelbyville				
Franklin				
Murfreesboro				
Maryville	9.38	.114140	110.75	.611731
Morristown				
Johnson City	8.30	.117971	110.83	.588197
Elizabethton				
Kingsport				
Greeneville				
Bristol				