

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE**

IN RE:)	
)	
ATMOS ENERGY CORPORATION)	
FOR APPROVAL OF ITS 2023 ANNUAL)	DOCKET NO. 23-00008
RATE REVIEW FILING PURSUANT)	
TO TENN. CODE ANN. § 65-5-103(d)(6))	
)	

**CONSUMER ADVOCATE’S RESPONSES TO
ATMOS’ FIRST SET OF DISCOVERY REQUESTS**

Jonathan Skrmetti, Attorney General and Reporter for the State of Tennessee, by and through the Consumer Advocate Division of the Office of the Tennessee Attorney General (“Consumer Advocate”), pursuant to Rules 26, 33, and 34 of the Tennessee Rules of Civil Procedure, Tennessee Public Utility Commission (“TPUC” or The “Commission”) Rule 1220-01-02-.11, and the Agreed Procedural Schedule entered by the Hearing Officer in this Docket, hereby submits its responses to the *First Set of Discovery Request of Atmos Energy Corporation* (“Atmos” or the “Company”) filed on April 6, 2023.

General Objections

All of the General Objections made herein are applicable to and are hereby incorporated into each and every response herein, and each response herein is made subject to and without waiver of these General Objections.

- A. The Consumer Advocate objects to each of the Company’s requests on the grounds that each is overly broad, unduly burdensome, and oppressive.
- B. The Consumer Advocate objects to the Company’s discovery requests to the extent that they purport to impose the obligations upon the Consumer Advocate beyond those contemplated by the Tennessee Rules of Civil Procedure, TPUC Rules, and Tennessee law.

- C. The Consumer Advocate objects to each of the Company's requests to the extent that each purports to call for information and/or documents prepared in anticipation of litigation, and/or information and/or documents protected by the attorney-client privilege, the work product doctrine, the common-interest doctrine, or any other applicable protection or privilege.
- D. The Consumer Advocate objects to each of the Company's requests to the extent that they are not applicable in the context of a proceeding before the TPUC, cite an incorrect legal conclusion, or mischaracterize or improperly summarize statements made by the Consumer Advocate's expert witnesses in their pre-filed direct testimonies.
- E. By providing the objections contained herein, the Consumer Advocate does not waive or intend to waive, but rather, intends to preserve, all objections with regard to competence, relevance, materiality, and admissibility of the discovery information or documents in any subsequent proceeding on the related subject matter. Moreover, the Consumer Advocate intends by this set of responses to preserve all objections to vagueness, ambiguity, and undue burden in connection with requests to produce documents, including those that are not in the Consumer Advocate's possession, custody, or control.
- F. The responses made herein are made to the best of Consumer Advocate's present knowledge after a reasonably diligent search for responsive information. The Consumer Advocate will supplement its responses in line with the requirements of the Tennessee Rules of Civil Procedure as well as TPUC Rules and expressly reserves its right to supplement or amend its answers, if and as appropriate, including with respect to objections that may arise at a later time than this filing.

Without waiving these General Objections as they apply to each individual request, the Consumer Advocate presents the following responses:

CONSUMER ADVOCATE'S RESPONSES

- 1-01. Please provide all formulas, excel spreadsheets, and workpapers supporting Mr. Novak's calculations resulting in the (\$416,107) change in revenue deficiency as a result of his recommended changes to allocation factor calculations, as set forth in page 10 of his pre-filed testimony.

RESPONSE:

Please see the <WHN Analysis of Atmos ARM in Docket 23-00008> spreadsheet for a copy of Mr. Novak's ARM Reconciliation Model in this Docket. As noted in Footnote 15 of Mr. Novak's pre-filed testimony regarding allocation factors, the revenue deficiency impact of \$416,017 is calculated by adjusting the inputs in this model and then noting the resulting change in the revenue deficiency or surplus.

Specifically relating to allocation factors, please refer to the "Allocation Factors" tab of this spreadsheet for the allocation factor rates used in Mr. Novak's model. Next refer to Cell F35 of the "Operating Results" tab of Mr. Novak's model to see the \$416,017 revenue deficiency change that was observed when the allocation factors were changed from those used in the Company's filing.

- 1-02. Admit or deny that the Company followed its Cost Allocation Manual ("CAM") in performing its cost allocation in connection with its Petition in this matter. If you deny this statement, specify in detail (i) the ways in which you contend the Company failed to follow its CAM and (ii) when you contend Atmos Energy first made that methodology change in its annual ARM filings.

RESPONSE:

The Consumer Advocate is unable to either admit or deny this statement. Mr. Novak has no knowledge of the Company's utilization of its CAM in performing its cost allocation with its Petition in this matter and has not stated any position on the CAM in his pre-filed direct testimony.

- 1-03. Admit or deny that, as stated in the Company's response to your email shown on page 1 of WHN-3, there have been no methodology changes in allocating Div 02 O&M since the

Company's last Tennessee general rate case. If you deny this statement, specify in detail (i) the methodology changes which you believe the Company has made and (ii) when you contend Atmos Energy first made that methodology change in its annual ARM filings.

RESPONSE:

The Consumer Advocate is unable to either admit or deny this statement. Mr. Novak has no knowledge of the Company's methodology changes in allocated Div. 02 O&M since the Company's last Tennessee general rate case and has not stated any position on any allocation factor methodology changes in his pre-filed direct testimony.

- 1-04. Admit or deny that none of the Commission's Orders in Docket No. 20-00047 required regulated public utilities to re-implement forfeited discounts, late payment fees, reconnection fees, or other miscellaneous service charges upon resuming disconnections for non-payment. If you deny this statement, please identify by date and page number and quote all portions of the Orders on which you rely in denying this statement.

RESPONSE:

Admit that there is no language in Commission Orders requiring reimplementations of forfeited discounts, late payment fees, reconnection fees, and other miscellaneous charges upon resuming disconnections for non-payment; denied to the extent that the language in the Orders requires reimplementations of compliance with the utilities' own tariff schedules in administering forfeited discounts, late payment fees, reconnection fees, or other miscellaneous service charges.

The Commission's first Order in Docket No. 20-00047 prohibited every public utility under its jurisdiction from "...disconnecting natural gas, electric, water, or wastewater service to

any customer for reason of nonpayment during the course of Governor Bill Lee’s March 12, 2020 declaration of public health emergency related to the COVID-19 virus.”¹ The Commission later stated that “The suspension of disconnections for non-payment, which has been in effect since March 2020, and applicable to all jurisdictional natural gas, electric, water, or wastewater service public utility regulated by the Tennessee Public Utility Commission is lifted effective August 29, 2020.”² After the Order lifting the suspensions, the Company was required to revert back to implementation of its own tariff schedules, some of which contain obligatory language in the charging of such forfeited fees,³ as it did prior to the TPUC Order requiring suspension of disconnections for lack of payment. The Commission’s language that the suspension of disconnections was “not a long-term solution” and that there would be a “date on which the utility would resume [disconnections]” clearly shows the Commission’s intent for regulated utilities to reimplement the disconnects and there attending fees after the emergency abated and subject to the tariffs previously dictating the administration of such fees.⁴

- 1-05. Admit or deny that Atmos Energy’s filing in this Docket accurately calculated the two-year average of actually collected forfeited discounts, miscellaneous service charges, and other items constituting Other Revenue. If you deny this statement, please state in detail what

¹ *Emergency Petition of the Consumer Advocate Unit of the Financial Division of the Office of the Tennessee Attorney General*, Order Requiring all Jurisdictional Utilities to Suspend Actions to Disconnect Service for Lack of Payment During the State of Public Health Emergency, at 11, TPUC Docket No. 20-00047 (March 31, 2020).

² *Emergency Petition of the Consumer Advocate Unit of the Financial Division of the Office of the Tennessee Attorney General*, Order Lifting Suspension of Disconnections of Service for Lack of Payment with Conditions, Effective on August 29, 2020, at 11, TPUC Docket No. 20-00047 (September 16, 2020).

³ Tennessee Regulatory Authority Gas Tariff of Atmos Energy Corporation, General Rules and Regulations, Sheet No. 60, 5.3 Activation Charge.

⁴ *Emergency Petition of the Consumer Advocate Unit of the Financial Division of the Office of the Tennessee Attorney General*, Order Lifting Suspension of Disconnections of Service for Lack of Payment with Conditions, Effective on August 29, 2020, 4, 10, TPUC Docket No. 20-00047 (September 16, 2020).

you contend the actual two-year average to be and provide all formulas, excel spreadsheets, and workpapers supporting your calculation.

RESPONSE:

The Consumer Advocate is unable to either admit or deny this statement. Mr. Novak has no knowledge if the Company accurately calculated the two-year average of actually collected forfeited discounts, miscellaneous service charges and other items constituting Other Revenue and has not stated any position on the accuracy of these amounts in his pre-filed direct testimony.

- 1-06. Please identify and quote from relevant portions of any Tariff Sheet, Commission Order, or Pre-Filed Testimony in other matters before the Commission on which Mr. Novak is relying in support of his claim, made on Page 12, A16 of his pre-filed testimony, that “The Company’s tariff provisions for Other Revenues attempt to assign specific costs to the customers that cause those costs.”

RESPONSE:

Mr. Novak is not relying on any Tariff Sheet, Commission Order or Pre-Filed Testimony regarding the Company’s tariff provisions for Other Revenues, since these documents rarely mention the details of the reasons for creating specific rates and charges. Instead, Mr. Novak is relying on his 40-plus years of experience in developing rate structures that include separate charges for Other Revenue in order to recover costs associated with specific customers that cause those costs.

- 1-07. Admit or deny that the Consumer Advocate did not object to the Company’s Other Revenue calculations in Docket No. 22-00010, despite the fact that the test period at issue

in that docket was also after the Commission lifted its moratorium on disconnections and despite the fact that the Company also did not charge forfeited discounts and miscellaneous service charges during that test period. If you deny this statement, please explain how and why you contend that the Company's practices related to Other Revenue differ between Docket No. 22-000010 and this docket.

RESPONSE:

The Consumer Advocate admits that it did not object in previous dockets but disagrees with the Company to the extent the Company is suggesting that the Consumer Advocate's action or inaction in a past docket bears on the propriety of raising the issue in this Docket. Discussions, strategies, decisions, and reasonings on specific issues to raise in each docket between Consumer Advocate attorneys and its experts is work product and privileged from production in this proceeding.

- 1-08. State the factual and legal basis for Mr. Novak's recommendation, as set forth in Pages 12-13, A17 of his pre-filed testimony, "that the Commission adopt the \$1,239,248 amount from the Company's last rate case as the appropriate level to include in the ARM reconciliation filing." Your answer should include, but not be limited to, (i) a citation to any authority on which Mr. Novak or the Consumer Advocate intends to rely in support of their request to apply figures from a prior test period with no connection to the actual revenue or expenses of the current test period; and (ii) an explanation concerning why other, more recent test periods could not be adopted.

RESPONSE:

The \$1,239,248 amount for Other Revenues adopted by the Commission in TPUC Docket No. 14-00146, represents the last time that there was a specific review of the value in this account. Since the Company suspended charging Other Revenues in 2020 without any later reinstatement, no recent test period value is available. Further, since the ARM mechanism trues-up any difference between the \$1,239,248 amount and what is actually recovered, adopting any other amount would be meaningless.

- 1-09. Please provide all formulas, excel spreadsheets, and workpapers supporting Mr. Novak's calculations resulting in a (\$1,200,536) change in revenue deficiency as a result of his proposed changes to Other Revenue, as set forth in page 13 of his pre-filed testimony.

RESPONSE:

Please see the <WHN Analysis of Atmos ARM in Docket 23-00008> spreadsheet for a copy of Mr. Novak's ARM Reconciliation Model in this Docket. As noted in Footnote 20 of Mr. Novak's pre-filed testimony regarding Other Revenues, the revenue deficiency impact of \$1,200,536 is calculated by adjusting the inputs in this model and then noting the resulting change in the revenue deficiency or surplus.

Specifically relating to Other Revenues, please refer to Cells FM26 and FM27 of the "Import" tab of this spreadsheet for the Other Revenues used in Mr. Novak's model. Next refer to Cell F37 of the "Operating Results" tab of Mr. Novak's model to see the \$1,200,536 revenue deficiency change that was observed when Other Revenues were changed from those used in the Company's filing.

- 1-10. Please provide the factual and legal basis for Mr. Novak's contention, in footnote 17 on page 11 of his pre-filed testimony, that full recovery of Atmos Energy's cost of service

would be an “unintended consequence” of the Commission’s COVID Order in TPUC Docket No. 20-00047.

RESPONSE:

The Commission’s third Order in TPUC Docket No. 20-00047 stated that “all issues related to the utilities’ potential recovery of costs related to the COVID-19 public health emergency may be considered in future, individual docketed proceedings.”⁵ As described in Mr. Novak’s testimony, the Company was able to avoid a “future, individual docketed” proceeding by recovering its full cost of service through the ARM Mechanism, which was an unintended consequence of the Commission’s COVID Order.

- 1-11. Please provide all formulas, excel spreadsheets, and workpapers supporting Mr. Novak’s (\$807) “miscellaneous adjustments” mentioned at Page 4, Lines 25-26 of his pre-filed testimony.

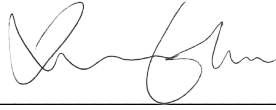
RESPONSE:

Please see the <WHN Analysis of Atmos ARM in Docket 23-00008> spreadsheet for a copy of Mr. Novak’s ARM Reconciliation Model in this Docket.

Specifically relating to Miscellaneous Adjustments, please refer to Cell J41 of the “Operating Results” tab of Mr. Novak’s model to see the \$806 revenue deficiency change that was observed from the amount calculated in the Company’s filing.

⁵ *Emergency Petition of the Consumer Advocate Unit of the Financial Division of the Office of the Tennessee Attorney General, Order Lifting Suspension of Disconnections of Service for Lack of Payment with Conditions, Effective on August 29, 2020, 11-12, TPUC Docket No. 20-00047 (September 16, 2020).*

RESPECTFULLY SUBMITTED,



VICTORIA B. GLOVER (BPR No. 037954)

Assistant Attorney General

KAREN H. STACHOWSKI (BPR No. 019607)

Senior Assistant Attorney General

Office of the Tennessee Attorney General

Consumer Advocate Division

P.O. Box 20207

Nashville, Tennessee 37202

Phone: (615) 360-4219

Fax: (615) 741-8151

Email: Victoria.Glover@ag.tn.gov

Email: Karen.Stachowski@ag.tn.gov

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Petition to Intervene was served via U.S. Mail, with a courtesy copy by electronic mail provided upon:

Erik Lybeck, Esq.
Sims Funk, PLC
3322 West End Avenue, #200
Nashville, TN 37203
Phone: (615) 425-7030
Email: Elybeck@simsfunk.com

This the 11th day of April, 2023.



VICTORIA B. GLOVER
Assistant Attorney General

WHN Consulting

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008

Schedule 1 - Revenue Deficiency Calculation - Twelve Months Ended September 30, 2022

SOURCE: Atmos Schedule 1

Item	Docket 23-00008		
	ATMOS	WHN	Difference
Rate Base	499,428,907	497,545,308	1,883,599
Operating Income	34,155,903	35,052,165	-896,262
Earned Rate of Return	6.84%	7.05%	-0.21%
Fair Rate of Return	7.58%	7.58%	0.00%
Required Operating Income	37,856,711	37,713,934	142,777
Operating Income Deficiency/(Excess)	3,700,808	2,661,769	1,039,039
Revenue Conversion Factor	1.357600	1.342900	0.014700
Revenue Deficiency/(Surplus)	5,024,218	3,574,490	1,449,727
Amortization of EDITL	-4,603,469	-4,603,469	0
Annual Reconciliation Revenue Requirement	-393,912	-569,040	175,128
Net Revenue Deficiency/(Surplus)	26,837	-1,598,019	1,624,855
Company Error in CA1-7 for Plant	5,030	0	5,030
Company Error on Common Equity in Lead/Lag	-3,163	0	-3,163
Company Error on Allocation Factors	-416,017	0	-416,017
Pro Forma Other Revenue	-1,200,536	0	-1,200,536
Division 02 O&M Expense Changes	-9,363	0	-9,363
Acknowledged Difference	-1,597,212	-1,598,019	806

Company only acknowledges this to be a \$20,924 error.

SOURCE: Atmos Schedule 2RB

Item	Docket 23-00008			Notes
	ATMOS	WHN	Difference	
Additions:				
Utility Plant in Service	811,685,075	811,146,870	538,205	
Contruction Work in Progress	11,767,197	11,714,042	53,155	
Working Capital / Deferred Rate Case	2,517,328	2,529,959	-12,631	Manually copy amount to avoid creating a circular reference
Materials & Supplies / Gas Inventory	8,627,217	8,627,170	47	
Intercompany Leased Property	5,985,565	5,985,565	0	
Cloud Projects	129,921	119,181	10,740	
Total Additions	840,712,303	840,122,787	589,516	
Deductions:				
Accumulated Depreciation	238,922,903	238,679,580	243,323	
Deferred Pension Regulated Asset	17,184,326	17,184,326	0	
Accumulated Deferred Income Taxes	75,558,974	77,096,381	-1,537,407	
Customer Advances for Construction	20,280	20,280	0	
Customer Deposits	1,069,120	1,069,120	0	
Accumulated Interest on Customer Deposits	18,913	18,913	0	
Capitalized Incentive Compensation	8,508,880	8,508,879	1	
Total Deductions	341,283,396	342,577,479	-1,294,083	
Rate Base	499,428,907	497,545,308	1,883,599	

SOURCE: Atmos Schedule 3IS

Item	Docket 23-00008			Comments
	ATMOS	WHN	Difference	
Operating Revenues:				
Gas Sales & Transportation Revenues	201,244,758	201,244,758	0	
Other Revenues	68,517	1,239,248	-1,170,731	
AFUDC	909,566	909,566	0	
Total Operating Revenue	202,222,841	203,393,572	-1,170,731	
Operation & Maintenance Expenses:				
Purchased Gas Expense	111,383,269	111,383,272	-3	
Operations & Maintenance - Labor	8,024,006	8,071,129	-47,123	
Operations & Maintenance - Non-Labor	13,582,643	13,546,736	35,907	
Total O&M Expenses	132,989,918	133,001,137	-11,219	
Other Expenses:				
Depreciation Expense	18,316,285	18,252,555	63,730	
Interest on Customer Deposits	38,488	38,488	0	
General Taxes	7,574,276	7,574,276	1	
State Excise Taxes	2,275,179	2,356,502	-81,323	
Federal Income Taxes	6,872,792	7,118,449	-245,657	
Total Other Expenses	35,077,020	35,340,270	-263,250	
Total Operating Expenses	168,066,938	168,341,407	-274,469	
Utility Operating Income	34,155,903	35,052,165	-896,262	

WHN Consulting

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008

Schedule 4 - Operation & Maintenance Expenses - Twelve Months Ended September 30, 2022

SOURCE: Atmos Schedule 4O&M

Item	Docket 23-00008			Comments
	ATMOS	WHN	Difference	
Labor:				
Labor	8,024,006	8,071,129	-47,123	
Total Labor	8,024,006	8,071,129	-47,123	
Non-Labor:				
Benefits	2,624,373	2,914,847	-290,474	
Employee Welfare	2,108,523	2,002,070	106,453	
Insurance	1,732,999	1,657,445	75,554	
Rent, Maint., & Utilities	1,259,517	1,258,983	534	
Vehicles & Equip	547,003	546,540	463	
Materials and Supplies	525,007	521,989	3,018	
Information Technologies	1,515,263	1,461,913	53,350	
Telecom	398,263	401,517	-3,254	
Marketing	336,183	335,370	813	
Directors & Shareholders & PR	237,737	222,913	14,824	
Dues & Donations	205,354	187,637	17,717	
Print & Postage	57,870	57,079	791	
Travel & Entertainment	272,043	270,649	1,394	
Training	52,297	50,477	1,820	
Outside Services	6,635,877	6,334,798	301,079	
Provision for Bad Debt	250,728	250,728	0	
Miscellaneous	-3,954,013	-3,704,186	-249,827	
Rate Case Expense	0	0	0	
Elimination of Intercompany Leased Property - Rent	0	0	0	
Inclusion of Barnsley Storage Operating Expense	440,870	440,864	6	
Disallowed Items	-1,660,466	-1,662,111	1,645	
Actual Allocable Pension Contribution	0	0	0	
Legal Invoices Adjustment	-2,785	-2,785	0	
Total Non-Labor	13,582,643	13,546,736	35,907	
Total O&M Expense	21,606,649	21,617,865	-11,216	
Interest Expense	7,391,548	7,363,671	27,877	
Total Expense	28,998,197	28,981,536	16,661	

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Schedule 5 - Taxes Other Than Income - Twelve Months Ended September 30, 2022****SOURCE:** Atmos Schedule 5Tax

Item	Docket 23-00008			Comments
	ATMOS	WHN	Difference	
Property Taxes	4,200,306	4,200,305	1	
State Gross Receipts Tax	717,361	717,361	0	
Payroll Taxes	721,854	721,854	0	
State Franchise Tax	1,301,996	1,301,996	0	
Other General Taxes	20,090	20,090	0	
TPUC Inspection Fee	612,669	612,669	0	
Total Taxes Other Than Income	7,574,276	7,574,276	1	

WHN Consulting

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008
Schedule 6 - Income Taxes - Twelve Months Ended September 30, 2022

SOURCE: Atmos Schedule 5Tax

Item	Docket 23-00008			Comments
	ATMOS	WHN	Difference	
Operating Revenues	202,222,841	203,393,572	-1,170,731	
Operating Expenses:				
Purchased Gas Expense	111,383,269	111,383,272	-3	
O&M Expenses	21,606,649	21,617,865	-11,216	
Depreciation Expense	18,316,285	18,252,555	63,730	
Interest on Customer Deposits	38,488	38,488	0	
General Taxes	7,574,276	7,574,276	1	
Total Operating Expenses	158,918,967	158,866,455	52,512	
NOI Before Excise and Income Taxes	43,303,874	44,527,116	-1,223,242	
AFUDC	909,566	909,566	0	
Interest Expense	7,391,548	7,363,671	27,877	
Pre-tax Book Income	35,002,760	36,253,880	-1,251,120	
Schedule M Adjustments	0	0	0	
Excise Taxable Income	35,002,760	36,253,880	-1,251,120	
Excise Tax Rate	6.50%	6.50%	0.00%	
Excise Tax Payable	2,275,179	2,356,502	-81,323	
Excise Tax - Deferred	0	0	0	
State Excise Tax Expense	2,275,179	2,356,502	-81,323	
Pre-tax Book Income	35,002,760	36,253,880	-1,251,120	
State Excise Tax Expense	2,275,179	2,356,502	-81,323	
Schedule M Adjustments	0	0	0	
FIT Taxable Income	32,727,581	33,897,378	-1,169,797	
FIT Rate	21.00%	21.00%	0.00%	
Federal Income Tax Payable	6,872,792	7,118,449	-245,657	
FIT - Deferred	0	0	0	
Federal Income Tax Expense	6,872,792	7,118,449	-245,657	
Total State & Federal Income Tax Expense	9,147,971	9,474,951	-326,980	

SOURCE: Atmos Schedule 7GU

Item	Docket 23-00008			Comments
	ATMOS	WHN	Difference	
Tax Rates:				
Forfeited Discount Ratio	0.000000	0.010971	-0.010971	
Uncollectible Ratio	0.002803	0.002803	0.000000	
State Excise Tax Rate	0.065000	0.065000	0.000000	
Federal Income Tax Rate	0.210000	0.210000	0.000000	
Operating Revenues	1.000000	1.000000	0.000000	
Forfeited Discount Adjustment	0.000000	0.010971	-0.010971	
Balance	1.000000	1.010971	-0.010971	
Uncollectible Ratio Adjustment	-0.002803	-0.002834	0.000031	
Balance	0.997197	1.008137	-0.010940	
State Excise Tax Adjustment	-0.064818	-0.065529	0.000711	
Balance	0.932379	0.942608	-0.010229	
Federal Income Tax Adjustment	-0.195800	-0.197948	0.002148	
Balance	0.736580	0.744660	-0.008081	
Revenue Conversion Factor	1.357600	1.342900	0.014700	

SOURCE: Atmos Schedule 8CC

Item	ATMOS	WHN	Difference	Comments
Capital Structure:				
Short-Term Debt	0.09%	0.09%	0.00%	
Long-Term Debt	37.71%	37.71%	0.00%	
Common Equity	62.20%	62.20%	0.00%	
Total	100.00%	100.00%	0.00%	
Capital Cost:				
Short-Term Debt	28.15%	28.15%	0.00%	
Long-Term Debt	3.83%	3.83%	0.00%	
Common Equity	9.80%	9.80%	0.00%	
Weighted Cost:				
Short-Term Debt	0.03%	0.03%	0.00%	
Long-Term Debt	1.45%	1.45%	0.00%	
Common Equity	6.10%	6.10%	0.00%	
Total	7.58%	7.58%	0.00%	
Interest Expense for Short-Term Debt:				
Rate Base	499,428,907	497,545,308	1,883,599	
Short-Term Weighted Debt Rate	0.03%	0.03%	0.00%	
Total Short-Term Debt Interest Expense	149,829	149,264	565	
Interest Expense for Long-Term Debt:				
Rate Base	499,428,907	497,545,308	1,883,599	
Long-Term Weighted Debt Rate	1.45%	1.45%	0.00%	
Total Long-Term Debt Interest Expense	7,241,719	7,214,407	27,312	
Total Interest Expense	7,391,548	7,363,671	27,877	
<div></div> <div>To O&M Expenses</div>				

WHN Consulting

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008

Rate Base Workpapers

WHN Consulting
ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008
Plant in Service Calculation - Plant Summary

Month	Total	Misc Deferred	Total
	Plant	Debit	
September-21	750,612,709	2,150,533	752,763,242
October-21	751,423,824	2,447,729	753,871,553
November-21	753,265,639	2,736,905	756,002,544
December-21	756,627,254	3,047,566	759,674,820
January-22	756,415,008	3,391,503	762,806,511
February-22	765,447,323	4,310,332	769,757,654
March-22	769,681,395	4,878,741	774,560,135
April-22	773,595,961	5,397,230	778,997,192
May-22	772,283,006	5,950,243	778,233,248
June-22	773,552,497	6,556,513	780,109,010
July-22	784,437,307	4,454,848	788,892,156
August-22	793,312,447	4,862,878	798,155,128
September-22	805,529,169	5,617,701	811,146,870
13-Month Average	769,952,118	4,294,640	774,246,168

Reconciliation	769,952,118	1,315,365	771,267,484
----------------	-------------	-----------	-------------

Thanks William,

Here is another item that I hope you can help with.

On Worksheet 7-10, the Company adds the September 2022 total deferral associated with "Rule 8209" of \$5,617,701 to Plant in Service.
However, in the Reconciliation Adjustment, the Company only adds the average net deferral (after deducting interest and RWIP interest) of \$1,315,365 to Plant in Service.

Why the difference? It seems that the Company would take the end-of-period and the average balance from the same line item.

Hal Novak, CPA
WHN CONSULTING

RE: Other Revenues in the ARM Filing

Matthews, William <William.Matthews@atmosenergy.com>
Re: 23-00008 (23-1622 ARM)
To: William Novak <halnovak@whnconsulting.com>
Cc: Yurlova, Maria <Maria.Yurlova@atmosenergy.com>; Victoria Glover <victoria.glover@ag.tn.gov>
Hal,

I know you would hit on a question I would already have the answer to at some point. Based upon the wording from the settlement agreement in 18-00112, pages 4-5 copied below, it states that for purposes of calculating average historic rate base as a part of the ARRR Interest deferrals and RWIP Interest Deferrals should be excluded.

I should have an answer on the O&M and Rate Base allocations from Shared Services to Tennessee back to you today also.

Thanks,
William

8. Atmos Energy will make a single annual ARM filing, which shall be made on or before February 1 (the "Annual Filing Due"). The annual ARM proceeding will serve two broad functions:

- (a) First, it will determine the Annual Reconciliation Revenue Requirement ("ARRR"), the calculation of which shall begin by comparing actual cost of service excluding gas cost from the Historic Cost Period just completed with actual gross margin from the same period.
- i. Actual cost of service for the purpose of the reconciliation shall be based upon average historic rate base and shall include synchronized (included) interest and income tax expense thereon. **ARRRR Interest rate base shall include the exposure of the regulated asset account balance associated with depreciation and, if taxable, income, interests, but shall exclude the**

- 4 -

Components of the Depreciation Expenditure with Interest Expenditure and a 50% General Deduction. The effect is to recognize cost for depreciation expense is an increase in accumulated depreciation which shall be recognized as a reduction to rate base in the ARRR as it is reflected in the Company's books and records. The actual cost of service for the purpose of the reconciliation shall not recognize an expense for portion of Depreciation expense and Ad Valorem expense deferred on a regulatory asset.

2021 Factors		100%		41.90%		4.79%		4.12%		1.30%		2.11%		5.08%		1.26%									
2022 Factors		100%		40.87%		4.74%		3.58%		1.25%		2.53%		4.78%		1.31%									
Month	91	Allocation	Tennessee	Division	91	Allocation	Tennessee	Division	91	Allocation	Tennessee	Greeneville	Factor	Amount	Asset	Allocation	Tennessee	AEAM	Allocation	Tennessee	ALGN	Allocation	Tennessee	Total	
September-21	734,575,928	100.00%	734,575,928	2,047,063	41.90%	807,739	135,300,137	4.79%	8,365,058	151,551,930	4.12%	6,261,635	9,387,669	1.30%	120,121	17,016,466	2.11%	388,827	34,982,872	5.08%	1,178,867	21,271,230	1.26%	267,845	752,812,709
October-21	738,236,788	100.00%	738,236,788	2,047,063	40.87%	838,539	135,300,137	4.74%	6,413,228	151,943,902	3.58%	5,439,595	9,287,669	1.25%	115,796	17,022,303	2.53%	430,864	34,982,229	4.78%	1,671,735	21,271,230	1.31%	276,481	751,423,824
November-21	738,071,723	100.00%	738,071,723	2,047,063	40.87%	838,539	135,300,137	4.74%	6,413,228	152,086,178	3.58%	5,444,475	9,287,669	1.25%	115,796	17,022,303	2.53%	430,864	34,982,229	4.78%	1,671,735	21,271,230	1.31%	276,481	753,366,639
December-21	741,520,418	100.00%	741,520,418	2,047,063	40.87%	838,539	135,862,133	4.74%	6,431,333	152,851,231	3.58%	5,464,914	14,440,570	1.25%	180,429	17,012,843	2.53%	492,426	34,982,164	4.78%	1,671,732	22,183,383	1.31%	291,465	756,827,254
January-22	744,117,721	100.00%	744,117,721	2,047,063	40.87%	838,539	135,863,456	4.74%	6,431,368	152,744,838	3.58%	5,468,265	13,516,270	1.25%	168,880	17,012,843	2.53%	492,426	34,982,074	4.78%	1,670,318	22,183,383	1.31%	291,465	758,416,508
February-22	750,146,826	100.00%	750,146,826	2,047,063	40.87%	838,539	135,863,148	4.74%	6,431,381	152,746,260	3.58%	5,468,317	13,516,082	1.25%	168,883	17,112,657	2.53%	492,948	34,982,164	4.78%	1,671,732	22,189,430	1.31%	291,677	766,447,323
March-22	754,378,128	100.00%	754,378,128	2,047,063	40.87%	838,539	135,863,183	4.74%	6,431,382	152,762,695	3.58%	5,468,904	13,709,849	1.25%	171,299	17,084,610	2.53%	491,735	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	769,881,395
April-22	758,266,456	100.00%	758,266,456	2,047,063	40.87%	838,539	135,863,183	4.74%	6,431,382	152,864,413	3.58%	5,473,682	13,825,098	1.25%	172,750	17,084,610	2.53%	491,735	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	773,589,181
May-22	759,678,488	100.00%	759,678,488	2,047,063	40.87%	838,539	141,685,238	4.74%	6,715,880	153,145,970	3.58%	5,482,626	13,827,034	1.25%	172,763	17,127,317	2.53%	493,321	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	772,283,006
June-22	757,933,957	100.00%	757,933,957	2,047,063	40.87%	838,539	141,975,975	4.74%	6,724,919	153,276,326	3.58%	5,487,384	13,827,669	1.25%	172,773	17,158,842	2.53%	493,537	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	773,582,467
July-22	768,793,937	100.00%	768,793,937	2,047,063	40.87%	838,539	141,862,978	4.74%	6,724,305	153,987,720	3.58%	5,512,700	13,827,669	1.25%	172,773	17,157,741	2.53%	493,585	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	784,437,387
August-22	777,286,543	100.00%	777,286,543	2,047,063	40.87%	838,539	141,998,422	4.74%	6,726,726	154,053,176	3.58%	5,573,125	14,127,899	1.25%	176,522	17,157,741	2.53%	493,585	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	784,437,387
September-22	769,452,195	100.00%	769,452,195	2,047,063	40.87%	838,539	142,065,113	4.74%	6,723,685	155,719,509	3.58%	5,555,729	14,147,907	1.25%	176,772	17,158,729	2.53%	493,610	34,982,164	4.78%	1,671,732	22,189,408	1.31%	291,676	785,526,159
12-Month Averages	734,421,833		734,421,833	2,047,063		838,173	137,864,897		6,539,698	154,988,687		5,498,495	12,813,266		168,429	17,077,894		493,658	34,979,937		1,679,869	21,859,735		287,873	789,894,118

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Plant in Service Calculation - Miscellaenous Deferred Debit**

Month	Tennessee Amount
September-21	2,150,533
October-21	2,447,729
November-21	2,736,905
December-21	3,047,566
January-22	3,391,503
February-22	4,310,332
March-22	4,878,741
April-22	5,397,230
May-22	5,950,243
June-22	6,556,513
July-22	4,454,848
August-22	4,882,678
September-22	5,617,701
13-Month Average	4,294,040

2021 Factors	100%			41.90%			4.73%			4.13%			Total
2022 Factors	100%			40.87%			4.74%			3.58%			
Month	Division 93	Allocation Factor	Tennessee Amount	Division 91	Allocation Factor	Tennessee Amount	Division 12	Allocation Factor	Tennessee Amount	Division 2	Allocation Factor	Tennessee Amount	Tennessee
September-21	9,048,502	100.00%	9,048,502	474,495	41.90%	198,830	3,809,753	4.73%	180,072	32,439,702	4.13%	1,340,303	10,767,707
October-21	11,561,996	100.00%	11,561,996	363,807	40.87%	148,671	4,022,472	4.74%	190,665	36,563,802	3.58%	1,308,984	13,210,316
November-21	15,014,147	100.00%	15,014,147	2,422,841	40.87%	990,102	4,272,697	4.74%	202,526	22,101,795	3.58%	791,244	16,998,019
December-21	16,684,960	100.00%	16,684,960	592,908	40.87%	242,294	4,516,009	4.74%	214,059	15,680,460	3.58%	561,360	17,702,673
January-22	18,380,098	100.00%	18,380,098	67,398	40.87%	27,543	4,975,702	4.74%	235,848	18,797,559	3.58%	672,953	19,316,441
February-22	16,144,535	100.00%	16,144,535	284,607	40.87%	116,306	5,304,340	4.74%	251,426	22,083,443	3.58%	790,587	17,302,853
March-22	16,285,100	100.00%	16,285,100	572,470	40.87%	233,942	5,721,677	4.74%	271,208	18,589,510	3.58%	665,504	17,455,754
April-22	16,932,719	100.00%	16,932,719	390,952	40.87%	159,764	6,083,038	4.74%	288,336	23,662,875	3.58%	847,131	18,227,949
May-22	18,870,909	100.00%	18,870,909	151,055	40.87%	61,729	780,276	4.74%	36,985	22,284,657	3.58%	797,791	19,767,414
June-22	20,138,747	100.00%	20,138,747	514,579	40.87%	210,284	865,181	4.74%	41,010	23,220,884	3.58%	831,308	21,221,348
July-22	22,009,164	100.00%	22,009,164	306,220	40.87%	125,138	944,116	4.74%	44,751	24,799,031	3.58%	887,805	23,066,859
August-22	19,763,696	100.00%	19,763,696	-320,076	40.87%	-130,800	1,027,188	4.74%	48,689	14,475,082	3.58%	518,208	20,199,792
September-22	11,084,898	100.00%	11,084,898	-51,046	40.87%	-20,860	1,273,561	4.74%	60,367	16,470,321	3.58%	589,637	11,714,042
13-Month Average	16,301,498		16,301,498	443,862		181,765	3,353,539		158,918	22,397,625		815,601	17,457,782

Inventory Calculation - Summary

Month	Gas Supply Inventory	Material Inventory	Total
September-21	7,862,456	654,598	8,517,054
October-21	10,271,178	288,294	10,559,471
November-21	8,887,254	288,294	9,175,547
December-21	9,497,224	288,020	9,785,244
January-22	5,372,423	263,052	5,635,476
February-22	2,846,484	263,052	3,109,536
March-22	1,363,897	269,469	1,633,366
April-22	2,724,622	281,143	3,005,764
May-22	5,941,765	288,160	6,229,925
June-22	8,055,945	291,171	8,347,116
July-22	11,111,160	289,547	11,400,707
August-22	14,766,910	337,848	15,104,759
September-22	18,387,362	1,261,879	19,649,240
13-Month Average	8,237,591	389,579	8,627,170

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Gas Inventory****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
September-21	7,862,456	100.00%	7,862,456
October-21	10,271,178	100.00%	10,271,178
November-21	8,887,254	100.00%	8,887,254
December-21	9,497,224	100.00%	9,497,224
January-22	5,372,423	100.00%	5,372,423
February-22	2,846,484	100.00%	2,846,484
March-22	1,363,897	100.00%	1,363,897
April-22	2,724,622	100.00%	2,724,622
May-22	5,941,765	100.00%	5,941,765
June-22	8,055,945	100.00%	8,055,945
July-22	11,111,160	100.00%	11,111,160
August-22	14,766,910	100.00%	14,766,910
September-22	18,387,362	100.00%	18,387,362
13-Month Average	8,237,591		8,237,591

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Materials & Supply Inventory**

2021 Factors		41.90%	
2022 Factors		40.87%	
	Division	Allocation	Tennessee
Month	91	Factor	Amount
September-21	1,562,160	41.90%	654,598
October-21	705,473	40.87%	288,294
November-21	705,473	40.87%	288,294
December-21	704,803	40.87%	288,020
January-22	643,705	40.87%	263,052
February-22	643,705	40.87%	263,052
March-22	659,407	40.87%	269,469
April-22	687,974	40.87%	281,143
May-22	705,146	40.87%	288,160
June-22	712,515	40.87%	291,171
July-22	708,540	40.87%	289,547
August-22	826,736	40.87%	337,848
September-22	3,087,897	40.87%	1,261,879
13-Month Average	950,272		389,579

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Elimination of Intercompany Leased Property****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
September-21	6,253,167	100.00%	6,253,167
October-21	6,231,664	100.00%	6,231,664
November-21	6,210,160	100.00%	6,210,160
December-21	6,188,657	100.00%	6,188,657
January-22	6,167,154	100.00%	6,167,154
February-22	6,145,651	100.00%	6,145,651
March-22	6,124,148	100.00%	6,124,148
April-22	6,102,645	100.00%	6,102,645
May-22	6,081,141	100.00%	6,081,141
June-22	6,057,214	100.00%	6,057,214
July-22	6,033,260	100.00%	6,033,260
August-22	6,009,111	100.00%	6,009,111
September-22	5,985,565	100.00%	5,985,565
13-Month Average	6,122,272		6,122,272

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Intangible Plant - Cloud Projects**

2021 Factors		4.13%	
2022 Factors		3.58%	
	Division	Allocation	Tennessee
Month	2	Factor	Amount
September-21	3,852,569	4.13%	159,176
October-21	3,698,791	3.58%	132,417
November-21	3,597,056	3.58%	128,775
December-21	3,452,629	3.58%	123,604
January-22	3,296,332	3.58%	118,009
February-22	3,140,469	3.58%	112,429
March-22	2,984,425	3.58%	106,842
April-22	2,828,381	3.58%	101,256
May-22	3,346,984	3.58%	119,822
June-22	3,250,784	3.58%	116,378
July-22	3,068,257	3.58%	109,844
August-22	3,509,675	3.58%	125,646
September-22	3,329,064	3.58%	119,181
13-Month Average	3,335,032		121,029

2021 Factors			41.90%			4.79%			4.12%			1.30%			2.11%			5.08%			1.26%			Total	
2022 Factors			40.87%			4.74%			3.58%			1.25%			2.53%			4.78%			1.31%				
Month	Division	Factor	Allocation	Tennessee	Amount	Division	Factor	Allocation	Tennessee	Amount	Division	Factor	Allocation	Tennessee	Amount	Asset	Allocation	Tennessee	Amount	Asset	Allocation	Tennessee	Amount	Tennessee	
September-21	226,493,528	100.00%	226,493,528	406,762	41.90%	170,647	64,794,537	4.73%	1,952,579	66,933,120	4.13%	2,765,047	4,655,028	1.26%	59,160	5,191,579	2.11%	108,909	17,683,381	5.08%	613,214	7,963,518	1.26%	96,974	236,565,493
October-21	230,597,125	100.00%	230,597,125	408,982	40.87%	187,132	65,597,814	4.74%	3,105,070	67,115,140	3.58%	2,402,722	4,988,568	1.25%	57,332	5,208,912	2.53%	131,785	18,152,700	4.78%	886,395	8,982,354	1.31%	106,193	237,436,755
November-21	231,813,739	100.00%	231,813,739	411,262	40.87%	188,639	66,221,091	4.74%	3,108,890	68,063,683	3.58%	2,465,320	4,912,586	1.25%	57,598	5,295,241	2.53%	132,683	18,402,020	4.78%	879,368	8,291,052	1.31%	107,793	238,763,338
December-21	233,044,140	100.00%	233,044,140	413,422	40.87%	188,946	66,865,032	4.74%	3,170,351	67,068,974	3.58%	2,491,069	4,643,478	1.25%	58,018	5,204,088	2.53%	133,940	18,611,339	4.78%	889,401	8,322,743	1.31%	109,362	239,975,227
January-22	234,258,095	100.00%	234,258,095	415,642	40.87%	189,854	67,399,987	4.74%	3,204,239	67,800,844	3.58%	2,430,452	4,673,313	1.25%	58,391	5,341,283	2.53%	135,134	18,820,524	4.78%	899,368	8,444,433	1.31%	110,951	241,283,563
February-22	234,864,887	100.00%	234,864,887	417,862	40.87%	190,761	68,314,939	4.74%	3,238,128	68,708,660	3.58%	2,459,748	4,703,153	1.25%	58,764	5,389,171	2.53%	136,346	19,029,869	4.78%	909,401	8,566,190	1.31%	112,541	241,990,686
March-22	235,994,878	100.00%	235,994,878	420,082	40.87%	191,688	69,029,892	4.74%	3,272,017	69,515,155	3.58%	2,488,464	4,733,408	1.25%	59,142	5,389,883	2.53%	136,339	19,239,195	4.78%	919,405	8,687,346	1.31%	114,150	243,186,082
April-22	237,255,397	100.00%	237,255,397	422,303	40.87%	172,575	69,744,445	4.74%	3,305,068	70,353,114	3.58%	2,517,102	4,763,668	1.25%	59,524	5,436,468	2.53%	137,542	19,448,531	4.78%	929,409	8,808,703	1.31%	115,750	244,488,205
May-22	232,867,846	100.00%	232,867,846	424,523	40.87%	173,463	70,505,775	4.74%	3,341,974	71,107,959	3.58%	2,545,605	4,794,511	1.25%	59,905	5,484,297	2.53%	138,753	19,657,867	4.78%	939,413	8,931,459	1.31%	117,350	245,184,388
June-22	239,989,214	100.00%	239,989,214	426,743	40.87%	174,350	71,276,593	4.74%	3,378,499	71,987,544	3.58%	2,574,469	4,824,972	1.25%	60,286	5,532,162	2.53%	139,964	19,869,338	4.78%	949,428	9,053,880	1.31%	118,958	237,387,267
July-22	234,190,318	100.00%	234,190,318	428,963	40.87%	175,237	72,046,764	4.74%	3,415,017	72,836,183	3.58%	2,607,321	4,855,432	1.25%	60,667	5,580,052	2.53%	141,175	20,081,208	4.78%	959,443	9,176,300	1.31%	120,567	241,670,004
August-22	234,686,983	100.00%	234,686,983	431,183	40.87%	176,204	72,816,695	4.74%	3,451,032	73,676,769	3.58%	2,644,360	4,886,165	1.25%	61,076	5,627,041	2.53%	142,387	20,292,078	4.78%	969,459	9,298,729	1.31%	122,175	242,226,263
September-22	231,021,064	100.00%	231,021,064	433,403	40.87%	177,111	73,594,084	4.74%	3,485,380	74,955,729	3.58%	2,684,381	4,921,300	1.25%	61,488	5,672,864	2.53%	143,617	20,504,550	4.78%	979,474	9,421,151	1.31%	123,784	242,775,589
13-Month Average			233,051,748	426,692		171,993	69,193,695		3,474,817	70,889,645		2,597,598	4,739,343		59,337	5,411,633		135,236	19,241,686		929,818	8,889,187		113,693	249,479,192

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Deferred Pension Regulatory Asset****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
September-21	-23,297,122	100.00%	-23,297,122
October-21	-22,787,722	100.00%	-22,787,722
November-21	-22,278,322	100.00%	-22,278,322
December-21	-21,768,922	100.00%	-21,768,922
January-22	-21,259,523	100.00%	-21,259,523
February-22	-20,750,123	100.00%	-20,750,123
March-22	-20,240,724	100.00%	-20,240,724
April-22	-19,731,324	100.00%	-19,731,324
May-22	-19,221,924	100.00%	-19,221,924
June-22	-18,712,523	100.00%	-18,712,523
July-22	-18,203,123	100.00%	-18,203,123
August-22	-17,693,724	100.00%	-17,693,724
September-22	-17,184,326	100.00%	-17,184,326
13-Month Average	-20,240,723		-20,240,723

Accumulated Deferred Income Taxes

2021 Factors			100%	41.90%			4.73%			4.13%			Total
2022 Factors			100%	40.87%			4.74%			3.58%			
Month	Division 93	Allocation Factor	Tennessee Amount	Division 91	Allocation Factor	Tennessee Amount	Division 12	Allocation Factor	Tennessee Amount	Division 2	Allocation Factor	Tennessee Amount	Tennessee
September-21	-80,307,951	100.00%	-80,307,951	-4,820,270	41.90%	-2,019,858	-14,654,092	4.73%	-692,640	550,204,761	4.13%	22,732,678	-60,287,771
October-21	-80,441,083	100.00%	-80,441,083	-4,820,270	40.87%	-1,969,819	-14,654,092	4.74%	-694,604	559,265,874	3.58%	20,021,718	-63,083,787
November-21	-80,574,215	100.00%	-80,574,215	-4,820,270	40.87%	-1,969,819	-14,654,092	4.74%	-694,604	570,003,952	3.58%	20,406,141	-62,832,496
December-21	-84,934,672	100.00%	-84,934,672	-4,145,089	40.87%	-1,693,904	-14,381,048	4.74%	-681,662	574,796,520	3.58%	20,577,715	-66,732,522
January-22	-85,067,803	100.00%	-85,067,803	-4,145,089	40.87%	-1,693,904	-14,381,048	4.74%	-681,662	557,554,824	3.58%	19,960,463	-67,482,906
February-22	-85,200,935	100.00%	-85,200,935	-4,145,089	40.87%	-1,693,904	-14,381,048	4.74%	-681,662	555,621,897	3.58%	19,891,264	-67,685,237
March-22	-87,685,016	100.00%	-87,685,016	-3,333,697	40.87%	-1,362,326	-14,278,566	4.74%	-676,804	539,608,094	3.58%	19,317,970	-70,406,176
April-22	-87,818,148	100.00%	-87,818,148	-3,333,697	40.87%	-1,362,326	-14,278,566	4.74%	-676,804	505,908,925	3.58%	18,111,540	-71,745,738
May-22	-87,951,279	100.00%	-87,951,279	-3,333,697	40.87%	-1,362,326	-14,278,566	4.74%	-676,804	497,370,765	3.58%	17,805,873	-72,184,536
June-22	-88,039,339	100.00%	-88,039,339	-3,924,818	40.87%	-1,603,889	-13,887,329	4.74%	-658,259	455,340,419	3.58%	16,301,187	-74,000,301
July-22	-88,172,471	100.00%	-88,172,471	-3,924,818	40.87%	-1,603,889	-13,887,329	4.74%	-658,259	469,982,257	3.58%	16,825,365	-73,609,255
August-22	-88,305,603	100.00%	-88,305,603	-3,924,818	40.87%	-1,603,889	-13,887,329	4.74%	-658,259	455,853,369	3.58%	16,319,551	-74,248,201
September-22	-91,974,711	100.00%	-91,974,711	-3,774,304	40.87%	-1,542,381	-13,552,864	4.74%	-642,406	476,623,376	3.58%	17,063,117	-77,096,381
13-Month Average	-85,882,556		-85,882,556	-4,034,302		-1,652,479	-14,242,767		-674,956	520,625,772		18,871,891	-69,338,100

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Customer Advances****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
September-21	-20,280	100.00%	-20,280
October-21	-20,280	100.00%	-20,280
November-21	-20,280	100.00%	-20,280
December-21	-20,280	100.00%	-20,280
January-22	-20,280	100.00%	-20,280
February-22	-20,280	100.00%	-20,280
March-22	-20,280	100.00%	-20,280
April-22	-20,280	100.00%	-20,280
May-22	-20,280	100.00%	-20,280
June-22	-20,280	100.00%	-20,280
July-22	-20,280	100.00%	-20,280
August-22	-20,280	100.00%	-20,280
September-22	-20,280	100.00%	-20,280
13-Month Average	-20,280		-20,280

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Customer Deposits****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
September-21	-1,059,185	100.00%	-1,059,185
October-21	-1,015,791	100.00%	-1,015,791
November-21	-1,000,121	100.00%	-1,000,121
December-21	-959,878	100.00%	-959,878
January-22	-942,080	100.00%	-942,080
February-22	-948,403	100.00%	-948,403
March-22	-997,271	100.00%	-997,271
April-22	-1,030,297	100.00%	-1,030,297
May-22	-1,053,492	100.00%	-1,053,492
June-22	-1,111,979	100.00%	-1,111,979
July-22	-1,159,360	100.00%	-1,159,360
August-22	-1,267,910	100.00%	-1,267,910
September-22	-1,352,786	100.00%	-1,352,786
13-Month Average	-1,069,120		-1,069,120

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Accumulated Interest on Customer Deposits****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
September-21	-12,658	100.00%	-12,658
October-21	-13,752	100.00%	-13,752
November-21	-14,431	100.00%	-14,431
December-21	-15,414	100.00%	-15,414
January-22	-16,858	100.00%	-16,858
February-22	-17,880	100.00%	-17,880
March-22	-19,429	100.00%	-19,429
April-22	-21,028	100.00%	-21,028
May-22	-22,004	100.00%	-22,004
June-22	-21,970	100.00%	-21,970
July-22	-22,977	100.00%	-22,977
August-22	-23,535	100.00%	-23,535
September-22	-23,938	100.00%	-23,938
13-Month Average	-18,913		-18,913

Capitalized Incentive Compensation

Date	Capitalized Amount	Depreciation Amount
Twelve Months Ended May 31, 2016	1,042,875	29,796
Twelve Months Ended September 30, 2017	1,134,172	29,847
Twelve Months Ended September 30, 2018	894,612	22,939
Twelve Months Ended September 30, 2019	976,782	24,420
Twelve Months Ended September 30, 2020	1,172,152	28,589
Twelve Months Ended September 30, 2021	1,819,062	43,311
Twelve Months Ended September 30, 2022	1,469,224	33,391
Total	8,508,879	212,293

WHN Consulting

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008

Income Statement Workpapers

Revenues

Item	Amount
Sales & Transportation Revenue:	
Total Adjusted Revenue Margin	89,861,486
Purchased Gas Expense	112,601,019
Less Elimination of Leased Storage Rent	-1,217,747
Total Sales & Transportation Revenue	201,244,758
Other Revenue:	
Forfeited Discounts	811,372
Miscellaneous Service Revenue	427,876
Total Other Revenue	1,239,248
<hr/>	
Reconciliation Revenue Calculation:	
Revenue per Books	199,018,745
Prior Period Reconciliation Revenue	-4,303,271
Prior Period Excess Deferred Income Tax Liability Amortization	6,112,798
Total	200,828,272
Less Purchased Gas Cost	111,383,272
Reconciliation Gross Margin	89,445,000

Purchased Gas Expense

2021 Factors

100%

2022 Factors

100%

Month	Division 93	Allocation Factor	Tennessee Amount
October-21	4,460,572	100.00%	4,460,572
November-21	11,705,554	100.00%	11,705,554
December-21	13,187,619	100.00%	13,187,619
January-22	22,440,140	100.00%	22,440,140
February-22	17,523,751	100.00%	17,523,751
March-22	11,155,187	100.00%	11,155,187
April-22	7,113,022	100.00%	7,113,022
May-22	4,804,433	100.00%	4,804,433
June-22	4,939,315	100.00%	4,939,315
July-22	5,139,615	100.00%	5,139,615
August-22	4,716,307	100.00%	4,716,307
September-22	5,415,504	100.00%	5,415,504
Total	112,601,019		112,601,019
Less Elimination of Leased Storage Rent			-1,217,747
Total Adjusted Purchased Gas Cost			111,383,272

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****Allowance for Funds Used During Construction****2021 Factors****100%****2022 Factors****100%**

Month	Division 93	Allocation Factor	Tennessee Amount
October-21	51,617	100.00%	51,617
November-21	78,073	100.00%	78,073
December-21	94,873	100.00%	94,873
January-22	93,979	100.00%	93,979
February-22	89,168	100.00%	89,168
March-22	99,800	100.00%	99,800
April-22	102,711	100.00%	102,711
May-22	113,444	100.00%	113,444
June-22	139,632	100.00%	139,632
July-22	151,386	100.00%	151,386
August-22	134,054	100.00%	134,054
September-22	82,653	100.00%	82,653
Total	1,231,389		1,231,389

	Rate	Amount
Gross AFUDC		1,231,389
Tennessee Excise Tax Impact	6.50%	-80,040
Subtotal		1,151,349
Federal Income Tax Impact	21.00%	-241,783
Net AFUDC Amount		909,566

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008

Operation & Maintenance Expense for the 12 Months Ended September 30, 2022

Month	Total Tennessee
1-Labor	8,071,129
2-Benefits	
Regular Benefits	2,492,192
20-Pension-Tennessee Allocation	540,850
21-Pension-Capitalized	-118,195
Total Benefits	2,914,847
3-Employee Welfare	2,002,070
4-Insurance	1,657,445
5-Rent, Maintenance & Utilities	1,258,983
6-Vehicles & Equipment	546,540
7-Materials & Supplies	521,989
8-Information Technology	1,461,913
9-Telecom	401,517
10-Marketing	335,370
11-Directors, Shareholders & PR	222,913
12-Dues & Donations	187,637
13-Printing & Postage	57,079
14-Travel & Entertainment	270,649
15-Training	50,477
16-Outside Services	6,334,798
17-Provision for Bad Debt	250,728
18-Miscellaneous & Unallocated Cost Center	-3,704,186
25-Inclusion of Barnsley Storage Operating Exp	440,864
Disallowed Expenses:	
19-Disallowed Expenses	-337,589
22-Incentive Compensation Adjustment (MFR #38)	-1,258,670
23-SERP Adjustment	-65,852
Total Disallowed Expenses	-1,662,111
24-Legal Invoices Adjustment	-2,785
Total	21,617,865

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008
 Operation & Maintenance Expense for the 12 Months Ended September 30, 2022

2021 Factors	100%			41.90%			4.74%			3.58%			Total
2022 Factors	Division 93	Allocation Factor	Tennessee Amount	Division 91	Allocation Factor	Tennessee Amount	Division 12	Allocation Factor	Tennessee Amount	Division 2	Allocation Factor	Tennessee Amount	Tennessee
Month													
1-Labor	3,367,059	100.00%	3,367,059	3,093,082	40.87%	1,264,143	29,616,600	4.74%	1,403,827	56,874,302	3.58%	2,036,100	8,071,129
2-Benefits	756,075	100.00%	756,075	1,525,323	40.87%	623,400	8,884,980	4.74%	421,148	19,317,596	3.58%	691,570	2,492,192
3-Employee Welfare	43,636	100.00%	43,636	1,698,810	40.87%	694,304	585,926	4.74%	27,773	34,535,122	3.58%	1,236,357	2,002,070
4-Insurance	170,791	100.00%	170,791	11,530	40.87%	4,712	77,068	4.74%	3,653	41,292,978	3.58%	1,478,289	1,657,445
5-Rent, Maintenance & Utilities	820,563	100.00%	820,563	286,141	40.87%	116,946	2,356,928	4.74%	111,718	5,859,077	3.58%	209,755	1,258,983
6-Vehicles & Equipment	505,913	100.00%	505,913	83,833	40.87%	34,263	9,044	4.74%	429	165,819	3.58%	5,936	546,540
7-Materials & Supplies	452,206	100.00%	452,206	66,951	40.87%	27,363	65,773	4.74%	3,118	1,097,826	3.58%	39,302	521,989
8-Information Technology	29,545	100.00%	29,545	131,083	40.87%	53,574	5,907,563	4.74%	290,018	30,692,057	3.58%	1,098,776	1,461,913
9-Telecom	144,498	100.00%	144,498	194,899	40.87%	79,574	1,596,259	4.74%	75,863	2,843,084	3.58%	101,782	401,517
10-Marketing	177,589	100.00%	177,589	372,044	40.87%	152,054	35,604	4.74%	1,688	112,828	3.58%	4,039	335,370
11-Directors, Shareholders & PR	0	100.00%	0	0	40.87%	0	431,821	4.74%	20,468	5,654,890	3.58%	202,445	222,913
12-Dues & Donations	147,752	100.00%	147,752	10,730	40.87%	4,385	8,374	4.74%	397	980,515	3.58%	35,102	187,637
13-Printing & Postage	33,361	100.00%	33,361	13,545	40.87%	5,536	70,040	4.74%	3,320	415,141	3.58%	14,862	57,079
14-Travel & Entertainment	109,516	100.00%	109,516	317,881	40.87%	129,918	117,203	4.74%	5,555	716,735	3.58%	25,659	270,649
15-Training	13,780	100.00%	13,780	34,665	40.87%	14,168	16,881	4.74%	800	606,960	3.58%	21,729	50,477
16-Outside Services	4,549,539	100.00%	4,549,539	2,422,552	40.87%	990,097	2,322,212	4.74%	110,073	19,136,566	3.58%	685,089	6,334,798
17-Provision for Bad Debt	250,728	100.00%	250,728	0	40.87%	0	0	4.74%	0	0	3.58%	0	250,728
18-Miscellaneous & Unallocated Cost Center	2,346	100.00%	2,346	-286,353	40.87%	-117,032	-77,115	4.74%	-3,655	-100,163,250	3.58%	-3,585,844	-3,704,186
19-Disallowed Expenses	-162,138	100.00%	-162,138	-138,446	40.87%	-56,583	-1,024,847	4.74%	-48,578	-1,963,428	3.58%	-70,291	-337,569
20-Pension-Tennessee Allocation	540,850	100.00%	540,850	0	40.87%	0	0	4.74%	0	0	3.58%	0	540,850
21-Pension-Capitalized	-118,195	100.00%	-118,195	0	40.87%	0	0	4.74%	0	0	3.58%	0	-118,195
22-Incentive Compensation Adjustment (MFR #38)				-1,516,083	40.87%	-619,623			-21,456			-617,591	-1,258,670
23-SERP Adjustment				-41,461	40.87%	-16,945						-48,907	-65,852
24-Legal Invoices Adjustment				-6,815	40.87%	-2,785							-2,785
Total	11,835,415		11,835,415	9,838,071		3,381,466	51,000,313		2,395,959	118,174,820		3,564,161	21,177,001

WHN Consulting**ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008****ALEX BRADLEY ADJUSTMENTS TO FY22 O&M EXPENSES FOR DIVISION 02**

SOURCE: Alex Bradley Workpapers.

Month	Division 02		
	As Filed	Adjusted	Difference
1-Labor	56,874,302	56,874,302	0
2-Benefits	12,048,386	19,317,596	7,269,209
3-Employee Welfare	34,535,122	34,535,122	0
4-Insurance	39,842,978	41,292,978	1,450,000
5-Rent, Maintenance & Utilities	5,859,077	5,859,077	0
6-Vehicles & Equipment	165,819	165,819	0
7-Materials & Supplies	1,097,826	1,097,826	0
8-Information Technology	30,706,505	30,692,057	-14,447
9-Telecom	2,843,084	2,843,084	0
10-Marketing	131,439	112,828	-18,611
11-Directors, Shareholders & PR	5,654,890	5,654,890	0
12-Dues & Donations	1,355,515	980,515	-375,000
13-Printing & Postage	415,141	415,141	0
14-Travel & Entertainment	716,735	716,735	0
15-Training	606,960	606,960	0
16-Outside Services	25,739,269	19,136,566	-6,602,703
17-Provision for Bad Debt	0	0	0
18-Miscellaneous & Unallocated Cost Center	-98,330,126	-100,163,250	-1,833,124
Total	120,262,924	120,138,249	-124,675

To O&M Expense-2

Depreciation Expense

<u>Jurisdiction</u>	<u>Total Depreciation</u>	<u>Tennessee Allocation</u>	<u>Tennessee Depreciation</u>
Tennessee Operations (Div 093)	16,953,381	100.00%	16,953,381
Mid-States General Office (Div 091)	26,641	40.87%	10,888
SSU Customer Service (Div 12)	11,129,320	4.74%	527,530
SSU General Office (Div 02)	19,705,259	3.58%	705,448
Gross Pro Forma Depreciation Expense			18,197,247
Intercompany Leased Property Depreciation			267,601
Depreciation Expense on Capitalized Incentive Compensation			-212,293
Net Pro Forma Depreciation Expense			18,252,555
			→ To Income Statement tab.
Gross Pro Forma Depreciation Expense			18,197,247
Test Period Depreciation Charged to Division 93			16,209,849
Adjustment to Reflect End-of-Period Plant Levels			1,987,398
Net Pro Forma Depreciation Expense			18,252,555
Adjustment to Reflect End-of-Period Plant Levels			1,987,398
Net Pro Forma Depreciation Expense for Annual Revenue Reconciliation Calculation			16,265,157
			→ To Rev Req-1 tab.

Interest Expense on Customer Deposits

Item	Amount
Average Customer Deposits	1,069,120
Current TPUC Interest Rate on Customer Deposits	3.60%
Pro Forma Interest Expense on Customer Deposits	38,488

Item	Division 93	Division 91	Division 12	Division 2	Barnsley Storage Transfer	Total
1-Property Taxes	4,143,173	0	0	0	57,132	4,200,305
2-Gross Receipts Taxes	717,361	0	0	0	0	717,361
3-Payroll Taxes	211,953	153,393	136,084	220,425	0	721,854
4-Franchise Taxes	1,301,996	0	0	0	0	1,301,996
5-General Taxes	20,090	0	0	0	0	20,090
6-TPUC Inspection Fee	612,669	0	0	0	0	612,669
Total Taxes Other Than Income	7,007,242	153,393	136,084	220,425	57,132	7,574,276

WHN Consulting

ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008

Other Workpapers

Cost of Capital

End-of-Period

Classification	Percentage	Cost	Weighted Cost
Short-Term Debt	0.09%	28.15%	0.03%
Long-Term Debt	37.71%	3.83%	1.45%
Equity	62.20%	9.80%	6.10%
Total	100.00%		7.58%

Reconciliation

Classification	Percentage	Cost	Weighted Cost
Short-Term Debt	0.10%	28.15%	0.03%
Long-Term Debt	39.24%	3.83%	1.50%
Equity	60.66%	9.80%	5.94%
Total	100.00%		7.47%

Uncollectible Expense Ratio

Item	Amount	Notes
Uncollectible Expense	250,728	
Gas Sales & Transportation Margin	89,445,000	
Total	0.002803	

Month	Amount
June-23	-503,441
July-23	-503,441
August-23	-503,441
September-23	-503,441
October-23	-503,441
November-23	-503,441
December-23	-503,441
January-24	-503,441
February-24	-503,441
March-24	-24,168
April-24	-24,168
May-24	-24,168
Total	-4,603,469



To
Operating
Results
Tab

SOURCE: Company Schedule 8 and Schedule 8R.

Item	Schedule 8 End-of-Period Amount	Schedule 8R Reconciliation Amount
Required Return	37,713,934	34,858,868
Current Return	35,052,165	35,238,631
Pre-Tax Deficiency	2,661,769	-379,763
Revenue Conversion Factor	1.342900	1.342900
After-Tax Deficiency from Current Return	3,574,490	-509,983
After-Tax Deficiency from Current Return	3,574,490	-509,983
Pre-Tax Deficiency from Current Return	2,661,769	-379,763
Tax Liability Increase	912,721	-130,221
Current Tax Liability	9,474,951	9,620,149
Pro Forma Income Tax Liability	10,387,672	9,489,928

SOURCE: Company Schedule 7 and 7R.

Item	Schedule 7 End-of-Period Amount	Schedule 7R Reconciliation Amount
Additions:		
Utility Plant in Service	811,146,870	771,267,484
Construction Work in Progress	11,714,042	17,457,782
Working Capital / Deferred Rate Case	2,529,959	2,529,959
Materials & Supplies / Gas Inventory	8,627,170	8,627,170
Intercompany Leased Property	5,985,565	6,122,272
Cloud Projects	119,181	121,029
Total Additions	840,122,787	806,125,695
Deductions:		
Accumulated Depreciation	238,679,580	240,278,162
Deferred Pension Regulated Asset	17,184,326	20,240,723
Accumulated Deferred Income Taxes	77,096,381	69,338,100
Customer Advances for Construction	20,280	20,280
Customer Deposits	1,069,120	1,069,120
Accumulated Interest on Customer Deposits	18,913	18,913
Capitalized Incentive Compensation	8,508,879	8,508,879
Total Deductions	342,577,479	339,474,177
Rate Base	497,545,308	466,651,518
Overall Rate of Return	7.58%	7.47%
Return	37,713,934	34,858,868

Rate of Return Calculation

SOURCE: Company Schedule 10 and Schedule 10R.

Item	Schedule 10 End-of-Period Amount	Schedule 10R Reconciliation Amount
Total Revenues	202,484,006	200,828,272
Purchased Gas Cost	111,383,272	111,383,272
Operation & Maintenance Expense	21,617,865	21,617,865
Taxes Other Than Income Taxes	7,574,276	7,574,276
Depreciation & Amortization Expense	18,252,555	16,265,157
Federal & State Income Taxes	9,474,951	9,620,149
Interest on Customer Deposits	38,488	38,488
Allowance for Funds Used During Construction	-909,566	-909,566
Total Expenses	167,431,841	165,589,641
Return on Rate Base	35,052,165	35,238,631
Interest Expense	7,363,671	7,139,768
Return on Equity	27,688,494	28,098,863
Return on Rate Base	35,052,165	35,238,631
Rate Base	497,545,308	466,651,518
Rate of Return on Rate Base	7.05%	7.55%
Return on Equity	27,688,494	28,098,863
Rate Base	497,545,308	466,651,518
Equity Capital Percentage	62.20%	60.66%
Equity Capital	309,466,240	283,085,284
Rate of Return on Equity	8.95%	9.93%

SOURCE: Company WP 10-1 and WP 10-1R.

Item	Tax Rates	WP 10-1 End-of-Period Amount	WP 10-1R Reconciliation Amount
Total Revenues		202,484,006	200,828,272
Purchased Gas Cost		111,383,272	111,383,272
Operation & Maintenance Expense		21,617,865	21,617,865
Taxes Other Than Income Taxes		7,574,276	7,574,276
Depreciation & Amortization Expense		18,252,555	16,265,157
Interest on Customer Deposits		38,488	38,488
Total Expenses before Income Taxes		158,866,455	156,879,058
Net Operating Income before Income Tax		43,617,551	43,949,214
Less Interest Deduction		7,363,671	7,139,768
Equity Portion Return		36,253,880	36,809,446
Tennessee Tax Rate	6.50%	2,356,502	2,392,614
Federal Tax Rate	21.00%	7,118,449	7,227,535
Total Income Tax Expense		9,474,951	9,620,149

Reconciliation Interest Calculation:

Reconciliation Rate Base		466,651,518
Reconciliation Weighted Short-Term Debt Cost	0.03%	
Reconciliation Weighted Long-Term Debt Cost	1.50%	
Reconciliation Weighted Total Debt Cost	1.53%	1.53%
Reconciliation Interest Expense		7,139,768

SOURCE: Company Schedule 1 and Schedule 1R

Item	Schedule 1 Amount	Schedule 1R Amount
Cost of Gas	111,383,272	111,383,272
Operation & Maintenance Expense	21,617,865	21,617,865
Taxes Other Than Income Taxes	7,574,276	7,574,276
Depreciation & Amortization Expense	18,252,555	16,265,157
Return	37,713,934	34,858,868
Income Taxes	10,387,672	9,489,928
AFUDC	-909,566	-909,566
Interest on Customer Deposits	38,488	38,488
Total Cost of Service	206,058,496	200,318,289
Revenue at Present Rates	202,484,006	200,828,272
Revenue Deficiency	3,574,490	-509,983
Amortization of EDITL	-4,603,469	
Reconciliation Revenue Requirement	-569,040	
Net Revenue Deficiency	-1,598,019	
Carrying Cost		-59,056
Annual Reconciliation Revenue Requirement		-569,040

To Operating Results tab.

Reconciliation Carrying Cost Calculation

Item	Rate	Amount
Reconciliation Net Revenue Deficiency		-509,983
Base Factor	1.0000	
Weighted Average Cost of Capital	<u>0.0758</u>	
Total Factor	1.07580	
Compounded for 18 months	<u>1.50</u>	
Carrying Cost Applied Rate	<u>1.1158</u>	<u>11.58%</u>
Reconciliation Carrying Cost		<u><u>-59,056</u></u>

→ To Rev Req-1

WHN Consulting
ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008
Working Capital Calculation

SOURCE: Company WP 7-5.

Item	Rate	
Revenue Lag	37.50	
Expense Lag	32.95	
Net Lag	4.55	
Daily Cost of Service	556,598	
Working Capital	2,529,959	→ To "Rate Base" tab.

SOURCE: Company WP 7-7.

Item	Amount	Lag	Dollar Days
Operating & Maintenance Expenses:			
Purchased Gas Expense	111,383,272	39.33	4,380,704,081
O&M Labor	8,071,129	14.07	113,560,782
O&M Non-Labor	13,546,736	29.43	398,680,441
Taxes Other Than Income Taxes:			
Ad Valorem	4,200,305	241.50	1,014,373,711
State Gross Receipts Tax	717,361	-151.50	-108,680,167
Payroll Taxes	721,854	14.51	10,474,101
Franchise Tax	1,301,996	37.50	48,824,852
TPUC Inspection Fee	612,669	272.50	166,952,417
DOT Fee	20,090	59.00	1,185,310
Federal Income Tax:			
Current	0	37.50	0
Deferred	7,118,449	0.00	0
State Income Tax:			
Current	0	37.50	0
Deferred	2,356,502	0.00	0
Other:			
Depreciation	16,265,157	0.00	0
Interest on Customer Deposits	38,488	182.50	7,024,115
Interest Expense - Long-Term Debt	7,214,407	91.25	658,314,639
Interest Expense - Short-Term Debt	149,264	24.05	3,589,799
Return on Equity	29,440,698	0.00	0
Total Cost of Service	203,158,377	32.95	6,695,004,081
Daily Cost of Service	556,598		

Equity Calculation:	Amount
Total Return under Proposed Rates	37,713,934
Less Long-Term Debt Interest Expense	-7,214,407
Less Short Term Debt Interest Expense	-149,264
Less AFUDC	-909,566
Return on Equity	29,440,698

Division	2022 Allocation Factors Used		2022 Allocation Factors Corrected	
	Rate Base	O&M Expense	Rate Base	O&M Expense
Division 02 - Shared Service-General	3.90%	3.90%	3.58%	3.58%
Division 12 - Shared Service-Customer Support	4.74%	3.96%	4.74%	4.74%
Division 91 - Mid-States General Office	40.87%	40.87%	40.87%	40.87%

Hal,

The Div 012 rate of 4.74% is the rate calculated in our Fiscal 2022 allocation factor file and is the correct rate. Due to a mapping issue in our monthly close process between the subaccounts 9220-41131 (to allocate Div 012) and 9220-41132 (to allocate Div 002) the 41131 subaccount was understated, causing our O&M allocation factor to be calculated at 3.96% instead of the intended 4.74% for Div 012.

Also, subaccount 41132 was overstated causing our O&M allocation factor to be calculated at 3.90% instead of 3.58% for Div 02. The allocation rate from Div 02 for O&M can vary because it is calculated on a cost center basis based on the support provided by each cost center to the distribution businesses.-

To quantify, SSU Div 002 billings to Div91 were \$10,529,984 * 40.87% = \$4,303,604, and SSU Div 012 Billings were \$5,722,768 * 43.10% = \$2,466,513, which total \$6,770,117 that **should have been** billed to TN, compared to actual billings of \$4,687,096 + \$2,062,097 = \$6,749,193, which means we **under allocated** O&M to TN by \$20,924.

We are working to correct this mapping issue between the subaccounts going forward.

Thanks,
William

William D Matthews | Mgr Rates and Regulatory Affairs | Atmos Energy Corporation | 214-208-3637 Cell |
William.Matthews@atmosenergy.com | www.atmosenergy.com

This transmission may be a confidential attorney-client communication, attorney work product, or otherwise be privileged or confidential. If you are not the intended recipient of this message you are strictly prohibited from disclosing, printing, copying, or disseminating any of this information. If you have received this message in error, immediately reply only to the sender and delete the message and all attachments.

From: William Novak <halnovak@whnconsulting.com>
Sent: Wednesday, March 22, 2023 11:54 PM
To: Matthews, William <William.Matthews@atmosenergy.com>
Cc: Yurova, Maria <Maria.Yurova@atmosenergy.com>; Victoria Glover <victoria.glover@ag.tn.gov>
Subject: [EXT] Re: Other Revenues in the ARM Filing

CAUTION: Don't be quick to click. This e-mail originated from outside of Atmos Energy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks William, this helps me understand this.

While I've got you here, can you help explain another item.

Division 12 has an allocation rate to Tennessee of 4.74% for Fiscal 22 for Rate Base allocations. However, Division 12 has an allocation rate to Tennessee of 3.96% for Fiscal 22 for O&M Expense allocations.

Why the difference? Divisions 2 and 91 have the same allocation factor for both Rate Base and O&M Expense.

Am I missing something?

[The page contains extremely faint, illegible vertical columns of text.]

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

<

1

[illegible]

WHN Consulting
ATMOS ENERGY CORPORATION - ARM RECONCILIATION - 23-00008
Trial Balance - Kentucky Mid-States - Income Statement Accounts

SOURCE: Company Filings "SSU & KMD Detail Trial Balance", "KMD Income Statement Accounts" tab.

Division	Division Description	Account	Account Description	Sub Account	Sub Account Description	OCT-21	NOV-21	DEC-21	JAN-22	FEB-22	MAR-22	APR-22	MAY-22	JUN-22	JUL-22	AUG-22	SEP-22	Total
093	Tennessee Division	4880	Miscellaneous service revenues	31301	Misc Service Revenue	-4,860	-4,576	-6,152	-5,432	-5,440	-5,612	-5,232	-5,720	-5,923	-5,333	-7,784	-6,484	-68,558

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

[The page contains extremely faint, illegible text, likely bleed-through from the reverse side of the document.]