

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION

NASHVILLE, TENNESSEE

September 16, 2019

IN RE:

AUDIT OF ATMOS ENERGY CORPORATION'S
WEATHER NORMALIZATION ADJUSTMENT FOR THE
PERIOD OCTOBER 1, 2018 TO APRIL 30, 2019

)
)
)
)
)

DOCKET NO.
19-00065

ORDER ADOPTING WNA AUDIT COMPLIANCE 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 John Hie, of the Tennessee Public Utility Commission, the voting panel assigned to this docket, during a regularly scheduled Commission Conference held on August 12, 2019, 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 audit of Atmos Energy Corporation’s (“Atmos” or the “Company”) Weather Normalization Adjustment (“WNA”) for the period of October 1, 2018 through April 30, 2019. The *Audit Report*, which was filed on July 30, 2019, is attached hereto as Exhibit 1 and incorporated by reference in this Order.

The *Audit Report* contained one finding. The Company used the incorrect actual daily heating degree days to calculate the WNA factor for twenty-eight (28) days in the period. The result was that customers were overbilled a net total of \$37,284.64 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 the Staff’s finding and recommendation. The

¹ *Audit Report*, p. 1 (July 30, 2019).

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 for Atmos and in accordance with the TPUC rules.²

During the regularly scheduled Commission Conference held on August 12, 2019, the panel considered the *Audit Report*. Thereafter, the panel voted unanimously to approve the July 30, 2019, *Staff Audit Report* as filed, including the findings and recommendations contained therein.

IT IS THEREFORE ORDERED THAT:

1. The *Compliance Audit Report of Atmos Energy Corporation's Weather Normalization Adjustment Rider*, 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 made with the Tennessee Public Utility Commission.

Chair Robin L. Morrison, Vice Chair Kenneth C. Hill, and Commissioner John Hie concur.

ATTEST:



Earl R. Taylor, Executive Director

² *Audit Report*, p. 1 (July 30, 2019).

EXHIBIT 1

EXHIBIT A

COMPLIANCE AUDIT REPORT

OF

ATMOS ENERGY CORPORATION

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

Docket No. 19-00065

TENNESSEE PUBLIC UTILITY COMISSION

UTILITIES DIVISION

July 2019

**COMPLIANCE AUDIT
ATMOS ENERGY CORPORATION
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
DOCKET NO. 19-00065**

TABLE OF CONTENTS

	<u>PAGE NO.</u>
I. INTRODUCTION AND AUDIT OPINION	1
II. SCOPE OF AUDIT	1
III. BACKGROUND INFORMATION ON THE COMPANY	2
IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT RIDER	2
V. IMPACT OF WEATHER NORMALIZATION ADJUSTMENT RIDER	4
GRAPHS COMPARING ACTUAL TO NORMAL HDD	7-10
VI. WNA AUDIT FINDINGS	11
VII. CONCLUSIONS AND RECOMMENDATIONS	13
ATTACHMENT 1 (WEATHER NORMALIZATION ADJUSTMENT RIDER TARIFF)	

COMPLIANCE AUDIT
ATMOS ENERGY CORPORATION
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
DOCKET NO. 19-00065

I. INTRODUCTION AND AUDIT OPINION

The subject of this compliance audit is the Weather Normalization Adjustment (“WNA”) Rider of Atmos Energy Corporation (“Atmos” or the “Company”). The objective of this audit is to determine if the WNA adjustments were calculated correctly and applied to customers’ bills appropriately between October 2018 and April 2019. As a result of the WNA Rider, the Company **surcharged a net \$400,577** to the residential customers and **surcharged a net \$487,475 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 calculations, showing that the Company **over-collected a net \$37,284.64** from customers. See Section VI for a description of the Staff’s finding. Except for the finding 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, 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 Annual Review Mechanism (ARM) filing;¹ and
- (3) the Company's calculation of the WNA factors to Staff's calculations.

Staff also selected a sample of customer bills to verify that the WNA factor had been correctly applied to the bills. Additionally, Staff 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 the TPUC is responsible for compliance audits of the regulated gas companies. Pat Murphy and Daniel Ray of the Utilities Division conducted this audit.

¹ *In Re: Atmos Energy Corporation's 2018 ARM Filing*, Docket No. 18-00067 (June 15, 2018).

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")^{2 3} 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 ("TETCO"), Columbia Gulf Transmission Corporation ("CGT") and Texas Gas Transmission Corporation ("TGT").

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

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

TGT 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 Commission⁴ 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.⁵

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

² Atmos Energy Marketing is the wholly owned marketing arm of Atmos Energy Corporation.

³ *In Re: Request of Atmos Energy Corporation for Approval of Contract Regarding Gas Commodity Requirements and Management of Transportation/Storage Contracts*, Docket No. 16-00008 (January 20, 2016).

⁴ Effective April 5, 2017, the name of Tennessee Regulatory Authority changed to the Tennessee Public Utility Commission and board members of the agency are now known as Commissioners rather than Directors.

⁵ Weather data is published monthly by NOAA.

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 Commission⁶ ("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.⁷ In periods of 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.⁸

As a result of the Company's prior rate case in Docket No. 12-00064 before this Commission, Atmos' WNA Rider tariff was amended effective December 1, 2012. Atmos calculates and bills the WNA to customers during the months of October through April of each year. The TPUC Staff audits these WNA calculations annually. Atmos' WNA Rider tariff that governs this audit period accompanies this Report as Attachment 1.

⁶ 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).

⁷ 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).

⁸ 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.

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 2018– 2019 heating season, in each of its four service areas.⁹ During the past winter, overall, weather was 7.5% colder in the Bristol area, 3.7% warmer in the Knoxville area, 5.3% warmer in the Nashville area, and 0.2% colder in the Paducah area compared to normal weather.

Bristol:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2018	0	36	Warmer
October 2018	244	282	Warmer
November 2018	623	551	Colder
December 2018	725	796	Warmer
January 2019	821	863	Warmer
February 2019	526	700	Warmer
March 2019	599	537	Colder
April 2019	192	268	Warmer
Total	3720	4033	7.5% Warmer

Knoxville:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2018	0	17	Warmer
October 2018	202	196	Colder
November 2018	585	462	Colder
December 2018	650	721	Warmer
January 2019	753	798	Warmer
February 2019	474	606	Warmer
March 2019	502	430	Colder
April 2019	129	191	Warmer
Total	3295	3421	3.7% Warmer

⁹ 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.

Nashville:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2018	2	17	Warmer
October 2018	190	181	Colder
November 2018	551	436	Colder
December 2018	613	710	Warmer
January 2019	766	786	Warmer
February 2019	443	615	Warmer
March 2019	493	442	Colder
April 2019	137	186	Warmer
Total	3195	3373	5.3% Warmer

Paducah:

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
September 2018	8	32	Warmer
October 2018	252	228	Colder
November 2018	673	510	Colder
December 2018	702	805	Warmer
January 2019	872	895	Warmer
February 2019	605	695	Warmer
March 2019	612	516	Colder
April 2019	187	221	Warmer
Total	3911	3902	0.2% Colder

Note: Graphs showing a visual 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** \$400,577 and commercial customers were **surcharged** \$487,475. This equates to an increase in residential sales revenues of 0.74% and an increase in commercial sales revenues of 1.46% (See Table 1). This surcharge is an increase from the amount surcharged during the previous year, when residential and commercial customers were surcharged \$183,995 and \$178,165 respectively. (See Table 2 for a comparison of the last three heating seasons.)

Table 1

**Impact of WNA Rider on Residential & Commercial Revenues
October 2018- April 2019**

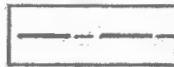
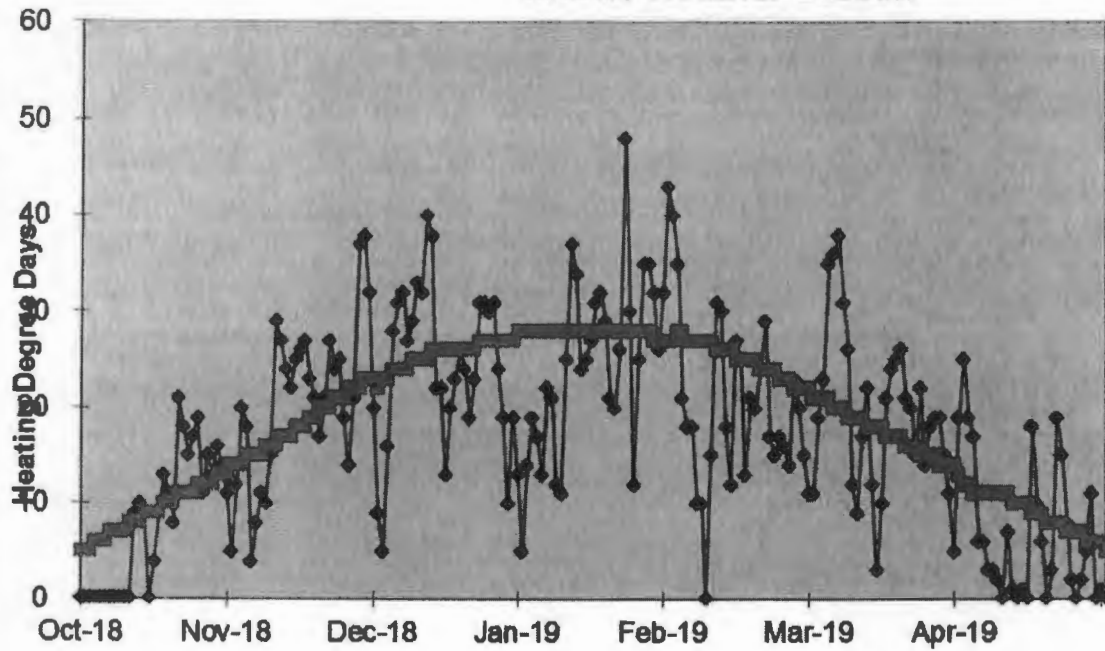
	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider On Revenues</u>
Residential Sales	\$400,577	\$54,009,936	0.74%
Commercial Sales	<u>487,475</u>	<u>33,493,669</u>	<u>1.46%</u>
Total	<u>\$888,052</u>	<u>\$87,503,605</u>	<u>1.01%</u>

Table 2

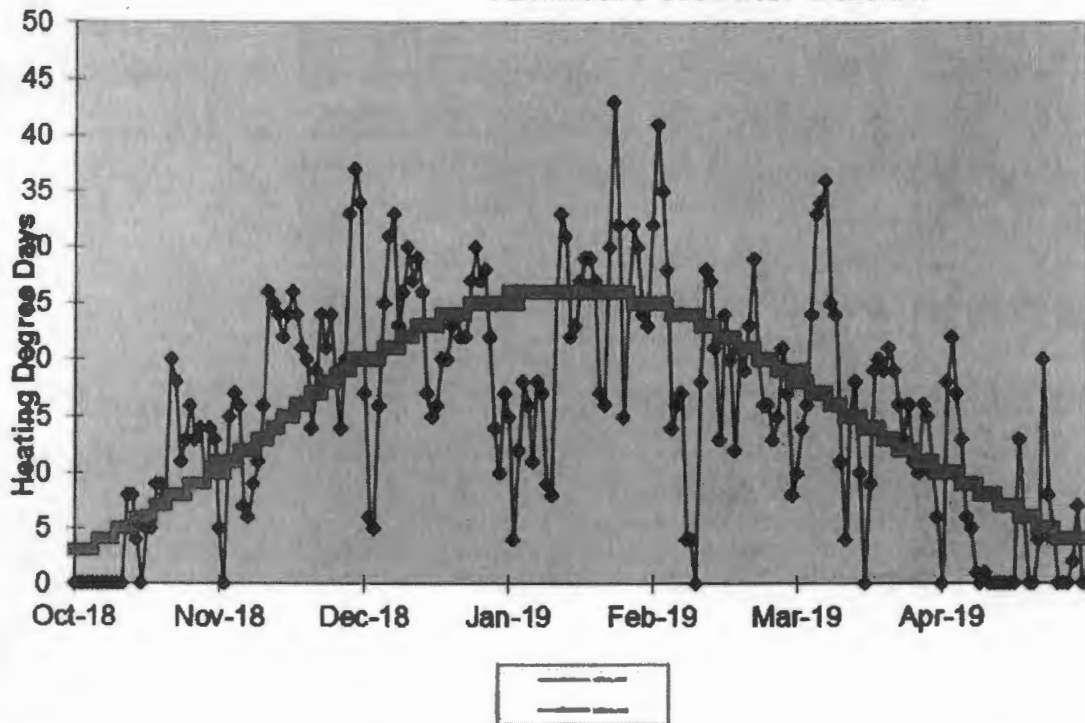
**Amount Surcharged (Refunded)
2016 - 2019**

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/(Refund)</u>
10/16-4/17	2,232,586	2,290,753	4,523,339
10/17-4/18	183,995	178,165	362,160
10/18-4/19	<u>400,577</u>	<u>487,475</u>	<u>888,052</u>
Total	<u>\$ 2,817,158</u>	<u>\$ 2,956,393</u>	<u>\$ 5,773,551</u>

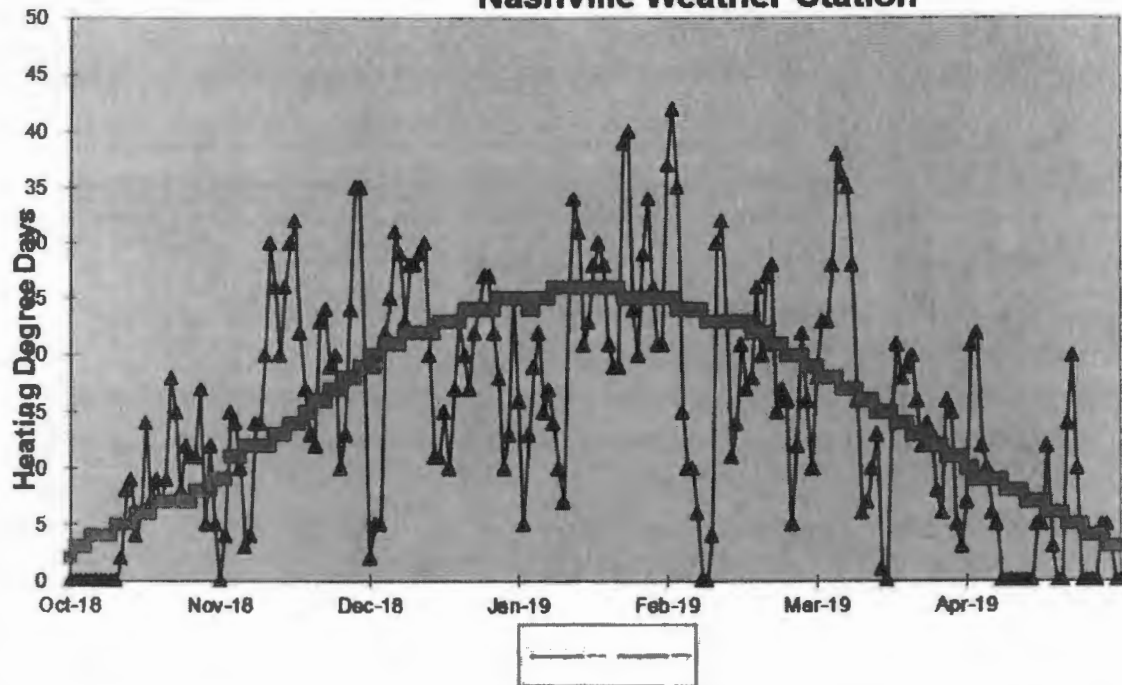
**Atmos Energy Corporation
Comparison of Actual to Normal Heating Degree Days
Bristol Weather Station**



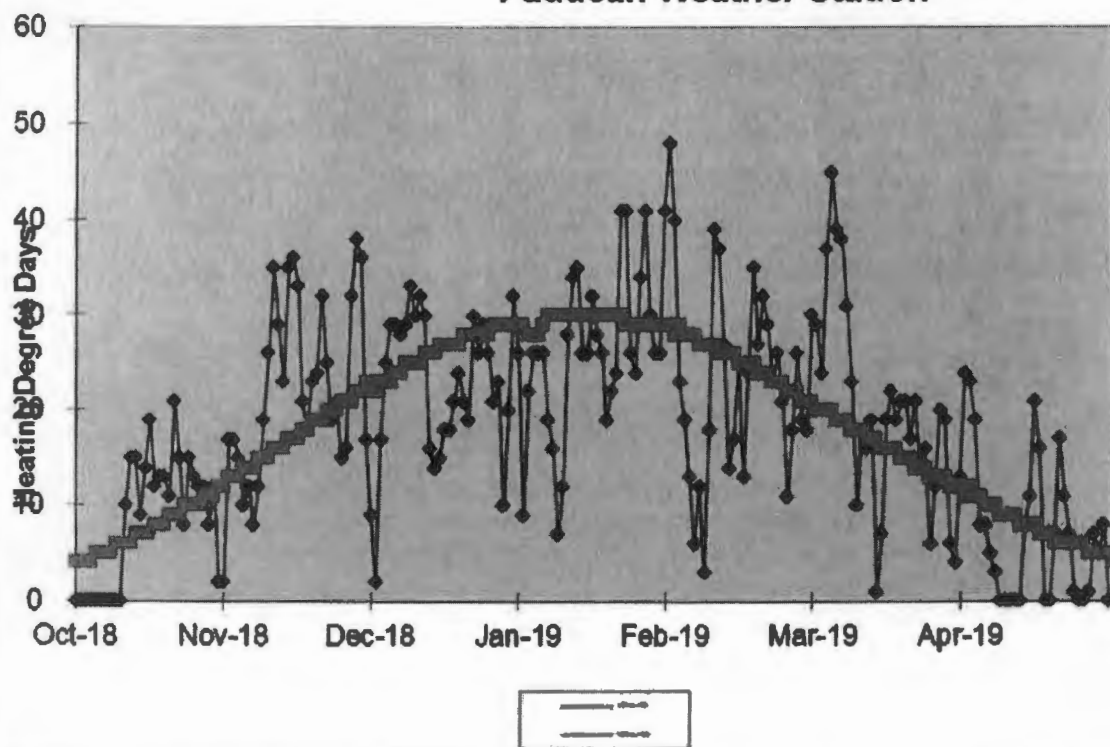
**Atmos Energy Corporation
Comparison of Actual to Normal Heating Degree Days
Knoxville Weather Station**



**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 ten (10) days for the Bristol weather station, three (3) days for the Knoxville weather station, eight (8) days for the Nashville weather station, and seven (7) days for the Paducah weather station for a total of twenty-eight (28) weather observations. These inaccuracies are due to differences in daily heating degree days published in NOAA's Local Climatological Data report¹⁰ and the daily heating degree days that the Company used in calculating its WNA factors.¹¹ 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>			
10/20/2018	8	9	-1
11/09/2018	15	16	-1
11/10/2018	29	30	-1
11/12/2018	24	23	1
1/19/2019	20	19	1
1/20/2019	26	29	-3
1/29/2019	32	33	-1
2/12/2019	12	13	-1
3/1/2019	11	12	-1
4/15/2019	18	19	-1
		Total	<u>-8</u>

¹⁰ 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.

¹¹ See Table below for detail of the differences.

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Knoxville:</u>			
11/12/2018	24	23	1
11/27/2018	33	34	-1
1/08/2019	8	9	-1
		Total	<u>-1</u>

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Nashville:</u>			
10/20/2018	9	10	-1
11/20/2018	23	24	-1
12/16/2018	10	13	-3
12/17/2018	17	18	-1
12/28/2018	13	14	-1
1/15/2019	30	31	-1
3/08/2019	16	18	-2
3/10/2019	7	5	2
		Total	<u>-8</u>

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<u>Paducah:</u>			
10/23/2018	8	9	-1
11/02/2018	17	16	1
11/09/2018	26	27	-1
11/16/2018	21	22	-1
11/30/2018	8	9	-1
3/2/2019	24	25	-1
4/12/2019	8	9	-1
		Total	<u>-5</u>

These heating degree day differences resulted in a **net over-recovery of \$37,284.64** in WNA revenues.¹²

Recommendation

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 available Actual Cost Adjustment filing, as has been this Commission's 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 \$37,284.64 net over-recovery is a reasonable assessment of the impact of these billing inaccuracies for the 2018-2019 heating season. We agree to include this correction in the next ACA filing as recommended.

VII. CONCLUSIONS AND RECOMMENDATIONS

The Company has satisfactorily responded to Staff's Finding #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 \$37,284.64 in its next Actual Cost Adjustment filing with the Commission, covering the period July 2018 through June 2019 if possible. Atmos has agreed to do so.**

Regarding the results of the last WNA Audit in Docket No. 18-00077 covering the 2017-2018 heating season, the net over-collection of \$12,283.05 was to be credited to the ACA Account in the next ACA filing (Docket No. 18-00090). The timing of the approval of Staff's report and the Company's filing of the ACA for the period July 1, 2017 – June 30, 2018, however, did not allow Atmos enough time to make this adjustment in Docket No. 18-00090. **Staff expects that the adjustment will be made to the next filing covering the period July 1, 2018 – June 30, 2019 and will confirm this fact in the next WNA report.**

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

¹² The net over-recovery is comprised of \$10,895.91 over-recovery for Bristol, \$1,603.17 over-recovery for Knoxville, \$24,448.71 over-recovery for Nashville, and \$336.85 over-recovery for Paducah.

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

Town	<u>Residential/PA</u>		<u>Commercial / Small Industrial</u>		
	Base use Ccf	Heat use Ccf/HDD	Base use Ccf	Heat use Ccf/HDD	
Union City	5.91	.136838	66.34	.487137	I, R
Columbia Shelbyville Franklin Murfreesboro	11.51	.142755	124.25	.527025	I, R
Maryville Morristown	8.63	.116968	106.81	.607598	I, R
Johnson City Elizabethton Kingsport Greeneville Bristol	8.96	.113755	119.25	.564837	I, R