

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

IN RE:)
)
ATMOS ENERGY CORPORATION FOR)
APPROVAL OF ITS 2026 ANNUAL)
RATE REVIEW FILING PURSUANT TO)
TENN. CODE ANN. § 65-5-103(d)(6))

DOCKET NO. 26-00009

DIRECT TESTIMONY

OF

CLARK D. KAML

April 10, 2026

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1 **I. INTRODUCTION**

2 **Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION FOR**
3 **THE RECORD.**

4 A1. My name is Clark Kaml. My business address is the Office of the Tennessee Attorney
5 General, John Sevier State Office Building, 500 Dr. Martin L. King Jr. Blvd., Nashville,
6 Tennessee 37243. I am a Financial Analyst employed by the Consumer Advocate Division
7 in the Office of the Tennessee Attorney General (the “Consumer Advocate”).

8 **Q2. PLEASE PROVIDE A SUMMARY OF YOUR BACKGROUND AND**
9 **PROFESSIONAL EXPERIENCE.**

10 A2. I received a Bachelor of Science Degree in Economics from the University of North Dakota
11 in 1987 and a Master of Arts Degree in Economics from the University of North Dakota in
12 1988. I have more than 30 years of experience working in the regulated utility industries
13 including electric, natural gas, telephone, and water. I have worked for various agencies
14 including the Public Service Commission of North Dakota, the Kansas Corporation
15 Commission, the Minnesota Public Utilities Commission, the Minnesota Office of the
16 Attorney General, and the Grant County Public Utility District. I have worked with private
17 companies, municipalities, and served on a Rate Committee. I served as Co-Chair of the
18 National Association of Regulatory Utility Commissioners (“NARUC”) Staff
19 Subcommittee on Strategic Issues, am currently Co-Chair of the National Association of
20 State Utility Consumer Advocates (“NASUCA”) Gas Committee, and a member of the
21 GTI Energy Public Interest Advisory Committee. In addition, I am the author of the book
22 “Don’t Fear the Cost Study.”¹

1 Clark Kaml, Don’t Fear the Cost Study (2022).

1 **Q3. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE**
2 **TENNESSEE PUBLIC UTILITY COMMISSION (“TPUC” OR THE**
3 **“COMMISSION”)?**

4 A3. Yes. I filed testimony in the Tennessee-American Water Company’s (“TAWC” or “the
5 Company”) recent rate case, TPUC Docket No. 24-00032, the Limestone Water Utility
6 Operating Company’s recent rate case, TPUC Docket No. 24-00044, Chattanooga Gas
7 Company’s Annual Rate Review, TPUC Docket No. 25-00028, the Kingsport Power
8 Company’s Alternative Rate Mechanisms, TPUC Docket No. 25-00022, Piedmont’s
9 Annual Rate Review Filing, TPUC Docket No. 25-00036, TAWC’s Approval of Merger,
10 TPUC Docket No. 25-00040, Limestone’s Petition for Approval of Loan Agreement,
11 TPUC Docket No. 25-00066, Integrated Resources Management’s Petition for an
12 Alternative Rate Mechanism, TPUC Docket No. 25-00072, Spire’s Petition to purchase
13 Piedmont’s Tennessee operations, TPUC Docket No. 25-00074, Two Rivers Utility, LLC
14 Application for a Certificate of Public Convenience and Necessity, TPUC Docket No. 25-
15 00073, TAWC’s PFAS Settlement Fund Investigation, TPUC Docket No. 25-00086,
16 TAWC Petition to adopt an Annual Review Mechanism, TPUC Docket No. 25-00089,
17 and Limestone Water Utility Operating Company’s Phase 2 of its Rate Case, TPUC
18 Docket No. 24-00044.

19 **II. PURPOSE OF TESTIMONY AND RECOMMENDATION**

20 **Q4. ON WHOSE BEHALF ARE YOU TESTIFYING?**

21 A4. I am testifying on behalf of the Consumer Advocate.

22 **Q5. WHAT IS THE SCOPE OF YOUR REVIEW IN THIS PROCEEDING?**

23 A5. My testimony addresses the Atmos’ cost of capital, rate design, and transparency.

1 **Q6. WHAT IS YOUR RECOMMENDATION?**

2 A6. I recommend the Commission:

- 3 • Adopt a capital structure consisting of 53.13% equity and 46.87% debt.
- 4 • Approve the proposed revenue deficiency allocation method proposed by Atmos.
- 5 • Require Atmos provide more detailed information in testimony in future ARM
6 filings, including explanations and detail of the specific methods that are being
7 followed and applied.
- 8 • Require Atmos to provide additional information regarding its capital investment
9 plans before the next ARM filing.
- 10 • Require Atmos to work with the Consumer Advocate to provide additional
11 information regarding its capital investments and its capital investment plans, such
12 that it is understood, prior to Atmos’s next ARM filing. In the alternative, the
13 Commission should initiate a prudence review of Atmos’s capital investment
14 projects.

15 **III. COST OF CAPITAL**

16 **Q7. SUMMARIZE YOUR RECOMMENDATION REGARDING THE COST OF**
17 **CAPITAL?**

18 A7. I recommend the Commission establish a revenue requirement based on the capital
19 structure and cost of equity from TPUC Docket No. 14-00146, that approved the Annual
20 Review Mechanism and ARM Tariff, and use the actual cost of debt as follows:²

- 21 • A capital structure comprised of 53.13% equity and 46.87% debt;
- 22 • A cost of long-term debt of 4.15%;
- 23 • And a cost of equity of 9.80%.

24 The rate impact of the proposed capital structure compared to that from the last rate case
25 is approximately \$4.6 million annually.

² *Order Approving Settlement*, Exhibit A, p. 4, ¶11.d-e, g, TPUC Docket No. 14-00146 (November 4, 2015) and *Petition*, Excel Spreadsheet, File <6> 26-xxxxx – 2026 Atmos Energy TN ARM Filing – Revenue Requirements Schedule.xlsx>, Tab “Schedule 9R”, TPUC Docket No. 26-00009 (January 30, 2026).

1 **Q8. WHAT HAS ATMOS PROPOSED FOR THE COST OF CAPITAL?**

2 A8. Atmos proposes a cost of capital of 7.57% for the period ending September 2025 based
3 on the following:

- 4 • A capital structure of 60.47% equity and 39.53% long-term debt;
- 5 • A cost of debt of 4.15%;
- 6 • A cost of equity of 9.8%.³

7 **Q9. HOW DID THE COMPANY DETERMINE THE CAPITAL STRUCTURE?**

8 A9. The Company explained that the values are based on the actual equity balance and actual
9 long-term debt balance of September 30, 2025, with modifications, and a twelve-month
10 average short-term debt balance for the twelve months ending September 30, 2025.⁴

11 The authorized return on equity is 9.8% is the allowed return on equity established in
12 TPUC Docket 14-00146.⁵

13 **Q10. WHY DID THE COMPANY USE THIS METHOD FOR DETERMINING THE**
14 **WEIGHTED COST OF CAPITAL?**

15 A10. The methods in those proceedings are consistent with the algebraic method of calculating
16 the weighted cost of capital by multiplying the percentage of financing for each type of
17 financing by the cost of that financing source, then adding weighted cost of the various
18 sources.

19 **Q11. WHAT ADJUSTMENTS WERE MADE?**

20 A11. The Company explained that in TPUC Docket No. 22-00010, Atmos removed \$2.2

³ *Petition*, Excel Spreadsheet, File <6> 26-xxxxx – 2026 Atmos Energy TN ARM Filing – Revenue Requirements Schedule.xlsx>, Tab “Schedule 9R”, TPUC Docket No. 26-00009 (January 30, 2026).

⁴ *Direct Testimony of Maureen H. Melson* at 12:9-19, TPUC Docket No. 26-00009 (January 30, 2026).

⁵ *Order Approving Settlement*, p.4 and Exhibit A, p. 4, ¶11.d, TPUC Docket No. 14-00146 (November 4, 2015).

1 billion of debt associated with Winter Storm Uri.⁶ The debt was issued in response to
2 extraordinary gas costs and securities in 2023. This was not associated with impacts in
3 Tennessee. The Company excluded this debt and the impact on deferred income tax.⁷
4 The same adjustment was made in previous ARM filings.

5 **Q12. HOW WAS THE COST OF EQUITY DETERMINED?**

6 A12. The cost of equity of 9.8% was approved in TPUC Docket 14-00146.⁸ Pursuant to the
7 statutory provisions, an Annual Rate Mechanisms shall use the “return on equity
8 established in the public utility’s most recent rate case pursuant to § 65-5-101 and
9 subsection (a).”⁹ Utilization of a 9.8% cost of equity is consistent with the TENN. CODE
10 ANN. § 65-5-103(d)(6)(C)..

11 **Q13. WHAT IS YOUR CONCERN ABOUT ATMOS’S PROPOSED COST OF**
12 **CAPITAL?**

13 A13. The proposed capital structure contains an excessive level of equity, which increases the
14 weighted average cost of capital (“WACC”), and results in higher rates for customers.
15 Because the cost of equity is generally more expensive than debt, at some equity ratio, as
16 the capital structure utilizes an increasing percentage of equity, the weighted average cost
17 of capital increases. Therefore, an unnecessarily high equity ratio benefits the Company
18 by reducing financial risk at the cost of ratepayers through higher cost of capital.
19 Additionally, equity returns are subject to income taxes, further increasing the revenue
20 requirement.

6 *Direct Testimony of Maureen H. Melson* at 12:22 – 13:1, TPUC Docket No. 26-00009 (January 30,
2026).

7 *Id.* at 12:20-13:9.

8 *Order Approving Settlement*, p.4 and Exhibit A, p. 4, ¶11.d, TPUC Docket No. 14-00146 (November
4, 2015).

9 TENN. CODE ANN. § 65-5-103(d)(6)(C).

1 **Q14. WHO CONTROLS THE CAPITAL STRUCTURE RATIOS?**

2 A14. The utility unilaterally decides what securities to use to finance its operations as a going
3 concern, thus determining the capital structure.

4 **Q15. IS ATMOS'S EQUITY RATIO EXCESSIVE?**

5 A15. Yes.

6 **Q16. WHY IS ATMOS'S EQUITY RATIO CONSIDERED EXCESSIVE?**

7 A16. Atmos's proposed 60.47% equity ratio, and it:

- 8 • Exceeds the Value Line Investment Survey ("Value Line") average equity ratio of
9 approximately 46% for the other natural gas utilities.¹⁰
- 10 • Exceeds the equity ratio of all other distribution gas utilities in Value Line dataset.
11 The next highest equity ratio is 57.5%.¹¹
- 12 • Exceeds the 53.13% equity ratio approved by the Commission.¹²

13 **Q17. WHAT IS A REASONABLE CAPITAL STRUCTURE FOR A REGULATED**
14 **UTILITY?**

15 A17. There is no single "correct" capital structure. As the percentage of debt financing
16 changes, the costs of the securities can also be expected to change. Regulated utilities
17 have lower financial risk than exists for other investments, enabling them to utilize a
18 higher percentage of debt financing. Magellan Investment Partners explained that
19 utilities have predictable returns regardless of market conditions:¹³

20 While returns set by regulators can be modest compared with other sectors,
21 utilities are often assured a minimum return regardless of how the economy
22 is performing because demand for their services is constant. The minimum

10 Exhibit CDK-1, and, in native format, Excel Spreadsheet, File <Exhibit CDK-1 Equity Ratios of Gas Utilities.xlsx>.

11 *Id.*

12 *Order Approving Settlement*, Exhibit A, p. 4, ¶11.d, TPUC Docket No. 14-00146 (November 4, 2015).

13 *Investing In Utilities, Predictable Returns Regardless of Market Conditions*, Magellan, Global Listed Infrastructure (January 2024) (<https://magellaninvestmentpartners.com/insights/investing-in-utilities/#:~:text=To%20gain%20this%20licence.%20a.in%20new%20or%20existing%20infrastructure>). A copy of this article is attached as Exhibit CDK-2.

1 returns provide an incentive for future or potential asset owners to invest in
2 new or existing infrastructure. This means utility stocks can provide stable
3 earnings and cash flows.

4 An equity ratio in the range of 45% to 55% is often considered reasonable level. Ratios
5 in this range generally match returns with risk and provide the lower capital while
6 maintaining financial integrity.

7 An equity ratio of 60% is excessive and does not represent the risks associated with a
8 regulated utility. For a gas regulated utility, a more balanced debt and equity ratio will
9 maintain financial integrity and access to capital at a lower cost.

10 **Q18. HAS THE COMMISSION ADDRESSED HIGH EQUITY RATIOS IN RECENT**
11 **RATE CASES?**

12 A18. Yes. In TPUC Docket No. 24-00044, Limestone:

- 13 • Represented that its actual capital structure is 100% equity;¹⁴
- 14 • Argued that it has extraordinary operating risks;¹⁵ and
- 15 • Proposed a hypothetical capital structure with 57% equity.¹⁶

16 The Commission adopted a capital structure with 55% equity, stating that it lies between
17 the median and maximum of the respective witnesses' comparable companies.¹⁷

18 In TPUC Docket No. 24-00032, Tennessee-American Water Company proposed a capital
19 structure with a 54.52% equity ratio. However, the Commission adopted a capital
20 structure for Tennessee-American Water Company comprised of 44.19% equity.¹⁸

21 **Q19. HAS ATMOS PROPOSED TO USE SIMILAR CAPITAL STRUCTURES IN**

14 *Direct Testimony of Dylan W. D'Ascendis* at 21:9-15, TPUC Docket No. 24-00044, (July 16, 2024).

15 *Id.* at 22:2-4.

16 *Id.* at 21:5-8.

17 *Order Setting Utility Rates*, p. 97, TPUC Docket No. 24-00044, (July 10, 2025).

18 *Order Setting Utility Rates*, p. 71, TPUC Docket No. 24-00032 (April 21, 2025).

1 **OTHER JURISDICTIONS?**

2 A19. Yes. Its petitions have been comparable in Kansas, Kentucky, Mississippi, and Colorado.

3 The proposed capital structures in those jurisdictions are as follows:

4	<u>Jurisdiction</u>	<u>Equity</u>	<u>Debt</u>	<u>Other</u>
5	Kansas	61.14%	38.86% ¹⁹	
6	Colorado	60.14%	39.86% ²⁰	
7	Mississippi	60.00%	39.77%	0.232% ²¹
8	Kentucky	60.88%	38.93%	0.19% ²²

9 The Mississippi proposal included ratepayer-provided financing. The Kentucky proposal
10 excluded securitized debt issued in connection with Winter Storm Uri and included short
11 term debt.

12 **Q20. HOW WAS THE CAPITAL STRUCTURE TREATED IN THOSE DOCKETS?**

13 A20. In Kansas, parties disagreed over the appropriate capital structure. The proceeding ended
14 with a settlement agreement stating “[t]he Parties agree that nothing in this Settlement
15 Agreement constitutes an agreement by the parties to the capital structure proposal
16 present in this case and this Agreement does not prevent the Parties from challenging

¹⁹ *Atmos Energy Corporation, Application for Adjustment of its Natural Gas Rates*, 2022 Filing Schedule Index, Section 7, Kansas Corporation Commission, Docket No 23-ATMG-359 -RTS (September 9, 2022). The full Filing Schedule Index is available at <https://kcc-connect.kcc.ks.gov/s/case/500cr00000YjqjEAAR/23atmg359rts?tabset-d4b00=2>. A copy of this Petition Schedule is attached as CA Exhibit CDK-3.

²⁰ *Hearing Exhibit 106, Direct Testimony of Joe T. Chrisitan*, Attachment JTC-1, Colorado Public Utilities Commission, Docket 25AL-0499G (November 25, 2025). Mr. Chrisitan’s full testimony is available at https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_fil=G_829371&p_session_id=. A copy of Attachment JTC is attached as Exhibit CDK-4.

²¹ *Final Order*, Mississippi Public Service Commission, p. 16, ¶ 7, Docket No. 2025-UN-59 (November 4, 2025). A copy of this Order is attached as Exhibit CDK-5.

²² *Order*, p.40, Kentucky Public Service Commission, Case No. 2024-00276 (Aug 11, 2025). A copy of this article is attached as Exhibit CDK-F.

1 such proposal in the future.”²³

2 The Kentucky Commission authorized a 53.5% equity.²⁴ The Kentucky Commission
3 held “that Atmos’s Proposed capital structure, as filed, is not reasonable and does not
4 result in, just, and reasonable rates for Atmos’ consumers in Kentucky, and therefore, the
5 Commission finds that an adjustment is necessary.”²⁵ Further, the Kentucky Commission
6 noted that the 53.5 percent equity ratio is at the higher end of the Utility Proxy Group.
7 More specifically, the Kentucky Commission stated:²⁶

8 Atmos, in making decisions regarding whether to raise capital through debt or equity
9 issuances, or by retaining capital, controls its capital structure. If Atmos makes
10 decisions with respect to its capital structure that unreasonably increase costs to
11 customers, the Commission has the authority to make an adjustment to prevent
12 unreasonable costs from being passed on to customers, and depending on the
13 circumstances, may be required to do so.

14
15 In Mississippi, the Commission noted “Atmos’s current and proposed capital structure
16 consisting of approximately 60% equity is far out of line with its peers, whose average
17 capital structure contains approximately 43% equity. In its Order, the Mississippi
18 Commission noted:²⁷

19 The record in this case contains ample evidence to suggest that Atmos has
20 been operating beyond the parameters of the market. This is shown both in
21 the difference in its capital structure and equity ratio and in the requested
22 return on equity as compared to market peers. To that effect, the
23 Commission has no desire to harm or otherwise affect Atmos's credit rating,
24 but it is tasked with balancing the interests of ratepayers against the interests
25 of the utility. That balance does not and cannot exist if the evidence shows
26 that seeking higher credit ratings as a sole objective leads to unaffordable

²³ *Order Approving Settlement Agreement*, Exhibit A, p. 5, ¶ 13, Kansas Corporation Commission, Docket No. 23-ATMG-359 -RTS (September 9, 2022). A copy of this Order is attached as Exhibit CDK-7.

²⁴ *Order*, p. 50, Kentucky Public Service Commission, Case No. 2024-00276 (August 11, 2025). A copy of this Order is attached as CA Exhibit CDK-6.

²⁵ *Order*, p. 49, Kentucky Public Service Commission, Case No. 2024-00276 (August 11, 2025). A copy of this Order is attached as CA Exhibit CDK-6.

²⁶ *Id.* at 48-49.

²⁷ *Final Order*, Mississippi Public Service Commission, pp. 4-5, Docket No. 2025-UN-59 (November 4, 2025). A copy of this Order is attached as Exhibit CDK-5.

1 rates for Mississippi customers. Testimony was given, however, that
2 companies with different capital structures and a lower authorized return on
3 equity still have access to capital markets.
4

5 The Mississippi Commission held that Atmos' actual capital structure to be "imprudent,
6 uneconomical, and unfair for ratemaking."²⁸ It approved a hypothetical capital structure
7 of 50% equity and 50% debt for ratemaking purposes.²⁹

8 The Colorado proceeding is ongoing. The appropriate capital structure is a disputed
9 issue.

10 **Q21. WHAT ARE YOUR OBSERVATIONS OF THE PROCEEDINGS IN OTHER**
11 **JURISDICTIONS?**

12 A21. The positions and decisions in these cases demonstrate the role that the capital structure
13 has on rates and the importance of a reasonable capital structure. The orders specifically
14 addressing the capital structure support the premise that Atmos's capital ratio is excessive
15 at a cost to ratepayers.

16 **Q22. WHAT IS AN APPROPRIATE STANDARD FOR DETERMINING AN**
17 **APPROPRIATE CAPITAL STRUCTURE?**

18 A22. Regulated utilities are entitled to a reasonable opportunity to recover their prudently
19 incurred costs. The cost of capital for regulated utilities is reviewed under the fair rate of
20 return standard established by two U.S. Supreme Court cases: *Federal Power*
21 *Commission et al v. Hope Natural Gas Co.*³⁰ ("Hope") and *Bluefield Water Works and*
22 *Improvement Co. v. Public Service Commission of West Virginia*³¹ ("Bluefield"). These

28 *Id.* at 17.

29 *Id.* at 17-18.

30 320 U.S. 591, 603 (1944).

31 262 U.S. 679 (1923).

1 cases establish that a fair rate of return is one that provides an **opportunity** to earn a
2 return that is:

- 3 • Commensurate with the return on investments of similar risks; and
- 4 • Sufficient to maintain the company’s financial integrity and attract capital.

5 At the same time, it must be just and reasonable (and cost effective) for ratepayers.

6 **Q23. WHY DO YOU CONSIDER A 53.13% EQUITY RATIO TO BE REASONABLE**
7 **AND COST-EFFECTIVE?**

8 A23. The cost of debt is a contractual obligation which reflects market-based rates. The cost of
9 equity and the appropriate capital structure are not set by a market in the same way as
10 debt and are subject to dispute and ultimately regulatory decisions in rate making
11 proceedings. In TPUC Docket No. 14-00146, the Commission established both the cost
12 of equity and the WACC to be used for rate settings within the context of a contested
13 proceeding.³²

14 Given the link between the cost of equity and the capital structure, it is reasonable to
15 think that the parties considered the capital structure and the cost of equity in
16 conjunction, and that taken together, they were reasonable. Since the cost of equity
17 would be used to set rates going forward, it is reasonable to assume that the established
18 capital structure would also be used going forward.

19 **Q24. IS THE LINK BETWEEN THE COST OF THE SECURITIES AND THE**
20 **CAPITAL STRUCTURE WELL KNOWN?**

21 A24. Yes. The concept is explained by the Modigliani-Miller theorem. Franco Modigliani and

³² *Order Approving Settlement*, Exhibit A, p. 4, ¶11, TPUC Docket No. 14-00146 (November 4, 2015) (“14-00146 Decision”).

1 Merton Miller explained that in the absence of transaction costs, access to full
2 information, and in an efficient market, a higher debt-to-equity ratio leads to higher
3 required return on equity due to the higher risks.³³ Conversely, as the percentage of debt
4 financing decreases, the cost of equity decreases.³⁴

5 **Q25. IS THE REDUCTION IN THE PERCENTAGE OF SHORT-TERM DEBT A**
6 **CONCERN?**

7 A25. No. However, it would not be reasonable to substitute short term debt with equity.

8 **Q26. WHY WOULD THE ACTUAL CAPITAL STRUCTURE BE USED WHEN**
9 **CALCULATING REVENUE REQUIREMENT AND EARNINGS IN ARM**
10 **FILINGS.**

11 A26. The statute allows for an annual review of rates based upon the method adopted in the
12 most recent rate case.³⁵ A prudent practice in a rate case is to start the cost of capital
13 review with the actual capital structure and actual cost of capital for the specified period.

14 Capital structure is not static and can change with time.

15 The Commission explained that the “[o]riginal proposed ARM tariff was based on the
16 company’s budget information with no reconciliation between budget and actual
17 information in future filings. The changes to the ARM tariff provided in the settlement
18 agreement include a reconciliation process utilizing actual expenses and capital
19 investments.”³⁶

33 Franco Modigliani and Merton H. Miller, Merton H, *The Cost of Capital, Corporation Finance and the Theory of Investment*, *The American Economic Review*. 48 (3): 261–297 (1958). A copy of this article is attached as CA Exhibit CDK-8.

34 *Id.*

35 TENN. CODE ANN. § 65-5-103(d)(6)(A).

36 *Order Approving Settlement*, p. 5, TPUC Docket No. 14-00146 (November 4, 2015).

1 Therefore starting with the actual capital structure is consistent with the ARM review
2 process. However, it does not dictate a finding that the actual capital structure is
3 reasonable or prudent.

4 **Q27. HAS A DIFFERENT CAPITAL STRUCTURE BEEN APPROVED AS PART OF**
5 **SETTLEMENT AGREEMENTS IN LATER PROCEEDINGS?**

6 A27. Yes. The Commission approved a settlement agreement with an actual capital structure
7 that was different from its 14-00146 Decision.

8 **Q28. WHY IS THE CAPITAL STRUCTURE UTILIZED IN 18-00112 NOT**
9 **APPROPRIATE FOR THIS PROCEEDING?**

10 A28. In its decision for Atmos’ 2018 ARM budget filing, the Commission ordered that a
11 limited purpose docket be “opened to examine and consider modification to allow a one-
12 step approach for Atmos Energy Corporation’s annual rate review mechanism.”³⁷ As a
13 result, the Commission opened TPUC Docket No. 18-00112, and it designated staff to
14 participate as a party to the proceeding.³⁸ The parties negotiated a settlement in this
15 limited purposed docket and filed it for review and approval by the Commission.³⁹ The
16 Commission approved the parties’ settlement agreement which defined the “**Authorized**
17 **Return on Equity** . . . as the return on equity established in TPUC Docket No. 14-
18 00146.”⁴⁰

³⁷ *Order Approving 2018 Annual Rate Review Filing*, p. 10, TPUC Docket No. 18-00067 (December 4, 2018).

³⁸ *Designation of Staff Participating as a Party*, TPUC Docket No. 18-00112 (December 4, 2018).

³⁹ *Stipulation and Settlement Agreement*, TPUC Docket No. 18-00112 (October 2, 2019).

⁴⁰ *Order Approving Stipulation and Settlement Agreement*, Exhibit 1, p. 3, ¶ 6(d), TPUC Docket 18-00112 (December 16, 2019).

1 **Q29. IF THE SETTLEMENT AND TARIFF INDICATE THAT THE REVENUE**
2 **REQUIREMENT IS CALCULATED USING THE ACTUAL CAPITAL**
3 **STRUCTURE. HOW IS YOUR RECOMMENDATION CONSISTENT WITH**
4 **THAT APPROACH?**

5 A29. In TPUC Docket No. 14-00146, the Commission authorized Atmos to opt into an annual
6 filing and review mechanism under TENN. CODE ANN. § 65-5-103(d)(6)(A). With a goal
7 of reflecting actual costs, designing a mechanism that reflects the actual cost of debt and
8 capital structure is reasonable. A company’s capital structure fluctuates with capital
9 spending and financing activities that reflect corporate decisions that are subject to
10 review. On its face, the 14-00146 Settlement Agreement established the mechanism
11 allowing for an updated capital structure based on actual equity and debt balances.⁴¹
12 Nevertheless, there is nothing within the settlements in TPUC Docket Nos. 14-00146, 18-
13 00097, and 18-00112 that prohibits a party from objecting to a capital structure that is
14 unreasonable. I am aware of nothing that would prohibit the Commission from reviewing
15 or adjusting an unreasonable capital structure for ratemaking purposes. In fact, during a
16 legislative committee on alternative ratemaking mechanisms, Chairman Jim Allison⁴²
17 explained that “if the rate of return gets out of kilter with the current market conditions
18 the [Commission] can and in the past we have brought proceedings to open the entire rate
19 spectrum” and this authority remains even with annual review mechanisms.⁴³ The ability

41 *Order Approving Settlement*, p. 5, Exhibit A, pp. 24-25, ¶ 11.1(i)-(iii), TPUC Docket No. 14-00146 (November 4, 2015).

42 James “Jim” M. Allison was the Chairman of the Tennessee Regulatory Commission, the immediate precursor to the current Commission.

43 Tennessee General Assembly, House Business and Utilities Committee, HB0191, Hearing at 34.04/59.17 minutes (March 6, 2013). The link to the hearing is https://tnga.granicus.com/player/clip/7320?view_id=269&redirect=true.

1 to review costs on an annual basis for prudence provides an expectation that the capital
2 structure would have a debt-to-equity ratio within industry norms and provide an
3 opportunity to question the ratio if it was not fair to ratepayers.

4 **Q30. ARE THERE OTHER REASONS FOR THE PUBLIC OR INTERESTED**
5 **PARTIES TO THINK THAT THERE IS AN OPPORTUNITY TO QUESTION**
6 **THE CAPITAL STRUCTURE?**

7 A30. Yes. The ARM filings are an annual review mechanism designed with the specific intent
8 of the review of costs. The Commission’s authority to review “the costs, the returns, the
9 expenses”⁴⁴ within the annual filing are not limited by TENN. CODE ANN. § 65-5-
10 103(d)(6), previous settlements or decisions.

11 TENN. CODE ANN. § 65-5-103(a) states that for a utility proposing a rate increase “[t]he
12 burden of proof to show that the increase, change, or alteration is just and reasonable
13 shall be upon the public utility making the same change.” Further, TENN. CODE ANN. §
14 65-5-103(d)(6)(D)(iii) provides:

15 The commission or the public may propose a modification to an approved
16 annual review plan for consideration by the commission. The commission
17 shall determine were there any proposed modification is in the public
18 interest should be approved within the time frame set forth in subdivision
19 (d)(6)(C). If the Commission denies a modification to the approved annual
20 review plan, the Commission shall set forth with specificity the reasons for
21 the denial.

22 In the Commission’s Order approving the settlement agreement, it states: ⁴⁵

23 The Parties agree the revenue deficiency and rates reflected in attachments
24 A and B are appropriate and reasonable for the limited purposes of resolving
25 the proceeding.

26 The Company and the Consumer Advocate state that the Settlement
27 Agreement is in the product of ‘give and take’ negotiations and agree that

44 *Id.* at 33.37/59.17 minutes (March 6, 2013).

45 *Order Approving Settlement*, pp. 4-5, TPUC Docket No. 14-00146 (November 4, 2015).

1 the settlement agreement shall not have any precedential effect. The Parties
2 further jointly requested that the authority adopt the methodologies used in
3 the Settlement Agreement for the limited purposes of implementing an
4 annual review mechanism pursuant to Tenn. Code Ann. § 65-5-103(d)(6)

5 The Order explained that “Atmos will be able to recover its reasonably and prudently
6 incurred expenses and costs of capital investment each year.”⁴⁶ Further, it states:⁴⁷

7 In addition, the panel found that, in accepting the *Settlement Agreement*, the
8 Authority maintains the authority to review the reasonableness and
9 prudence of the Company’s expenses and capital investments included in
10 the annual rate and reconciliation filings and make adjustments as required
11 by the public interest and directed by the Authority staff to perform such
12 review. The Parties have confirmed through data requests that neither the
13 *Settlement Agreement* nor the terms of the ARM tariff expands or limits the
14 annual review statute or the authority’s rate setting powers and discretion.

15 The Settlement Agreement articulates the limitations of the agreements. Specifically,
16 Paragraph 16 provides for the Consumer Advocate to petition to terminate or modify the
17 ARM Tariff:⁴⁸

18 16. CAPD⁴⁹ Authority to Petition -- The CAPD shall have the right in
19 its sole discretion to file a petition or complaint asking the TRA to terminate
20 or modify any ARM Tariff resulting from this Docket or any directly or
21 indirectly related docket or to take any other action contemplated by Tenn.
22 Code Ann. § 65-5-103(d)(6). Atmos Energy agrees not to oppose the
23 CAPD’s petition or complaint filed under this Section on the grounds that
24 such a proceeding is not statutorily authorized or that CAPD is not
25 authorized to bring such a proceeding; provided, however, that Atmos
26 Energy reserves all rights with regard to the merits of any termination or
27 modification or other relief that the CAPD may request or position that the
28 CAPD may assert in any such proceeding.

29 The Settlement Agreement further states:⁵⁰

30 21. The resolution of issues reflected herein is the result of give and take
31 negotiations between the Parties and does not necessarily reflect the

46 *Id.* at 9.

47 *Id.* at 9.

48 *Id.* at Exhibit A, p. 28.

49 CAPD refers to the Consumer Advocate and Protection Division. At the time of the settlement the Consumer Advocate Division was part of a larger, combined division.

⁵⁰ *Order Approving Settlement*, pp. 4-5, Exhibit A, pp. 29-31, TPUC Docket No. 14-00146 (November 4, 2015).

1 position of any single Party on any discrete issue, and no Party waives the
2 right to assert any position in any future proceeding.

3 22. Except to the limited extent necessary to allow the Authority to
4 implement an annual review mechanism under Tenn. Code Ann. § 65-5-
5 103(d)(6) in this Docket (and, for the avoidance of doubt, only in this
6 Docket 14-00146), the Parties acknowledge and agree as follows:
7

8 a. This Settlement Agreement shall not have any precedential effect in
9 any other proceeding or be binding upon any of the Parties in this or
10 any other jurisdiction;
11

12 b. None of the signatories hereto shall be deemed to have acquiesced
13 in any ratemaking or procedural principle, including without
14 limitation, any cost of service determination or cost allocation or
15 revenue related methodology,
16

17 c. No provision of this Settlement Agreement shall be deemed an
18 admission of any Party.
19

20 [23. – not shown]
21

22 24. The terms of the Settlement Agreement have resulted from
23 extensive negotiations between the signatories, and the terms hereof are
24 interdependent. The provisions of this Settlement Agreement are
25 agreements reached in compromise and settlement and solely for the
26 purpose of resolving this Docket without the need for further litigation.

27 Nothing in the record suggests that the capital structure and resulting WACC should not
28 be reviewed in the ARM proceedings. Rather, the process is designed to review the
29 reasonableness and prudence of the Company's expenses and investments.

30 **Q31. WHAT IS YOUR OVERALL ASSESSMENT REGARDING THE COST OF**
31 **CAPITAL?**

32 A31. One of the goals of the ARM is to reduce the burden and costs associated with litigation.
33 If the rates resulting from the ARM exceed costs associated with litigation, it is not a
34 benefit to customers. Here, ratepayers are incurring a cost of capital that is
35 approximately \$4.6 million higher than using the capital structure from the last rate case.

1 This level is not reasonable or prudent from a ratepayer perspective. On an annual basis,
2 the additional cost may exceed costs associated with a full rate case proceeding. Such a
3 result is counter to the very purpose of an ARM.

4 **Q32. WHAT IS YOUR RECOMMENDATION?**

5 A32. Atmos' decision to increase its equity ratio is a corporate decision that unnecessarily
6 increased costs to ratepayers without benefit. This level of equity financing is not
7 necessary to provide safe, reliable service, and it is not necessary to meet the just and
8 reasonable standards established by the *Hope* and *Bluefield* decisions. I recommend that
9 for the purpose of setting rates, the Commission limit the capital structure to an equity
10 ratio approved in the last rate case proceeding.

11 **IV. RATE DESIGN**

12 **Q33. HAVE YOU REVIEWED THE COMPANY'S PROPOSED RATE ALLOCATION?**

13 A33. Yes.

14 **Q34. WHAT DIRECTION DOES COMMISSION'S ORDER IN TPUC DOCKET NO. 14-**
15 **00146 PROVIDE REGARDING REVENUE RECOVERY THROUGH THE ARM?**

16 A34. In its Order, the Commission explained that "[t]he *Agreement* proposes any revenue
17 deficiency is to be distributed proportionately to the current margins of each class with the
18 current base and volumetric rates consistent with Schedule 11-3 of the *Settlement*
19 *Agreement*."⁵¹

20 **Q35. HOW HAS ATMOS PROPOSED TO ALLOCATE THE REVENUE**
21 **DEFICIENCY?**

22 A35. Atmos does not directly explain how it allocated the recovery. The Company references

⁵¹ *Order Approving Settlement*, p. 7, TPUC Docket No. 14-00146 (November 4, 2015).

1 Schedule 11 and states “[t]he net revenue requirement (comprised of the deficiency for the
2 Historic Test Period ending September 30, 2025, plus the ARRR minus the amortization
3 of the excess deferred tax liability) is distributed across the billing determinants (customer
4 classes and rate schedules) in this filing, consistent with the ARM tariff and Approved
5 Methodologies.”⁵²

6 **Q36. WHAT ARE YOUR CONCERNS WITH ATMOS’S EXPLANATION?**

7 A36. The testimony fails to explain these methodologies, how they are applied, or the ratepayer
8 impact. Excluding transport, demand and economic development charges, rate increases
9 between approximately 12.3% and 13.9%. The proposed rates in Schedule 11-3, Columns
10 (m) and (n) are hard coded. Neither the testimony nor the schedules provide detailed
11 rational or supporting calculations for the hard coded numbers.

12 **Q37. WHAT IS YOUR RECOMMENDATION REGARDING THE REVENUE
13 RECOVERY ALLOCATION?**

14 A37. The revenue deficiency allocations maintain the revenue requirement by rate class and
15 charge type. I recommend that in future ARM filings the testimony provide details of the
16 specific methods that are being followed and applied.

17 **V. TRANSPARENCY, PRUDENCE, AND RATEPAYER BENEFITS**

18 **Q38. DOES THE CONSUMER ADVOCATE HAVE CONCERNS WITH THE
19 CURRENT FILING?**

20 A38. Yes. As noted in the testimony David Dittmore, the Consumer Advocates’ review in this
21 proceeding has raised concerns regarding the Atmos’ ARM filing and access to base
22 information necessary for transparency.

⁵² *Direct Testimony of Maureen H. Melson* at 14:8-12, TPUC Docket No. 26-00009 (January 30, 2026).

1 The Company appears to be focused on the “timely means of recovering its cost of
2 service.”⁵³ It stated that the ARM “is a reasonable and effective solution that allows the
3 company timely recovery of its cost of service while avoiding costly and litigious general
4 rate cases.”⁵⁴

5 An ARM has goals other than the timely recovery of costs including:

- 6 • Transparency
- 7 • Prudence
- 8 • Fairness to Tennessee ratepayers.

9 **Q39. DOES THE PETITION CONTAIN THE INFORMATION REQUIRED TO BE**
10 **FILED?**

11 A39. Generally, the necessary information is provided. As explained by Mr. Dittemore, the
12 filing contains detailed schedules and supporting workpapers that comply with
13 Commission requirements and allow for verification of how amounts flow through its
14 filing. However, it did not contain foundational information.

15 **Q40. WHY IS THIS INFORMATION IMPORTANT?**

16 A40. The underlying information is necessary to determine the reasonableness and prudence of
17 costs of the petition. As explained by Mr. Dittemore, the ARM “does not diminish the
18 Commission’s responsibility to understand and evaluate the overall customer impact of
19 rate adjustments.”⁵⁵

20 **Q41. IS THE IMPORTANCE OF SUPPORTING DOCUMENTATION OF COSTS**
21 **GENERALLY RECOGNIZED?**

53 *Id.* at 4:10-11.

54 *Id.* at 4:16-17.

55 *Direct Testimony of Mr. David Dittemore*, TPUC Docket No. 26-00009 (April 10, 2026).

1 A41. Yes. Both the Commission Staff and the Consumer Advocate have the ability to obtain
2 additional information and documentation, which is recognized in the Commission-
3 approved Settlement:⁵⁶

4 Nothing herein shall limit the TRA staff or Consumer Advocate from
5 requesting additional data and/or documents after each Annual ARM Filing,
6 and the Company shall provide any such additional requested data and/or
7 document within 10 business days of such request.

8 In addition, the ARM is subject to reasonably and prudently incurred expenses and cost
9 of capital investments.⁵⁷

10 **Q42. WHAT ARE THE ROLES OF TRANSPARENCY AND PRUDENCE**
11 **REVIEWS?**

12 A42. Prudence reviews and transparency are foundational concepts for ratemaking, including
13 alternative regulatory ratemaking mechanisms. Prudence reviews act to protect
14 customers from unjust costs while ensuring utilities can recover reasonable expenses in a
15 less adversarial, more predictable regulatory environment. A concern with ARM
16 petitions is the creation of “informational asymmetry.” The Company contains the
17 information necessary to review the appropriateness of its costs. Regulators and other
18 parties are dependent on the cooperation of the utility to provide the information before a
19 review can be conducted. Prudence reviews and transparency ensure that utilities remain
20 accountable for their spending.

21 **Q43. WHAT ADDITIONAL INFORMATION DOES THE CONSUMER ADVOCATE**
22 **THINK IS NECESSARY?**

23 A43. Capital investments are a driving factor of the revenue requirement increase and should

⁵⁶ *Order Approving Settlement*, Exhibit A, p. 5, ¶13.a.(iii), TPUC Docket No. 14-00146 (November 4, 2015).

⁵⁷ *Order Approving Settlement*, p. 9, TPUC Docket No. 14-00146 (November 4, 2015).

1 be understood in detail beyond simply the amount spent.

2 **Q44. IS THE AMOUNT OF CAPITAL INVESTMENT A CONCERN IN ATMOS**
3 **SERVICE AREAS OTHER THAN TENNESSEE?**

4 A44. Yes. The amount of capital investment has been a topic of contention with several
5 implications. A recent Mississippi Public Service Commission Order noted ongoing
6 concerns regarding Atmos' capital investments, not only in Mississippi, but cited
7 incidents in other jurisdictions including Kentucky, Louisiana, and Colorado.⁵⁸ The
8 Mississippi Commission expressed difficulty in obtaining information stating:⁵⁹

9 Yet, notwithstanding the array of acronyms and dashboards invoked to
10 justify that conclusion, Atmos offered no concrete outputs of those tools -
11 no scorecards, no risk-reduction yardsticks, no before-and-after metrics - by
12 which the Commission could evaluate whether the proposed pace and
13 dollars are warranted.

14 **Q45. WHAT EFFORTS WERE TAKEN TO OBTAIN ADDITIONAL INFORMATION**
15 **IN THIS PROCEEDING?**

16 A45. The Consumer Advocate sought additional information regarding capital investments
17 through numerous discovery requests including CA DR Nos. 1-1, 1-5, 1-9, 1-12, 1-13,
18 and 1-14. The Company objected to several of the requests. All the responses are not
19 detailed here, but here are a few examples are:

- 20 • The Company is withholding responsive materials based on such objections as
21 “irrelevant, overly broad, and unduly burdensome.”⁶⁰
- 22 • The Company is “willing to meet and confer with the Consumer Advocate
23 regarding the grounds for which the document is sought and whether those issues
24 may be addressed through means that will protect the Company’s confidentiality

⁵⁸ *Final Order*, pp. 6-7, Mississippi Public Service Commission, Docket No. 2025-UN-59 (November 4, 2025). A copy of this order is attached as Exhibit CDK-5.

⁵⁹ *Id.*

⁶⁰ Atmos Energy’s Response to CA DR No. 1-1. A copy of this DR response is attached as CA Exhibit CDK-9.

- 1 interests in unrelated portions or version of the documents being requested.”⁶¹
- 2 • Atmos Energy objects to this request “on the grounds that it is not relevant to any
3 issue in this proceeding. . . . The Company is withholding responsive materials
4 based on these objections.”⁶²
 - 5 • “Atmos Energy objects to this request to the extent it seeks the analysis
6 supporting noncollection of AIC for any and all Mains installed during a period of
7 three years on the grounds that it is irrelevant, overly broad, and unduly
8 burdensome. . . . The Company is withholding responsive materials based on these
9 objection.”⁶³

10 The Consumer Advocate made follow-up requests in its second set of discovery on
11 March 13, 2026, and again with a third set of discovery on March 24, 2026. The
12 responses and the lack of necessary information is discussed by Mr. Dixon.

13 **Q46. WHAT ARE YOUR CONCLUSIONS?**

14 A46. The Consumer Advocate cannot confirm that the costs being requested by Atmos are
15 reasonable and prudent and fair to ratepayers. The Consumer Advocate is concerned
16 about Atmos’ lack of transparency in the ARM process as exhibited in its responses to
17 the Consumer Advocate’s information requests. This is especially troubling in light of
18 the compressed timeframe of ARMs. Further, the lack of transparency does not
19 demonstrate a spirit of cooperation necessary to facilitate the goals of an efficient and
20 effective alternative rate mechanism, including fairness to ratepayers.

21 **Q47. ARE CONCERNS REGARDING ADEQUATE OPPORTUNITY FOR REVIEW**
22 **NEW?**

23 A47. No. The potential for inadequate review was raised in the original Atmos ARM petition.

⁶¹ Atmos Energy’s Response to CA DR No. 1-5. A copy of this DR response is attached as CA Exhibit CDK-10.

⁶² Atmos Energy’s Response to CA DR No. 1-9. A copy of this DR response is attached as CA Exhibit CDK-11.

⁶³ Atmos Energy’s Response to CA DR No. 1-14. A copy of this DR response is attached as CA Exhibit CDK-12.

1 The Consumer Advocate expressed concerns regarding the management protocol and
2 potential impact of the proposed ARM. Specifically, the Consumer Advocate, William
3 H. Novak, stated:⁶⁴

4 [T]he ARM proposed by Atmos includes the Company's entire cost of
5 service. Such a radical shift in rate setting will likely result in cultural
6 changes since all costs would automatically be recovered. . . . The second
7 goal would be to implement a management audit that examines the
8 processes carried out by the Company to that they are both efficient and
9 effective instead of just the going-level rate recovery in an annual filing.

10 The CA noted that there had been an extended period since Atmos last had a management
11 Audit.

12 **Q48. WHAT IS YOUR RECOMMENDATION FOR REVIEWING THE CAPITAL**
13 **INVESTMENT?**

14 A48. Given the investment levels, rate increases, and the inability to review necessary supporting
15 documentation, a prudence review is recommended. Mr. Dittmore explained notes:

- 16 • A thorough prudence review requires significant effort considering the quick time-
17 frame for ARM dockets, but this doesn't mean that prudency should be ignored.
- 18 • Atmos lacks the autonomy to conduct its own prudence review in a manner that
19 would be dependable to external parties, including the Commission.

20 The Commission should direct Atmos to work with the Consumer Advocate to provide
21 additional information regarding its capital investments and capital investment plans such
22 that it is understood prior to Atmos's next ARM filing. In the alternative, the Commission
23 should initiate a prudence review of Atmos' capital investment projects.

⁶⁴ *Direct Testimony of William Novak* at 41:13-22, FN 38, TPUC Docket 14-00146 (April 4, 2015).

1 **VI. RECOMMENDATIONS**

2 **Q49. WHAT ARE YOUR RECOMMENDATIONS?**

3 A49. I recommend the Commission require the following:

- 4 • Adopt a capital structure consisting of 53.13% equity and 46.87% debt.
- 5 • Approve the proposed revenue deficiency allocation method proposed by Atmos.
- 6 • Require Atmos to provide more detailed information in the testimony in future
7 ARM filings, including explanations and detail of the specific methods that are
8 being followed and applied.
- 9 • Require Atmos to work with the Consumer Advocate to provide additional
10 information regarding its capital investments and capital investment plans such that
11 it is understood prior to Atmos's next ARM filing. In the alternative, the
12 Commission should initiate a prudence review of Atmos's capital investment
13 projects.

14 **Q50. DOES THIS CONCLUDE YOUR TESTIMONY?**

15 A50. Yes, it does. However, I reserve the right to incorporate any new data that may
16 subsequently become available.

IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE

IN RE:)
)
ATMOS ENERGY CORPORATION)
FOR APPROVAL OF ITS 2026 ANNUAL)
RATE REVIEW FILING PURSUANT)
TO TENN. CODE ANN. § 65-5-103(d)(6))
)

DOCKET NO. 26-00009

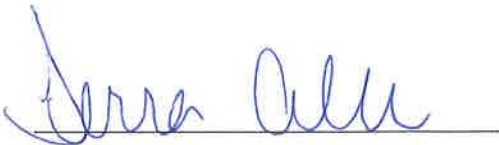
AFFIDAVIT

I, Clark D. Kaml, on behalf of the Consumer Advocate Division of the Attorney General's Office hereby certify that the attached Testimony represents my opinion in the above-referenced case and the opinion of the Consumer Advocate Division.


CLARK D. KAML

Sworn to and subscribed before me

This 9th day of April, 2026.



NOTARY PUBLIC



My Commission Expires: 1/31/2027

Docket 26-0009
Exhibit CDK-A
Equity Ratios of Gas Utility Companies

<u>Company</u>	<u>Equity Ratio</u>		
	<u>2024</u>	<u>2025</u>	<u>2026E</u>
Chesapeake Util	52.4%	51.5%	E 51.5%
New Jersey Res	43.3%	42.5%	43.5%
Nisource	41.8%	46.0%	45.0%
N.W. Natural	45.2%	45.0%	E 45.0%
One Gas, Inc	56.5%	57.5%	E 57.0%
Southwest Gas	44.6%	45.0%	E 45.0%
Spire Inc.	43.1%	46.6%	40.5%
UGI Corp	42.2%	45.0%	E 45.0%
Average	<u>46.14%</u>	<u>46.14%</u>	<u>46.56%</u>
Atmos Energy Corp	<u>60.70%</u>	<u>60.20%</u>	<u>60.00%</u>
Difference	<u>14.56%</u>	<u>14.06%</u>	<u>13.44%</u>



Investing in Utilities

Predictable returns regardless of market conditions



Exhibit CDK-2

Regulated utilities are known for their ability to generate predictable returns regardless of market conditions. For this reason, we often describe utility stocks as the ‘lead in the keel’ of our infrastructure portfolios. They allow us to navigate volatile global equity markets with confidence.

What are utilities?

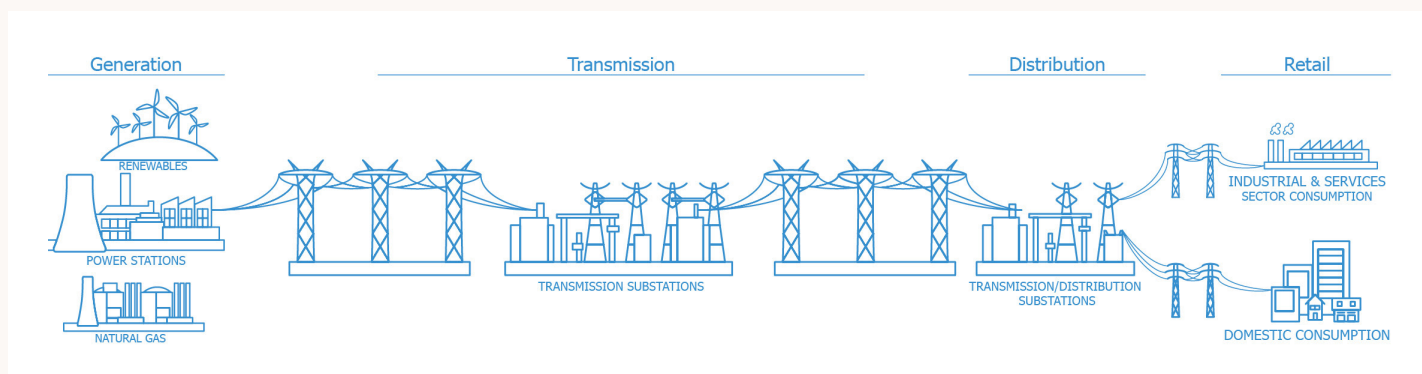
Utilities are companies that produce and deliver basic essential services such as electricity, natural gas and water. These services are delivered by a network of assets that require the use of public rights-of-way. Crucially, these networks exhibit attributes of a natural monopoly: the extensive capital required to construct the assets make it difficult for another company to compete profitably against the incumbent.

Due to this natural monopoly, governments have generally operated utilities but in recent decades they have handed the responsibility to private operators under licence.

To gain this licence, a utility agrees to submit to economic regulation governing the rates it can charge customers. In exchange, the regulator promises to set prices fairly so that the utility can cover its costs effectively and make a reasonable profit considering the risks involved. While returns set by regulators can be modest compared with other sectors, utilities are often assured a minimum return regardless of how the economy is performing because demand for their services is constant. The minimum returns provide an incentive for future or potential asset owners to invest in new or existing infrastructure. This means utility stocks can provide stable earnings and cash flows.

The electricity network

Electricity is delivered over a network where each segment serves a specific function and displays different economic characteristics, as displayed below:



Generation

Electricity is generated using fuels such as nuclear, coal, natural gas or renewables (hydro, solar, wind and biomass). Many companies making electricity are merchant generators, which means their output is sold at competitive prices in unregulated markets. As such, earnings can fluctuate due to unexpected changes in demand (e.g. weather) and input costs. Some generation assets, however, are regulated. Power prices from these assets have typically been set or agreed upon by the regulator.

Transmission

The power plant or substation provides electricity to a local distribution network. This is facilitated via highvoltage lines that carry electricity over long distances. Most transmission assets are common carriers, which are entities granted a licence by the regulator to provide services to the public. As common carriers, transmission owners sell access to their network under regulated terms. The terms of these contracts usually allow the transmission owner a fair return regardless of demand, while ensuring that the company operates without discrimination or preference.

Exhibit CDK-2

Distribution

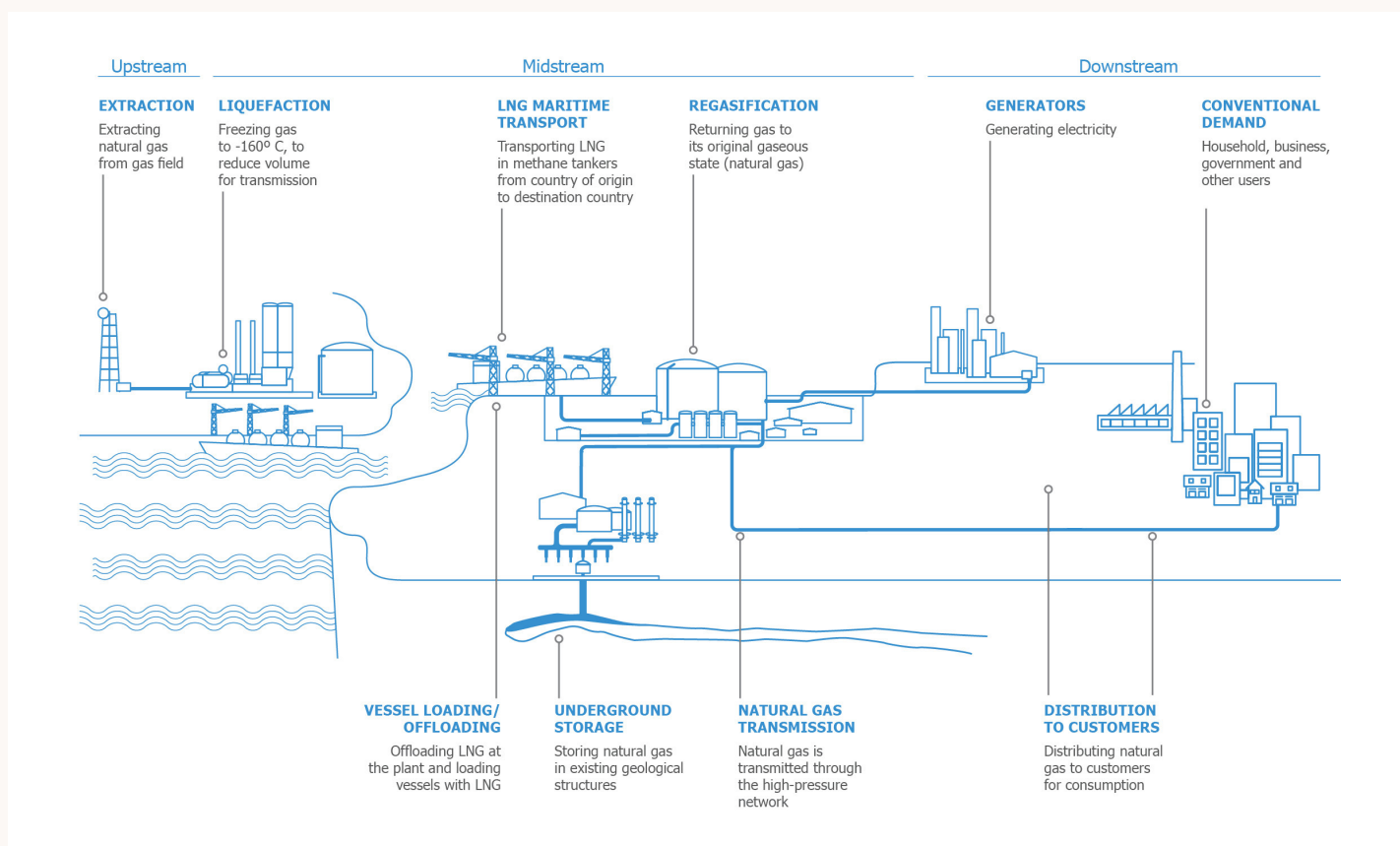
This is the stage when electricity is delivered to the end user. Distribution assets are lower voltage and cover shorter distances. Like transmission, owners of distribution lines charge a regulated rent for access to the network irrespective of demand. In most cases, the distribution company is owned by the utility that exclusively services an area.

Retail

This stage covers the companies interacting with electricity users. In some cases, the customer chooses a provider from a number of competitors. This occurs in markets where third parties can compete with the incumbent utility. While competition benefits customers (through lower prices), it can be difficult for the utility and third-party retailers to generate stable earnings because of customer switching.

The natural gas value chain

The natural gas value chain can be broadly viewed in three segments; upstream, midstream and downstream.



Upstream (exploration and production)

The value chain begins where natural gas is extracted from the ground. Natural gas exploration activity is typically determined by prices, which are influenced by: i) the balance between supply and demand, ii) the ease of extraction, iii) the price and availability of alternative fuels, iv) the weather, v) government regulations; and vi) macroeconomic conditions. Revenues of upstream producers will fluctuate as producers typically take ownership of a commodity whose prices can change at any time.

Midstream (pipelines and storage)

Natural gas pipelines move gas to local distribution networks. Pipeline operators tend to have stable and predictable revenue across the network for three reasons: i) demand needs to be high to justify the capital cost, ii) pipeline operators don't own the natural gas; and iii) revenues are typically regulated or are under contract.

Exhibit CDK-2

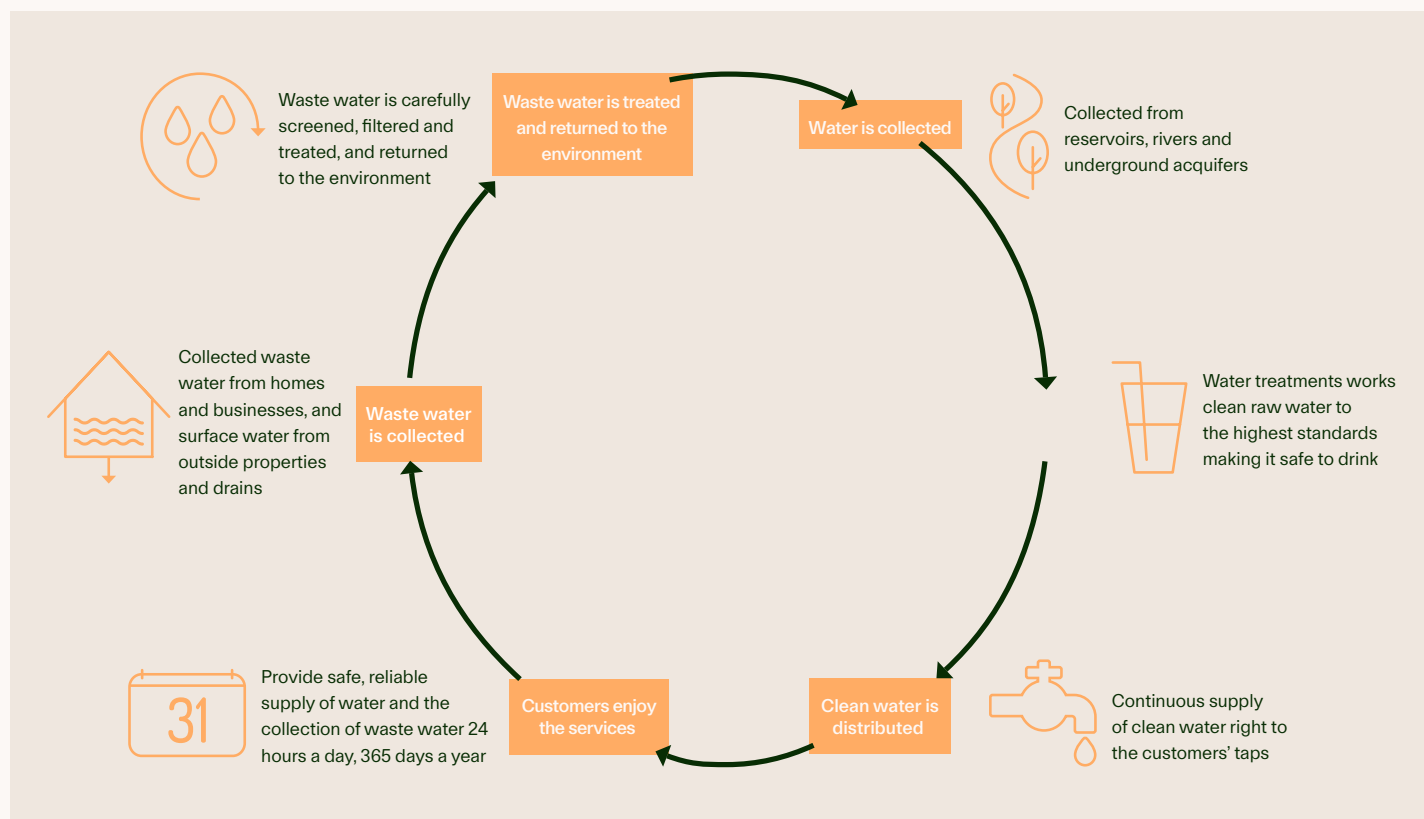
Contract terms and length can vary though, most owners will seek feebased or 'take-or-pay' provisions. The midstream segment also includes storage assets, which play an important role in the value chain by balancing supply and demand. This balancing role, along with limited commodity exposure, tends to result in relatively stable earnings for storage owners.

Downstream (local distribution companies)

Distribution involves the delivery of gas to the consumer. While some customers (commercial and industrial) receive natural gas directly from high-capacity pipelines, the majority of users receive gas from local distribution companies. Due to their highly regulated nature (as a result of their natural monopoly), these distributors benefit from stable and predictable cash flows.

The water network

Unlike electric and gas, the water network is typically fully regulated – from the assets collecting water to the waste-water treatment plants.



Regulated water utilities will usually own the physical assets needed to store, pump, treat and transport water to users as well as the assets used to collect, treat, transport and recycle waste water.

Water utilities, generally, do not own the water, but rather, own the access or property rights that allow them to divert water from a source for public consumption. These rights can include the licence to recycle the wastewater or return it to the environment. The defined supply sources may include reservoirs, lakes, rivers and streams, as well as ground water sources such as wells.

As shown above, the water network begins with water collection from the supply source. From there, the water is transported to the water-treatment facility where it is treated and conditioned for consumption. Once treated, the water is distributed through water mains to users. After use, the wastewater is collected via sewer lines and transported to the waste-water treatment facility. The waste water is then treated to meet regulatory standards before it is reused for consumption or returned to the environment.

Exhibit CDK-2

Key earnings drivers

Under the regulatory compact, the utility submits to rate regulation in exchange for exclusive rights to operate within a market. Regulation allows the utility to recover its costs, as well as earn a reasonable rate of return. For its part, the regulator defines what costs can be recovered and what is a fair rate of return, which help determine the prices a utility can charge.

Determining rates

The process by which utility charges or rates are determined differs across countries and jurisdictions. At its core, a utility's rates are a function of its rate (or asset) base and the authorised rate of return. One of the more common approaches used (particularly in North America) is 'cost of service'. This approach requires the regulator to determine the revenue requirement, which reflects the amount a utility must collect from its customers to recover its costs and earn a fair and reasonable return.

To put it another way: Revenue requirement = operating expenses + (asset base multiplied by the rate of return).

The utility tends to focus on its 'rate base' and the rate of return, as these factors typically exert the greatest influence on the company's long-term earning power. By contrast, operating expenses have less impact on returns, as these costs are typically passed through to consumers (i.e. utilities do not earn a return on expenses).

As noted above, the approach to determining rates can differ across markets. In the UK, regulators use performance-based ratemaking to determine customer charges. While similar to cost-of-service ratemaking in some ways, performance-based ratemaking provides the utility with opportunities to increase earnings by reducing or limiting costs (instead of increasing rates). The regulator, for example, may allow a utility to adjust its rates based on pre-determined productivity measures or other factors. The exhibit below provides a comparison of cost-of service and performance-based rates.

Table 1: Different ways to calculate rates

Cost of service	Performance based
Rate base	Rate in year one
x rate of return	+ inflation
+ operating expenses	+/- productivity
= revenue requirement / sales	+/- other
= rate	= rate in year two

Incentive ratemaking is another regulatory approach that uses mechanisms to reward utilities for achieving certain operating targets (as opposed to performance-based cost metrics). Incentives may range from higher allowed returns for meeting energy-efficiency goals to return-on-equity adders for making specific investments. Conversely, (negative) incentives are tools used to penalise utilities for failing to meet certain operating standards.

Incentive ratemaking is another regulatory approach that uses mechanisms to reward utilities for achieving certain operating targets (as opposed to performance-based cost metrics). Incentives may range from higher allowed returns for meeting energy-efficiency goals to return-on-equity adders for making specific investments. Conversely, (negative) incentives are tools used to penalise utilities for failing to meet certain operating standards.

The rate base

The rate base represents all capital employed by the utility to serve its customers. These might include buildings, power plants, poles, wires, transformers and pipelines.

Over time, the rate base declines as the capital base depreciates. Equally, the rate base grows whenever the utility invests in its capital base. For this reason, investors typically view most (regulated) capital investments as positive for earnings growth.

Exhibit CDK-2

In countries such as Australia, Chile, NZ and the UK, the regulated asset base is the comparable reference used by regulators. It is, however, a term that carries no legislative backing. The regulated asset base, unlike the US 'rate-base' model, allows the regulator to amend contracts via an ordered review, the revision or the renegotiation of licences.

Rate of return

A utility's rate of return is an aggregation of costs for the different sources of funding (i.e. weighted-average cost of capital based on the utility's capital structure).

As each source of funding has different costs, the mix can have a sizeable effect on the overall weighted rate of return. Moreover, a higher share of equity will usually translate into higher rates for consumers because of the higher cost of equity. This often requires regulators to establish limits on a utility's capital structure.

US utilities have a capital structure that ranges somewhere between 40% and 60% equity, although this can be higher in other parts of the world. Moreover, US utilities often only concern themselves with their return on equity as the cost of debt is passed through to the customer. In jurisdictions such as the UK, however, regulation considers the entire return on capital.

Those unfamiliar with utilities might find any company with debt comprising more than 50% of the capital structure surprising as other industries typically carry less leverage. But the ability to have a more highly levered balance sheet is a function of earnings predictability, which is borne out of regulation.

Table 2: How rates of return are derived

	% of capital structure	Cost of capital for element	% of capital structure
Common equity	45%	10%	4.50%
+ preferred equity	5%	8%	0.40%
+ long-term debt	45%	7%	3.15%
+ short-term debt	5%	5%	0.25%
= rate of return	100%		8.30%

Key risks to investing in utilities

There are three key risks for investing in regulated utilities:

Regulatory risk

Utility investments are sensitive to changes in the rate-making and regulatory process. This could come in the form of changes to inputs for determining the rate of return to disallowances for cost recovery. The regulator could amend ratemaking such that it becomes difficult for the utility to earn its authorised return.

Financial results can also be affected by changes in environmental regulations, as well as changes to local, state and federal government policies. Jurisdictions where regulators are elected (as opposed to appointed) will tend to have more customer-friendly rates.

Interest-rate risk

Changes in interest rates can affect how investors view utility stocks. Rising interest rates, for example, can lead to underperformance for the sector. This can happen because income-seeking investors shift to higher-yielding investments and away from stocks with lower income growth such as utilities or because higher rates increase interest payments for companies that are capital intensive and more heavily indebted.

Exhibit CDK-2

Technology risk

Technological advancements pose a long-term risk for utilities, particularly for electricity utilities. Disruptive technologies such as rooftop solar and battery storage may lead to some customers disconnecting from the grid, which would reduce the value of transmission and distribution assets.

Why does Magellan consider regulated utilities infrastructure?

For an asset to meet Magellan's definition of infrastructure, it must have two traits. The first is that it must be essential to the efficient functioning of a community. The other is that it must have earnings that are not sensitive to competition, movements in commodity prices and regulatory risk.

Regulated utilities are a staple holding for any infrastructure portfolio because of their highly stable and predictable stream of earnings that are secured by a lack of competition, regulation and their limited exposure to commodity prices and the economic cycle.

Magellan believes infrastructure assets, when properly defined, should generate reliable earnings and cash flows from the provision of essential services. Over time, the stable and reliable earnings derived from transmission and distribution assets should deliver income and capital growth for investors.

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Exhibit CDK-3

Atmos Energy Corporation
Kansas Distribution System Filing Requirements
Capital and Cost of Money
Test Year Ending March 31, 2022

Line No.	Description (a)	Reference (b)	Beginning Balance 3/31/2021 (c)	Ending Balance 3/31/2022 (d)	Rate Base Allocation (e)
1	Long-Term Debt Capital		\$ 5,117,141,945	\$ 5,710,726,673	\$ 117,510,164
2	Equity Capital		7,820,925,344	8,983,230,787	184,883,464
3					
4	Total Capital	(Line 1 + Line 2)	<u>\$ 12,938,067,289</u>	<u>\$ 14,693,957,460</u>	<u>\$ 302,393,628</u>
5					
6	Long-Term Debt Capital Percentage	(Line 1 ÷ Line 4)	39.55%	38.86%	
7	Equity Capital Percentage	(Line 2 ÷ Line 4)	<u>60.45%</u>	<u>61.14%</u>	
8					
9	Total Capital Percentage	(Line 6 + Line 7)	<u>100.00%</u>	<u>100.00%</u>	
10					
11	Long-term Debt Rate	WP 7A LTD Rate-Test Period, Column (p), Line 37		3.84%	
12	Cost of Equity	Input Value		10.95%	
13					
14	Weighted Cost of Capital - Long-Term Debt	(Line 6 × Line 11)		1.49%	
15	Weighted Cost of Capital - Equity	(Line 7 × Line 12)		<u>6.69%</u>	
16					
17	Total Cost of Capital	(Line 14 + Line 15)		<u>8.18% ROR</u>	

ATMOS ENERGY CORPORATION
 COLORADO SERVICE AREAS - COST OF SERVICE FILING
 CAPITAL STRUCTURE AND COST OF CAPITAL
 TEST YEAR ENDING JUNE 30, 2025

Line No.	Description	Capital	Ratio	Average Cost Rate	Overall Cost of Capital
	(a)	(b)	(c)	(d)	(e)
1	<u>Atmos Energy Corporation, Consolidated</u>				
2	Long Term Debt Capital	\$ 8,872,068,409	39.86%	4.20%	1.67%
3	Equity Capital	13,385,838,293	60.14%	10.80%	6.50%
4					
5	Total Capital (Ln 2 + Ln 3)	<u>\$ 22,257,906,702</u>	<u>100.00%</u>		<u>8.17%</u>
6					

BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION

ATMOS ENERGY CORPORATION

DOCKET NO. 2025-UN-59

UTILITY ID NO. GC-123-0081-00

RE: NOTICE OF INTENT OF ATMOS ENERGY CORPORATION TO CHANGE RATES TO SUPPORT SYSTEM INTEGRITY PLAN AND CONTINUED MODERNIZATION OF INFRASTRUCTURE

FINAL ORDER

COMES NOW, The Mississippi Public Service Commission (“PSC or “Commission,”) in the above-styled and numbered matter, having considered all of the evidence and being fully advised in the premises, and finds that it has full jurisdiction of Atmos and of the subject matter and further finds as follows:

Procedural History

1. Atmos Energy Corporation (“Atmos” or “The Company”) is a natural gas utility subject to the jurisdiction of the Commission.
2. Atmos was required to file this general rate case pursuant to Commission Orders dated November 4, 2024, and April 8, 2025.¹
3. On June 2, 2025, Atmos, on behalf of its Mississippi Division (“Atmos Mississippi”), filed with the Commission a Notice of Intent to change gas utility rates for its customers, along with other related relief (the "NOI") pursuant to Section 77-3-37 of the Mississippi Code of 1972, as amended, and RP 9.100(4) of the Commission’s Public Utilities Rules of Practice and Procedure. The NOI filed by Atmos seeks a Major Change in Rates of \$15 million or more under Commission RP 9.100(4).

¹ See Mississippi Public Service Commission (“MPSC”) Docket No. 2005-UN-503, Order dated Nov. 4, 2024 (setting deadline of May 1, 2025, for Atmos Energy to file a general rate case), and Order dated Apr. 8, 2025 (extending deadline to June 2, 2025).

4. Atmos provided notice of its NOI to each of the utility's affected customers as part of customer bills beginning on June 4, 2025, and ending on July 16, 2025 pursuant to RP 9101.2. Atmos verified the provision of notice through a Certificate Verifying Notice to Customers by Atmos Energy Corporation filed with the Commission on July 18, 2025.²

5. On June 5, 2025, the Commission issued a Suspension Order, which suspended the NOI filed by Atmos for a period not to exceed one hundred twenty (120) days from the date of the filing of the NOI to allow for a full investigation into the NOI.

6. By operation of Section 77-2-9(3) of the Mississippi Code of 1972, as amended, and RP 2.117, the Mississippi Public Utilities Staff ("Staff" or "MPUS") participated in this case as a party and had the benefit of full discovery to conduct a full investigation of the NOI filed by Atmos.

7. In support of its rate request, Atmos submitted the direct testimony, rebuttal testimony, and exhibits of 13 witnesses. In support of its position regarding Atmos rate request, Staff submitted the direct testimony and exhibits of 7 witnesses.

8. A hearing on the merits was held beginning on September 30, 2025 and concluding on October 2, 2025 (the "Hearing"), closing the evidentiary record on October 2, 2025.

9. The Commission finds that the Notice of Intent Rate Schedules filed in this Docket by Atmos comply with all statutory filing requirements and the Commission's procedural rules.

Overview

In its initial filing, Atmos requested a revenue requirement of \$293,615,332, excluding gas costs. Staff argued that the revenue requirement should be set at \$214,253,665.³ Atmos subsequently updated its filing to address issues raised by Staff and to update certain aspects of the filing, which reduced its requested revenue requirement to \$292,124,557 and resulted in a

² Atmos Energy Exh. 2, Certificate Verifying Notice to Customers By Atmos Energy Corporation.

³ MPUS Exh. 1, Direct Testimony of R. Lane Sisung at 21.

proposed increase of \$56,072,196.⁴ Atmos's proposed effective date for new rates was November 1, 2025.⁵ In addition to its requested revenue requirement, Atmos seeks notably: the continued use of Equal Life Group ("ELG") depreciation method, along with new depreciation rates for the Company's Mississippi plant assets, as well as the plant assets held by Atmos's Shared Services Unit ("SSU"); continuation of its Stable Rate Adjustment Rider ("SRA"), with certain amendments, including the incorporation of its System Integrity Plan Rider ("SIR") into the SRA; approval to account for and capitalize Cloud Computing costs and to recover these investments in SRA filings; approval to establish a placeholder regulatory asset to address the impact of the Corporate Alternative Minimum Tax; and to recover all reasonable rates case expenses, as well as any expenses the Commission orders to be reimbursed to other parties for their participation in this case.⁶

Staff proposes the use of a historic test year without forward-looking elements to reflect known and measurable changes through the end of the Rate Period and the imposition of a cap on the annual recovery of System Integrity Plan (SIP) investment that can be recovered through the annual filings. Staff also challenged five items in the overall calculation of the Company's operations and maintenance expense proposing approximately \$8,264,912 of separate adjustments.⁷ In the depreciation expense context, Staff proposes a change in the methodology

⁴ Atmos Energy Exh. 12, Rebuttal Testimony of William D. Matthews at Exhibit WDM-R-2. In its Post-Hearing Brief, Atmos Energy offered a proposed alternative that would result in a revenue increase of approximately \$33.4 million, which was determined by using the terms of the currently effective SRA and SIR. This adjusted revenue deficiency contains the following adjustments from the Rebuttal Model: No Depreciation change (\$17,360,429); Cash Working Capital 1/8 method \$504,839; Remove Labor & Benefits Known and Measurable Adjustment (\$2,070,222); Add 3-Year Average Expense Review Adjustment (\$592,439); Add 3-Year Average Incentive Compensation O&M and Capital Exclusion (\$930,700); Amortize Jackson O&M Project Cost over 5 Years (\$2,190,955); Other/Model Synchronization (\$27,330).

⁵ See Atmos Energy Exh. 1, which sets for the proposed effective date of November 1, 2025.

⁶ Atmos Energy Exh. 3, Direct Testimony of Wendy S. Collins at 15.

⁷ Staff's proposed adjustments include the exclusion of costs in Account 8740 and Account 9230, as well as the Company's payroll adjustment, incentive compensation costs, and a lump sum amount derived based on a generic expense review.

used to calculate depreciation rates, as well as five life and five salvage adjustments to certain asset accounts maintained by the Atmos Mississippi. Staff proposed no life or salvage adjustments to the Company's proposed SSU depreciation rates. In the area of rate base, Staff proposed nine separate adjustments.⁸ In the area of rate of return, the Commission must evaluate both Atmos Energy's and Staff's proposals to arrive at an overall rate of return. Finally, the Commission must consider whether revisions to the Company's SRA tariff and other tariffs are warranted.

Before the Commission articulates its specific findings on the numerous disputed issues in this case, it is worth spending a moment to remind the parties and the public of the Commission's charge in general and its view of this case in particular. The very purpose of regulation for vertically-integrated monopolies is to try to simulate or recreate market conditions where they otherwise do not exist. The Commission is, "in effect, the counterpart of the marketplace by which other businesses are measured."⁹ This is why comparison to market data is not just useful as evidence but occupies a place of importance. The record in this case contains ample evidence to suggest that Atmos has been operating beyond the parameters of the market. This is shown both in the difference in its capital structure and equity ratio and in the requested return on equity as compared to market peers. To that effect, the Commission has no desire to harm or otherwise affect Atmos's credit rating, but it is tasked with balancing the interests of ratepayers against the interests of the utility. That balance does not and cannot exist if the evidence shows that seeking higher credit ratings as a sole objective leads to unaffordable rates for Mississippi customers. Testimony was given, however, that companies with different capital structures and a lower authorized return

⁸ Atmos Energy Exh. 12, Rebuttal Testimony of William D. Matthews at Exhibit WDM-R-1.

⁹ *Mississippi Pub. Serv. Comm'n v. Mississippi Power Co.*, 429 So. 2d 883, 886 (Miss. 1983)

on equity still have access to capital markets.¹⁰ Nothing in the Commission’s legislative directives under Title 77 requires that it uphold company credit ratings at the expense of ratepayer.

Atmos Mississippi has spent approximately \$1.112 billion on planned and budgeted capital projects between fiscal year 2015 and fiscal year 2024, beginning with a total capital budget in fiscal year 2015 of approximately \$45 million, and now projects its total capital budget for the 2026 fiscal year will be \$215 million.¹¹ This is largely driven by Atmos Mississippi’s System Integrity Plan (“SIP”), the cost of which is recovered through the SIR. Originally pitched as an additional \$10 million annually in capital spending,¹² Atmos’s formal SIP recovery through the SIR began in fiscal year 2016 with a budget of \$39.4 million. This year, Atmos Mississippi is currently spending a SIR budget of \$171.3 million, more than four times the budget it was 10 years ago.

It is clear to this Commission that Atmos anticipates this capital spending to continue increasing at the same pace it has over the last decade. Both parties agree that the issue of capital spending in this case is about pace.¹³ Atmos asserts that its chosen pace is dictated by safety,¹⁴ and that the effectiveness of the dollars Atmos spends can only be judged through an intricate process that is too complicated to “be summarized in a chart or list.”¹⁵ Yet, notwithstanding the array of acronyms and dashboards invoked to justify that conclusion, Atmos offered no concrete outputs of those tools – no scorecards, no risk-reduction yardsticks, no before-and-after metrics – by which the Commission could evaluate whether the proposed pace and dollars are warranted.

¹⁰ MPUS Exh. 6, Direct Testimony of John E. Mayeaux at 117.

¹¹ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 7.

¹² Direct Testimony of David H. Doggette, Docket No. 2014-UN-117, Mississippi Public Service Commission (May 30, 2014) at 4.

¹³ Atmos Energy Exh. 4, Rebuttal Testimony of Wendy S. Collins at 21; Transcript of Proceedings – Vol. I (9/30/2025) at 62:21-63:2; MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 7.

¹⁴ Transcript of Proceedings - Vol. I (9-30/2025) at 136:10-19; Atmos Energy Exh. 4, Rebuttal Testimony of Wendy Collins at 21.

¹⁵ Atmos Energy Exh.6, Rebuttal Testimony of Jeffrey S. Knights at 15.

The record shows a long history of concerns being expressed by Staff over these continually-increasing spending levels.¹⁶ By all accounts, those concerns seem to have been ignored by the Company. In fact, Atmos suggested that the Staff, more specifically the personnel of the Staff's retained consultants, United Professionals Company ("UPC"), lacked the qualifications to provide an expert opinion on Atmos's system integrity investment decisions.¹⁷ In other jurisdictions, Atmos has shown a consistent pattern of challenging the qualifications of any expert witness whose testimony questions the Company's level of capital spending. In Kentucky, in 2018, when Mr. Lane Kollen, a regulatory consultant with over 30 years of experience questioned the pace of Atmos's spending, they accused him of "putting a price on safety" and called his proposal "irresponsible, ... dangerous and imprudent."¹⁸ In Louisiana, in 2023, when Mr. William Barta, a regulatory consultant with over 20 years of experience, questioned Atmos's spending, Atmos repeatedly noted he was as an accountant, not an engineer and, in sworn testimony, Atmos characterized Mr. Barta's concerns as "fearmongering" because they purportedly "twist[ed] the Company's 10K and investor information into a nefarious plot that disadvantages the customer."¹⁹ Earlier this year, in Kentucky, when Mr. Kollen, again questioned the pace of Atmos's spending, Atmos said his critique was "results-oriented rather than grounded in sound ratemaking principles."²⁰ Ironically, in each of these cases, including this year in Kentucky, those commissions approved limits on Atmos's capital spending.²¹ Not only has Atmos had warning of

¹⁶ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 4-5, referencing attached Exhibit JRB-2.

¹⁷ *Id.* at 5, referencing Atmos response to MPUS Data Request 6-28, attached as Exhibit JRB-3.

¹⁸ Direct Testimony of Mark A. Martin, Case No. 2018-00281, Kentucky Public Service Commission (Mar. 13, 2019), at pp. 12-13.

¹⁹ Rebuttal Testimony of Joe T. Christian, Docket No. U-35937, Louisiana Public Service Commission (Oct. 2, 2023), at p. 23.

²⁰ Rebuttal Testimony of Joel J. Multer, Case No. 2024-00276, Kentucky Public Service Commission (Mar. 10, 2025), at p. 5.

²¹ Kentucky Public Service Commission, Case No. 2018-00281, Order (May 7, 2019); Louisiana Public Service Commission, Docket No. U-36658, Order Accepting Uncontested Stipulated Settlement (May 13, 2024); Kentucky Public Service Commission, Case No. 2024-00276, Order (Aug. 11, 2025).

the concerns here in Mississippi, but the same concerns have also been voiced by commissions in other jurisdictions. In the above-referenced case, the Kentucky Public Service Commission ruled in Atmos's general rate case that "spending caps remain necessary as a tool to prevent ratepayers from being subject to unlimited spending or from spending decisions that are not made on a deliberate, prioritized basis for reducing potentially dangerous pipe."²² The Colorado Public Utilities Commission determined in 2023 that Atmos's Colorado Division's System Safety and Integrity Ride ("SSIR") had, within the balancing of interest, served its purpose and should be discontinued. In relevant part, "We find that its [sic] appropriate to begin winding down the SSIR and support the Recommended Decision's extension of the SSIR for two years. This limited extension *will provide discipline* for the Company as it addresses system safety and integrity projects, ensuring that ratepayers' dollars are used efficiently and effectively."²³ The discipline, guardrails, and accountability that the Staff seeks for the Commission to impose now should come as no surprise. The Company's own narrative illustrates why that discipline is needed. Before the January 2024 incident in Jackson, Atmos had already moved Mississippi customers from among the lowest gas bills in the region toward the middle of the pack.²⁴ Staff's witness Jonathan R. Bourg's analysis shows that this migration coincides with an elevated rate of capital spending relative to peers.²⁵ After the Jackson incident, Atmos unilaterally – and indeed contrary to a two-month old stipulation agreed to by the Company²⁶ – increased its integrity capital spending still further, raising it by more than 50% annually, which equates to \$50 million per year. This increase

²² Kentucky Public Service Commission, Case No. 2024-00352, Order (Aug. 11, 2025).

²³ Colorado Public Utilities Commission, Proceeding No. 22AL-0348G, Decision No. C230293: Commission Decision Granting, in Part, and Denying, in Part, Exceptions to Recommended Decision No. R23-0181 and Requiring Compliance Filing (Apr. 21, 2023), at p. 26 (emphasis added).

²⁴ Transcript of Proceedings - Vol. I (9-30/2025) at 48:13-49:15.

²⁵ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 14

²⁶ Joint Stipulation Between Atmos Energy Corporation and the Mississippi Public Utilities Staff, November 29, 2023, attached to December 5, 2023 MPSC Order in Docket No. 2015-UN-49.

contributes to the now \$11 to \$12 monthly increase that Atmos seeks to impose on residential customers annually and indefinitely.²⁷ Atmos's response to concerns about these extreme customer rate increases is that its rates have not yet caught up to some Florida utilities with rates twice above average.²⁸

Discipline has been a key word in this case. Unfortunately, that word carries with it negative connotations, but it is not the intention of the Commission in this case to punish or single out Atmos, nor does it wish to signal some sweeping change in regulatory climate. On the contrary, the Commission is attempting to bring Atmos more in line with its fellow investor-owned natural gas utilities in this state, and as stated above, fulfill its role as the "counterpart to the marketplace" that a good regulator should be.

Revenue Requirement Determination

1. **Test Year and Standard of Review** – Atmos urges the Commission to retain its current policy of establishing utility rates using a forward-looking Test Year. The Company introduced evidence establishing that the use of a forward-looking Test Year to establish rates has been consistently approved by the Commission in formula rate plan filings and general rate cases,²⁹ and that a forward-looking Test Year is consistent with Mississippi law,³⁰ governing legal precedent,³¹

²⁷ MPUS Exh. 1, Direct Testimony of R. Lane Sisung at 12-13.

²⁸ Transcript of Proceedings - Vol. II (10/1/2025) at 428:1-18; MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 35.

²⁹ See, e.g., Docket No. 2005-UN-503, *In Re: Stable/Rate Annual Evaluation for 12 Months Ending March 31, 2024*, Final Order (Nov. 4, 2024); Docket No. 2014-UN-132, *In Re: Notice of Intent of Entergy Mississippi, Inc. to Modernize Rates to Support Economic Development, Power Procurement, and Continued Investment*, Final Order (Dec. 11, 2014).

³⁰ Miss. Code Ann. §77-3-37(5) ("The notice of intent for major changes in rates as defined in subsection (8) of this section shall state the test period adopted by the public utility in support of its proposed rate changes, which may be a twelve-month period beginning with the proposed effective date of the rates proposed in the notice.")

³¹ *United Gas Corp. v. Mississippi Public Service Commission*, 127 So. 2d 404 (1961). See also *Mississippi Public Service Com'n v. Coast Waterworks, Inc.*, 437 So. 2d 448, 451 (Miss. 1983) (when operational expenses increase it is error for the Commission not to take the increases into consideration); *Mississippi Public Service Com'n v. Dixie Land & Water Co., Inc.*, 707 So. 2d 1086, 1090 (Miss. 1998) ("If the expenses to be incurred within the next year are not to be properly considered then there would be no need for the requirement of submitting a pro forma income statement.")

and the Commission's Rule of Practice and Procedure.³² Staff argues that the Commission should utilize a historic test year, that nothing in Mississippi law prohibits a historical test year, and, in practice, Mississippi has long operated formula plans that reconcile to actuals, including the state's other investor-owned natural gas utilities which currently employ historical test years.³³ Staff bases its position on the growth in Atmos's capital investment program in recent years and its contention that the pace of the Company's investment decisions is driven by financial objectives, rather than system safety needs.³⁴

The Commission agrees that a fully forward test year tends to shift timing and financing risks from the utility to its customers and that when recovery is premised on forecasts, the Company has fewer reasons to pace projects, finalize designs, or sequence work to align with demonstrated readiness and measurable outcomes. By anchoring rates to a historical test year and reconciling through a formula built on actual results, the Commission can re-balance those incentives. The Commission finds that the test year ending December 31, 2024, as adjusted only for known and measurable changes approved in this order, provides a reasonable basis for setting Atmos's rates in this proceeding. In doing so, the Commission finds that the rates will produce revenues sufficient to recover the utility's prudently incurred expenses and provide a fair rate of return on property used and useful in providing service, consistent with Section 77-3-33(1) of the Mississippi Code of 1972, as amended.

2. Rate Base: Plant in Service – The Commission denies Atmos's proposed adjustments to include projections for Plant-In-Service and associated Accumulated Depreciation and

³² MPSC RP 21.101 ("In arriving at such a rate base, the Commission shall give due consideration to 1. The reasonable original costs of the property used and useful, or to be used and useful within a reasonable time after the test period"); MPSC RP 21.102 ("The test period for measuring a public utility's rate base may be the twelve (12) month period beginning with the proposed effective date of the new rates set forth in the Notice of Intent.")

³³ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 61-62.

³⁴ *Id.* at 14.

Accumulated Deferred Income Taxes. The Plant-In-Service, Accumulated Depreciation, and Accumulated Deferred Income Taxes amounts to be used for purposes of setting rates in this case are the balances as of the end of the Test Year, December 31, 2024.

3. **Capital Spending** – The issue of capital spending has been briefly discussed above. The policy objective is straightforward: to impose discipline on pace and align incentives so that Mississippi customers fund proven, high-value safety work first. A limit or cap does not prohibit Atmos from making prudent investments; it simply restricts what flows automatically through the rider. Staff seeks to impose a cap on Atmos’s annual recovery of System Integrity capital investment at \$61 million dollars beginning in fiscal year 2026, which reflects the original 2016 SIR authorization level escalated to 2026 dollars, followed by 2% annual inflationary growth.³⁵ Evidence offered by Staff shows that the \$61 million figure is based on actual reported inflation per construction material, and serves to: (1) insert the concept of customer affordability into the Atmos ratemaking equation; (2) removes the current systematic structure that provides no spending accountability in the form of metrics or performance; and (3) aligns Atmos Mississippi’s business model with that of the many other jurisdictions in the country that have placed limits on Atmos’s capital spending.³⁶ Atmos claims that such a limit would not even be sufficient to cover leak repairs, which alone add up to \$70.6 million.³⁷ The Commission finds this assertion unpersuasive and dubious at best. Atmos admitted at hearing that several “bucket projects” included in its integrity spending list and the dollars associated with them include more than just leak repairs.³⁸ So, at the very least, Atmos’s claimed “leak repair” budget is overstated. Moreover,

³⁵ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 61.

³⁶ *Id.* at 60-61.

³⁷ Atmos Energy Exh. 7, Direct Testimony of Chad A. Keim at Exhibit CAK-1; Atmos Energy Exh. 8, Rebuttal Testimony of Chad A. Keim at Table CAK-R-2.

³⁸ Transcripts of Proceedings – Vol. III (10/2/2025), at 491:3-11.

two years ago, in 2023, when Atmos presented its categorized integrity spending projections to Staff, it told the MPUS that \$25 million per year was needed for leak repair through 2028.³⁹ Atmos does not suggest why that budget has apparently tripled, nor has Atmos shown what part of its purported \$70.6 million leak repair budget is needed for hazardous leaks requiring repair.⁴⁰

Most concerning, however, is the lack of evidence and support offered by Atmos to show that the ever-increasing spending has resulted in corresponding, tangible results. The record shows that from 2019 to 2023, integrity capital rose 28%, while the rate of Hazardous Leak Repairs over that timeframe remained flat.⁴¹ Atmos specifically calls for the replacement of legacy bare steel pipe to improve overall system integrity, yet, although 19 miles of bare steel pipe and 242 miles of coated steel pipe have been replaced over the last 11 years, 35.2 miles of bare steel pipe still remain in operation.⁴² Given the amount spent, all bare steel should have been prioritized and replaced by this time.⁴³

Therefore, the Commission finds that Staff's proposed annual cap on System Integrity capital spending recoverable through the SRA, more specifically described below, is just and reasonable. If the Company believes a specific safety-critical project truly cannot be completed within the cap, it should file a separate, time-limited petition demonstrating need and requesting targeted recovery which the Commission can evaluate on its merits. This structure protects customers from an open-ended escalation in formula recoveries while preserving a path for additional, necessary, and well-documented safety work.

³⁹ Transcripts of Proceedings – Vol. III (10/2/2025), at 491:3-11.

⁴⁰ *Id.*

⁴¹ MPUS Exh. 2, Direct Testimony of Byron Coy at 25.

⁴² *Id.* at 26.

⁴³ *Id.*

4. **Cash Working Capital** – Cash working capital is the capital investment (in addition to other rate base items) required to bridge the gap between when cash is paid for expenses necessary to provide service and when cash is received from customers for that service. A cash working capital study measures the lag between (1) the provision of service to customers and the collection of cash from customers (Revenue Lag) and (2) the recording of expenses and the payment of cash by the Company for those expenses (Expense Lag). As required by Section 77-3-37(4)(2) of the Mississippi Code of 1972, as amended, Atmos conducted a lead/lag study which studies the actual leads in cash revenues as compared to lags in cash expenses to determine whether ratepayers or investors are funding the day-to-day needs of the company. Staff contends that Atmos improperly included non-cash items, specifically depreciation, deferred income taxes, and return on equity, in its analysis. Staff maintains that these items do not involve actual cash outlays and therefore should not be included in a cash working capital study.⁴⁴ While the Company disputes the Staff's contentions, the Company proposes to continue the methodology that currently exists in the Stable Rate Adjustment ("SRA"), the 1/8 Method or 45-day Rule of calculating cash working capital. The Commission finds that the non-cash items of depreciation, deferred income taxes, and return on equity should not be considered in the determination of Atmos's Cash Working Capital included in rate base. With these items removed, the Commission accepts the other aspects of Atmos's lead/lag study as the appropriate method for establishing the cash working capital included in Atmos's rate base for ratemaking purposes.

5. **Net Operating Loss Carryforward Accumulated Deferred Income Taxes** – Utilities recover income tax expense in rates based on the application of effective federal and state income tax rates to book income. However, utilities remit taxes to taxing authorities based on taxable

⁴⁴ MPUS Exh. 1, Direct Testimony of R. Lane Sisung at 28-29.

income, which differs from book income due to various allowances, deductions, and timing differences prescribed by the Internal Revenue Code. Accumulated Deferred Income Taxes (“ADIT”) are established under Generally Accepted Accounting Principles (“GAAP”) to record the timing differences between the recognition of income and expenses for financial reporting purposes and for tax purposes. When a utility takes accelerated tax deductions, it collects more cash from customers through rates than it currently owes to taxing authorities. Without a ratemaking adjustment, this would create a source of cost-free capital supplied by customers. The advance collection recorded as a Deferred Tax Liability (“DTL”) on the utility’s books thus represents customer cash held for taxes that will be paid in the future. Conversely, when a utility must recognize an expense for book purposes before it can deduct it for tax purposes or must recognize income for tax purposes before it is recognized for book purposes, the utility effectively advances cash to pay taxes before recovering those costs in rates. This results in a Deferred Tax Asset (“DTA”). For ratemaking purposes, a DTL is treated as a reduction to rate base because it represents cost-free capital supplied by ratepayers, while a DTA is treated as an increase to rate base because it represents shareholder-supplied capital.⁴⁵ In addition to the timing differences described above, Tax Attributes are also accounted for as ADIT in ratemaking. A Tax Attribute is an allowance provided by the Internal Revenue Code (or state equivalent) that can be used to reduce future tax liability. The most common examples of a Tax Attribute are Net Operating Losses (“NOL”) and Tax Credits. These Tax Attributes are accounted for as DTAs because they represent a benefit the company expects to use later and therefore are included as an increase to rate base and generally offset the otherwise net utility ADIT liability position. Because NOLs can be carried forward to future tax years, they are commonly referred to as a Net Operating Loss Carryforward

⁴⁵ *Id.* at 32-34.

("NOLC"). The benefit to the utility of a net DTL position is its ability to defer a tax owed. If the tax is not owed due to the utility having a NOL, then the benefit of the deferred payment is lost.

Atmos Energy reports its taxable income on a consolidated basis and files a consolidated tax return which includes both the regulated and non-regulated legal entities of the Company.⁴⁶ The Company calculates the taxable income of the regulated operations separately from the non-regulated operations and allocates a portion of that amount to the Mississippi Division.⁴⁷ Atmos separately calculates the profit and loss of its regulated and unregulated activities and, for the regulated utility activities, allocates that calculated NOLC using a self-developed "Composite Allocation Factor" based on the average of each division's relative percentage of (i) Gross Direct PP&E, (ii) Average Number of Customers, and (iii) Total O&M Expenses, none of which bears a direct relationship to NOLC Accumulated Deferred Income Taxes ("ADIT").⁴⁸ Staff argues that Atmos should separately track and calculate each of its regulated division's actual contribution to its NOL carryforward, instead of using a composite allocation factor.⁴⁹ Atmos's rebuttal essentially contends that the Company has never had to do this before, and it would require a "significant analysis" to produce.⁵⁰ Staff acknowledges and the Commission agrees that it is not practical for Atmos to determine each utility division's specific contribution to the NOLC-related ADIT balance prior to the November 2025 rate implementation date.

The Commission finds that Atmos is fully capable of tracking each of its regulated divisions' actual contributions to its consolidated NOLC going forward. The Commission denies Atmos's proposed ratemaking adjustment to eliminate the \$189,193,355 credit NOLC ADIT balance

⁴⁶ Atmos Exh. 20, Rebuttal Testimony of Joel J. Multer at 14-15.

⁴⁷ *Id.* at 16-17.

⁴⁸ MPUS Exh. 1, Direct Testimony of R. Lane Sisung at 41.

⁴⁹ *Id.* at 41-42.

⁵⁰ Atmos Exh. 20, Rebuttal Testimony of Joel J. Multer at 11-12

representing the amount of utility division NOLC ADIT utilized on the Atmos Corporation Tax Return balance. For purposes of setting rates for the initial rate determination of this proceeding, Atmos shall utilize its proposed Composite Allocation Factor to allocate its total unadjusted NOLC ADIT balance to Atmos Mississippi as provided in the direct testimony of R. Lane Sisung. Accordingly, the NOLC-related ADIT included in the Atmos Mississippi rate base shall be reduced by \$11,048,892 to reflect the shareholder benefit derived from its allocable share of the \$189,193,355 credit balance. The Commission further orders that for future SRA filings, Atmos shall cease utilizing its Composite Allocation Factor and instead shall utilize the actual NOLC contribution of the Atmos Mississippi division to the Atmos consolidated NOLC balance and shall only include in rate base the amount of any such NOLC ADIT balance necessary for compliance with IRS normalization requirements, consistent with the recommendation of the MPUS in this proceeding.

Additionally, based on agreement on agreement between the parties: (1) rate base should be reduced by the amount of \$541,759 to eliminate FD-NOL Credit Carryforward for Company's operations outside of Mississippi and (2) rate base should be reduced by the amount of \$29,269 to eliminate ST-State Net Operating Loss associated with state tax attributes that are excluded from regulatory filings. The Commission therefore orders these adjustments.

6. Corporate Alternative Minimum Tax – The Corporate Alternative Minimum Tax (“CAMT”), enacted under the Inflation Reduction Act of 2022, imposes a 15% minimum tax on corporations with average annual Adjusted Financial Statement Income (“AFSI”) exceeding \$1 billion, calculated over a three-year period, to ensure that highly profitable companies pay at least some federal tax even when deductions or credits reduce their regular tax liability to little or nothing. While Atmos currently has no CAMT liability and does not anticipate paying the CAMT

until its 2027 fiscal year, it seeks approval of a methodology for determining a Mississippi-specific AFSI and proposes to include any related CAMT in rate base to earn a return on the CAMT credit.⁵¹ The Commission finds this request premature and improper. Atmos's Mississippi division, on a stand-alone basis, does not have sufficient AFSI to trigger the CAMT and thus any inclusion could violate cost-causation principles.⁵² Moreover, even if CAMT were included in tax expense, it may not create a new financing requirement since the Company may already be collecting taxes in rates to cover the liability, meaning investors would not be funding the payments.⁵³ Allowing CAMT credits in rate base could therefore enable Atmos to earn a return on amounts already recovered from ratepayers, an unjust and unreasonable outcome.⁵⁴ The Commission shall consider any proposals from Atmos to include any CAMT actually paid by Atmos upon Atmos actually incurring such payment and making a specific proposal within a future SRA or other ratemaking procedure for inclusion.

7. Rate of Return: Capital Structure – Atmos argues for use of the Company's actual capital structure to determine base rates which is comprised of 60.00% equity, 39.77% long-term debt, and 0.232% customer deposits.⁵⁵ Atmos relies heavily on the Mississippi Supreme Court holding in *Pittman v. Mississippi Public Service Commission*, which they argue is factually analogous to this Atmos proceeding.⁵⁶ However, the essential detail noted by the Court in *Pittman* when approving the use of an actual capital structure was “[t]he fact that Entex's actual capital structure falls well within the median range of comparable companies.”⁵⁷ The record in this case clearly

⁵¹ Atmos Energy Exh. 19, Direct Testimony of Joel J. Multer at 4-6.

⁵² MPUS Exh. 1, Direct Testimony of R. Lane Sisung at 49.

⁵³ *Id.* at 49-50.

⁵⁴ *Id.* at 48-50.

⁵⁵ Atmos Energy Exh. 16, Rebuttal Testimony of Daniel M. Meziere at Exhibit DMM-R-1.

⁵⁶ In *Pittman*, the natural gas utility Entex, Inc. (“Entex”), had filed a general rate case with the Commission requesting that rates be set based on its actual cost of service, including its actual capital structure of 56.59% equity and 43.41% debt.

⁵⁷ *Pittman v. Miss. Pub. Serv. Com'n*, 538 So. 2d 387 (1989) at 395.

shows that Atmos can be distinguished from Entex on this issue. Atmos's current and proposed capital structure consisting of approximately 60% equity is far out of line with its peers, whose average capital structure contains approximately 43% equity.⁵⁸

Staff is recommending that Atmos adopt a hypothetical 50%/50% equity to debt ratio for ratemaking purposes. The Mississippi Supreme Court made it clear in *Pittman* that “[n]othing in this opinion should be construed to prohibit absolutely the imposition of hypothetical capital structures by the PSC.”⁵⁹ The Court had previously found that “the Commission, *having found that the capital structure of the company was imprudent and uneconomical and unfair to telephone subscribers because of its low debt ratio*, had a right to adopt a hypothetical capital structure which would be less burdensome to the telephone subscribers for use in the determination of the earning requirements of the company.”⁶⁰ As stated above, Atmos's proposed capital structure is well outside of the range of peer utilities, and the Company has not performed any quantitative optimization to minimize its cost of capital for ratepayers, leaning instead on its own management preference.⁶¹ Moreover, while Atmos suggests that the 50% equity ratio advanced by Staff is somehow arbitrary or capricious, the other two investor-owned natural gas utilities in this state operate under the very hypothetical capital structure Staff proposes: 50% equity.⁶²

Therefore, the Commission finds that Atmos's actual capital structure is imprudent, uneconomical, and unfair for ratemaking and further finds that a hypothetical capital structure of 50% equity to 50% debt is supported by substantial evidence presented in this case, is just and

⁵⁸ MPUS Exh. 6, Direct Testimony of John E. Mayeaux at 110.

⁵⁹ *Id.* at 398.

⁶⁰ *Pittman v. Miss. Pub. Serv. Com'n*, 538 So. 2d 387 (1989) at 395, citing *Southern Bell Telephone & Telegraph Co. v. Miss. Pub. Serv. Com'n*, 113 So. 2d 622 (1959) at 656 (emphasis added).

⁶¹ MPUS Exh. 6, Direct Testimony of John E. Mayeaux at 16-17.

⁶² MPSC Docket No. 2015-UN-109, Order dated December 3, 2015 and Docket No. 2012+-UN-139, Order dated May 8, 2025.

reasonable, better aligns with peer utilities, and balances financial integrity with ratepayer protection and shall be utilized for setting Atmos's rates in this proceeding.

8. **Rate of Return: Authorized Return on Equity** – Atmos requests a return on common equity (“ROE”) of 10.41% derived using the existing, Commission-approved Stable SRA Rider formula calculated by Staff’s chosen ROE consultant for investor-owned utilities’ annual formula rate plans, Dr. Bruce Fairchild, plus the Performance Adjustment outlined in the SRA Rider.⁶³ Staff submitted evidence that, with its proposed capital structure adopted by the Commission in this case, an ROE of 9.40% is reasonable and comparable to the trend of other recently approved ROEs for natural gas utilities.⁶⁴ Atmos contends that this ROE, together with the proposed hypothetical capital structure, is “woefully inadequate”⁶⁵ and warns that if the Commission acts on its jurisdiction to set such an ROE, it would be perceived as “meddling,” which would make the Commission look bad to investors,⁶⁶ and ultimately result in the degradation of Atmos’s credit rating, allegedly violating the capital attraction standards articulated in the *Hope*⁶⁷ and *Bluefield*⁶⁸ U.S. Supreme Court decisions.⁶⁹ However, the standard dictated by *Hope* and *Bluefield* is that the “return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to *maintain its credit* and to attract capital.”⁷⁰ The Commission believes that this distinction matters. Ratings reflect agency models and assumptions about management policy, leverage, or forward capex exposure, which are often factors within the company’s control, not the

⁶³ Atmos Energy Exh. 17, Direct Testimony of Dylan W. D’Ascendis at 5.

⁶⁴ MPUS Exh. 6, Direct Testimony of John E. Mayeaux at 145.

⁶⁵ Joint Statement of Position by Atmos Energy Corporation and MPUS filed in this Docket on September 9, 2025 at 18.

⁶⁶ Transcript of Proceedings - Vol. II (10/1/2025) at 342:7-17.

⁶⁷ *Fed. Power Comm’n v. Hope Nat. Gas Co.*, 320 U.S. 591, 64 S. Ct. 281, 88 L. Ed. 333 (1944) (“*Hope*”).

⁶⁸ *Bluefield Waterworks & Imp. Co. v. Pub. Serv. Comm’n of W. Va.*, 262 U.S. 679, 43 S. Ct. 675, 67 L. Ed. 1176 (1923) (“*Bluefield*”).

⁶⁹ Atmos Energy Exh. 18, Rebuttal Testimony of Dylan W. D’Ascendis at 7-8.

⁷⁰ *Fed. Power Comm’n v. Hope Nat. Gas Co.*, 320 U.S. 591 at 603 (1944).

Commission's. *Hope* and *Bluefield* require that the company's financial soundness and access to capital be preserved, not that regulators guarantee management a rating target or shield it from the consequences of its own financial strategy. The relevant test is whether the Company can obtain necessary financing on reasonable terms consistent with its risk profile, which the evidence in the record clearly shows this capital structure and ROE would not jeopardize.⁷¹

It is also worth noting that other Atmos regulators have rejected the assertions Atmos makes here and have followed proposals similar to those presented by Staff. Most recently, the Kentucky Public Service Commission established a 53.5% hypothetical equity ratio and an ROE of 9.75% for base rates, with capital rider recovery limited to a 9.65% ROE.⁷² While Atmos contends that approximately 80% of its business is in Texas, Mississippi, and Louisiana, so actions taken by regulators in those jurisdictions would have a significantly greater impact to its credit rating,⁷³ the overwhelming majority of their business is in Texas. In fact, Atmos Mississippi represents just 5.3% of Atmos's business and would be more closely correlated with Atmos Kentucky, which represents 3.6% of Atmos's business.⁷⁴ Therefore, the Commission finds that a 9.40% ROE is supported by substantial evidence demonstrating that this level of return is just and reasonable, will maintain the Company's access to capital on reasonable terms, and considers the interests of the Company's shareholders and customers.

9. Depreciation Expense:

a. **Average Life Group vs. Equal Life Group** – The Average Life Group (“ALG”) and the Equal Life Group (“ELG”) procedures are methods used to allocate the annual accrual of

⁷¹ MPUS Exh. 6, Direct Testimony of John E. Mayeaux at 117, referencing Patrick C. Mann, *Financing Mechanisms for Capital Improvements for Regulated Water Utilities*, The National Regulatory Research Institute (1999) and Moody's Ratings, *Rating Methodology, Regulated Electric and Gas Utilities* (August 6, 2024 edition).

⁷² Kentucky Public Service Commission, Case No. 2024-00352, Order (Aug. 11, 2025).

⁷³ Transcript of Proceedings - Vol. II (10/1/2025) at 346:6-16.

⁷⁴ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 15.

depreciation rates across groups of utility property, e.g., fixed assets such as pipes, poles, and equipment. Using the ALG procedure, a constant accrual rate based on the average life of all property in a group is applied to the surviving property. Using the ELG method, property is divided into subgroups that each have a common life and are depreciated using an accrual rate based on the common life of each subgroup. Fundamentally, using ELG assets with shorter anticipated service lives are depreciated more rapidly and result in higher annual depreciation rates in the early years of a vintage's life and lower in later years.⁷⁵ As part of its original filing, Atmos presented a depreciation study for its Mississippi Division assets as of September 30, 2024, and a depreciation study for SSU assets as of September 30, 2022. Overall, the Company has proposed service life changes for twenty-two (22) accounts and net salvage rate changes for twenty-one (21) accounts. The only depreciation issues in dispute relate to the proposed Mississippi Division assets. The proposed SSU depreciation rates are unopposed. To perform its depreciation studies, Atmos Energy relied on the ELG methodology but also provided a depreciation expense result using the alternative, ALG methodology out of “concern for its customers.”⁷⁶ Staff supports adoption of the ALG methodology, which it contends has been adopted by the vast majority of regulatory jurisdictions in the U.S.⁷⁷ The Commission finds that the depreciation rates as proposed by Staff, based on the standard ALG method, result in a just and reasonable depreciation expense to customers that appropriately compensates the Company for a return of its investment in plant, and Atmos is directed to adopt the ALG procedure for establishing depreciation rates in Mississippi.

b. **Service Life Adjustment** – Atmos and Staff also disagree on the service lives for five asset accounts (Accounts 37600, 37800, 37900, 39000, and 39200), as well as the net salvage

⁷⁵ MPUS Exh. 9, Direct Testimony of David J. Garrett at 7.

⁷⁶ Atmos Energy Exh. 27, Direct Testimony of Dane A. Watson at 27.

⁷⁷ MPUS Exh. 9, Direct Testimony of David J. Garrett at 8.

lives for five accounts (Accounts 35200, 36701, 37600, 37601, and 37602). As a general matter, life analysis estimates the service lives of groups of utility property, and the ELG or ALG procedures discussed above determine how those estimates are applied across groupings of utility property to derive annual depreciation rates. The service lives of assets can be estimated using the statistically derived Iowa Curves.⁷⁸ For the five accounts to which Staff proposes a service life adjustment in this case, its proposed Iowa Curves for each account better match the observed lives of the assets at issue than those chosen by Atmos.⁷⁹ Therefore the Commission finds that the service lives proposed by Staff are based on sound depreciation policies and practices and result in just and reasonable depreciation rates for its customers that allow the company to receive a return of its investment in plant and should be adopted by Atmos.

c. **Net Salvage Rate** – The term “net salvage” equates to gross salvage, that is the proceeds from the sale of an asset when it is retired from service, less the cost of removal. Net salvage rates are considered in the development of depreciation rates. When a negative net salvage rate is applied to an account in calculating the depreciation rate, it results in an increase to the total depreciable base to be recovered from ratepayers over a particular period and, therefore, increases the depreciation amount of the depreciation accrual ultimately collected from customers. All else held constant, greater negative net salvage rates increase depreciation rates and expense. The net salvage data presented by Atmos indicates that net salvage rate increases for these accounts may be warranted at this time, but Staff proposes that these increases be more gradual than those proposed by the Company, in the interest of affordability for customers.⁸⁰ The Commission finds that the negative net salvage values proposed by Staff provide just and reasonable depreciation

⁷⁸ See Atmos Energy Exh. 27, Direct Testimony of Dane A Watson at Exhibit DAW-2 and MPUS Exh. 9, Direct Testimony of David J. Garrett at Appendix B for a more detailed discussion of the Iowa curves.

⁷⁹ MPUS Exh. 9, Direct Testimony of David J. Garrett at 13-22.

⁸⁰ *Id.* at 23-26.

rates for customers that allow the Company to receive a return of its capital investment and should be adopted by Atmos.

10. Operations and Maintenance (“O&M”) Expenses

a. **Incentive Compensation** – Staff argues that the total amount of dollars that Atmos ultimately uses to incentivize its employees is based on the Atmos Energy Corporation’s financial performance, specifically the earnings that the Company enjoys per share of its common stock, commonly referred to as Earnings Per Share (“EPS”) and that regulatory policy generally allows a utility to recover incentive compensation from customers only to the extent it is tied to measurable benefits that directly improve utility service, such as safety, reliability, or customer service, and not to the extent it is based on financial performance that primarily benefits shareholders.⁸¹ While this may be true generally, in Mississippi this allowance is slightly broader. The Mississippi Supreme Court has held that “any payment or benefit given labor, in the absence of proof of bad faith, is presumptively a proper expenditure for fixing rates.”⁸² The Court has further held that “if the plan adopted is a fair one which promotes economic security for the employee and thereby increases his mental and moral efficiency as a worker, such payments made for this benefit should be considered as compensation just the same as his weekly or monthly salary.”⁸³ The test in Mississippi is whether the compensation is unreasonable or excessive.⁸⁴ There is no evidence in the record that the Company’s compensation program is unreasonable or excessive. In fact, according to third-party surveys, Atmos’s compensation program is in the 50th percentile of the market compared to industry peers.⁸⁵ Additionally, Atmos presented evidence that

⁸¹ MPUS Exh. 4, Direct Testimony of Jonthan R. Bourg at 68-71.

⁸² *Mississippi Public Service Commission v. Home Tel. Co.*, 236 Miss. 444, 110 So. 2d 618, 622 (1959).

⁸³ *Id.*

⁸⁴ *Id.* (citing 43 Am.Jur., Public Utilities and Services, Sec. 141; 73 C.J.S. Public Utilities § 25(2), p. 1042).

⁸⁵ Atmos Energy Exh. 4, Rebuttal Testimony of Wendy S. Collins at 37.

the financial metrics in the incentive compensation plan provide a benefit to customers and shareholders by increasing employee productivity, customer retention and satisfaction, adherence to safety and environmental concerns, control of operations and maintenance expenses minimizing operating expense levels.⁸⁶ Finally, it is worth noting that the Commission currently allows other investor-owned utilities in Mississippi to include non-executive incentive compensation packages in their revenue requirements.⁸⁷ Therefore, the Commission finds that the Company's requested level of incentive compensation expense is just and reasonable and should be recovered in rates.

b. **Staff's Disallowance of One Time Charges** – Extraordinary and non-recurring items, be they costs or savings, do not reflect the ongoing cost of service and therefore should be removed from the test year, normalized over an appropriate period, or, where policy warrants recovery, deferred and amortized with a corresponding rider or expense amortization. For Atmos's legal expenses, totaling \$1,786,830 and booked to Atmos Energy Account 9230,⁸⁸ Staff has recommended normalization to achieve this result, and while Atmos contends that this is not necessary, as they will seek to change the rates set in this case in one year and update the level of these costs through a rate action, the Company has not objected. The Commission agrees and finds that Account 9230 should be adjusted to normalize those expenses based on the five-year average, resulting in an \$836,690 expense reduction, and an offsetting increase to rate base for the resulting deferral which shall be amortized over five (5) years.

Regarding the expenses related to Atmos's response to two natural gas-related incidents that occurred in January 2024 in Jackson, Mississippi, Atmos seeks to recover \$2,738,694 for the mobilization of emergency response crews, inspections and testing, and the engagement of outside

⁸⁶ *Id.* at 39-40.

⁸⁷ MPSC Docket No. 2019-UN-219, Order dated March 17, 2025 and Docket No. 2014-UN132, Order dated December 11, 2014.

⁸⁸ MPUS Exh. 7, Direct Testimony of J. Thomas McGuckin at 5.

experts and legal/regulatory support.⁸⁹ Atmos recorded these costs in Accounts 8740 and 8560 and seeks to recover these costs as part of base rates established in this proceeding.⁹⁰ Atmos argues that “while the incident causing these costs to be incurred may be unique, the activities undertaken to respond to this event are reflective of normal, on-going natural gas distribution operations.”⁹¹ The Commission is unconvinced by this argument. The mere chance that extraordinary costs may occur in the future is not a reason to include them in a test year that is supposed to be reasonably reflective of prospective costs. This does not mean that these incident-response costs were imprudently incurred, or that the Commission is barring their recovery through some other means, but that such costs should not be included in prospective rates in this case. Therefore, the Commission finds that the one-time non-recurring expenses associated with the Jackson incident totaling \$2,738,694 should be removed from the Company’s test year operating expenses.

c. **Atmos Payroll Adjustments** – The test year in this case is the twelve-month period ending December 31, 2024. The total test-year level of base payroll for the Atmos Mississippi Division, including SSU labor was \$19,554,395.⁹² Atmos calculated an adjustment to this amount to annualize the pay increase made during the test period on October 1, 2024, for an additional nine months that is not included in the test period, plus the 3.5% pay increase that took effect on October 1, 2025, which was to coincide with the time rates established in this case will be in effect. There is no dispute regarding the test year level of base payroll expenses. The dispute focused upon the annualization of the October 1, 2024 pay increase and the post-test-year adjustment. Staff, however, acknowledged that known-and-measurable adjustments can be appropriate within a rate

⁸⁹ *Id.* at 4-5.

⁹⁰ *Id.*

⁹¹ Atmos Energy Exh. 12, Rebuttal Testimony of William D. Matthews at 18.

⁹² Atmos Energy Exh. 12, Rebuttal Testimony of William D. Matthews, Exhibit WDM-R-2 at WP_O&M Labor Adjustment.

case. Consequently, Staff takes the position that if the continuation of the Stable Rate Adjustment Rider is not approved and the Commission nonetheless wishes to reflect a narrow, truly known 2025 effect, Staff concedes that a limited O&M adjustment, confined to the first, known component, that is the Company's already-set 2025 merit factor and the mechanical payroll-tax load on it, is appropriate. Therefore, Commission finds it appropriate to allow Atmos to annualize its labor increases that occur during the test year as those amounts can be verified in the filing presented to the Commission, preserves balance in the public interest, and still affords Atmos an opportunity to earn its revenue requirement. Atmos's labor adjustment is therefore approved in part. The October 2025 portion of the adjustment, however, could not ordinarily be verified within the timeline of a ratemaking proceeding and therefore is denied. If, however, Atmos is able to verify this portion of the adjustment with documentation submitted in its compliance filing, the Commission authorizes Atmos to include this October 2025 increase in its Labor Adjustment for purposes of setting prospective rates arising from this rate case proceeding.

d. **Other O&M Adjustments** – Additionally, Staff seeks to disallow \$874,711 in direct O&M expenses and \$271,626 of SSU expenses for a total of \$1,146,337 of disallowances based on removals of non-utility, non-customer related, and undocumented expenses that should not be embedded in base rates.⁹³ The Staff identified specific line items, including club dues, community relations/trade shows, directors' fees and related retirement expense, investor relations, miscellaneous employee welfare, spousal/dependent travel, sales-promotion transportation, and "unsupported" contracted labor, and then tied each to the regulatory rationale for exclusion (e.g., shareholder/PR functions, not serving a utility purpose, or lacking documentation).⁹⁴ Atmos fails to demonstrate that expenses such as club dues, investor relations, spousal travel, or

⁹³ MPUS Exh.7, Direct Testimony of J. Thomas McGuckin at 8.

⁹⁴ *Id.* at 7-9.

unsubstantiated contractor invoices are prudent, recurring utility expenses that benefit Mississippi customers, but only rebuts that the adjustment to remove \$150,000 of O&M in its initial adjustment reflects expenses that would normally be removed from an SRA filing.⁹⁵ The Commission therefore finds that the identified non-utility expenses totaling \$874,711 for Atmos Mississippi and \$271,626 for Atmos's shared services divisions should be disallowed and removed test year operating expenses.

11. Ad Valorem Tax Expense – Consistent with the treatment afforded under its Stable Rate Filings, Atmos included a proposed ad valorem tax adjustment to reflect a forward-looking, pro-forma increase in the level of expense that will be incurred during the time period rates established in this case will be in effect.⁹⁶ Staff argues that Atmos's ad valorem tax adjustment should be denied under a historic test year and that recovery of ad valorem expenses should be limited to actual tax bills incurred in the test period.⁹⁷ The Company's proposal is a forward-looking, pro-forma increase in expenses which projects assessed value growth and millage outcomes beyond the test year, layers timing true-ups, and then annualizes those projections into base rates. Without a forward test year, those components are unnecessary as the historic test year includes actual tax bills incurred in the test period. As the Commission has found in this Order that Atmos's rates should be based on an historic test year, the Commission finds that no adjustment to property taxes is warranted.

12. Class Cost of Service

a. **Class Cost of Service Study** – A traditional Class Cost of Service Study (“CCOSS”) is prepared using generally accepted practices and standards applied across the

⁹⁵ Atmos Energy Exh. 12, Rebuttal Testimony of William D. Matthews at 21.

⁹⁶ Atmos Energy Exh. 12, Rebuttal Testimony of William D. Matthews at 27-28.

⁹⁷ MPUS Exh. 4, Direct Testimony of Jonathan R. Bourg at 76.

industry that are perhaps best articulated in the National Association of Regulatory Utility Commissioners ("NARUC") Gas Distribution Rate Design Manual ("NARUC Manual"). A CCOSS goes through three determinations: (i) Functionalization: investment and expenses are grouped by the function they provide within the electric or gas system, e.g. generation/production, transmission, and distribution; (ii) Classification: the characteristics of the investment and expenses are determined relative to their cost causative properties, e.g. customer related, demand related, and energy or commodity related costs; and (iii) Allocation: the final stage of the cost-of-service study is to allocate the functionalized and classified costs using reasonable allocation methodologies, which reflect the inherent cost causative properties of those costs, e.g. customer-related costs are ordinarily charged based on customer count and demand-related costs may vary based on the peak level of demand. While the Staff does not dispute the accuracy of the way in which the Company has assigned the costs to serve each customer rate class in its CCOSS submitted in this case, Staff seeks to change the way in which distribution mains are classified for cost assignment purposes by making them 100% demand driven, rather than using the minimum system approach recommended by Atmos.⁹⁸ The Company's classification approach is commonly referred to as the "minimum system method" and, while Atmos contends is endorsed by NARUC,⁹⁹ Staff argues that this approach to classification of distribution main "ignores the operational purpose of those assets which are constructed to serve an overall level of projected peak demand on the system, not a specific or identifiable number of customers."¹⁰⁰ The Commission finds and directs Atmos to perform, as part of its next CCOSS, additional analysis of its proposed minimum system classification of distribution mains. Specifically, Atmos is directed to identify all gas mains

⁹⁸ MPUS Exh. 8, Direct Testimony of Dustin Madsen at 10.

⁹⁹ Atmos Energy Exh. 25, Direct Testimony of Paul H. Raab at 2-3.

¹⁰⁰ MPUS Exh. 8, Direct Testimony of Dustin Madsen at 11.

that it proposes to classify, in whole or in part, as customer-related, and confirm that those assets are either: (i) required to serve a single customer; or (ii) specifically designed by the Company to a level that is intended to serve only those identified customers that are currently connected to the system.

b. **Customer Charge** – The last step in developing rates for each class is to develop a rate design for each rate class to establish fixed and/or variable rates based on historical billing determinants that are projected to produce the revenue requirement allocated to that class. Evidence in the record shows that Atmos proposes a customer charge as part of its rate design that is not supported by its CCOSS, and that the Company's own CCOSS using a minimum system approach to classifying distribution mains implies a customer charge of \$75.10 should be approved for residential customers, but the Company recommends a customer charge of \$32.50.¹⁰¹ Staff proposes a customer charge of \$28.92 based on its CCOSS, which by coincidence or otherwise is much closer to Atmos's proposed customer charge of \$32.50 than the results of the Company's CCOSS. Therefore, the Commission finds that it is reasonable to use the Staff's CCOSS as a guide to design rates and that Atmos's customer charge shall be set at \$28.92, consistent with the class cost of service proposed by Staff. This customer charge shall not be adjusted by future SRA filings and will remain in place until altered by the Commission on petition from Atmos, the MPUS, or the Commission.

c. **Revenue Allocation** – As discussed above, Atmos's proposed allocations of revenues amongst classes are not directly related to its CCOSS, whereas Staff's proposed allocations of revenues amongst classes is directly related to Staff's CCOSS. For example, the Atmos CCOSS results indicate that Residential Rates should receive a rate increase of 55.78%,¹⁰²

¹⁰¹ *Id.* at 17.

¹⁰² *Id.* at 20.

whereas the revenue allocation proposed by Atmos proposes a rate increase of 22.5%.¹⁰³ The Staff's CCOSS supported residential rate increase is 26.77%¹⁰⁴ as compared to the Company's proposed 22.5%. For the sake of clarity, these percentage increases are all based on Atmos' proposed \$64.7 million increase in revenue requirement for the rate case which, of course, is in dispute. It is necessary to highlight the discrepancies to show the basis for the Commission's determination on this issue. Therefore, the Commission finds that the class cost of service study proposed by Staff should be adopted for purposes of allocating Atmos's revenue requirement among customer classes consistent with provisions of this Order. Utilizing this approach results in allocations similar to those proposed by Atmos while maintaining a direct tie to a just and reasonable class cost of service study.

13. Accounting Treatment for Cloud Computing – Cloud computing is the delivery of Information Technology (“IT”) products, including servers, storage, databases, networking and software, over the internet or “cloud” that is owned, hosted, and maintained by a third-party provider.¹⁰⁵ Atmos's cloud computing implementations and subscriptions include digital construction management, supplier management, data analytics, leak survey data management, emergency callout systems, productivity support, business continuity services, customer billing and relationship management, human resources management, collaboration services, budgeting and planning, ticket management solutions, and regulatory reporting, accounting, and audit support.¹⁰⁶ Pursuant to the Stipulation filed as part of the Parties Joint Position Statement in this proceeding, Staff does not oppose the Company's proposed accounting treatment for Cloud Computing. Therefore, the Commission finds that it is reasonable for Atmos Energy to record

¹⁰³ *Id.* at 22.

¹⁰⁴ *Id.* at 20.

¹⁰⁵ Atmos Energy Exh. 23, Direct Testimony of Emily B. Wiebe at 13.

¹⁰⁶ *Id.* at 13.

Cloud Computing costs for contracts having terms greater than one year as a capital investment in FERC Account 399.08.¹⁰⁷ The Commission further finds that it is reasonable for Atmos Energy to record Cloud Computing costs for contracts having terms greater than one year as a capital investment recoverable through annual SRA filings.¹⁰⁸

14. Rate Base Adjustment for Previously Stipulated Adjustments of Capitalized Incentive Compensation Costs – The Company and Staff agree that Atmos has not reflected an ongoing reduction to rate base for amounts of capitalized incentive compensation adjusted in previous Stable Rate Joint Stipulations between the Company and Staff. As such, it is reasonable to require Atmos to reduce its rate base by \$13,035,758 to remove these capitalized incentive compensation costs back to 2013.

15. Tariff Revisions – Per Atmos’s request,¹⁰⁹ the Commission finds that it is reasonable that the Company be allowed to remove the following rate schedules from its Tariff: Rate Schedule 307 (Intermediate Volume Service), Rate Schedule 308 (Large Volume Service), Rate Schedule 309 (Interruptible Gas Service Special (For Oil Mills, Cotton Compresses and Cotton Gins)), Rider Schedule 323 (Spot Gas Sale and/or Transportation Pricing Rider), and Rate Schedule 325 (Gas Services for Municipal Distributors as there are no customers taking service under these tariffs.¹¹⁰ The Commission also finds that it is reasonable that the Company be allowed to revise Atmos Energy Rate Schedules 312 (End-Use Sales Service) and 313 (Transportation Service) to clarify that the Firm Demand Charge is billing on the basis of MMBtu, rather than Mcf¹¹¹ and Rider Schedule 326 Weather Normalization Rider (WNA) to reflect that the temperature zones for

¹⁰⁷ *Id.* at 18-20.

¹⁰⁸ *Id.*

¹⁰⁹ Atmos Energy Exh.1, Notice of Intent at Attachment R, MFR-3.

¹¹⁰ Atmos Energy Exh. 3, Direct Testimony of Wendy S. Collins at 16.

¹¹¹ *Id.* at 16-17.

application of the WNA will use NOAA industry standard weather data for the appropriate operating districts effective with the WNA period beginning in November 2025.¹¹² The Commission further finds that it is reasonable that the Company be allowed to revise Atmos Energy's Purchased Gas Adjustment (PGA) Rider to clarify that the costs of compressed natural gas (CNG) or liquified natural gas (LNG) incurred to supply customers are supplemental gas costs recoverable through the PGA and to update the PGA Rider to include changes approved under the Commission's Order in Docket No. 2005-UN-503 (issued October 4, 2022).¹¹³

Stable Rate Adjustment Rider

1. **Continuation of Formula Ratemaking** – The arguments presented by parties and the related Commission determinations are addressed in earlier sections of this Order and incorporated by reference. Based on the foregoing, the Commission finds that continuation of formula-based ratemaking serves the public interest when coupled with adequate safeguards and transparency, and as such, the Commission approves Atmos's request to continue its SRA. However, the record and the foregoing determinations by the Commission demonstrate that Atmos's current SRA (and former SIR) framework lacks sufficient accountability and measurable performance metrics and therefore orders changes consistent with the terms of this Order to Atmos's SRA as outlined below.

2. **Terms of the SRA** – The Commission authorizes Atmos to utilize the SRA, as modified herein, for a term of five years (Test Years 2025, 2026, 2027, 2028, and 2029). Thereafter, the availability of the SRA as a ratemaking mechanism will terminate unless extended by the Commission on petition from Atmos, Staff, or the Commission. The use of the SRA approved herein is not mandatory and Atmos may seek to adjust its rates through other means provided by law, including a rate case similar to the one addressed in this proceeding.

¹¹² *Id.* at 17.

¹¹³ *Id.* at 17-18.

3. **Test Year** – Atmos’s SRA shall be based on a Test Year that consists of the twelve months ending December 31 of the year immediately preceding the Company’s filing. The Company shall make no pro forma adjustments to the Test Year except as outlined herein or as ordered by the Commission in subsequent proceedings based on an approved request to allow specific known and measurable changes to the test year.

4. **Rate Base** – Rate base balances shall be based on the historic test period and calculated as the average of the beginning rate period and ending rate period based on per book evaluation amounts. The Company is authorized to use the end-of-year balance for plant-in-service. If it does so, it must also include the same end of period balances for accumulated depreciation (and associated depreciation expense) and ADIT.

5. **Regulatory Debits and Credits** – Atmos may utilize end of period balances for regulatory assets or liabilities, provided the annualized amount of amortization is also reflected within the evaluation amounts.

6. **Cash Working Capital** – In every SRA filing, Atmos shall not use its proposed 45-day methodology and shall instead utilize the lead/lag study methodology presented by the Staff in this case and approved for setting Atmos’s revenue requirement in this case. Atmos, however, shall not include the non-cash items of depreciation, deferred income taxes, and return on equity. Inputs into the lead/lag study shall be updated with per book Test Year expense information and rely on same leads and lags unless a request is made by Atmos, Staff, or the Commission for such leads and lags to be updated.

7. **Limit on Recoverable Integrity Capital** – The Commission establishes an annual cap on System Integrity capital spending recoverable through the SRA.¹¹⁴ For 2026, that cap shall be \$61

¹¹⁴ The Company’s capital budget as presented to this Commission over the last decade, and as presented in Exhibit CAK-2 in this proceeding, is segregated into eight categories: Equipment, Vehicles, Growth, Information

million and will increase over the course of this five-year SRA approval as outlined in the table below.

Fiscal Year	Annual Cap (\$ million)
FY 2026	61.00
FY 2027	62.22
FY 2028	63.46
FY 2029	64.73
FY 2030	66.02

Future SRA and SIR filings shall include project-level listings identifying scope, purpose, cost, and measurable outcomes for all projects exceeding \$1 million. Functional projects included in this amount must be separately identified with a specific description of what work will be performed under the functional project. Costs to repair hazardous leaks, if included in a functional project, shall be separately identified. In addition, Atmos shall include, contemporaneous with each annual filing (a) leak-rate data, (b) miles of pipe replaced by material type, (c) PHMSA safety incident trends, and (d) cost-per-mile benchmarks relative to peer utilities.

Atmos may petition for additional recovery above this cap upon a showing that such spending is justified and cannot be accomplished within the limits set out herein. At a minimum, such petition shall fully explain and demonstrate the need and provide measurable safety or reliability benefits that will result from the spending.

8. Capital Structure Constraint within SRA – The SRA model shall reflect a capital structure that does not exceed 50% equity. If the Company’s actual capital structure exceeds this equity ratio, a hypothetical capital structure will be utilized by adjusting Atmos’s debt ratio upwards to the extent necessary to limit Atmos’s equity ratio to 50% for ratemaking purposes.

Technology, Public Improvements, Structures, System Improvements, and System Integrity. The limit on recovery here applies only to the System Integrity category. The Commission will monitor to ensure that the Company continues to categorize projects in the same manner so that capital spending traditionally identified as System Integrity is not categorized differently to avoid the limits on recovery through the SRA.

9. **ROE within SRA** – The formula rate calculations shall use the authorized 9.40% ROE as the midpoint and include a \pm 50 basis-point bandwidth within which no adjustments to rates shall be made. If Atmos’s actual earnings as calculated in the SRA fall outside of the bandwidth, Atmos’s rates shall be adjusted prospectively to the midpoint of the bandwidth, which is the 9.40% ROE ordered herein. This allowed ROE shall remain in effect for the term of this five-year SRA approval unless ordered otherwise by the Commission on petition from Atmos, Staff, or the Commission.

10. **NOLC** – SRA filings shall utilize the actual NOLC contribution of the Atmos Mississippi division to the Atmos consolidated NOLC balance and shall only include in rate base the amount of any such NOLC ADIT balance necessary for compliance with IRS normalization requirements, consistent with the recommendation of the MPUS in this proceeding.

11. **Depreciation Method and Reporting** – Atmos shall continue to use the depreciation rates approved in this proceeding for setting Atmos’s revenue requirement. Consistent with the use of year end balances, the Company is authorized to adjust its depreciation expense to reflect the annualized amount of depreciation as of December 31st of the Test Year.

12. **Compliance Filing** – Atmos shall, within 60 days of this Order, file a revised Stable Rate Adjustment Rider and supporting tariff sheets consistent with the findings in this Order. Staff will be allowed 30 days to review the Company’s filing to determine if it meets the requirements of the Commission. If Staff and Atmos are unable to agree on a final SRA and supporting tariff sheets consistent with the findings in this Order, such dispute shall be submitted to the Commission for its final determination of the issue.

IT IS THEREFORE, ORDERED, that the Company shall file compliance tariffs in this Docket consistent with this Order within seven (7) days of the effective date of this Order, and

such compliance tariffs shall become the lawful rates of Atmos, effective no later than the first billing cycle of December 2025, without further order from this Commission.

This Order shall be deemed issued on the day it is served upon the parties herein by the Executive Secretary of this Commission who shall note the service date in the file of this Docket.

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COMMISSION VOTE

Chairman Chris Brown	Aye <u>X</u>	Nay _____
Commissioner De'Keither Stamps	Aye <u>X</u>	Nay _____
Commissioner Wayne Carr	Aye <u>X</u>	Nay _____

SO ORDERED AND ADJUDGED, this the 4th day of November 2025.

MISSISSIPPI PUBLIC SERVICE COMMISSION



Chris Brown

CHRIS BROWN, CHAIRMAN

De'Keither Stamps

DE'KEITHER STAMPS, COMMISSIONER

Wayne Carr

WAYNE CARR, COMMISSIONER

ATTEST: A TRUE COPY

Katherine Collier

KATHERINE COLLIER,
EXECUTIVE SECRETARY

Effective this the 4th day of November 2025.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF ATMOS)	CASE NO.
ENERGY CORPORATION FOR AN)	2024-00276
ADJUSTMENT OF RATES; APPROVAL OF)	
TARIFF REVISIONS; AND OTHER GENERAL)	
RELIEF)	

ORDER

On September 27, 2024, Atmos Energy Corporation (Atmos), tendered an application for a general rate adjustment, which was accepted for filing as of an October 11, 2024 Order granting a deviation from a provision of 807 KAR 5:001, Section 17(2)(b), notice requirements.¹ By Order dated October 17, 2024, the Commission, pursuant to KRS 278.190(2), suspended Atmos's proposed rates for six months through May 11, 2025. On May 8, 2025, Atmos filed notice that it would be placing its requested rates into effect effective May 12, 2025 subject to refund pursuant to KRS 278.190(2).

By Order dated October 3, 2024, the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General), was granted intervention. Atmos responded to four sets of requests for information submitted by

¹ Atmos's customer notice failed to accurately state the dollar amount change to average bills under the G-2 proposed rate. Atmos mailed a corrected notice to the six customers that take service under the G-2 (interruptible) rate and also printed revised notice in the applicable newspapers the week of October 6, 2024, outside the time permitted by 807 KAR 5:001, Section 17(2)(b).

Commission Staff and two sets submitted by the Attorney General.² The Attorney General submitted direct testimony on January 27, 2025, and responded to two sets of requests for information, one each from Atmos and Commission Staff.³ Atmos provided rebuttal testimony on March 10, 2025. A hearing was conducted May 6, 2025, through May 7, 2025. Atmos responded to two sets of post-hearing requests for information, one each from the Attorney General and Commission Staff.⁴

BACKGROUND

Atmos is a Texas corporation in good standing with its headquarters in Dallas, Texas, registered to do business in Kentucky and with its Kentucky office in Owensboro, Kentucky.⁵ Atmos is a utility that delivers natural gas to approximately 3.3 million ratepayers in eight states.⁶ Atmos has six gas utility operating divisions located in Denver, Colorado (Colorado/Kansas Division); Baton Rouge, Louisiana (Louisiana Division); Flowood, Mississippi (Mississippi Division); Lubbock, Texas (West Texas Division); Dallas, Texas (Mid-Tex Division); and Franklin, Tennessee (Kentucky/Mid-States

² Atmos's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Oct. 25, 2024); Atmos's Response to Commission Staff's Second Request for Information (Staff's Second Request) (filed Dec. 2, 2024); Atmos's Response to Commission Staff's Third Request for Information (Staff's Third Request) (filed Jan. 3, 2025); Atmos's Response to Commission Staff's Fourth Request for Information (Staff's Fourth Request) (filed Apr. 18, 2025); Atmos's Response to Attorney General's First Request for Information (Attorney General's First Request) (filed Dec. 2, 2024); Atmos's Response to Attorney General's Second Request for Information (Attorney General's Second Request) (filed Jan. 3, 2025).

³ Attorney General's Response to Atmos's First Request for Information (Atmos's First Request) (filed Feb. 24, 2025); Attorney General's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Feb. 24, 2025).

⁴ Atmos's Response to Commission Staff's Post-Hearing Request for Information (Staff's Post-Hearing Request) (filed May 28, 2025); Atmos's Response to Attorney General's Post-Hearing Request for Information (Attorney General's Post-Hearing Request) (filed May 28, 2025).

⁵ Application at 1, 3; Attachment FR_14(2)_Att1 and FR_14(2)_Att2.

⁶ Application at 1–2.

Division).⁷ Atmos's corporate offices in Dallas provide services to its operating divisions such as accounting, legal, human resources, rate administration, procurement, information technology, and customer service organizations. The costs of these centralized services are shared among the six regional Atmos operating divisions noted above, including the Kentucky/Mid-States division.⁸ As a result, Atmos allocates portions of the cost of company-wide centralized services and Kentucky/Mid-States division shared services to Kentucky operations for ratemaking purposes.⁹ Atmos's regulated gas distribution operation in Kentucky serves approximately 180,694 residential, commercial, and industrial customers in central and western Kentucky.¹⁰ Atmos last filed for a rate adjustment in Kentucky in Case No. 2021-00214.¹¹

Atmos asserted that the proposed rate adjustment is necessary to allow it to recover its reasonable operating costs and to earn a reasonable return on its investment while providing sufficient revenue to maintain its facilities and provide the level of service mandated by the Commission and Atmos customers.¹² Atmos requested an increase in revenue requirement used to calculate rates, increasing total revenue by \$33,001,164 using the forecasted test year rate base of \$628,233,491.¹³ Atmos projected its revenue

⁷ Application at 1–2.

⁸ Application at 1–2

⁹ Application at 11.

¹⁰ Application at 2.

¹¹ Case No. 2021-00214, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Final Order issued May 19, 2022).

¹² Application at 4.

¹³ Application at 5; Exhibit FR_16(7)(h)4_Att1.

requirement based on a forecasted test year ending on March 31, 2026, and using the year ending December 31, 2024, as a base period.¹⁴

The Attorney General's witnesses submitted several recommended adjustments to elements of Atmos's requested revenue requirement. In rebuttal testimony, Atmos agreed to certain reductions to revenue requirement recommended by the Attorney General including:¹⁵ (1) \$1.3 million as a result of an overstatement in employee benefits expense;¹⁶ (2) \$17,000 due to using an incorrect number of third-party vendor operations and maintenance (O&M) expense lag days in computing O&M expense;¹⁷ (3) \$526,000 resulting from updating composite allocation factors from the 12-month period ended September 30, 2023 to the 12-month period ended September 30, 2024;¹⁸ (4) \$85,000 reduced for a Net Operating Loss Carryforward Deferred Tax Assets (NOLC DTA) balance update provided during discovery;¹⁹ and (5) \$690,000 in NOLC DTA that excluded taxable income.²⁰ Atmos also agreed to a decrease in ad valorem taxes²¹ discussed below. The remaining ten Attorney General recommendations, totaling an

¹⁴ Application at 3.

¹⁵ All adjustments are grossed up to account for the accompanying reductions for income tax, Commission assessments, and bad debt.

¹⁶ Revised Direct Testimony of Randy A. Futral (filed April 24, 2025) (Futral Revised Direct Testimony) at 11; Rebuttal Testimony of Gregory K. Waller (Waller Rebuttal Testimony) at 11.

¹⁷ Revised Direct Testimony of Lane Kollen (filed Jan. 27, 2025) (Kollen Revised Direct Testimony) at 28; Rebuttal Testimony of Joe T. Christian (Christian Rebuttal Testimony) at 21.

¹⁸ Futral Revised Direct Testimony at 26. Waller Rebuttal Testimony at 23.

¹⁹ Kollen Revised Direct Testimony at 10-11; Waller Rebuttal Testimony at 5; Rebuttal Testimony of Joel J. Multer (Multer Rebuttal Testimony) at 2.

²⁰ Kollen Revised Direct Testimony at 14; Waller Rebuttal Testimony at 5.

²¹ Waller Rebuttal Testimony, Exhibit GWK-R-1 at 3.

additional \$16.109 million in revenue requirement reductions,²² are opposed by Atmos and are discussed below.

LEGAL STANDARD

The Commission's statutory obligation when reviewing a rate application is to determine whether the proposed rates are "fair, just and reasonable."²³ Applying that standard, the Commission has held that cost-based rates for investor-owned utilities should be set at a level to allow the utility to recover its reasonable expenses and provide its shareholders an opportunity to earn a fair return on invested capital.²⁴ However, when a utility proposes a rate increase, "the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the utility."²⁵ The Commission must review the record in its entirety and apply its expertise to make an independent decision as to the level of rates that should be approved, including terms and conditions of service.

TEST PERIOD

Atmos proposed the 12 months ending March 31, 2026, as its forecasted test period to determine the reasonableness of its proposed rates. The Attorney General did

²² Futral Revised Direct Testimony at 17; Waller Rebuttal Testimony, Exhibit GKW-R-1 at 3.

²³ See *Kentucky Pub. Serv. Comm'n v. Com. ex rel. Conway*, 324 S.W.3d 373, 377 (Ky. 2010) ("Because utilities are allowed to charge consumers only 'fair, just, and reasonable rates' under KRS 278.030(1), the [Commission] must ensure that utility rates are fair, just, and reasonable to discharge its duty under KRS 278.040 to ensure that utilities comply with state law.").

²⁴ Case No. 2017-00481, *An Investigation of the Impact of the Tax Cuts and Job Act on the Rates of Atmos Energy Corporation, Delta Natural Gas Company, Inc., Columbia Gas of Kentucky, Inc., Kentucky-American Water Company, and Water Service Corporation of Kentucky* (Ky. PSC Dec. 27, 2017), Order at 1-2; see also *Com. ex. rel. Stephens v. South Central Bell Tel. Co.*, 545 S.W.2d 927, 931 (Ky. 1976) ("Rates are non-confiscatory, just and reasonable so long as they enable the utility to operate successfully, to maintain its financial integrity, to attract capital and to compensate its investors for the risks assumed.").

²⁵ KRS 278.190(3); see also KRS 278.2209 ("In any formal commission proceeding in which cost allocation is at issue, a utility shall provide sufficient information to document that its cost allocation procedures and affiliate transaction pricing are consistent with the provisions of this chapter.").

not object to the proposed test period or suggest an alternative test period. The Commission finds Atmos Kentucky's forecasted test period to be within the provisions of KRS 278.192 and 807 KAR 5:001, Section 16(6), (7), and (8). Therefore, the Commission accepts the forecasted test period proposed by Atmos Kentucky for use in this proceeding.

VALUATION

Pursuant to KRS 278.290(1), the Commission is empowered to “ascertain and fix the value of the whole or any part of the property of any utility,” and, in doing so, is given guidance by the legislature “in establishing value of utility property in connection with rates,” and the Commission must “give due consideration” to a number of factors, including capital structure, original cost and “other elements of value recognized by law” in order to ascertain the value of any property under KRS 278.290 “for rate-making purposes.” In its application, Atmos proposed to use the rate base method to calculate its revenue requirement and required increase.²⁶ The Commission has weighed the evidence filed in the case and finds that Atmos’s base rates should be based on a 13-month average test period rate base of \$610,960,000.²⁷

DISCUSSION AND FINDINGS

Having reviewed the evidence and being sufficiently advised, the Commission has determined that certain adjustments to the rates proposed in Atmos’s application are necessary. These adjustments are discussed in more detail below.

²⁶ Application, Attachment FR_16(6)(f)_Att1.

²⁷ Application, Attachment FR_16(6)(f)_Att1. Atmos’s requested rate base is \$628,233,000, less the \$17,273,000 in revenue requirement reductions noted in Appendix A attached.

RATE BASENet Operating Loss Carryforward (NOLC) Accumulated Deferred Income Tax (ADIT)

Prior to its last rate case, Atmos tracked its deferred tax assets arising from net operating loss carryforward, referred to herein as NOLC ADIT, on a consolidated company basis for all of Atmos's divisions.²⁸ Atmos recorded that NOLC ADIT in Division 2, Account 190, and allocated a share of that NOLC ADIT to its Kentucky operations using a cost allocation percentage.²⁹ Atmos then included the NOLC ADIT allocated to it in rate base.

Including NOLC ADIT in rate base acts to increase rate base, and therefore, the amount of a utility's return. Federal tax law requires that certain NOLC ADIT arising from accelerated tax depreciation be included in rate base. The Internal Revenue Service (IRS) has indicated that including NOLC ADIT in rate base is intended to offset corresponding deferred tax liabilities arising from accelerated tax depreciation to reflect the extent to which the book-tax timing differences that gave rise to those deferred tax liabilities could not actually be used to defer tax expense.³⁰

In Atmos's last rate case, Case No. 2021-00214, the Commission noted that the inclusion of NOLC ADIT arising from losses in other jurisdictions in rate base would not serve the purpose given by the IRS for accounting for NOLC, because losses that are not attributable to this jurisdiction could not have arisen from the accelerated depreciation of utility property in this jurisdiction and any deferred tax liabilities associated with losses in

²⁸ Case No. 2021-00214, May 19, 2022 Order at 8.

²⁹ See Application, Schedule B, Tab B.5 B.

³⁰ See Private Letter Ruling 2015-34001, 2015 WL 4978111 (issued Aug. 21, 2015).

other jurisdictions is not offsetting rate base in Kentucky.³¹ The Commission also expressed concern about significant taxable losses in other Atmos divisions and that Atmos's percentage method of allocating NOLC ADIT to various divisions could result in those significant losses being unreasonably allocated to Atmos's Kentucky customers.³²

Thus, the Commission found that:

Atmos Kentucky must now track the generation and utilization of NOL ADIT for Kentucky in each fiscal year on a standalone basis based on the expenses incurred and revenue generated from regulated operations in Kentucky, including any revenue from Atmos Kentucky's performance-based rates, without regard to losses incurred by other jurisdictions. In future applications to increase base rates, Atmos Kentucky must file a report showing the generation and utilization of NOL ADIT for Kentucky since this Order based on the expenses incurred and revenue generated from Kentucky operations. If Atmos Kentucky proposes to use a different method to reflect the generation and utilization of NOL ADIT for Kentucky in its revenue model in such cases, Atmos Kentucky must explain in detail why using that method would be reasonable.³³

In the present case, Atmos used the NOLC ADIT balance allocated pursuant to the previous allocation methodology through September 30, 2021 as a starting point. Atmos then used "Pretax Book Income" and changes in ADIT balances for its Kentucky operations in Fiscal Years 2022 and 2023 and for Fiscal Year 2024 through June 30,

³¹ Case No. 2021-00214, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC Jun. 24, 2022), Order at 10.

³² Case No. 2021-00214, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 19, 2022), Order at 13–4; see also Case No. 2021-00183, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; Issuance of a Certificate of Public Convenience and Necessity, and Other Relief* (Ky. PSC Dec. 28, 2021), Order at 15, explaining that there is an argument that including NOL ADIT attributable to losses in other jurisdictions would violate normalization rules in the same manner that using ADIT from other jurisdictions to offset Kentucky rate base would violate the normalization rules.

³³ Case No. 2021-00214, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 19, 2022), Order at 14.

2024 to calculate the utilization or generation of NOLC ADIT since September 30, 2021, which is the end of Atmos's Fiscal Year 2021. This resulted in approximately \$34,259,069 in NOLC ADIT being included in rate base as of the beginning of the forecasted period.³⁴

The Attorney General's witness, Lane Kollen, made three recommendations regarding the NOLC ADIT Atmos included in rate base. Atmos referred to those recommendations as NOLC DTA Adjustments 1 through 3,³⁵ which the Commission will use herein for ease of reference.

NOLC DTA Adjustment 1 was a recommendation to update the NOLC ADIT balance to reflect revenues from June 2024 through September 2024 based on updated information provided by Atmos for those periods, which resulted in a \$85,000 decrease in revenue requirement.³⁶ Atmos, which provided the updated information on which that adjustment was based, agreed to that proposed adjustment by the Attorney General.³⁷

NOLC DTA Adjustment 2 involves Atmos's compliance with the Commission's directive to apply only Kentucky losses to Kentucky operations as discussed above.³⁸ The Attorney General agreed that the NOLC ADIT balance should be calculated on a Kentucky-standalone basis, but argued that if doing so, it should be calculated on a standalone basis from the last time Atmos had no NOLC instead of using the previous balance from September 30, 2021, allocated on a percentage basis.³⁹ The Attorney

³⁴ See Application, Direct Testimony of Joel J. Multer (Multer Direct Testimony), Exhibit JJM-1.

³⁵ Kollen Revised Direct Testimony at 4–5.

³⁶ Kollen Revised Direct Testimony at 10–11.

³⁷ Waller Rebuttal Testimony at 5; Multer Rebuttal Testimony at 2.

³⁸ Kollen Revised Direct Testimony at 4–5.

³⁹ Kollen Revised Direct Testimony at 13.

General's witness stated that Atmos did not provide information for such a calculation and that the information regarding the utilization and generation of NOLC ADIT since the last rate case was insufficient.⁴⁰ Thus, the Attorney General's witness argued that unless the necessary information exists to calculate from the last time Atmos had no NOLC, that the Commission should allow Atmos to start with the previous percentage allocation methodology in this case alone, which he indicated results in a decrease in the NOLC ADIT in the amount of \$6.481 million and therefore a decrease in rate base in that amount and corresponding decrease of \$690,000 in revenue requirement.⁴¹

In rebuttal testimony, Atmos asserted that the Attorney General's testimony supporting use of the prior methodology to determine NOLC ADIT balance was results driven and that the Attorney General was only recommending that the Commission revert back to the percentage allocation method because it would achieve a lower NOLC ADIT in this case.⁴² Atmos responded to post-hearing data requests regarding historical NOLC ADIT information, indicating it had the data necessary to calculate the Kentucky-specific NOLC ADIT back to 2008, the last year Atmos did not have a NOLC balance.⁴³ However, Atmos did not review its records to separate Kentucky-specific losses from other jurisdictions' losses to determine this balance,⁴⁴ and Atmos agreed to the adjustment recommended by the Attorney General's witness.⁴⁵

⁴⁰ Kollen Revised Direct Testimony at 13–14.

⁴¹ Kollen Revised Direct Testimony at 14.

⁴² Multer Rebuttal Testimony at 5.

⁴³ Atmos's Response to Staff's Post-Hearing Request, Item 6(b).

⁴⁴ Atmos's Response to Staff's Post-Hearing Request, Item 6(c).

⁴⁵ Waller Rebuttal Testimony at 5.

NOLC DTA Adjustment 3 was the Attorney General's witness's argument that NOLC ADIT should only be included in rate base to the extent that it arises from differences between book depreciation and accelerated federal tax depreciation under Internal Revenue Code (IRC) normalization rules.⁴⁶ This reduction would result in a decrease in the NOLC ADIT of \$5.896 million and corresponding decrease of approximately \$627,000 in the revenue requirement.⁴⁷ Atmos objected to the Attorney General's recommendation that only NOLC ADIT associated with timing differences arising from accelerated tax depreciation should be reflected in rates because Atmos does not receive the economic benefit (in the form of cost-free capital) of deferring the income tax asset until the year it is applied to reduce taxes.⁴⁸ Atmos also claimed that the IRC only requires a minimum, not maximum amount of NOLC ADIT that must be included in rate base to avoid a normalization violation.⁴⁹ Although Atmos also took issue with the Attorney General's witness's calculation of the difference in book and accelerated depreciation, Atmos conceded that it chose not to incur the cost or effort required to provide this calculation.⁵⁰

The Attorney General's witness also recommended another reduction (NOLC DTA Adjustment 4) because Atmos did not include taxable income from the bridge period from October 1, 2024 through March 31, 2025,⁵¹ for which information was not available when

⁴⁶ Kollen Revised Direct Testimony at 14–15.

⁴⁷ Kollen Revised Direct Testimony at 19.

⁴⁸ Rebuttal Testimony of Joel J. Multer (Multer Rebuttal Testimony) at 9–10.

⁴⁹ Multer Rebuttal Testimony at 13.

⁵⁰ Multer Rebuttal Testimony at 18.

⁵¹ Kollen Revised Direct Testimony at 13.

earlier discovery requests were made. Atmos countered that the Attorney General assumed net positive income for this period.⁵² However, post-hearing discovery revealed net positive income of \$583,289 for that period, resulting in a decrease in Atmos's NOLC ADIT and a corresponding \$62,064 revenue requirement reduction.⁵³

Having reviewed the record and being otherwise sufficiently advised, the Commission makes the following findings with respect to the proposed adjustments to NOLC ADIT. The Commission finds that NOLC DTA Adjustment 1 is reasonable and should be accepted to reflect the most recent available information regarding the utilization and generation of NOLC ADIT, which would decrease the revenue requirement by \$85,000.

The Commission finds that NOLC DTA Adjustment 2 is reasonable and should be accepted, decreasing revenue requirement by approximately \$690,000. The Commission continues to believe that tracking the utilization and generation of NOLC ADIT on a Kentucky specific, standalone basis is more reasonable and appropriate than the percentage allocation method for the reasons discussed in Atmos's last rate case.⁵⁴ However, if the previous use of the percentage allocation method resulted in excess NOLC ADIT being allocated to Kentucky customers, the Commission is concerned that the excess may take an unreasonably long and unrealistic period to reverse using Atmos's new proposed method, which relies on net changes in ADIT, because the timing differences that generated the NOLC ADIT would be reversing in another jurisdiction. To

⁵² Multer Rebuttal Testimony at 19.

⁵³ Atmos's Response to Staff's Post-Hearing Request, Item 6(e).

⁵⁴ See Case No. 2021-00214, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 19, 2022), Order at 13-4.

avoid that issue and to more accurately reflect NOLC ADIT for Kentucky, the Commission generally believes that Kentucky-specific NOLC ADIT should be calculated from the last time Atmos had no carryforward if reliable information is available to make that calculation, but at minimum, that the percentage allocation should be checked against information that is available.

Atmos did not provide information in the record to allow for the calculation of NOLC ADIT from the last time it had no NOL carryforward.⁵⁵ However, although Atmos has the burden of supporting its revenue requirement, the Commission does not believe Atmos should be unduly punished here for not providing information that was not required by the Commission for its prior calculation of NOLC ADIT. Rather, the Commission finds that it would be more reasonable to stay with the percentage allocation for determining the historical NOLC ADIT prior to July 2024 until Atmos is able to provide additional information regarding the state specific accumulation of NOLC ADIT from the last time that Atmos had no NOLC. Thus, Atmos's decision to accept NOLC DTA Adjustment 2, which results in a revenue requirement decrease, is a reasonable compromise compared to removing all or significantly more NOLC ADIT from rate base.

Regarding NOLC DTA Adjustment 3, the Commission finds that the Attorney General's recommended adjustment should be denied. While the Attorney General is correct that only NOLC ADIT arising from accelerated tax depreciation is "protected"

⁵⁵ Atmos indicated at the hearing and in response to post-hearing requests for information that it had least some of the information necessary to make that calculation. However, it noted that there may be some questions about the veracity of that information or difficulties in determining what should and should not be included given the passage of time. Thus, if the information had been obtained at that point, there would have been no opportunity to test the methodology or the veracity of potentially questionable information. Hearing Testimony of Joel J. Multer, May 6, 2025, Hearing Video Transcript (HVT) at 15:28:53; Atmos's Response to Staff's Post-Hearing Request, Item 6(b).

pursuant to federal normalization rules, the inclusion of NOLC ADIT may still be considered reasonable for ratemaking purposes to reflect the extent to which corresponding deferred tax liabilities could not have been used to offset tax expense. Further, while Atmos did not perform the state specific calculations in this matter back to when it last had no NOLC ADIT and Atmos does bear the burden, the Commission does not believe Atmos should be unduly punished for not providing information that was not required by the Commission for prior calculations of NOLC ADIT without at least giving Atmos an additional opportunity to provide such information. Thus, under the circumstances, the Commission finds that it is reasonable to reject NOLC DTA Adjustment 3 and accept NOLC DTA Adjustment 2.

However, in doing so, the Commission finds that Atmos should continue to track the generation and utilization of NOL ADIT for Kentucky in each fiscal year on a standalone basis based on the expenses incurred and revenue generated from regulated operations in Kentucky, including any revenue from Atmos Kentucky's performance-based rates, without regard to losses incurred by other jurisdictions. Further, in Atmos's next application to increase base rates, Atmos Kentucky should file a report showing the generation and utilization of NOL ADIT for Kentucky since the last time that it had no NOL carryforwards. If Atmos Kentucky proposes to use a different method to reflect the generation and utilization of NOL ADIT for Kentucky in its revenue model, Atmos Kentucky should explain as part of the application, in detail, why using that method would be reasonable and why the Commission-ordered method is less reasonable or unavailable.

Finally, the Commission finds that NOLC DTA Adjustment 4 should be accepted, as post-hearing discovery revealed net positive income of \$583,289 for the bridge period from October 1, 2024 through March 31, 2025, resulting in a decrease in Atmos's NOLC ADIT and a corresponding \$62,064 revenue requirement reduction.

Vendor Supplied Portion of Construction Expenditures

Atmos temporarily finances its capital expenditures for plant and other assets as well as O&M expense, in part, through delayed payments to its vendors recorded as accounts payable. The Attorney General's witness, Kollen, recommended subtracting construction accounts payable from rate base because the delay between billing and payment of those accounts, at no cost, effectively provided Atmos with zero-cost financing.⁵⁶ Kollen noted that the Commission excluded those amounts from rate base in Atmos's last rate case for the same reason that the Commission removes amounts not financed by the utility from cash working capital.⁵⁷ Kollen further noted that Atmos neither appealed nor requested rehearing regarding that adjustment.⁵⁸ Kollen calculated that the adjustment amounts to a \$5.312 million reduction in base rates and a reduction in the base revenue increase of \$565,000.⁵⁹

Atmos alleged on rebuttal that the Attorney General's proposal improperly introduced a capital expenditures component into the calculation of the lead-lag study, which is intended to only look at expense items, and was therefore inconsistent with

⁵⁶ Kollen Revised Direct Testimony at 20–22.

⁵⁷ Kollen Revised Direct Testimony at 20–22.

⁵⁸ Kollen Revised Direct Testimony at 20-22; Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 17.

⁵⁹ Kollen Revised Direct Testimony at 22.

ratemaking principles associated with working capital.⁶⁰ Atmos also alleged that the Attorney General's analysis was incomplete because it proposed to use the 13-month average of construction accounts payable to reduce rate base but Atmos did not include construction work in progress (CWIP) as an element of rate base, and therefore, the adjustment would result in the removal of items that are not included in rate base.⁶¹

At the hearing, Atmos witness Christian testified that its rate base does not include CWIP, but that Atmos accrues Allowance for Funds Used During Construction (AFUDC). However, Mr. Christian was unclear in hearing testimony regarding exactly how Atmos's AFUDC calculation is completed, and therefore, how the lag between receipt and payment of invoicing for amounts in construction accounts payable is handled. Mr. Christian did indicate that the company uses the methodology approved by Federal Energy Regulatory Commission (FERC) regulations.⁶²

The Commission finds that the Attorney General's recommendation should be denied. The Commission has generally found that a utility may account for construction carrying costs by either including CWIP in rate base or by capitalizing AFUDC.⁶³ In general, including CWIP in rate base accounts for construction carrying costs by allowing a utility to recover a return, usually at the utility's weighted average cost of capital (WACC), on the utility's CWIP balance during the test period. Conversely, in Kentucky,

⁶⁰ Christian Rebuttal Testimony at 17.

⁶¹ Christian Rebuttal Testimony at 17.

⁶² Hearing Testimony of Joe T. Christian, May 6, 2025, HVT at 17:30:52; Multer Rebuttal Testimony at 17.

⁶³ See Case No. 2018-00281, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 7, 2019), Order at 25, noting that a utility may use AFUDC or CWIP and that Atmos uses CWIP; see also 18 C.F.R. § 35.25(e)-(f).

a utility that uses AFUDC will not generally include any CWIP in rate base but will track the carrying costs on CWIP on an ongoing basis and will then capitalize these costs for future recovery.⁶⁴

Although the Commission agrees with the Attorney General's witness that sources of cost-free capital generally should reduce rate base,⁶⁵ in the present case, no corresponding CWIP is included in rate base to offset—meaning the cost that is being funded at no cost due to the lag between billing and payment is not included in rate base so there is nothing to offset. Further, while some adjustment would likely be necessary if Atmos provided evidence that it was accruing AFUDC on construction accounts payable before payment was made on those invoices, the adjustment would be different (and potentially larger or smaller) than simply removing construction accounts payable from rate base. However, no evidence has been presented in this matter that Atmos accrues AFUDC on construction accounts payable before the payment of the invoices by Atmos. Thus, while the Commission accepted this adjustment in Atmos's last rate case, the facts in this case do not support finding that Atmos's revenue requirement includes carrying costs on construction accounts payable, and therefore, the Commission finds that this adjustment proposed by the Attorney General should be denied in this case.⁶⁶

Cash Working Capital (CWC)

⁶⁴ See Case No. 2018-00281, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 7, 2019) (discussing CWIP and AFUDC); *but see* 18 C.F.R. § 35.25(e)-(f).

⁶⁵ See Case No. 2021-00214, May 19, 2022 Order at 16–17.

⁶⁶ If the evidence in a future case indicates that Atmos's cost of service includes carrying costs on the amounts in question, then the Commission may reach a different conclusion.

Atmos filed a lead-lag study to calculate the extent to which CWC should be included in rate base. However, Atmos included non-cash depreciation expense, non-cash deferred income tax expense, and the non-cash growth component of the return on equity (ROE) in its CWC calculations.⁶⁷

The Attorney General's witness, Kollen, noted that Atmos included the non-cash expenses using 34.63 revenue lag days offset by zero expense lag days for each of the non-cash expenses, which resulted in an increase of \$9.817 million in the CWC added to rate base, all else equal.⁶⁸ Witness Kollen asserted that the purpose of CWC calculations is to quantify the cash investment provided by either investors (positive) or customers (negative) on average for the delay in cash revenues to recover cash expenses incurred over the course of the test year, but stated that there will never be a cash disbursement for depreciation expense. Witness Kollen also indicated that Atmos is able to retain the carrying charge value of this non-cash expense in the calculation of rate base and between rate cases, because the net accumulated depreciation and accumulated deferred income taxes are subtracted from rate base on a lagged basis.⁶⁹ Thus, the Attorney General recommended excluding all non-cash expenses from the CWC calculations, reducing the CWC included in rate base by \$9.817 million and the base revenue requirement by \$1.045 million.⁷⁰ Atmos disagreed with this recommendation in rebuttal and argued that the inclusion of these items in the study and assigning a zero

⁶⁷ Kollen Revised Direct testimony at 22.

⁶⁸ Kollen Revised Direct testimony at 22.

⁶⁹ Kollen Revised Direct testimony at 22.

⁷⁰ Kollen Revised Direct testimony at 26.

payment lag recognizes that the investor funding has occurred, but that it has not been recovered from the customer.⁷¹

This issue was considered in Commission Case No. 2021-00214, where the Commission found that “[n]oncash expenses are not appropriate to include in the CWC determination.”⁷² Similarly, here the Commission finds that non-cash items should be removed from the lead-lag study. The Commission continues to agree that non-cash expenses should not be included in the lead-lag study when calculating CWC, because working capital is not necessary to fund those expenses. Further, even if it were necessary, an expense lag of zero days would not be appropriate here given delays in how the non-cash items are reflected in rate base. Thus, the Commission finds that the Attorney General’s proposed adjustment should be accepted as reasonable, and that CWC should be reduced by \$9.817 million and that the revenue requirement for base rates should be reduced by \$1.045 million.

OPERATING INCOME ADJUSTMENTS

Payroll Expense and Related Payroll Taxes

The Attorney General’s witness, Randy Futral, recommended reducing Atmos’s payroll expense and related payroll tax expense to account for differences in the historical payroll increases and the projected increase between the base period and the forecasted period. Witness Futral argued that the projected labor expense increase between 2024 and the test year was unduly high given the two pay increases likely to occur during that period, because it assumes full employment during that period, which the Attorney

⁷¹ Christian Rebuttal Testimony at 18.

⁷² Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 20.

General indicated was inconsistent with past years.⁷³ Witness Futral proposed to adjust the 2024 amounts to reflect projected 3.5 percent raises, but indicated that the Commission should account for vacancies from full employment. Accordingly, witness Futral proposed to reduce the test year payroll and payroll tax expense by \$1.044 million for a grossed-up test year reduction of \$1.056 million.⁷⁴

In rebuttal testimony, Atmos acknowledged that it assumed full employment in its projections, despite typically having some turnover in historical periods, but argued that the Attorney General's use of Fiscal Year 2024 wage information, adjusted for expected raises, failed to account for other labor related variances that occurred in Fiscal Year 2024 that are not expected to be repeated in Fiscal Year 2025—(1) a capitalization rate of 59.7 percent in Fiscal Year 2024 as compared to 56.9 percent projected for Fiscal Year 2025; and (2) nine projected new positions, including seven new line location technicians and two compliance technicians.⁷⁵ Atmos asserted that when those variances are accounted for that projected expense would exceed the amount it included in base rates.

Atmos's rebuttal testimony also indicated that it used a capitalization for the test period labor expense that was higher than its historical capitalization rate.⁷⁶ Further, while Atmos argued that using the capitalization rate for its budget forecast was more accurate than using the 2024 capitalization rate, as effectively used by the Attorney General, the evidence indicated that its budgeted rates have been historically above its actual

⁷³ Futral Revised Direct Testimony at 7–8.

⁷⁴ Futral Revised Direct Testimony at 10–11.

⁷⁵ Waller Rebuttal Testimony at 9. Atmos stated that the new positions were created to enhance damage prevention and to bring line locating in house. Atmos reduced contracted line locating expense in the 2025 budget by \$600,000 that offset the cost of the new line locating positions.

⁷⁶ Waller Rebuttal Testimony at 8.

capitalization rates.⁷⁷ The Attorney General proposed a decrease in payroll expense based on the actual Fiscal Year 2024 capitalization rate compared to the budgeted rate used by Atmos in its original filing; Atmos's witness Waller indicated that using the Fiscal Year 2024 capitalization rate for payroll and related expenses would result in a \$538,225 reduction in revenue requirement.⁷⁸

The Commission finds that the Attorney General's recommended payroll expense adjustment should be rejected, in part, and accepted, in part. The Commission has not generally made adjustments due to vacancies where evidence showed that the utility intended to fill the positions,⁷⁹ and therefore, finds that an adjustment based solely on vacant positions would not be appropriate in this case, given that Atmos provided evidence that that the positions have or will be filled. However, the Commission finds that an adjustment should be made to Atmos's revenue requirement to reflect a higher capitalization rate than that used by Atmos in the forecasted period. Specifically, the Commission finds that the extent to which Atmos's payroll expense is included in O&M expense should be based on Atmos's actual FY 2024 capitalization rate of 59.7 percent as opposed to the forecasted FY 2025 capitalization rate of 56.9 percent. The FY 2024 capitalization rate is reasonable, because the FY 2025 capitalization rate is lower than forecasted rates in previous years, previous years forecasted rates have been lower than

⁷⁷ Attorney General's Post-Hearing Brief (Attorney General's Brief) at 13-14; Atmos's Responses to Staff's Post Hearing Request for Information, Item 5 (indicating actual capitalization rates were higher than budgeted and were in line with the Fiscal Year 2024 rate used by the Attorney General in its payroll adjustment).

⁷⁸ Attorney General's Brief at 13-14; Waller Rebuttal Testimony at 8.

⁷⁹ Case No. 2023-00191, *Electronic Application of Kentucky-American Water Company for an Adjustment of Rates, a Certificate of Public Convenience and Necessity for Installation of Advanced Metering Infrastructure, Approval of Regulatory and Accounting Treatments, and Tariff Revisions* (Ky. PSC May 3, 2024), Order at 10.

actual rates, and the actual capitalization rate for FY 2024 is in line with rates in other historical years.⁸⁰ Thus, the Commission finds that a \$538,225 reduction in revenue requirement should be applied to reflect the effect on payroll expense of that capitalization rate adjustment.

Ad Valorem Tax

The Attorney General recommended a reduction of \$3.216 million in ad valorem tax expenses from the \$12.385 million Atmos projection calculated in the table below.⁸¹ The Attorney General asserted that all components of the Atmos’s projection were based on estimates used to record its accounting accruals and in its projection of gross plant balances and that no part of the application calculation was based on actual ad valorem taxes paid or actual gross or net plant balances. The Attorney General’s reduction calculation was based on monthly accruals of \$792,000 each month starting in October 2024 less the \$340,000 that is recovered via the Pipeline Replacement Program (PRP) Rider.⁸²

⁸⁰ In Atmos’s Response to Staff’s Post-Hearing Request, Item 5, Atmos provided the following budgeted and actual capitalization rates for FY 2020 through FY 2023:

<u>Fiscal Year</u>	<u>Budgeted</u>	<u>Actual</u>
2020	57.6%	60.1%
2021	57.6%	60.7%
2022	57.4%	60.2%
2023	57.9%	58.7%

⁸¹ Waller Rebuttal Testimony at 9-10.

⁸² Futral Revised Direct Testimony at 17.

Division 009 Only

Base Period Ad Valorem - Accrual	\$ 11,322,473
Remove non-recurring adjustment	1,000,000
Ad Valorem Recovered in PRP Rates Case No. 2023-00231	(339,931)
Adjusted Base Period Ad Valorem	<u>\$ 11,982,542</u>
Ending Base Period Gross Plant	\$ 909,763,471
Ad Valorem Rate	1.32%
Ending Forecasted Period Gross Plant	\$ 940,325,173
Forecasted Period Ad Valorem - Accrual	\$ 12,385,072

In rebuttal, Atmos rejected the Attorney General's proposed adjustment, stating that Atmos had now received its total tax bill for 2024 from the Kentucky Department of Revenue of \$1,075,778 and used this to calculate a new adjustment.⁸³ Using the \$1,075,778 amount, Atmos estimated its total ad valorem tax expense of \$9,424,575 using the table below.

⁸³ Waller Rebuttal Testimony at 12–13.

Table GKW-R-3			
Estimated 2024 Kentucky State and Local Taxes			
Property Class	Tax Rate Per \$100	Noticed Value	State Tax Due
Real Estate	0.109 \$	647,451,382 \$	705,722
Tangible Property	0.45	79,415,375	357,369
Business Inventory	0.05	25,373,751	12,687
Total State Taxes			\$ 1,075,778
Local Taxes	Noticed Value	Tax Rate Per \$100	Est. Local Taxes
	\$ 752,240,508	1.109857369	\$ 8,348,797
Total Est State & Local Taxes			<u>\$ 9,424,575</u>

Atmos then subtracted \$339,931 to recognize the amount of ad valorem recovered in its PRP. Then, Atmos calculated an effective expense ratio and applied that ratio to the plant forecast for the test period. The result is \$9,389,824.⁸⁴ Atmos also asserted that the Attorney General ignored that plant investment is forecasted to grow over the course of the test period. Atmos included an additional \$500,000 increase in Ad Valorem expense to account for a previously anticipated change in Kentucky Department of Revenue methodology that was expected to take place on January 1, 2026. This resulted in a test-period \$9,889,824 in ad valorem expense.⁸⁵ Atmos stated that given the uncertainty of the methodology change that the additional \$500,000 increase would be removed should the Commission approve the Tax Rider Tariff.⁸⁶

⁸⁴ Waller Rebuttal Testimony at 13.

⁸⁵ Waller Rebuttal Testimony at 14.

⁸⁶ Waller Rebuttal Testimony at 15.

The Commission finds that a \$3.03 million⁸⁷ reduction to revenue requirement should be applied to align the estimated ad valorem expense as originally filed with subsequent actual tax bills for 2024. This reduction includes elimination of the \$500,000 revenue requirement increase previously included by Atmos due to the potential January 1, 2026 tax change. Atmos indicated at hearing that it no longer anticipated that this tax change would take effect.⁸⁸

Corporate Expenses

The Attorney General challenged the full inclusion of Atmos's expenses allocated to Kentucky for Director and Officers' insurance, Board of Directors compensation,⁸⁹ and investor relations expenses, suggesting that Atmos's shareholders should bear 50 percent of these expenses, arguing that the majority of the benefits arising from these expenses are retained by shareholders.⁹⁰ This would result in a \$65,000 revenue reduction for insurance expense and \$19,000 for investor relations.⁹¹

Atmos responded that these expenses are prudent and necessary for providing service and their inclusion is supported by Commission precedent, which held that these expenses reduce costs that would be passed on to ratepayers.⁹²

⁸⁷ See Attorney General's Brief at 17.

⁸⁸ Hearing Testimony of Gregory K. Waller, May 6, 2025, HVT at 13:20:30.

⁸⁹ Less Board of Directors retirement expenses. See Futral Revised Direct Testimony at 19, footnote b 20.

⁹⁰ Futral Revised Direct Testimony at 19–20.

⁹¹ Futral Revised Direct Testimony at 20. The Attorney General testimony omits a reduction for Board of Directors compensation.

⁹² Waller Rebuttal Testimony at 15-16; Case No. 2024-00092, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; and Other Relief* (Ky. PSC Dec. 30, 2024), Order at 24.

The Commission finds that none of the referenced corporate expenses should be eliminated from recovery by Atmos. Costs from litigation against executives would be passed on, at least in part, to ratepayers. Investor relations expense is a necessary component of raising necessary capital for the company. Although shareholders also benefit from these expenses, attracting and maintaining investors is also a key element for financial stability, which benefits ratepayers as well. The Attorney General has not offered a compelling basis for what percentage of these expenses should be excluded from recovery. Attorney General witness Futral indicated that the recommended 50/50 split was approved by the Florida Public Service Commission but did not identify any factual or logical bases for selection of this split.⁹³

Dues

The Attorney General recommended eliminating recovery of American Gas Association (AGA) and Kentucky Chamber of Commerce dues, resulting in a grossed-up revenue requirement adjustment of \$78,000.⁹⁴ The Commission previously disallowed recovery of these dues on the basis that Atmos did not establish that these dues did not include prohibited lobbying costs.⁹⁵ Atmos argued that AGA dues should be recoverable, because among other things, AGA exists to fulfill the needs of the local natural gas distribution companies and thereby improve the industry's ability to better serve its customers. Atmos similarly notes that Chambers of Commerce are the primary organizations within a community to coordinate efforts to strengthen the economy and

⁹³ Hearing Testimony of Randy A. Futral, May 7, 2025, HVT at 10:04:38.

⁹⁴ Futral Revised Direct Testimony at 22.

⁹⁵ Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 24–25.

employment opportunities, and thereby, supports natural gas load growth in the area. Atmos also argued that engagement with these organizations allows them to promote safe practices.⁹⁶ Atmos also stated that it removed lobbying costs associated with these entities by reducing the recovery based on the percentage of cost attributable to lobbying as indicated on the dues invoices.⁹⁷

The Commission finds that dues expenses should be excluded from recovery. Without knowing how the AGA or Chambers of Commerce determine the percentage of dues attributable to lobbying noted on their invoices, the Commission cannot find that these percentages are based on actual lobbying spending. Furthermore, Atmos has not established that these expenses benefit ratepayers.

RATE OF RETURN

Return on Equity (ROE)

In its application, Atmos Energy Corporation (Atmos) used multiple models to develop its ROE recommendation, including the Discounted Cash Flow (DCF) model, the Capital Asset Pricing Model (CAPM), and the Risk Premium Model (RPM) (collectively, Models).⁹⁸ In its analysis, Atmos used a utility proxy group comprised of six natural gas utilities (Utility Proxy Group) and a general proxy group comprised of 53 domestic, non-price regulated companies (Non-Price Regulated Proxy Group).⁹⁹ The proxy groups were selected on the basis of several risk measures, including both business risk and financial

⁹⁶ Waller Rebuttal Testimony at 20-21.

⁹⁷ Hearing Testimony of Gregory K. Waller, May 6, 2025, HVT at 14:35:52.

⁹⁸ Direct Testimony of Dylan D'Ascendis (D'Ascendis Direct Testimony) at 3.

⁹⁹ D'Ascendis Direct Testimony at 3-4.

risk, as well as a set of criteria to develop proxy groups which were proffered as highly representative of the risks and prospects faced by Atmos.¹⁰⁰ Additionally, Atmos relied upon the Predictive Risk Premium Model (PRPM) in its estimation of the equity risk premium used in its PRM and CAPM analyses.¹⁰¹ Atmos's estimated ROE results from the Models ranged from 9.93 percent to 12.05 percent, which were then adjusted based on company-specific risk factors.¹⁰² The adjustments applied to the common equity cost rates included a size adjustment, credit risk adjustment, and a flotation cost adjustment.¹⁰³ After these adjustments, the ROE estimates ranged from 10.12 percent to 12.12 percent, and Atmos recommended an ROE of 10.95 percent.¹⁰⁴ No adjustment to the ROE based on Atmos's PRP rider was proposed.¹⁰⁵ The estimated ROE results and adjustments are shown in the table below.¹⁰⁶

¹⁰⁰ Atmos's Response to Staff's Second Request for Information (Staff's Second Request), Item 10.

¹⁰¹ D'Ascendis Direct Testimony at 29.

¹⁰² D'Ascendis Direct Testimony at 4–5.

¹⁰³ D'Ascendis Direct Testimony at 4.

¹⁰⁴ D'Ascendis Direct Testimony at 5.

¹⁰⁵ D'Ascendis Direct Testimony at 62.

¹⁰⁶ D'Ascendis Direct Testimony, Table 2 at 4.

Discounted Cash Flow Model	9.93%
Risk Premium Model	10.80%
Capital Asset Pricing Model	11.36%
Market Models Applied to Comparable Risk, Non-Price Regulated Companies	12.05%
Indicated Range of Common Equity Cost Rates Before Adjustments for Company-Specific Risk	9.93% - 12.05%
Size Adjustment	0.05%
Credit Risk Adjustment	-0.04%
Flotation Cost Adjustment	0.06%
Indicated Range of Common Equity Cost Rates after Adjustment	10.12% - 12.12%
Recommended Cost of Common Equity	10.95%

The Attorney General provided alternative ROE estimates using the CAPM and the DCF model applied to one proxy group consisting of seven natural gas distribution companies.¹⁰⁷ In regard to the CAPM analysis, the Attorney General argued that because a considerable amount of judgment must be employed in determining the market return and the expected risk premium elements of the CAPM equation, it was less accurate than the DCF model.¹⁰⁸ However, the Attorney General relied on both the CAPM and DCF models in determining Atmos's ROE.¹⁰⁹ Consistent with the midpoint between the average and median growth rate DCF ROE estimates and the range of the CAPM

¹⁰⁷ Direct Testimony of Richard Baudino (Baudino Direct Testimony) at 2–3.

¹⁰⁸ Baudino Direct Testimony at 24.

¹⁰⁹ Baudino Direct Testimony at 3.

estimates, the Attorney General recommended an ROE of 9.40 percent for Atmos.¹¹⁰ Additionally, the Attorney General recommended a 9.30 percent ROE be applied to investments collected through the PRP.¹¹¹ The following table summarizes Attorney General witness Richard A. Baudino's results:¹¹²

Summary of ROE Estimates	
<u>DCF Methodology</u>	
Average Growth Rates	
- High	9.75%
- Low	8.25%
- Average	9.33%
Median Growth Rates	
- High	10.14%
- Low	8.11%
- Average	9.46%
<u>CAPM Methodology</u>	
Forward-looking Market Return:	9.71%
Historical Risk Premium:	
- Arithmetic Mean	10.52%
- Supply Side MRP	9.73%
- Supply Side Less WWI Bias	8.92%
Kroll MRP	8.72%
KMPG MRP	8.72%
IESE MRP Survey	9.14%
Damodaran MRP	8.30%

The Attorney General argued that this recommendation fully reflected current economic and financial market conditions at the time the testimony was prepared, and that it provides a fair return to investors on a low-risk regulated gas distribution utility

¹¹⁰ Direct Testimony of Richard A. Baudino (Baudino Direct Testimony) at 33.

¹¹¹ Baudino Direct Testimony at 37.

¹¹² Baudino Direct Testimony, Table 1 at 33.

investment such as Atmos.¹¹³ The Attorney General argued that Atmos's recommended ROE of 10.95 percent was grossly excessive and should be rejected.¹¹⁴ In addition, Attorney General witness Baudino argued that Atmos's ROE recommendation was a clear and obvious outlier when compared to recent commission-approved ROEs.¹¹⁵ In regard to Atmos's DCF calculation, although Atmos relied on earnings growth forecasts generated by Value Line Investment Survey (Value Line), witness Baudino argued that Atmos should have considered Value Line's dividend growth forecasts as well. While Baudino agreed that security analysts' earnings growth forecasts have a more significant influence on market prices than dividend growth expectations, he also asserted that forecasted dividend growth should also be considered because dividend payments are such a significant portion of the total return to utility shareholders.¹¹⁶ The Attorney General noted that his DCF results were lower than Atmos's results, and stated that this was primarily due to the use of updated stock prices and growth rates, as well as Value Line's projected dividend growth rates.¹¹⁷ The Attorney General's position was that by not including dividend forecasted growth rates, Atmos's DCF analysis was limited and results were overstated.¹¹⁸ Regarding the RPM analyses, the Attorney General argued that the analyses were too imprecise and should only be used as a guide for estimating

¹¹³ Baudino Direct Testimony at 3.

¹¹⁴ Baudino Direct Testimony at 38.

¹¹⁵ Baudino Direct Testimony at 39.

¹¹⁶ Baudino Direct Testimony at 40.

¹¹⁷ Baudino Direct Testimony at 40.

¹¹⁸ Baudino Direct Testimony at 40.

ROE in regulated utility proceedings.¹¹⁹ The Attorney General argued that the RPM ROE results were outliers, and did not represent current investor required ROE for regulated gas utilities.¹²⁰ In addition, the Attorney General argued that the Atmos's PRPM should be rejected because it is unproven, produced excessive ROE results and not widely accepted noting that it had been rejected by the Florida Public Service Commission.¹²¹ The Attorney General argued that Atmos's CAPM and ECAPM results were based on excessive earnings growth rates and market returns, and are so overstated for regulated gas utilities that they should be rejected out of hand.¹²² The use of ECAPM to correct the CAPM results for companies with betas less than 1.0 is another indication that the model is not sufficiently accurate.¹²³ Finally, the Attorney General argued that Atmos's use of unregulated companies as proxies for a regulated company, and the inclusion of size adjustments and flotation cost adjustments, are inappropriate and should be rejected.¹²⁴

In rebuttal, Atmos provided an updated ROE analysis using the same methods and updated data as of January 31, 2025.¹²⁵ Additionally, Atmos updated its Utility Proxy Group to include Southwest Gas Holdings, Inc (SWX), and to no longer include Yahoo! Finance projected five-year earnings per share growth rates in the DCF calculations, as

¹¹⁹ Baudino Direct Testimony at 40–41.

¹²⁰ Baudino Direct Testimony at 49.

¹²¹ Baudino Direct Testimony at 45–48.

¹²² Baudino Direct Testimony at 52–54.

¹²³ Baudino Direct Testimony at 55.

¹²⁴ Baudino Direct Testimony at 56–60.

¹²⁵ Rebuttal Testimony of Dylan D'Ascendis (D'Ascendis Rebuttal Testimony) at 1.

they were no longer available.¹²⁶ This updated analysis resulted in estimated ROEs ranging from 10.43 percent to 11.91 percent with adjustments and 10.37 percent to 11.85 percent without.¹²⁷ From these ranges, Atmos maintained its ROE recommendation of 10.95 percent.¹²⁸

Atmos disagreed with several aspects of the Attorney General's analysis, and argued that the ROE recommendation was significantly understated.¹²⁹ Concerning the DCF analysis, Atmos disagreed with the inclusion of dividend per share growth rates, arguing that the use of earnings per share growth rates is more appropriate in DCF analyses.¹³⁰ Atmos also found fault with the Attorney General's CAPM analysis, specifically the recency of the data used, the approaches used in calculating the market risk premium, and failure to incorporate the empirical CAPM analysis to correct for low-beta values.¹³¹

In its brief, Atmos maintained the appropriateness of a 10.95 percent ROE, and argued that it is commensurate with returns in business with similar risk.¹³² Atmos further maintained that the use of multiple models added reliability to the estimated ROE.¹³³ Regarding the authorized ROE for PRP, Atmos argued that the lower risk of having a

¹²⁶ D'Ascendis Rebuttal Testimony at 3.

¹²⁷ D'Ascendis Rebuttal Testimony at 1–2.

¹²⁸ D'Ascendis Rebuttal Testimony at 4.

¹²⁹ D'Ascendis Rebuttal Testimony at 16.

¹³⁰ D'Ascendis Rebuttal Testimony at 19–20.

¹³¹ D'Ascendis Rebuttal Testimony at 26–27.

¹³² Atmos's Post-Hearing Brief (Atmos Brief) at 33.

¹³³ Atmos Brief at 33.

PRP, if any, would already be subsumed in the market data for its Utility Proxy Group.¹³⁴ Atmos maintained that its ROE should not be adjusted due to its PRP Rider.¹³⁵

The Attorney General's brief reiterated the ROE recommendation of 9.4 percent, based on the results of the DCF model and CAPM model using both historical and forecasted data from multiple sources.¹³⁶ The models were applied to a proxy group of the same seven gas distribution companies utilized by Atmos, with one additional company.¹³⁷ The Attorney General noted the controversy over the use of the CAPM model and historical MRP calculated over long periods, and the additional sources used to supplement his analyses to mitigate the risk of upward bias.¹³⁸ The Attorney General reiterated his recommended 9.3 percent ROE for the PRP.¹³⁹ The Attorney General argued that Atmos's ROE results were grossly excessive and unreasonable.¹⁴⁰ Additionally, the Attorney General took issue with assumptions and calculations in Atmos's DCF, CAPM, and RPM analyses, as well as the use of both the CAPM and PRPM models in its analyses.¹⁴¹ Finally, the Attorney General argued against the use of a non-regulated proxy group, size adjustments, and flotation cost adjustments.¹⁴²

¹³⁴ Atmos Brief at 33.

¹³⁵ Atmos Brief at 34.

¹³⁶ Attorney General's Brief at 22.

¹³⁷ Attorney General Brief at 22. The Commission notes that the Attorney General included Southwest Gas Holdings, Inc to Atmos's proxy group, which was subsequently added to Atmos's proxy group in Rebuttal testimony.

¹³⁸ Attorney General Brief at 25.

¹³⁹ Attorney General at 22, footnote 97.

¹⁴⁰ Attorney General Brief at 27.

¹⁴¹ Attorney General Brief at 27–33.

¹⁴² Attorney General Brief at 33–34.

In its response brief, Atmos again reiterated its position that the Attorney General's DCF analysis contained faults including outdated data, incorporation of DPS growth rates, and duplication of S&P Capital IQ growth rates.¹⁴³ Atmos argued that in correcting these issues, the Attorney General's DCF analysis results would indicate ROEs of 9.80 percent to 10.01 percent.¹⁴⁴ Atmos also maintained its position that its RPM results are reasonable as compared to historically observed returns and risk premiums.¹⁴⁵ Additionally, Atmos argued that since both parties agree that the CAPM has its limitations in practice, using the ECAPM may provide a more accurate measure of the ROE than the traditional CAPM.¹⁴⁶ Finally, Atmos noted its disagreement with the Attorney General's assertions regarding non-utility proxy groups, size premiums, and flotation cost adjustments.¹⁴⁷

As discussed in recent cases, such as Case No. 2024-00092¹⁴⁸, the Commission explained why it is appropriate for utilities to present, and for the Commission to evaluate, multiple methodologies to estimate ROEs. Each approach has its own strengths and limiting assumptions. As demonstrated in the respective ROE testimonies in this proceeding, considerable variation exists in both data and application within each modeling approach, which can lead to very different results. The Commission's role is to

¹⁴³ Atmos's Post-Hearing Reply Brief (Atmos Response Brief) at 17.

¹⁴⁴ Atmos Response Brief at 17.

¹⁴⁵ Atmos Response Brief at 18.

¹⁴⁶ Atmos Response Brief at 19.

¹⁴⁷ Atmos Response Brief at 19-20.

¹⁴⁸ Case No. 2024-00092, *Electronic Application of Columbia Gas of Kentucky, Inc. For An Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; and Other Relief* (Ky. PSC Dec. 30, 2024) Order at 42.

conduct a balanced analysis of all presented models, while giving weight to current economic conditions and trends.

The Commission cautions all parties against unreasonably removing or ignoring “outlier” data due to a subjective perception of being “too high” or “too low.” As demonstrated in the case record, there are multiple actions that can be and were taken into account for “outlier” or “unreasonable” data. Result-oriented exclusions of data that are not beyond the realm of reasonableness are inappropriate. Results based upon excluded data without adequate support will be given less weight in future Commission determinations.

Although the Commission supports the use and presentation of multiple modeling approaches, the Commission finds that Atmos Kentucky’s use of the Predictive Risk Premium Model (PRPM) should be rejected. Though the PRPM model has been published and presented in multiple forums, it has been rejected by this Commission and only been addressed by three other regulatory commissions thus far and is not universally accepted.¹⁴⁹ According to Attorney General witness Baudino, Atmos witness D’Ascendis developed the PRPM method, which Mr. Baudino states:

[I]s based on historical risk premium relationships that may or may not hold for the future. We do not really know if investors expect the variance of historical risk premiums to continue or if they even use this information to assist them in determining their required ROE. We also do not know if investors would model the PRPM using Mr. D’Ascendis’ assumptions.¹⁵⁰

¹⁴⁹ See Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 47–48; See also Case No. 2022-00372, *Electronic Application of Duke Energy Kentucky, Inc. for (1) An Adjustment of Electric Rates; (2) Approval of New Tariffs; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and (4) All Other Required Approvals and Relief* (Ky. PSC Oct. 12, 2023), Order at 41; Case No. 2024-00092, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; and Other Relief* (Ky. PSC Dec. 30, 2024), Order at 43.

¹⁵⁰ Baudino Direct Testimony at 46–47.

The Commission will evaluate all models but will accord most weight to DCF and CAPM analyses based upon regulated company proxy groups. Both the DCF and CAPM are long-standing, well-accepted models that evaluate risk and returns both implicitly and explicitly.

The Commission reiterates that it also continues to reject the use of flotation cost adjustments, financial risk adjustments, and size adjustments in the ROE analyses.¹⁵¹ Atmos included a 0.06 percent increase in ROE for flotation costs, which are costs associated with the sale of new issuances of common stock, such as market pressure, underwriting fees, and out-of-pocket costs for printing, legal, and registration.¹⁵² Attorney General witness Baudino asserted that a DCF model using current stock prices should already account for investor expectations regarding the collection of flotation costs, and recovering flotation costs “essentially assumes that the current stock price is wrong and that it must be adjusted downward to increase the dividend yield and the resulting cost of equity.”¹⁵³ The Commission finds that Atmos has not established that flotation costs should be recovered through rates.

Regarding financial risk adjustment, Atmos adjusted its requested ROE 0.04 percent lower to account for decreased investor risk for Atmos for its better long-term issuer ratings compared to the Utility Proxy Group.¹⁵⁴ The Attorney General’s witness

¹⁵¹ See Case No. 2024-00092, Dec. 30, 2024 Order at 43.

¹⁵² D’Ascendis Direct Testimony at 4, 56.

¹⁵³ Baudino Direct Testimony at 60.

¹⁵⁴ D’Ascendis Direct Testimony at 54.

Baudino stated that this assertion of lower credit risk was inconsistent with Atmos's claim that it was a greater investor risk due to its size,¹⁵⁵ discussed below.

Regarding size adjustment, Atmos argued in favor of a 0.05 percent ROE increase to account for Atmos's smaller size compared to the Utility Proxy Group companies.¹⁵⁶ Atmos asserted that investors generally demand greater returns from smaller companies to offset increased risk that a smaller company will be unable to handle significant events that affect sales, revenues and earnings.¹⁵⁷ Attorney General witness Baudino countered that Atmos should not be treated as a small company because Atmos's size (not just its Kentucky operations) is comparable to the Utility Proxy Group companies—the Kentucky division does not issue its own debt or equity and therefore does not face risks independent of Atmos's overall financial stability.¹⁵⁸ The Commission finds that Atmos's ROE should not include a size adjustment.

After consideration of the evidence on record, the Commission finds that an ROE of 9.75 percent for Atmos's base rates and an ROE of 9.65 percent for its natural gas capital riders is fair, just and reasonable. Furthermore, ROE for capital riders is adjusted downwards because "[w]ith a rider, since a return is guaranteed and the time line of recovery is known and ordinarily not meaningfully delayed, the required return is less than

¹⁵⁵ Baudino Direct Testimony at 59.

¹⁵⁶ D'Ascendis Direct Testimony at 4, 46,

¹⁵⁷ D'Ascendis Direct Testimony at 46–47.

¹⁵⁸ Baudino Direct Testimony at 58.

the ROE associated with a rate case as the risk involved is decreased and most lag associated with recovery is eliminated.”¹⁵⁹

Capital Structure/Cost of Debt:

The Kentucky/Mid-States Division of Atmos Energy Corporation is not a separate legal entity and, therefore, all debt or equity funding of the operations it performs must be issued by Atmos Energy Corporation (Atmos Energy) as a whole, on a consolidated basis.¹⁶⁰ Atmos argued that, for this reason, it is appropriate to use Atmos Energy’s consolidated capital structure in setting rates for Atmos’s Kentucky customers.¹⁶¹ Therefore, Atmos proposed a capital structure comprised of 38.93 percent long-term debt, 0.19 percent short-term debt, and 60.88 percent common equity.¹⁶² This proposed capital structure is consistent with the 13-month actual capital structure for the period ending June 30, 2024.¹⁶³ Additionally, Atmos proposed a 4.11 percent weighted average cost of long-term debt, which excludes securitized debt issued in connection with Winter Storm Uri.¹⁶⁴ A summary of Atmos Energy’s modified cost of capital for Atmos follows:

¹⁵⁹ Case No. 2020-00060, *Electronic Application of Kentucky Utilities Company for Approval of Its 2020 Compliance Plan for Recovery by Environmental Surcharge* (Ky. PSC Sept. 29, 2020), Order at 20.

¹⁶⁰ Direct Testimony of Joe Christian (Christian Direct Testimony) at 7.

¹⁶¹ Christian Direct Testimony at 7–8.

¹⁶² Christian Direct Testimony at 8.

¹⁶³ Christian Direct Testimony at 8.

¹⁶⁴ Christian Direct Testimony at 8–9.

	Capital Ratio	Component Costs	Weighted Avg Cost
Short-Term Debt	0.19%	17.14%	0.03%
Long-Term Debt	38.93%	4.11%	1.60%
Common Equity	60.88%	10.95%	6.67%
Total Capital	<u>100.00%</u>		<u>8.30%</u>

In addition to reducing the ROE to 9.4 percent, the Attorney General recommended reducing Atmos's equity ratio from its proposed 60.88 percent to 52.5 percent.¹⁶⁵ The Attorney General explained that this recommendation is consistent with past Commission Orders, as well as recent requests from gas distribution companies.¹⁶⁶ Regarding Atmos's proposed equity ratio, the Attorney General argued that an equity ratio of 60.88 percent is unreasonable, excessive, and directly conflicts with the Commission's Order in the past rate case that Atmos's common equity ratio be reduced in subsequent a case toward the common equity ratio of a proxy group of companies.¹⁶⁷ The Attorney General's proposed capital structure results in a WACC of 8.30 percent and is as follows:¹⁶⁸

¹⁶⁵ Baudino Direct Testimony at 36.

¹⁶⁶ Baudino Direct Testimony at 36.

¹⁶⁷ Baudino Direct Testimony at 3.

¹⁶⁸ Direct Testimony of Randy Futral (Futral Direct Testimony), Table 4 at 24.

	Capital Ratio	Component Costs	Weighted Avg Cost
Short-Term Debt	0.19%	17.14%	0.03%
Long-Term Debt	47.31%	4.11%	1.94%
Common Equity	52.50%	9.40%	4.94%
Total Capital	<u>100.00%</u>		<u>6.91%</u>

In rebuttal, Atmos reiterated that it does not have a holding company and, therefore, its proposed capital structure represents an actual cost, rather than a hypothetical or subsidiary cost that is part of a larger holding company.¹⁶⁹ Atmos argued that its proposed capital structure is reflective of what is necessary for it to maintain its current credit metrics, which enable it to access long-term debt at more favorable terms.¹⁷⁰ Additionally, Atmos provided multiple analyses showing the effects of the Attorney General's recommended capital structure if it were applied to Atmos Energy as a whole.¹⁷¹ As a result of this analysis, Atmos concluded that the Attorney General's proposed capital structure would lead to a credit worthiness downgrade if Atmos's Kentucky operations represented the entirety of Atmos Energy.¹⁷² Atmos argued that it would be inappropriate to use Atmos Kentucky's approximate five percent representation of Atmos Energy as an excuse to not allow it to contribute ratably to Atmos Energy's overall financial performance.¹⁷³ Atmos also argued that the use of a hypothetical capital

¹⁶⁹ Christian Rebuttal at 3.

¹⁷⁰ Christian Rebuttal at 4.

¹⁷¹ Christian Rebuttal at 4.

¹⁷² Christian Rebuttal at 4 and Exhibit JTC-R-1.

¹⁷³ Christian Rebuttal at 4–5.

structure for ratemaking purposes with increased long-term debt would negatively affect its financial integrity, putting it at risk of a credit rating downgrade and increases to its cost of debt financing.¹⁷⁴ Atmos also provided an analysis which compared the savings that have been achieved since 2014 as a result of being ‘A’ rated by debt rating agencies, and the effect on these savings if it had been a ‘B’ rated company.¹⁷⁵ Atmos recomputed the imbedded long-term cost of debt which resulted in an overall cost of debt of 4.56 percent, and concluded that its cost of debt of 4.11 percent supported in this case resulted in savings of approximately \$1.14 million.¹⁷⁶ Atmos asserted that, if the Commission were to accept the Attorney General’s recommended capital structure, it would be appropriate to also utilize the higher cost of long-term debt rate of 4.56 percent.¹⁷⁷

Atmos argued further that its proposed common equity ratio of 60.88 percent falls within the range of the common equity ratios maintained by the Utility Proxy Group of 40.23 percent to 62.38 percent, for the fiscal year 2023. Atmos provided an additional comparison which examined the past eight quarters of average capital structures for the Utility Proxy Group, including and excluding short-term debt which range from 31.92 percent to 59.06 percent and 35.43 percent to 59.24 percent, respectively.¹⁷⁸ Additionally, Atmos considered Value Line’s projected capital structures for the proxy group which ranged from 42.50 percent to 61.00 percent for 2024-2029.¹⁷⁹ Finally, Atmos

¹⁷⁴ Christian Rebuttal Testimony at 4 and Exhibit JTC-R-1.

¹⁷⁵ Christian Rebuttal Testimony at 6 and Exhibit JTC-R-2.

¹⁷⁶ Christian Rebuttal Testimony at 6–7 and Exhibit JTC-R-2.

¹⁷⁷ Christian Rebuttal Testimony at 7.

¹⁷⁸ D’Ascendis Rebuttal Testimony at 6 and Exhibit DWD-2R at 1.

¹⁷⁹ D’Ascendis Rebuttal Testimony at 6 and Exhibit DWD-2R at 3.

surveyed the authorized equity ratios of natural gas utility companies from 2020 through the present, which ranged from 32.27 percent to 62.38 percent.¹⁸⁰ In consideration of these analyses, Atmos argued that the requested capital structure is consistent with the range of capital structures maintained by the Utility Proxy Group, and is appropriate to be used.¹⁸¹

In his brief, the Attorney General reiterated that Atmos's proposed common equity ratio is unreasonable, excessive, and recommended the Commission reject it.¹⁸² The Attorney General argued further that Atmos's requested common equity ratio is 20.5 percent higher than the proxy group average, and stands in sharp contrast to the Commission's final Order in Atmos's last rate case, in which the Commission ordered Atmos to reduce its equity ratio and placed Atmos on notice that in a subsequent rate case, the Commission might further reduce its common equity ratio to more closely approximate that of its peers.¹⁸³ The Attorney General argued that transferring more of Atmos's financing costs into long-term debt would reduce costs to Atmos and its ratepayers, and that Atmos did not provide evidence to support its concern of a ratings downgrade should it not receive its proposed capital structure and that this concern is mere speculation.¹⁸⁴ The Attorney General maintained that Atmos's proposed common

¹⁸⁰ D'Ascendis Rebuttal Testimony at 6 and Exhibit DWD-2R at 4.

¹⁸¹ D'Ascendis Rebuttal Testimony at 7.

¹⁸² Attorney General Brief at 20.

¹⁸³ Attorney General Brief at 20.

¹⁸⁴ Attorney General Brief at 21.

equity ratio is far beyond traditional norms, and exceeds its needs for its Kentucky operations.¹⁸⁵

In its brief, Atmos reiterated that its proposed common equity ratio reflects its actual capital structure, rather than a hypothetical common equity ratio as proposed by the Attorney General.¹⁸⁶ Atmos argued that the Commission's Order in its prior rate case is a clear outlier from decades of Commission precedent, as the Order approved a hypothetical capital structure for Atmos Energy, rather than an actual capital structure.¹⁸⁷ Atmos stated that, with an imposed hypothetical capital structure, Atmos Energy's Kentucky customers would not be contributing back ratably to the funds from operations at the same level as customers in Atmos Energy's other jurisdictions.¹⁸⁸ Atmos argued that Atmos Energy's current capitalization allows it to respond to emergencies in ways other utilities cannot, and that its strong balance sheet allows it to access the debt market at more favorable rates.¹⁸⁹ Atmos argued further that Atmos Energy's actual capital structure and strong balance sheet benefit Atmos Energy's Kentucky customers.¹⁹⁰

In its final brief, Atmos argued that the Attorney General's argument supporting its proposed capital structure relies solely on its proxy group comparison, and goes against Commission precedent of utilizing actual capital structures.¹⁹¹ Atmos again reiterated its

¹⁸⁵ Attorney General Brief at 22.

¹⁸⁶ Atmos Brief at 27-28.

¹⁸⁷ Atmos Brief at 28.

¹⁸⁸ Atmos Brief at 30.

¹⁸⁹ Atmos Brief at 30–31.

¹⁹⁰ Atmos Brief at 30.

¹⁹¹ Atmos Response Brief at 11.

argument that the Attorney General's proposed capital structure is purely hypothetical, and Atmos's proposed capital structure is its actual 13-month period end capital structure.¹⁹² Atmos also argued that the Attorney General's proposed capital structure would result in Atmos Energy's customers in other jurisdictions subsidizing Kentucky customers.¹⁹³

In the final Order of Case No. 2021-00214, the Commission voiced its concerns regarding the size of Atmos's common equity ratio.¹⁹⁴ In that case, the Commission found that Atmos's common equity ratio should be reduced to 54.50 percent, and noted that, in subsequent rate case filings, the Commission would review the proxy group common equity ratios and further transition down to the average common equity ratio of 50.0 percent or a median or average, whichever the facts merited.¹⁹⁵ Despite the Commission's findings in Case No. 2021-00214, Atmos proposed an even larger common equity ratio than the 57.05 percent it proposed in the prior case and, more importantly, failed to establish the reasonableness of that capital structure.

As an initial matter, the Attorney General's witness, Baudino, presented evidence that the average common equity ratio for the proxy group was 49.36 percent in 2023 and 49.79 percent in 2024 and is expected to be 48.71 percent for the 2027-2029 period.¹⁹⁶ Witness Baudino further noted that Columbia Gas of Kentucky requested a common equity ratio of 52.64 percent in its most recent rate case and that Delta Gas Company

¹⁹² Atmos Response Brief at 12.

¹⁹³ Atmos Response Brief at 15.

¹⁹⁴ Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 37.

¹⁹⁵ Case No. 2021-00214, Order at 38.

¹⁹⁶ Baudino Direct Testimony, Table 2 at 35.

requested a common equity ratio of 52.76 percent in its most recent rate case.¹⁹⁷ Atmos's witness responded to that evidence, in part, by asserting that Atmos's requested common equity ratio of 60.88 percent "falls within the common equity ratios maintained by the Utility Proxy Group."¹⁹⁸ However, a closer examination of the common equity ratios for the "Utility Proxy Group" in the table provided by Atmos's own witness indicated a range of common equity ratios from 37.55 percent to 47.17 percent in the third quarter of 2024, if Atmos is excluded from the group.¹⁹⁹ Moreover, Atmos's own witness indicated that those same companies, again excluding Atmos, had a range of common equity ratios from 37.55 percent to 55.08 percent in the third quarter of 2024 at the operating company level.²⁰⁰ Atmos's witness also indicated that the equity ratios of natural gas utility companies from 2020 through the present ranged from 32.27 percent to 62.38 percent,²⁰¹ but those companies are not as representative as the gas distribution companies included in his Utility Proxy Group. Further, even among those companies, equity ratios above 55 percent were unusual.²⁰² Thus, the evidence supports the Attorney General's position that Atmos's equity ratio is substantially higher than comparable utilities.

While Atmos asserts that to its high equity ratio provides benefits, Atmos failed to present evidence indicating that those benefits justify the cost to customers of an unusually high equity ratio. Specifically, the Attorney General's witness indicated that

¹⁹⁷ Baudino Direct Testimony, at 36.

¹⁹⁸ D'Ascendis Rebuttal Testimony at 6.

¹⁹⁹ D'Ascendis Rebuttal Testimony, Exhibit DWD-2R at 1.

²⁰⁰ D'Ascendis Rebuttal Testimony, Exhibit DWD-2R at 2.

²⁰¹ D'Ascendis Rebuttal Testimony, at 6.

²⁰² See D'Ascendis Rebuttal Testimony, Exhibit DWD-2R at 4–6.

adjusting Atmos's capital structure to reflect a 52.5 percent equity ratio, all else being equal, would reduce the revenue requirement by about \$5.375 million.²⁰³ Conversely, in an attempt to reflect the benefits of Atmos's higher equity ratio, Atmos presented evidence that adjusting Atmos's capital structure to reflect a 52.5 percent equity ratio in the capital structure would increase borrowing costs on long term debt from 4.11 percent to about 4.56 percent and would therefore increase costs by about \$1.14 million annually,²⁰⁴ which was substantially lower than the savings reflected by the Attorney General. Thus, assuming the accuracy of Atmos's estimated cost, the benefits to customers of reducing the equity share of the capital structure to 52.5 percent, which were generally accurately reflected in the testimony presented by the Attorney General,²⁰⁵ would far exceed the cost in the form of an increased debt rate such that it would be unreasonable to choose that increased equity cost to achieve the claimed debt savings.²⁰⁶

While a change in the equity share of the capital structure could increase debt rates, Atmos's evidence did not establish that would occur in this case. Specifically, Atmos's analysis of the increased debt cost was premised on its position that its rating would fall from an A+, A, or A- to a BBB+, BBB, or BBB-, and it would suffer increased borrowing costs for debt it incurred from October 15, 2014, forward if it had an equity ratio

²⁰³ Futral Revised Testimony at 5.

²⁰⁴ Christian Rebuttal Testimony at 6–7.

²⁰⁵ The savings would be slightly reduced by the change in the return on equity approved herein, because the Attorney General calculated the savings before adjusting the return on equity. However, even with the lower return on equity approved in this case, the savings from reducing the equity ratio would be significantly higher than the costs alleged by Atmos.

²⁰⁶ Hearing Testimony of Richard A. Baudino (Baudino Hearing Testimony), May 7, 2025 HVT at 11:10:32.

of 52.5 percent.²⁰⁷ Atmos did not provide sufficient evidence to support that its rating would fall. In contrast, Atmos's actual common equity ratios in a 2013 rate case and a 2017 rate case were 49.16 percent and 52.57 percent.²⁰⁸ All things being equal, the common equity from those two prior cases would suggest that an equity ratio in the 50 percent range would not negatively affect Atmos's borrowing costs. That inference is further supported by common equity ratios of the utilities in the proxy group which have apparently generally found that a lower equity ratio is sufficient to support borrowing. Thus, the Commission finds that Atmos failed to establish that its proposed equity ratio of 60.88 percent is reasonable or provide sufficient benefit to ratepayers, or that reducing the equity ratio as proposed by the Attorney General would materially affect borrowing costs.

Further, there is nothing improper about the Commission adjusting a utility's capital structure for ratemaking purposes where the Commission finds that the utility's actual capital structure is unreasonable. Atmos, in making decisions regarding whether to raise capital through debt or equity issuances, or by retaining capital, controls its capital structure. If Atmos makes decisions with respect to its capital structure that unreasonably increase costs to customers, the Commission has the authority to make an adjustment to prevent unreasonable costs from being passed on to customers, and depending on the

²⁰⁷ See Christian Rebuttal Testimony, Exhibit JTC-R-2 Interest Savings; see also Baudino Hearing Testimony, May 7, 2025 HVT at 11:06:30-11:10:32 (discussing Mr. Christian's analysis).

²⁰⁸ See Case No. 2018-00281 (Ky. PSC May 7, 2019), Order at 33-34 (indicating the common equity ratios at the time of the 2013 and 2017 cases, when discussing how Atmos's actual common equity ratio has increased over the years); Baudino Hearing Testimony, May 7, 2025 HVT at 11:06:30-11:10:32 (explaining that Atmos's actual common equity ratios at the time of the 2013 and 2017 cases rebut Mr. Christian's claims that a reduction in the equity ratio would have actually changed the debt cost).

circumstances, may be required to do so.²⁰⁹ Further, the Commission has given Atmos significant notice that it was concerned with the reasonableness of Atmos's rising equity ratio.²¹⁰ However, Atmos failed to establish that its equity ratio in this case is reasonable for the reasons discussed above and in the evidence presented by the Attorney General. Thus, the Commission finds that Atmos's proposed capital structure, as filed, is not reasonable and does not result in fair, just, and reasonable rates for Atmos's consumers in Kentucky, and therefore, the Commission finds that an adjustment is necessary.

The Attorney General proposed to adjust the capital structure to reflect an equity ratio of 52.5 percent consistent with the capital structure of Columbia Kentucky and Delta. However, while there is some merit to the Attorney General's argument, the Commission finds that it would be more reasonable to reduce Atmos's common equity ratio to 53.50 percent, which is roughly between the equity ratios of those Kentucky LDCs and the highest recent common equity ratios at the operating level for companies, other than Atmos, in the Utility Proxy Group.²¹¹ The Commission notes that a 53.5 percent equity ratio, which is still on the higher end of the Utility Proxy Group, is an incremental step from the adjustment made in Atmos's last rate case. In subsequent rate filings, the

²⁰⁹ See KRS 278.030(1), indicating that a utility demand, collect and receive fair, just and reasonable rates for the services rendered or to be rendered by it to any person; KRS 278.040(1) indicating that the Commission shall enforce the provisions of KRS Chapter 278; see also KRS 278.270 stating "Whenever the commission, upon its own motion or upon complaint as provided in KRS 278.260, and after a hearing had upon reasonable notice, finds that any rate is unjust, unreasonable, insufficient, unjustly discriminatory or otherwise in violation of any of the provisions of this chapter, the commission shall by order prescribe a just and reasonable rate to be followed in the future."

²¹⁰ See Case No. 2018-00281 (Ky. PSC May 7, 2019), Order at 32-35, discussing Atmos's rising equity ratio, which had increase from 49.16 percent to 52.57 percent from 2013 to 2017, and then increased to 58.06 percent in 2018, before indicating that the Commission may make adjustments in future cases if Atmos did not bring the equity ratio down; see also Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 37-38.

²¹¹ See D'Ascendis Rebuttal Testimony, Exhibit DWD-2R at 2.

Commission will continue to review the proxy group common equity ratios and, if supported, will further transition down to an equity ratio based on the median or average ratio, as the facts merit.

Having reviewed the record and being otherwise sufficiently advised, the Commission finds, in this case, that Atmos’s common equity ratio should be adjusted to 53.50 percent and that the equity balance adjusted out of the capital structure should be placed in long-term debt at Atmos’s current average long-term debt rate of 4.11 percent.

Rate of Return Summary

Applying the cost rates of 17.14 percent for short-term debt, 4.11 percent for long-term debt, and 9.75 percent for common equity, the Commission revised capital structure percentages consisting of 0.19 percent, 46.31 percent, and 53.50 percent, respectively, produce an overall weighted cost of capital of 7.15 percent.

	Percent of Total	Cost Rate	13-month Avg. Cost
Short-Term Debt	0.19%	17.41%	0.03%
Long-Term Debt	46.31%	4.11%	1.90%
Common Equity	53.50%	9.75%	5.22%
Total Capital	100.00%		7.15%

RATE DESIGN

Cost of Service Study

Atmos filed three cost of service studies (COSSs), which are identified as the Customer/Demand study, the Demand-Only study, and the Energy/Demand Study.²¹²

²¹² Application, Direct Testimony of Paul H. Raab (Raab Direct Testimony) at 13.

The Customer/Demand study classifies investments in distribution mains as both customer- and demand-related, which reflects that the Company's level of investment in distribution mains is driven by the maximum demand that customers place on the system, but that there is also a minimum level of investments in distribution mains that would be necessary regardless of the level of such demand.²¹³ The Demand-Only study classifies investments in distribution mains as only demand-related.²¹⁴ The Energy/Demand Study classifies distribution main investment costs as both demand-related and commodity-related, based on the average and excess demand approach.²¹⁵

In the Customer/Demand study, Atmos utilized the minimum system approach. The Commission has expressed its concern about the demand/customer expense allocation for distribution plant classification and the Commission's preference for the zero-intercept method.²¹⁶ Although this concern has been expressed in electric rate cases, it was also expressed for natural gas²¹⁷ as the same concept applies to natural gas in that if the zero-intercept analysis does not provide reasonable results, then this indicates little relationship between the amount of costs and the number of customers. Atmos stated that it did not perform a COSS utilizing the zero-intercept method in preparation of its rate case filing because the results of such a study have not been

²¹³ Raab Direct Testimony at 3.

²¹⁴ Raab Direct Testimony at 4.

²¹⁵ Raab Direct Testimony at 9.

²¹⁶ See, Case No. 2020-00131, *Electronic Application of Meade County Rural Electric Cooperative Corporation for an Adjustment in Rates* (Ky. PSC Sept. 16, 2020), Order at 12.

²¹⁷ See, Case No. 2021-00190, *Electric Application of Duke Energy Kentucky, Inc. for: 1) an Adjustment of Natural Gas Rates; 2) Approval of New Tariffs, and 3) All Other Required Approvals, Waivers, and Relief* (Ky. PSC Jan 25, 2022).

reliable in the past and Atmos could not defend them.²¹⁸ The Attorney General's testimony did not address Atmos's COSSs and did not propose an alternate COSS.

Having reviewed Atmos's multiple COSSs, the Commission finds the evaluation of the results of the Customer/Demand study to not be reasonable. The Commission finds the Demand-Only study to be reasonable to use as a guide for revenue allocation and rate design. The Commission finds that Atmos should continue to file multiple COSSs in future base rate filings, including a COSS based upon the zero-intercept method for the allocation of distribution mains. If such study does not produce reasonable results, a COSS should be filed where distribution mains are allocated as 100 percent demand.

Revenue Allocation and Rate Design

For the revenue allocation, Atmos examined the minimum, maximum, and average revenue increases required by class to produce an equalized rate of return from the three studies.²¹⁹ Below illustrates the relative rate of return (ROR) at current rates and at Atmos's proposed rates.²²⁰

²¹⁸ Atmos's Response to Commission Staff's Fourth Request for Information (Staff's Fourth Request), Item 4(c).

²¹⁹ Raab Direct Testimony at 19.

²²⁰ Raab Direct Testimony, Exhibit PHR-2, page 1 of 75; Exhibit PHR-3, page 1 of 75; Exhibit PHR-4, page 1 of 75.

Rate of Return	Res	Non-Res Firm	Non-Res Interruptible	Transport Firm	Transport Interruptible	Total Company
Customer/Demand						
Current	0.23	2.00	22.29	4.35	26.57	1.00
Proposed	0.50	1.56	15.75	3.53	17.91	1.00
Demand Only						
Current	0.65	0.88	23.95	1.23	27.04	1.00
Proposed	0.78	0.85	16.90	1.29	18.22	1.00
Energy/Demand						
Current	0.91	1.20	1.92	0.55	1.77	1.00
Proposed	0.96	1.05	1.70	0.81	1.48	1.00

Atmos proposed no change in rate design, maintaining a monthly base customer charge and declining block volumetric rates for all rate schedules. Based on the results of the Demand-Only COSS, the Commission finds that the revenue allocation for the rate classes will be applied to the volumetric rates, where applicable, while the customer charges are within the range of reasonableness and will remain unchanged from the proposal. Based on the remaining revenue allocation, the Commission finds the volumetric charges for the G-1 Firm Sales Service to be reasonable as follows: \$1.6261 per Mcf for 0-300 Mcf, \$1.1390 per Mcf for 301-15,000 Mcf, and \$0.9817 per Mcf for over 15,000 Mcf.

In Case No. 2021-00214, the Commission denied Atmos's proposed increase to its monthly residential customer charge from \$19.30 to \$24.00 citing that the proposed increase would result in Atmos collecting one of the most expensive customer charges in the Commonwealth.²²¹ Additionally, the proposed increase would have occurred at a time when customers in Atmos's Kentucky service territory were recovering from a natural disaster.²²² Atmos's monthly residential customer charge was last adjusted to \$19.30 in

²²¹ Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 52-53.

²²² Case No. 2021-00214, (Ky. PSC May 19, 2022), Order at 53.

Case No. 2018-00281.²²³ Here, the Commission finds that the residential customer charge should increase to \$25.00 per billing period, which is an increase of \$5.70 from the current residential customer charge of \$19.30 per billing cycle. The Commission recognizes that Atmos will have a higher-than-average residential customer charge compared to other LDCs in Kentucky. However, the Commission also recognizes that Atmos's fixed costs have increased and that fixed costs can be higher for a utility that primarily serves rural customers, such as Atmos, due to serving low density areas where the number of meters per mile would be lower than those in higher density areas. A residential customer with an average monthly usage of 5.2 Mcf will experience an average monthly bill of \$33.73, which is an increase of \$6.38 or 23.34 percent from an average monthly bill of \$27.35 based on current rates.²²⁴

The Commission finds that the interruptible sales and interruptible transportation declining block volumetric rates should be revised as follows: \$0.9755 per Mcf for 0-15,000 Mcf, and \$0.8002 per Mcf for over 15,000 Mcf. The Commission finds the revisions to rates, which are outlined in Appendix B to this Order, are reasonable and should be approved.

Effective Date and Refund

On May 8, 2025, Atmos made a filing in which it provided the Commission notice pursuant to KRS 278.190(2) of its intent to place its proposed rates into effect, subject to refund, for service rendered on or after May 12, 2025, and in which it indicated that it

²²³ Case No. 2018-00281, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 7, 2019), at 51.

²²⁴ For the purpose of this Order, the average monthly bill at the current and proposed rate is calculated based on the customer charge and the per Mcf base rate. Additional line items, such as the Gas Cost Recovery rate and the PRP, are excluded from this average monthly bill calculation.

would maintain records for such refunds. The rates determined to be reasonable and approved herein are different from and lower than those proposed by Atmos, which were placed into effect for service rendered on or after May 12, 2025. Thus, the Commission finds that Atmos should refund to its customers all amounts collected in excess of the rates approved herein for service rendered on or after May 12, 2025, through the date of entry of this Order, and that the rates approved herein should be effective for service rendered on or after the date of entry of this Order.

RIDERS

Pipeline Replacement Program (PRP)

The Commission first approved Atmos's PRP rider in Case No. 2009-00354,²²⁵ allowing Atmos to receive accelerated recovery of costs associated with the replacement of bare steel pipeline, which presented a safety risk, over a period of 15 years at an estimated cost of \$124 million. However, due to greater than anticipated costs for the replacement of bare steel pipelines initially approved to be included in the PRP,²²⁶ the Commission determined in Case No. 2017-00349 that greater scrutiny of the PRP was necessary, and therefore, among other things, placed a \$28 million per year cap on capital spending for projects that could be included in the PRP,²²⁷ with the intent of shielding ratepayers from potentially unreasonable PRP costs.

²²⁵ Case No. 2009-00354, *Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 28, 2010), Order at 8.

²²⁶ Atmos discovered an additional 100 miles of bare steel pipeline to be replaced and underestimated replacement costs per mile by over 100 percent. Thus, by 2017, the estimated cost of the PRP had ballooned to \$438 million. See Case No. 2017-00349, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications* (Ky. PSC May 3, 2018), Order at 37.

²²⁷ Case No. 2017-00349, (Ky. PSC May 3, 2018), Order at 40-42, stating "[t]he eligible bare steel pipeline replacements for which Atmos's PRP is approved, however, cannot reasonably be made and funded by ratepayers at the levels estimated by Atmos for the PRP program years of 2019 through 2022."

In response to the \$28 million cap on PRP spending, among other things, Atmos filed a forecasted rate case in Case No. 2018-00281 in which the Commission found that Atmos had simply shifted the capital it expected to spend on bare steel replacements in the PRP to other capital projects in base rates, which the Commission referred to as non-PRP projects.²²⁸ The Commission at that time was concerned with the pace of Atmos's capital spending and the need for the non-PRP projects, which Atmos asserted were necessary to address safety concerns, given that Atmos shifted capital expenditures to the non-PRP projects and effectively doubled spending on those projects largely because of the limit imposed on the PRP spending.²²⁹ The Commission found that Atmos failed to justify the need for some of those projects, and limited non-PRP capital spending used to determine rate base in that rate case to \$29.26 million, based on a 5-year historical average. Further, while the Commission stated that it was "not imposing a specific limit on Atmos's non-PRP capital spending in years after the forecasted test period [in that case]," the Commission indicated that in future cases "Atmos should scrutinize the justification for its projects closely and be prepared to provide supporting documentation showing how each project is consistent with its DIMP or TIMP [Transmission Integrity Management Program] . . . if its total non-PRP capital spending exceeds the 5-year rolling average."²³⁰

²²⁸ Case No. 2018-00281, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 7, 2019), Order at 18-19. The Commission noted that Atmos's non-PRP spending went from \$33.9 million in 2018 to \$58.7 million in 2019 and \$68.7 million in 2020, which the Commission noted was in addition to an increase from \$18.6 million in 2015 to \$34.2 million in 2016. Case No. 2018-00281, (Ky. PSC May 7, 2019), Order at 19.

²²⁹ Case No. 2018-00281 May 7, 2019 Order at 21–23

²³⁰ Case No. 2018-00281, May 7, 2019, Order at 24–25.

In Case No. 2021-00214, Atmos was permitted to include Alydl-A projects in the PRP on a case-by-case basis. In Case No. 2023-00231, the Commission increased the \$28 million cap on PRP projects to \$30 million but excluded specific Alydl-A projects that Atmos sought to include in that case.²³¹ In denying the inclusion of the Alydl-A projects at issue in that case, the Commission explained that:

Atmos did not indicate that the projects proposed herein ranked the highest on its DIMP or explain why they should be prioritized over specific projects that rank higher, including why the projects should be prioritized over higher ranking bare steel projects in this and subsequent years.²³²

While the Commission indicated that deviations from the DIMP were permitted based on specific facts, the Commission indicated that reference to Atmos's DIMP, which is prepared pursuant to a federal requirement that distribution system operators rank the risks to their distribution system,²³³ is important, because it offered a quick guide to ensure that Atmos was prioritizing projects that posed the greatest safety risk.²³⁴

In the present case, Atmos requests that: (1) All Alydl-A pipe replacement be included for recovery under the PRP,²³⁵ (2) The PRP spending cap be removed or increased,²³⁶ and (3) The non-PRP spending cap, which Atmos contends was imposed by Case No. 2018-00281, be removed or increased.²³⁷

²³¹ Case No. 2023-00231, *Electronic Application of Atmos Energy Corporation for PRP Rider Rates Beginning October 1, 2023* (Ky. PSC Sept. 29, 2023), Order at 18.

²³² Case No. 2023-00231 (Ky. PSC Sept. 29, 2023), Order at 17.

²³³ See 49 C.F.R. § 192.1007.

²³⁴ Case No. 2023-00231 (Ky. PSC Sept. 29, 2023), Order at 16–18.

²³⁵ Application at 8.

²³⁶ Application at 6–7.

²³⁷ Application at 6–7.

Atmos argued that Aldyl-A should be included in the PRP, because Aldyl-A has been identified by both PHMSA and the Commission as posing a significant safety risk. Atmos noted that other Kentucky utilities have been authorized to address Aldyl-A replacement through similar capital recovery mechanisms and states that it seeks comparable treatment.²³⁸ Atmos also asserted that the ad-hoc, case-by-case analysis of whether Aldyl-A may be included in the PRP lacks clarity.

The Attorney General argued Atmos performed poorly in implementing its bare steel replacement through the PRP, which resulted in significant cost overruns and caused the Commission to impose limits on Atmos's PRP. The Attorney General asserts Atmos is still unable to give a clear timeline and costs estimates for its remaining bare steel replacement.²³⁹ The Attorney General argued that Atmos's implementation of its bare steel replacement through the PRP is evidence of how the Aldyl-A replacement will go, and stated that "[g]iven the cost uncertainties that exist in the pending bare steel program, the addition of a new replacement program on top of the existing one poses enormous rate risk for Atmos ratepayers."²⁴⁰ The Attorney General argued that the Commission should maintain its current approach, which allows Atmos to replace any project-specific section of Aldyl-A pipe if it is prioritized based on the DIMP.²⁴¹

Atmos argued that the PRP cap will not allow Atmos to replace bare steel pipeline within the original 15-year timeline.²⁴² Atmos estimated the remaining cost to replace

²³⁸ Atmos Post-Hearing Brief at 3.

²³⁹ Attorney General Post-Hearing Brief at 35–38.

²⁴⁰ Attorney General Post-Hearing Brief at 38.

²⁴¹ Attorney General Post-Hearing Brief at 38–39.

²⁴² Austin Direct Testimony at 42.

bare steel in the sum of \$144 million.²⁴³ Atmos estimated that the cost of replacing all Aldyl-A pipe would be \$243,697,545.²⁴⁴ Atmos argued that the non-PRP cap limits should be raised or removed to allow Atmos's budget to include all projects necessary to maximize safety, reliability, and economic growth.²⁴⁵ The Attorney General's witness Kollen countered that the caps are necessary to protect ratepayers from continuing cost overruns.²⁴⁶ He also asserted that the caps are not hard caps because Atmos is permitted to engage in additional spending if it justifies such spending.²⁴⁷

As the Commission has previously recognized, there are significant risks posed by Aldyl-A pipelines, particularly pre-1973 Aldyl-A pipelines, which according to evidence presented by Atmos make up a significant portion of the Aldyl-A pipe on its system. The Commission does share some of Attorney General's concerns with respect to expanding the scope of the PRP. However, case-by-case review of each project in the time anticipated by the PRP rider is difficult and may result in needed projects being excluded or not requested. Further, as discussed in more detail below, the Commission is maintaining an overall limit on annual PRP capital spending to protect ratepayers. The Commission also still expects Atmos to prioritize replacement of the existing pipe through the PRP based on potential safety risks and to follow its TIMP and DIMP when deciding replacement priority, unless specific circumstances justify deviating from the DIMP and TIMP (e.g. there is pipeline that is more risky but that risk is not reflected in the DIMP, or

²⁴³ Atmos's Response to Attorney General's First Request, Item 48(b).

²⁴⁴ Atmos's Response to Staff's Post-Hearing Data Request, Item 3, Exhibit Staff_PH_1-03_Att1.

²⁴⁵ Austin Direct Testimony at 27–28.

²⁴⁶ Kollen Revised Direct Testimony at 34.

²⁴⁷ Kollen Revised Direct Testimony at 35.

economic savings justify replacing lower risk pipe as part of another nearby project). If the Commission finds in later cases, particularly in later rate cases, that Atmos failed to prioritize replacement of the existing pipe through the PRP based on potential risk without justification, the Commission may eliminate or reduce the scope of Atmos's PRP, because the intent of the PRP is to prioritize projects based on safety by allowing for accelerated cost recovery outside of a rate case. The Commission believes that those limits and the risk to Atmos that the PRP may be eliminated are sufficient to address the very valid concerns raised by the Attorney General, though the Commission expects to review how Atmos's PRP is working, including how Atmos is prioritizing projects, in Atmos's next rate case. Thus, subject to the limits discussed herein, the Commission finds that Atmos should be permitted to include all Aldyl-A pipe replacement in the PRP.

With respect to Atmos's request to increase the annual PRP caps, the Commission finds that PRP spending caps remain necessary as a tool to prevent ratepayers from being subject to unlimited spending or from spending decisions that are not made on a deliberate, prioritized basis for reducing potentially dangerous pipe. However, the Commission recognizes that additional capital spending will be necessary on an annual basis to complete the replacement within a reasonable timeframe, especially since all Aldyl-A is now authorized to be included in the PRP. The Commission therefore finds that the PRP cap should be increased to \$40 million annually to keep up with cost increases and expedite safety measures.

In approving the increase in the PRP cap, the Commission notes that Atmos has repeatedly framed the PRP cap as an obstacle to meeting safety guidelines. However, nothing herein should be construed as preventing Atmos from completing projects to

replace bare steel or Aldyl-A beyond the annual PRP cap as necessary to provide safe, adequate, and reliable service. Such capital expenditures to replace bare steel or Aldyl-A beyond the annual cap may be recovered in future general rate cases. The PRP was developed as an incentive to encourage replacement of potentially hazardous pipeline—limiting accelerated recovery does not prevent Atmos from replacing all its bare steel and Aldyl-A pipe immediately. The limitations only prevent accelerated recovery of costs through the PRP to provide a check against cost overruns. In that regard, Atmos should also be prepared to demonstrate in future filings everything that it has done to determine accurate cost estimates and reduce the per unit actual costs for pipeline replacement. Atmos ratepayers cannot be expected to bear the entire burden of consequences for incorrect estimates and delays to the extent Atmos has the ability to plan and control those costs.

With respect to Atmos's request to increase the non-PRP spending, the Commission does not believe that the statements in Case No. 2018-00281 to which Atmos referred were intended to impose a specific cap on non-PRP spending in future periods. However, to the extent that was the intent of the language, the Commission is not maintaining an ongoing cap on non-PRP spending going forward. Atmos, like other utilities, may construct needed plant additions and replacements so long as they do not result in wasteful duplication,²⁴⁸ and Atmos otherwise complies with the provisions of KRS Chapter 278 and 807 KAR Chapter 5 such as requesting a CPCN where

²⁴⁸ KRS 278.020(1), in relevant part, prohibits a utility from constructing any plant, equipment, property, or facility without the Commission's approval, except for "ordinary extensions of existing systems in the usual course of business. The Commission will not grant a CPCN unless the utility establishes that the facility the utility intends to construct will not result in "wasteful duplication." *Kentucky Utilities Co. v Pub. Serv. Comm'n*, 252 S.W.2d 885 (Ky. 1952). Further, pursuant to 807 KAR 5:001, Section 15(3), a facility is not considered to be in the ordinary course of business if it results in wasteful duplication.

appropriate. Further, Atmos is entitled, pursuant to KRS 278.180 and 897 KAR 5:001, Section 16, among other statutes and regulations, to request a rate increase in its discretion to recover the reasonable costs of providing service. Thus, nothing herein should be construed as preventing Atmos from completing projects necessary for Atmos to furnish adequate, efficient and reasonable service or as preventing Atmos from requesting recovery of costs in future general rate cases.

In addition to the issues addressed above, the Commission makes the following findings regarding annual PRP filings to facilitate a prompt review of Atmos's annual PRP filings. Atmos should not propose changes to the methodology for calculating or applying the PRP mechanism in the annual PRP filings, because proposing such changes complicate and delay the review of the PRP filings. Changes to the methodology for calculating or applying PRP mechanism should only be proposed in rate cases or in separate applications. The Commission also finds that Atmos shall use the PRP ROE approved in this case in future PRP filings until its next rate case order. As a result, Atmos shall not be required to file ROE testimony as part of a PRP filing.²⁴⁹

Pipeline Modernization

Atmos also sought accelerated recovery of costs related to new federal Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations, referred to as the Mega Rule, via a Pipeline Modernization (PM) Rider.²⁵⁰ Atmos proposed a mechanism

²⁴⁹ See Case No. 2022-00222, *Electronic Application of Atmos Energy Corporation to Establish PRP Rider Rates for the Twelve Month Period Beginning October 1, 2022* (Ky. PSC Mar. 25, 2023), Order at 24-25 (explaining how opening up the ROE in each annual PRP filing slowed down the processing of Atmos's PRP filings).

²⁵⁰ Application, Direct Testimony of T. Ryan Austin (Austin Direct Testimony) at 24.

similar to the PRP process, which would involve over \$48 million in spending over the next ten years.²⁵¹

The Attorney General recommended denying addition of the PM Rider and was concerned that it would be used broadly to circumvent non-PRP caps to replace Aldyl-A pipe or other present or future projects.²⁵² However, Atmos witness Ryan Austin testified that the intent of the PM Rider is only to cover pipeline testing and replacement of pipeline that cannot be tested in compliance with PHMSA in a cost-effective manner without replacing pipeline.²⁵³ Atmos provided a list of the projects it identified intending to recover for under the PM Rider, with projected project dates.²⁵⁴

The purposes of allowing accelerated recovery of an expense or capital expenditure are twofold: (1) to incentivize spending on a certain type of project, and (2) to simplify the process of approving spending on that type of project.²⁵⁵ The PRP incentivizes spending on projects intended to increase pipeline safety but not expressly required law. Atmos is required by PHMSA to perform testing, so the Commission need not provide Atmos any incentive to perform its federal statutory duties.

In addition, contrary to Atmos's PRP cases where the review process is simplified because Atmos has already established a uniform method for pipeline replacement, the

²⁵¹ Atmos's Response to Staff's Post-Hearing Request, Item 2, Attachment 1.

²⁵² Kollen Revised Direct Testimony at 44.

²⁵³ Hearing Testimony of T. Ryan Austin (Austin Hearing Testimony), HVT at 10:03:39.

²⁵⁴ Austin Direct Testimony, Exhibit TRA-5.

²⁵⁵ See Case No. 2009-00354, *Application of Atmos Energy Corporation for an Adjustment of Rates*, Application (filed Oct. 29, 2009), Direct Testimony of Gary L. Smith at 16, stating "the PRP mechanism will provide benefits to the customer by avoiding the costly and resource-intensive process necessary to review adjustments through the traditional rate case process replacing it instead with a simple, straightforward and financially transparent process." See also Case No. 2018-00281, *Electronic Application of Atmos Energy Corporation for an Adjustment of Rates* (Ky. PSC May 7, 2019), Order at 14.

same uniform application does not apply to PHMSA compliance. In PRP cases, Atmos uniformly replaces bare steel with current industry standard pipeline material of the same size.²⁵⁶ The PRP process advances administrative efficiency because for each bare steel pipeline to be replaced, Atmos is not required to file an application for a CPCN, establish the need to replace bare steel, or establish that the replacement pipeline is the least-cost reasonable alternative to meet that need.

Improvements for PHMSA compliance require a more varied assessment of reasonable options that are necessary to comply with PHMSA and do not result in wasteful duplication.²⁵⁷ At hearing, Mr. Austin acknowledged four different options for complying with the PHMSA Mega Rule:²⁵⁸ (1) replacing pipeline that is incompatible with the inline inspection (ILI) tool; (2) retrofitting existing pipeline for ILI tool usage; (3) conducting pressure testing on existing pipeline and transporting in liquid natural gas to prevent outage while the pipeline is bypassed; and (4) reducing pressure to a level that would not trigger application of PHMSA Mega Rule requirements. Three of these four options are listed as proposed options for the proposed projects listed by Atmos.²⁵⁹ PHMSA-related replacement or testing involves too many variables for a one-size-fits-all process that is appropriate for PRP projects. The Commission must assess whether PHMSA requires action be taken, whether each option resolves that requirement, and the

²⁵⁶ Case No. 2018-00281, (Ky. PSC May 7, 2019), Order at 14; Application, Direct Testimony of Gregory W. Smith at 3.

²⁵⁷ See Case No. 2022-00084, *Electronic Application of Duke Energy Kentucky, Inc. for a Certificate of Public Convenience and Necessity Authorizing the Phase One Replacement of the AM07 Pipeline* (Ky. PSC Feb. 24, 2023), Order at 2.

²⁵⁸ Austin Hearing Testimony, HVT at 10:09:30.

²⁵⁹ Austin Direct Testimony, Exhibit TRA-5.

costs and benefits associated with each option. The Commission sees no advantage in treating projects that would normally require a CPCN as part of a streamlined process. The Commission notes that it previously permitted a similar rider as part of a settlement between Duke Kentucky and the Attorney General; however, Duke Kentucky was still required to file a CPCN for pipeline replacement projects outside the ordinary course of business.²⁶⁰

The Commission finds that in order to maintain consistency, Atmos's request to implement a PM Rider should be granted. However, as in the Duke Kentucky case, and in light of Atmos's previous failure to file CPCN applications when appropriate,²⁶¹ the Commission finds that any projects for which Atmos seeks to obtain accelerated recovery under the PM Rider must be approved via CPCN application. Furthermore, the PM rider shall be limited in scope to the projects listed in Exhibit TRA-5 to Mr. Austin's Direct Testimony.

Taxes

Atmos proposed a Tax Rider designed to capture the effects of federal income tax changes implemented by the Inflation Reduction Act of 2022 (IRA)²⁶² and other tax related costs that would change from the amounts included in the base revenue requirement, including the return on the Corporate Alternative Minimum Tax (CAMT) deferred tax asset and credits included in rate base and in the base revenue requirement.²⁶³ Atmos noted

²⁶⁰ Case No. 2021-00190, *Electronic Application of Duke Energy Kentucky, Inc. for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of New Tariffs, and 3) All Other Required Approvals, Waivers, and Relief* (Ky. PSC Dec. 28, 2021), Order at 5–6.

²⁶¹ Case No. 2018-00281, (Ky. PSC May 7, 2019), Order at 24–25.

²⁶² Public Law 117-169, 136 STAT. 1818.

²⁶³ Multer Direct Testimony at 6.

that the Tax Rider is also intended to capture future changes to the federal or state income tax rate and other federal, state, or local tax law changes, including changes in property tax rates.²⁶⁴

The Attorney General's witness argued that the Tax Rider is not necessary to capture tax changes and notes that Atmos only seeks accelerated recovery of tax increases, while the Commission implemented investigations to reflect decreases in the federal income tax rate following the Tax Cuts and Jobs Act.²⁶⁵ The Attorney General's witness also noted that there have historically been differences of opinion as to the calculation of deferred tax assets and deferred tax liabilities and that the Tax Rider would have the Commission preemptively delegate the authority for making such calculations to Atmos.²⁶⁶ He also argued that the property tax rate, which would be true-up through the mechanism, is ill-defined and that a true-up mechanism is not necessary to reflect changes in that rate.²⁶⁷

Atmos's rebuttal testimony asserted that rejection of the rider would result in an unacceptable delay of application of tax changes, resulting in the filing of more frequent general rate cases.²⁶⁸

The Commission finds that implementation of a Tax Rider should be denied. Atmos has not met its burden of proof that the Tax Rider is necessary, and the Commission sees no justification for treating taxes differently than any other expense

²⁶⁴ Multer Direct Testimony at 6

²⁶⁵ Kollen Revised Direct Testimony at 36–37.

²⁶⁶ Kollen Revised Direct Testimony at 37.

²⁶⁷ Kollen Revised Direct Testimony at 38.

²⁶⁸ Multer Rebuttal Testimony at 20.

regarding the timing of recovery. Further, the mechanism as proposed is not well-defined and does not provide significant transparency over the true-up of tax changes.

Research & Development

The Attorney General supported eliminating an existing approximately \$300,000 per year recovered under the Research and Development (R&D) Rider, which provides a grant to the Research Technology Institute.²⁶⁹ The Attorney General witness asserted that ratepayers do not directly benefit from this and that these activities should be funded directly by the suppliers to the industry and manufacturers of industry and end-use customer equipment and appliances, both for competitive advantage and through their industry research organizations for safety and other reasons.²⁷⁰ Atmos countered that consistent with a NARUC resolution, the Commission previously chose to keep and increase the R&D rider despite Attorney General witness Kollen's recommendation against it.²⁷¹

The Commission finds that the R&D Rider should be retained. It may benefit safety and efficiency of gas infrastructure, and if removed, R&D costs may be passed through to ratepayers anyway via increased supplier costs.

IT IS THEREFORE ORDERED that:

1. The rates and charges proposed by Atmos are denied.

²⁶⁹ Kollen Revised Direct Testimony at 48.

²⁷⁰ Kollen Revised Direct Testimony at 49.

²⁷¹ Rebuttal Testimony of Brannon C. Taylor (Taylor Rebuttal Testimony) at 27; Case No. 2017-00349, *Electronic Application of Atmos Energy Corporation for an Adjustment of rates and Tariff Modifications* (Ky. PSC May 3, 2018), Order at 44.

2. The rates and charges as set forth in Appendix B to this Order are approved as fair, just and reasonable rates for Atmos, and these rates and charges are approved for service rendered on and after the date of entry of this Order.

3. Within 60 days of the date of service of this Order, Atmos shall refund to each customer all amounts collected from that customer in excess of the rates approved in this Order for service rendered on or after May 12, 2025, through the date of entry of this Order.

4. For PRP years beginning after the entry of this Order, Atmos's PRP rider shall be subject to a \$40 million annual recovery cap and shall allow the recovery of expenditures to replace bare steel and Aldyl-A pipeline. Atmos shall not propose changes to the PRP mechanism in its annual PRP filings. Atmos shall use the PRP ROE approved in this case in future PRP filings until the next rate case order.

5. Atmos's PM Rider is approved only for the projects listed in Exhibit TRA-5 to Mr. Austin's Direct Testimony. Projects to be initiated under this rider shall require a CPCN application to be approved prior to commencement of work. A CPCN shall not be required for any of these projects commenced prior to the issuance of this Order for which a CPCN would not otherwise be required.

6. Atmos's proposed tax rider is denied.

7. Within 20 days of the date of this Order, Atmos shall file with the Commission, using the Commission's electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and modifications approved or as required herein and reflecting their effective date and that they were authorized by this Order.

8. This case is closed and removed from the Commission's docket.

PUBLIC SERVICE COMMISSION



Chairman



Commissioner



Commissioner

ATTEST:

Executive Director



APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2024-00276 DATED AUG 11 2025

Atmos Energy Corporation - Kentucky Division	
Case No. 2024-00276	
Test Year Ended March 31, 2026	
\$ Millions	
	<u>Rate Increase Amount</u>
Atmos Requested Base Revenue Increase	\$ 33.001
Rate Base Adjustments	
Reduce Asset NOL ADIT to Reflect Updated Balances though FYE 2024	(0.085)
Reduce Asset NOL ADIT to Reflect Allocated Share of SSU Division Amount	(0.690)
Reduce Asset NOL ADIT to Reflect Taxable Income from Bridge Period	(0.062)
CWC - Adjustment 1 - Remove All Non-Cash Expenses	(1.045)
CWC - Adjustment 2 - Correct O&M, Non-Labor Expense Lag Days	(0.017)
Operating Income Adjustments	
Reduce Payroll Expense and Related Payroll Taxes Expense	(0.538)
Reduce Benefits Expense for Filing Error	(1.300)
Reduce Ad Valorem Expense	(3.030)
Remove American Gas Association and Kentucky Chamber of Commerce Dues	(0.078)
Rate of Return Adjustment	
Reflect Changes in Capital Structure (53.5% Equity and 46.5% Debt)	(4.729)
Reflect Return on Equity of 9.75%	(5.174)
Atmos-KY Composite Allocation Factor Update	
Reduction Due to FYE 2024 Composite Allocation Factor Update	<u>(0.526)</u>
Total Adjustments	<u>\$ (17.273)</u>
Base Rate Increase	<u>\$ 15.728</u>

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2024-00276 DATED AUG 11 2025

The following rates and charges are prescribed for the customers in the area served by Atmos Energy Corporation. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of this Commission prior to the effective date of this Order.

RATE G-1
GENERAL FIRM SALES SERVICE

Base Charge

\$25.00	per meter per month for residential service
\$75.00	per meter per month for non-residential service

Distribution Charge

	\$ 1.6261 per Mcf
1-300 Mcf	\$ 1.1390 per Mcf
301-15000 Mcf	\$ 0.9817 per Mcf
Over 15000 Mcf	

RATE G-2
INTERRUPTIBLE SALES SERVICE

Base Charge

\$685.00	per delivery point per month
----------	------------------------------

Distribution Charge for Interruptible Service

1-15000 Mcf	\$ 0.9755 per Mcf
Over 15000 Mcf	\$ 0.8002 per Mcf

RATE T-3
INTERRUPTIBLE TRANSPORTATION SERVICE

Base Charge

\$685.00	per delivery point per month
----------	------------------------------

Distribution Charge for Interruptible Service

1-15000 Mcf	\$ 0.9755 per Mcf
Over 15000 Mcf	\$ 0.8002 per Mcf

RATE T-4
FIRM TRANSPORTATION SERVICE

Base Charge

\$685.00	per delivery point per month
----------	------------------------------

Distribution Charge for Firm Service

1-300 Mcf	\$ 1.6261 per Mcf
301-15000 Mcf	\$ 1.1390 per Mcf
Over 15000 Mcf	\$ 0.9817 per Mcf

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**THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

Before Commissioners: Susan K. Duffy, Chair
Dwight D. Keen
Andrew J. French

In the Matter the Application of Atmos Energy)
Corporation for Adjustment of its Natural Gas) Docket No. 23-ATMG-359-RTS
Rates in the State of Kansas)

ORDER APPROVING SETTLEMENT AGREEMENT

This matter comes before the State Corporation Commission of the State of Kansas (Commission). The Commission concludes the following:

Background

1. On September 9, 2022, Atmos Energy Corporation (Atmos) filed an Application requesting an overall revenue increase of approximately \$8.3 million, excluding the rebasing of the \$3.5 million currently collected through its Gas System Reliability Surcharge Rider (GSRS) into base rates and setting to zero, as well as \$0.6 million of its Ad Valorem Tax Surcharge being adjusted into Ad Valorem Expense and collected in base rates going forward rather than through the Ad Valorem surcharge.¹ If approved, Atmos' new overall rate of return would be 8.18%.² Atmos seeks to increase the current budget and a five-year extension of its System Integrity Program (SIP) Tariff from \$35 million to \$50 million.³ Atmos also seeks to implement a Voluntary Smart Choice Carbon Offset Tariff (SCCO) Rider which allows customers the option of paying for carbon offsets for their gas usage.⁴

¹ Application, pg. 2 (Sept. 9, 2022).

² *Id.*, at 3.

³ *Id.*

⁴ *Id.*, at 4.

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2. Atmos also requested to revise its Transportation Tariffs to require most transportation customers to install Electronic Flow Management (EFM) equipment by November 1, 2024. This would necessitate a company-administered wireless phone line to provide the communications capability necessary to operate the EFM.⁵

3. Atmos Witness Rob Leivo testified that during times of volatile pricing like Winter Storm Uri, an EFM makes it possible to accurately determine which customers are responsible for imbalances during an Operational Flow Order (OFO) event. Atmos estimates the costs of the EFM equipment to be approximately \$4,000 per customer, however about 165 of the 285 EFM customers would also be required to upgrade their meter at significant additional cost.⁶

4. Under Atmos' current tariff the cost of the EFM could be paid in monthly \$30 increments, however Atmos requests the Commission eliminate this option due to increases in EFM equipment costs.⁷

5. Atmos proposes eliminating the fees found on schedule 18 of its tariff which include meter reading fees and credit card fees.⁸ Atmos states that these charges vary greatly from year to year and it would be administratively simpler to recover them through base rates; additionally, it is more equitable to recover these costs spread throughout the customer base.⁹

6. Atmos requests that customers who sign up for transportation service in the future be required to maintain a minimum consumption level; all current customers would be grandfathered in regardless of usage.¹⁰

⁵ Out of 512 current transportation customers, about approximately 285 would be required to install EFM. *See*, Justin Grady Direct Testimony, pg. 18 (Jan 17, 2023).

⁶ "If a customer does not already have a large enough meter, they would also have to upgrade their meter, which could cost tens of thousands of dollars more", Direct Testimony of Rob R. Leivo, pg. 2, 4 (Sept. 9, 2022).

⁷ Leivo Direct at 4.

⁸ Direct Testimony of Kathleen R. Ocanas, pg. 9 (September 9, 2022).

⁹ *Id.*

¹⁰ Leivo Direct at 6.

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7. Atmos states that it is currently an outlier, both Kansas Gas Service and Black Hills have minimum usage for transportation customers in their tariffs.¹¹

8. On September 13, 2022, the Citizen's Utility Ratepayer Board (CURB) filed a Petition to Intervene which was granted on September 20, 2022.

9. On September 26, 2022, WoodRiver Energy, LLC (WoodRiver) filed a Petition to Intervene which was granted on October 12, 2022. Wood River is a privately owned natural gas marketing company which anticipates that the outcome of this proceeding may affect the costs paid by its customers.¹²

10. On January 17, 2023, Commission Staff (Staff) filed direct testimony of Roxie McCullar, Leo Haynos, Jaren Dolsky, William Baldry, Adam Gatewood, Kristina Luke-Fry, Justin Grady, Robert Glass, Lana Ellis, and Justin Prentiss.

11. Also on January 17, 2023, CURB filed direct testimony of Josh Frantz, Andrea Crane and J. Randall Woolridge.

12. On January 26, 2023, WoodRiver filed Cross Answering Testimony of Don Krattenmaker.

13. On February 10, 2023, Parties filed rebuttal testimony.

14. On February 13, 2023, the participants in the Energy Management Program of the Kansas Association of School Boards (KASB), the Olathe Public Schools (USD 233) and the Natural Gas Transportation Customer Coalition (NGTCC) (Collectively "Amici"), filed a Motion for Order Permitting the Filing of an Amicus Brief, which was granted on February 20, 2023.

¹¹ *Id.* at 5.

¹² Presiding Officer Order Granting Woodriver's Petition to Intervene and Admission of Alex Goldberg *Pro Hac Vice*, pg. 2 (October 12, 2022).

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The Settlement

15. On February 21, 2023, Staff, Atmos, CURB, and WoodRiver filed a Joint Motion to Approve Unanimous Settlement Agreement. (Exhibit A) A non-exhaustive list of the provisions of the Unanimous Settlement Agreement includes,

- Rolling \$3,515,823 of GSRS into base rates as well as an additional \$2,200,000 into base rates for a net increase of approximately 2.2 million;
- A compromise on depreciation rates, using Atmos' rates for some parts and Staff's for others;
- For purposes of calculating Atmos' GSRS and SIP, the carrying charge is 8.7% Gross of tax;
- Atmos withdraws its request to increase the budget of the 5 year SIP program from \$35 to \$50 million;
- Parties agree to make change to SIP program's risk assessment tool placing greater weight on bare steel;
- \$8.5 million for ad valorem taxes;
- Changes to cost allocation methodology;
- EFM required for transportation customers except schools using less than 3,000 Dth/year; 9 year amortization for costs from conversion. About \$63.26/month;
- Wireless communication line requirements for EFM subject to a future compliance filing;
- Minimum usage thresholds for future transportation customers;
- Approving the voluntary smart choice carbon offset tariff, on a pilot basis;

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- Waiver of requirement to charge a credit card fee; other schedule 18 fees to remain the same.¹³

16. On February 24, 2023, Andrea Crane, Justin Grady and William Matthews provided testimony in support of the settlement.

17. On March 7, 2023, the Commission held an evidentiary hearing via Zoom regarding the joint settlement agreement and heard testimony in support of the settlement from William Matthews for Atmos, Andrea Crane for CURB and Justin Grady on behalf of Staff.¹⁴ Testimony of parties at the hearing was substantially similar to the testimony the witnesses provided in support of the settlement.

The Amicus Brief

18. On March 31, 2023, Amici filed their brief. Amici argue that instead of implementing Atmos' proposed changes, the Commission should instead open a general investigation on (1) required threshold volumes, if any, for natural gas transportation; (2) circumstances, if any, where the Commission might require an EFM; and (3) a determination of which entity is responsible for non-compliance with operation orders, such as OFO, end use customers, or natural gas marketers providing aggregation services.¹⁵

19. Amici argue that: (1) there is no substantial material evidence in the Docket to support minimum volume thresholds for natural gas transportation in the docket; (2) there is no cost-benefit justification to require EFM for transportation customers; and (3) liability for non-conformance with an OFO is properly placed upon natural gas marketers as opposed to end users.¹⁶

¹³ Joint Motion to Approve Unanimous Settlement Agreement, Exhibit A, (Feb. 21, 2023).

¹⁴ Tr. pgs. 34-65.

¹⁵ Amicus Brief of Kansas Association of School Boards, the Olathe Public Schools, and the Natural Gas Transportation Customer Coalition, pgs. 1-2, (March 31, 2023).

¹⁶ *Id.*

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20. On April 5, 2023, Atmos filed a response to the Amici. Atmos argues that a general investigation is not necessary and that there are enough differences between the utilities that a “one size fits all” approach garnered from a general investigation would be imprudent.¹⁷ Atmos references the fact that after Winter Storm Uri, the Commission opened separate investigations into each utility because it recognized that each utility was unique and had unique challenges.¹⁸ Atmos also argues that there is substantial evidence to support the provision that transportation customers be required to meet a minimum threshold amount.¹⁹ Specifically, Atmos references the direct testimony of Rob Leivo, Ken Fogle and Staff witness Justin Grady.²⁰

21. On April 20, 2023, Staff filed a response to the Amicus brief. Staff generally opposes the arguments raised by the Amici. Specifically, Staff argues that because the gas utilities are so different in their geography and system characteristics, the consistency sought by Amici through a general investigation is not necessary.²¹ Because the Commission opened specific dockets for each of the utilities this allows a more wieldy approach.²²

22. Contrary to the Amici, Staff argues that there is material evidence in the record to support the minimum volume threshold.²³ Staff posits that Amici chose not to participate as parties and therefore may not have an understanding of the depth of discussion regarding minimum volume thresholds.²⁴ Staff states that as a natural gas marketer, WoodRiver’s support for the settlement is indicia that the agreement is reasonable.²⁵ Staff argues that no *party* to the docket has raised the issue of responsibility for non-compliance with OFOs and that Amici are barred from raising issues not

¹⁷ Response of Atmos Energy to Amicus Brief, pg. 1 (April 5, 2023).

¹⁸ *Id.* at 1-2.

¹⁹ *Id.* at 2, 4-5.

²⁰ *Id.* at 4-6.

²¹ Response of Staff to the State Corporation Commission of the State of Kansas to Amicus Brief, pg. 1-2 (April 20, 2023).

²² *Id.*

²³ *Id.* at 2-3.

²⁴ *Id.*

²⁵ *Id.* at 3

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first raised by the parties.²⁶ (*emphasis added*). The Commission is not persuaded by the arguments raised by Amici.

The Commission's Three Factor Test

23. When analyzing a unanimous settlement, a three-factor test is used, the Commission must make an independent finding as to whether the settlement: (1) is supported by substantial competent evidence in the record as a whole, (2) will establish just and reasonable rates, and (3) is in the public interest.²⁷

The Settlement is Supported by Substantial Competent Evidence in the Record as a Whole.

24. William Matthews stated that the settlement is consistent with the testimony filed in the Docket but also reflects a compromise on the part of the parties.²⁸

25. Justin Grady testified that the agreement is supported by substantial competent evidence and explained some of the processes that led the parties to arrive at the terms of the settlement.²⁹

26. Substantial competent evidence possesses something of substance and relevant consequence, which furnishes a substantial basis of fact to reasonably resolve the issues.³⁰ Whether another trier of fact could have reached a different conclusion given the same facts is irrelevant; a Commission decision lacks substantial competent evidence when the Commission's determination "is so wide of the mark as to be outside the realm of fair debate."³¹

27. Having reviewed the record as a whole, the Commission finds the Settlement Agreement is supported by substantial competent evidence.

²⁶ *Id.* at 4

²⁷ See, Docket No. 21-BHCG-418-RTS, Order Approving Unanimous Settlement Agreement, pgs. 6-7 (December 30, 2021).

²⁸ Testimony in Support of Unanimous Settlement Agreement of William D. Matthews for Atmos Corporation, pg. 15 (February 24, 2023).

²⁹ Testimony in Support of Settlement & Agreement Prepared by Justin Grady, pgs. 12-15 (February 24, 2023).

³⁰ *Farmland Indus., Inc. v. Kansas Corp. Comm'n.*, 25 Kan.App.2d 849, 852 (1999).

³¹ *Id.* at 851, 856.

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The Settlement will Result in Just and Reasonable Rates

28. The System Integrity Program (SIP) is a surcharge, separate from the GSRS that allows Atmos to accelerate replacement of older or at-risk pipelines. This helps Atmos mitigate the risk of incidents that can lead to property damage or death.³² Accelerated replacement improves system safety and reliability and helps update records to ensure better information for future risk assessments.³³ Parties have agreed to work collaboratively through the issues raised by parties and allow Atmos to file a new request to extend the SIP program. Parties agree to modify current risk assessment to place greater weight on replacement of bare steel service lines.

29. William Matthews testified that the overall budget impact on residential customers will be an increase of 1.2% or \$1.03 on their monthly bill.³⁴

30. Every gas utility in Kansas is required to provide reasonably efficient and sufficient service and establish just and reasonable rates.³⁵ The parties represent a variety of interests, including investors, small commercial customers, residential customers and the public generally. The terms of the Agreement are fair and reasonable, and were fully and fairly negotiated by the parties in conjunction with the acknowledgement that it is unlikely the Commission would accept wholesale any party's prefiled position.

31. Justin Grady stated that the rates resulting from the agreement fall within a "zone of reasonableness" which is a balance between the interest of investors versus the interest of ratepayers and the interest of current versus future ratepayers.³⁶ The agreed upon revenue requirement strikes the proper balance between the company's desire to have a reasonable assurance that it will earn

³² Direct Testimony of John M. Willis, pg. 15(September 9, 2022).

³³ *Id.* at 16.

³⁴ Testimony in Support of Unanimous Settlement Agreement of William D. Matthews for Atmos Corporation, pg. 17 (February 24, 2023).

³⁵ K.S.A 66-1,202.

³⁶ Testimony in Support of Settlement & Agreement Prepared by Justin Grady, pgs. 16-17 (Feb. 24, 2023).

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sufficient revenues and cash flows to meet its financial obligations.³⁷ Generally speaking, the public interest is served when ratepayers are protected from unnecessarily high prices and unreliable service.³⁸ The fact that the settlement is unanimous amongst diverse views supports the contention that the rates will be just and reasonable and in the public interest.³⁹

32. Andrea Crane testified on behalf of CURB in support of the unanimous settlement. Crane testified that the settlement is within the zone of reasonableness because the increase in rates was higher than Staff and CURB's positions but was lower than what Atmos wanted. The rate of return is based on capital structures proposed by the parties and the settlement adopts Staff's depreciation rates but allow the Parties to propose different depreciation methodologies in the future.

33. The settlement agreement will increase residential rates 3.36%, but reduce the monthly fixed charge by \$0.45 from \$20.20 to 19.75.⁴⁰

34. The Commission finds that the cost of the SIP program is reasonable given the safety and reliability benefits to the ratepayers.

The Settlement is in the Public Interest

35. Justin Grady testified that the agreement is in the public interest because it reduces Atmos' requested revenue increase but still provides Atmos with sufficient revenues to meet its financial obligations and provide reliable service.⁴¹ The agreement also avoids costly and time consuming litigation.⁴²

36. Andrea Crane testified that the rate increase in the Unanimous Settlement Agreement was within the zone of reasonableness because it was higher than what Staff and CURB wanted but

³⁷ *Id.* at 17.

³⁸ *Id.* at 19.

³⁹ *Id.* at 17.

⁴⁰ Andrea C. Crane, Testimony in Support of Unanimous Settlement Agreement, pg. 7 (Feb. 24, 2023).

⁴¹ Testimony in Support of Settlement & Agreement Prepared by Justin Grady, pg. 17 (Feb. 24, 2023).

⁴² *Id.* at 20.

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lower than what Atmos requested.⁴³ The settlement Agreement provides flexibility and allows parties to propose different depreciation methods in future rate cases.⁴⁴

37. Crane testified that the agreement is in the public interest because it reasonably allocates the increase amongst various customer classes as well as resolves issues related to depreciation rates without approving a specific depreciation method. It also avoids the cost of unnecessary litigation.⁴⁵

38. Each party has a duty to protect the interest of the party it represents. Atmos has a duty to its customers, employees, and shareholders. Wood River represents the interest of itself and its clients. The Staff and the Commission are in the unique position of being required to weigh and balance the interests of the company, the customers, and the public generally. CURB represents the interests of residential and small commercial customers.

39. This agreement was sufficient to satisfy the diverse interest of all the parties, this supports the notion that the agreement is in the public interest. The total effect of the terms of the Agreement results in just and reasonable rates and represents an equitable balancing of the interest of all the Parties. Therefore, the Agreement is in the public interest.

THEREFORE, THE COMMISSION ORDERS:

A. The Joint Motion to Approve Unanimous Settlement Agreement is granted effective May 9, 2023.

B. Any party may file for reconsideration pursuant to the requirements and time limits established by K.S.A. 77-529(a)(1).⁴⁶

⁴³ Andrea C. Crane, Testimony in Support of Unanimous Settlement Agreement, pgs. 5-6 (Feb. 24, 2023).

⁴⁴ *Id.* at 6.

⁴⁵ *Id.* at 8.

⁴⁶ K.S.A. 77-529(a)(1).

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BY THE COMMISSION IT IS SO ORDERED.

Duffy, Chair; Keen Commissioner (Dissenting in part), French, Commissioner

05/09/2023

Dated: _____

Lynn M. Retz

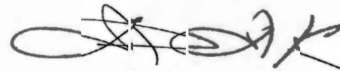
Lynn M. Retz
Executive Director

DGC

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DISSENTING IN PART OPINION

I support the Commission's findings with one exception, albeit an important one. I would deny Atmos' request to waive the requirement to charge a credit card fee. By waiving the fee for customers paying their gas bill by credit card, those fees are being passed on to all Atmos residential customers, even those customers who choose not to pay by credit card. Rather than force customers who elect to pay by other means to subsidize customers that choose to pay by credit card, I believe those customers who pay by credit card should bear all associated costs and fees. Customers may choose to pay by credit card to get airline miles or other perks, unrelated to natural gas service. Customers that wish to earn airline miles or other perks should pay for those privileges. Likewise, customers who wish to avoid credit card fees by paying their bill by other means, should not be forced to incur fees, when they have received no benefit. I strongly believe it is unfair to make customers who do not pay by credit card subsidize those customers that do. Socializing the costs of paying by credit card is not good public policy. Therefore, I dissent from the Commission's Order. Furthermore, I believe the policy of prohibiting the socialization of these costs should have been adopted by the Commission and designated as precedential, and therefore, applicable with like effect to all of the Commission's regulated utilities.



Dwight D. Keen
Commissioner

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Atmos)
Energy Corporation for Approval of the) Docket No. 23-ATMG-359-RTS
Commission to Make Certain Changes in its)
Rates for Natural Gas Service.

UNANIMOUS SETTLEMENT AGREEMENT

This Unanimous Settlement Agreement ("Agreement") is entered into between and among the Staff of the State Corporation Commission of the State of Kansas ("Staff"), Atmos Energy Corporation ("Atmos Energy"), the Citizens' Utility Ratepayer Board ("CURB") and WoodRiver Energy LLC ("WoodRiver") (collectively referred to herein as the "Parties" or "Joint Movants"). This Agreement is being submitted to the Commission for its approval pursuant to K.A.R. 82-1-230a.

I. ATMOS ENERGY'S APPLICATION

1. On September 9, 2022, Atmos Energy filed an Application in this docket to make certain changes in its rates and charges for natural gas service. Pursuant to the Commission's Order dated September 15, 2022, the effective date of the Application was suspended until May 8, 2023. On October 12, 2022, the Presiding Officer issued an Order establishing a procedural schedule. By agreement from Atmos Energy the suspension date was extended to May 9, 2023. This matter is currently set for hearing on March 7-9, 2023.

2. On September 13, 2022, CURB requested intervention in this proceeding and was granted intervention on September 20, 2022. On September 26, 2022, WoodRiver filed for intervention, which was approved on October 12, 2022.

3. The schedules filed with Atmos Energy's Application indicated a need to increase base rates by approximately \$11.83 million, based upon normalized operating results for the 12

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months ending March 31, 2022, adjusted for known and measurable changes in revenues, operating and maintenance expenses, cost of capital and taxes, and other adjustments. As set forth in Atmos Energy's Application, the \$11.83 million increase in base rates included rolling into base rates revenues recovered through the Gas System Reliability Surcharge ("GSRS") in the amount of approximately \$3.52 million and resetting the GSRS rate to zero (for a net increase of \$8.3 million). Atmos Energy proposed an overall rate of return of 8.18 percent. Additionally, Atmos Energy included a depreciation study and sought new depreciation rates for Atmos Energy's Shared Services ("SS") and Colorado/Kansas Office divisions ("CO/KS") as part of its Application. Atmos Energy also requested an increase in the current budget (from \$35 million to \$50 million) for its System Integrity Program ("SIP") Tariff that was approved in Docket No. 19-ATMG-525-RTS ("19-525 Docket") and a five-year extension of the SIP program and tariff. Atmos Energy requested changes to its transportation tariffs as a direct result of its and its customers' experiences during Winter Storm Uri in February, 2021. Atmos Energy requested changes to its general terms and conditions of service and the elimination of some miscellaneous service fees. Atmos Energy also requested permission to implement a Voluntary Smart Choice Carbon Offset Tariff ("SCCO") Rider that would allow customers on a solely voluntary basis to offset some or all of the carbon emissions associated with their natural gas usage through Atmos Energy's purchase and retirement of Carbon Credits on their behalf. In support of its Application, Atmos Energy submitted the testimony of 9 witnesses and the schedules required by K.A.R. 82-1-231.

II. STAFF AND OTHER PARTIES' PRE-FILED POSITIONS

4. On January 17, 2023, Staff filed its direct testimony (including supporting schedules and exhibits) in the above docket recommending that Atmos Energy be granted a base rate increase (revenue requirement increase) of approximately \$5.49 million, which included rebasing the GSRS

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revenues of approximately \$3.52 million and resetting the GSRS charge to zero (for a net increase of \$1.97 million). Staff also recommended an adjustment to Atmos Energy's proposed depreciation rates and made recommendations regarding capital structure, return on equity (ROE) and adjustments to the income statement and rate base. Additionally, Staff addressed Atmos Energy's requests relating to Atmos Energy's SIP tariff. Staff also made recommendations regarding the proposed changes to Atmos Energy's transportation tariff due to Winter Storm Uri and the proposed changes to the other tariff provisions and the elimination of some miscellaneous service fees. Staff supported Atmos Energy's proposed SCCO Rider.

5. On January 17, 2023, CURB filed testimony in which it recommended a revenue deficiency of approximately \$5.21 million, which included rebasing the GSRS revenues of approximately \$3.52 million in to base rates and resetting the GSRS charge to zero (for a net increase of \$1.69 million). CURB addressed Atmos Energy's requests relating to the Company's SIP tariff. CURB also made recommendations regarding the proposed changes to Atmos Energy's transportation tariff due to Winter Storm Uri and the proposed changes to the other tariff provisions and the elimination of some miscellaneous service fees. CURB supported Atmos Energy's proposed SCCO Rider provided that it be implemented as a five-year pilot program.

6. WoodRiver filed direct testimony and cross-answering testimony objecting to certain of Atmos Energy's proposed changes to its transportation tariffs primarily as they related to schools.

7. Atmos Energy filed rebuttal testimony on February 10, 2023.

8. Subsequently, on February 15, 2023, Atmos Energy, Staff, CURB, and WoodRiver met to discuss the possible settlement of the issues in this matter. The Joint Movants were able to reach a settlement agreement in principle resolving all issues in the case. This Settlement Agreement ("Agreement") was executed on February 21, 2023. The resolution of the issues are set forth in this

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Agreement. Since all parties to the docket signed this Agreement, it is considered a unanimous settlement agreement under the Commission's regulations (K.A.R. 82-1-230a).

9. The Joint Movants believe that this Agreement represents a reasonable and fair resolution of this matter and that the terms contained therein are in the public interest. Joint Movants believe that this Agreement satisfies the three factors that the Commission considers when reviewing a proposed settlement agreement.

III. SETTLEMENT PROVISIONS

10. **Stipulated Revenue Requirement and GSRS Rebasing.** The Parties agree that Atmos Energy's overall annual revenue increase to base rates shall be \$5,715,823, which is inclusive of each parties' view of rate case expense. The Parties agree that Atmos Energy shall roll into base rates the GSRS revenues in the amount of \$3,515,823 and reset the GSRS charge to zero. The GSRS revenues are included in the \$5,715,823 annual revenue increase agreed to by the Parties, making the net annual increase approximately \$2,200,000.

11. **Depreciation Rates.** The Parties agree the revenue requirement specified in paragraph 10 above includes Staff's Shared Service depreciation expense consistent with the depreciation rates proposed by Staff and set forth in **Appendix A** to this Settlement. The Parties also agree that the revenue requirement specified in paragraph 10 above includes the Colorado/Kansas division depreciation rates proposed by Atmos Energy. Atmos Energy agrees it will adopt the depreciation rates in **Appendix A**. By agreeing to Atmos Energy's depreciation proposal, Staff is not agreeing to any policy recommendations made by Atmos Energy Witness Watson. The Parties agree the policy recommendations made by Staff Witness McCullar and Atmos Energy Witness Watson regarding ALG v. ELG may be addressed in future general rate case filings.

12. **GSRS and SIP Carrying Charge.** For purposes of calculating Atmos Energy's

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GSRS and SIP, the carrying charges to be applied to recoverable investments in such filings shall be calculated using a pre-tax rate of return of 8.70%, which is based on state and federal tax rates in effect as of the date of this Agreement. The Parties agree this carrying charge is solely for purposes of GSRS and SIP filings and is not precedential for any other purpose.

13. **Capital Structure.** The Parties agree that nothing in this Agreement constitutes an agreement by the Parties to the capital structure proposals presented in this case and this Agreement does not prevent the Parties from challenging such proposals in the future.

14. **SIP Tariff.** (a) Atmos Energy shall be allowed to withdraw its request to increase the budget amount for the remaining term of the five-year SIP pilot program from \$35 million to \$50 million. Atmos Energy shall also be allowed to withdraw without prejudice its request to extend the SIP program for an additional five-year period. The Parties have agreed to collaboratively work through the issues raised by the Parties in this case relating to the extension of the SIP program with Atmos Energy being allowed to file a new request with the Commission to extend the SIP program either in a separate application or in a subsequent general rate case filing prior to the expiration of the pilot program.

(b) With respect to the existing SIP pilot program, and in order to address the three recommendations included in the direct testimony filed by Mr. Haynos, the Parties agree to the following provisions:

i. While Atmos Energy's risk assessment model does currently account for the risk associated with bare steel service lines, Atmos Energy agrees that the program could be enhanced by modifying the current model as proposed by Mr. Haynos to place a greater weight on the risk associated with bare steel service lines. Atmos Energy agrees to adjust the risk-ranking accordingly when prioritizing pipe

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replacement projects, that includes mains and associated bare steel service lines, beginning with the projects identified for Year Four of the currently approved SIP.

ii. With respect to the recommendation by Mr. Haynos that replacement of plastic pipe manufactured after 1983 should not be recovered through SIP, the Parties agree that the cost of replacing pipe segments greater than 100 feet in length of recently installed (post 1983) plastic pipe placed in low pressure service shall not be recovered through the SIP charge unless Atmos Energy can show at the time it makes its filing for approval of the SIP charge that either (i) the replacement of the installed (post 1983) plastic pipe was equally or more cost effective than uprating the existing pipe, or (ii) the replacement is necessary to comply with state or federal safety requirements applicable at that time, and such is accepted by the Commission. If the Commission determines that Atmos Energy has shown that the replacement of the installed (post-1983) plastic pipe was equally or more cost effective than uprating the existing pipe or that the replacement is necessary to comply with state or federal safety requirements, then the replacement cost shall be recovered through the SIP charge. If the Commission determines that Atmos Energy has not shown that the replacement of the installed (post-1983) plastic pipe was equally or more cost effective than uprating the existing pipe and that the replacement is not required by state or federal safety requirements, then the replacement cost shall not be recovered through the SIP charge and Atmos Energy can request recovery of the replacement cost in its next general rate case filed after the replacement projects in question have been placed in service but not to be included in this current rate case. Staff and CURB shall have the right to challenge any showing by Atmos Energy that the replacement

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of the installed (post-1983) plastic pipe was equally or more cost effective than upgrading the existing pipe or that the replacement is not required by state or federal safety requirements. This provision shall apply to Year Three (2023), Four (2024) and Five (2025) approved SIP projects.

iii. With respect to the recommendation made by Mr. Haynos that Atmos Energy should provide an in-depth description of the cause of any failure for each leak discovered on plastic piping so it can be determined if the failure was due to the pipe's material, Atmos Energy agrees to provide the Commission with an in-depth description of the results of its leak investigation for each leak discovered and ultimately uncovered for a root cause analysis on plastic piping based on available information and include such description in its annual report filed in compliance with the 343 Docket. When the pipe is exposed through the leak repair process, more information is available to Atmos Energy to determine the root cause of the leak. However, the process for addressing leaks under pavement or on service lines involves a process that does not result in exposing the leak. As a result of this and other limitations on available information that arise during the investigation process, it is not always possible to determine with certainty the exact cause of a leak in those circumstances. In those cases, Atmos Energy agrees to note why it was unable to expose the leak to determine the root cause of the leak.

15. **Ad Valorem Surcharge Rider.** For purposes of filing Atmos Energy's Ad Valorem Surcharge Rider (all subsequent years until rebased in Atmos Energy's next base rate case), the Parties agree that the ad valorem expenses embedded in base rates shall be \$8,597,886 (\$8,737,864 gross assessment, net of \$139,978 capitalized to CWIP).

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16. **Amortization Periods.** Amortization periods and/or expenses are established as follows:

(a) Atmos Energy's actual rate case expense shall be amortized over three years;

(b) Atmos Energy's Pension and OPEB deferrals in the amounts of \$(273,567) and \$1,159,782 respectively shall be amortized over three years \$(91,189) and \$386,594 per year, respectively;

(c) With respect to item 7(b) above, Atmos Energy shall have the right to recover any over-amortized amount relating to Pension and OPEB deferrals, and with respect to item 7(a), Atmos Energy reserves the right to seek recovery of any unamortized amount relating to rate case expense, with the understanding that Staff and CURB reserve their right to object to the recovery of any unamortized amount relating to rate case expense, including the arguments raised in Staff witness Ian Campbell's Direct Testimony; and

(d) The revenue requirement set in this case includes the flow back of Unprotected Excess Accumulated Deferred Income Tax ("EDIT") and the flow back due to the State of Kansas income tax rate elimination. The flow back adjustment decreases income tax expense by \$6,135,433, which includes \$2,982,437 for federal tax expense and \$3,152,996 for state income tax expense, and recognizes the effect of amortizing the federal accumulated deferred income taxes on Atmos Energy's income tax expense over five years and state excess accumulated deferred income taxes on Atmos Energy's income tax expense over three years.

17. **Pension and OPEB Trackers.** For the purposes of calculating Atmos Energy's pension and OPEB tracker going forward, the Parties agree that the base rates agreed to in this Agreement include the following expenses:

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(a) Atmos Energy's Pension Expense:

Kansas Direct: \$114,085

Shared Services Divisions: \$45,914

CO/KS Division: \$14,518

(b) Atmos Energy's OPEB Expense:

Kansas Direct: (\$263,741)

Shared Services Divisions: \$22,340

CO/KS Division: (\$274,447)

18. **Allocation of Costs to Customers Classes in GSRS and SIP Filings.** For allocating costs among customer classes in subsequent GSRS and SIP filings, such costs shall be allocated among Atmos Energy's classes of customers based on the rate allocation approved in this rate case and as reflected in **Appendix B** attached hereto.

19. **Class Cost of Service and Rate Design.** The Parties agree the annual revenue requirement increase shall be allocated among the respective classes of customers according to the amounts indicated for each class as shown in Appendix B attached hereto. The Parties agree to the facilities charges and commodity charges for each class as shown on **Appendix B** attached hereto.

20. **Billing Determinants; Weather Normalization Adjustment; Customer Annualization Adjustment.** The Parties agree to use Atmos Energy's billing determinants, weather normalization adjustment and customer annualization recommendation, as adjusted by Staff Witness Ellis, to calculate the billing determinants and WNA factors to be used to determine Atmos Energy's WNA adjustment.

21. **General Terms and Conditions and Miscellaneous Service Fees.**

(a) Atmos Energy agrees to include in its proposed changes to its tariffs and

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general terms and conditions the changes included in Staff witness Prentiss's testimony.

(b) Atmos Energy agrees to withdraw its request to eliminate its miscellaneous service charges.

22. **Transportation Tariff Issues.**

(a) The Parties agree that the Commission should approve Atmos Energy's request, as amended by this settlement and which amended request will be captured in a compliance filing with the Commission containing revised tariff language, to require Electronic Flow Measurement ("EFM") equipment for all transportation customers, except for existing smaller use meters that have been historically aggregated in order to qualify for transportation service, and school customers using less than 3,000 Dth/year, by November 1, 2024, or be converted to sales service. The November 1, 2024, deadline may be extended in the event of delays caused by labor availability and supply chain disruptions. The deadline may also be extended in the event the customer has a preexisting multi-year contract that expires after November 1, 2024. School customers using less than 3,000 Dth/year will instead be required to deliver a specified quantity of natural gas during critical days and or/Operational Flow Orders, as determined and timely communicated by Atmos Energy. The Parties agree to work in good faith to jointly develop tariff language pertaining to this requirement, and the consequences of small schools under-delivering the required quantities of natural gas, with such language to be presented in a compliance filing to the Commission.

(b) The Parties agree that Atmos Energy will pay for EFM equipment for school transportation customers that use at least 3,000 Dth/year, and Atmos Energy will recover the actual costs of those conversions in a regulatory asset with a carrying cost at its approved rate of return for the GSR/SIP. The parties agree that Atmos Energy will request that this

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regulatory asset balance be recovered over a nine year amortization period from all Transportation customers in the next rate case.

(c) The Parties agree that the Commission should not approve Atmos Energy's request to eliminate the option for transportation customers to pay for the EFM equipment through a monthly charge, instead of the upfront cost of \$4,300. That initial charge will be set at \$63.26/month, which is calculated as a level-payment financing over the nine years. This charge shall be charged for the duration of the customer's service as a transportation customer, not to exceed nine years. If the customer leaves transportation service to move to sales service before the nine years is up, Atmos Energy agrees to bill the transportation customer for the remaining balance of the EFM cost. Atmos Energy shall be allowed to request an increase in the current monthly charge by filing an application in a separate docket and providing support for any increase in the monthly charge. The Parties reserve their respective rights to challenge any increase in the monthly charge requested by Atmos Energy in that separate docket.

(d) The Parties agree that the Commission should approve Atmos Energy's request to change its transportation tariff to require an Atmos Energy administered wireless communication line for the reasons set forth in Mr. Leivo's direct testimony which was adopted by Mr. Fogle. Atmos Energy shall be required to list the charge for wireless communication service in its Schedule II service fees. Atmos Energy shall make a compliance filing identifying the fee and submitting support for that fee in the compliance filing. This fee may be updated periodically based on current actual costs through a compliance tariff filing or in conjunction with a general rate case.

(e) Recognizing the exceptions identified in paragraph (a) above, the Parties

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agree that Atmos Energy shall change its transportation tariffs to require all new transportation customers, after November 1, 2024, to have a minimum annual gas usage of 1,500 MMBtu in any month or 5,000 MMBtus of natural gas in a year. The minimum usage requirement would not apply to schools or any existing transportation customer.

23. **Smart Choice Carbon Offset Tariff ("SCCO") Rider.** The Parties agree that Atmos Energy's proposed SCCO rider as corrected and set forth in Rebuttal Exhibit GLS-3 should be approved by the Commission on a pilot basis. The parties agree that a re-evaluation of the program's reasonableness and effectiveness should be completed before the end of a six year time frame.

24. The parties agree that Atmos Energy shall be effectively granted a waiver from the Commission's minimum payment standards pertaining to the requirement to charge a fee for customers that choose to pay their bills with a debit or credit card.

IV. MISCELLANEOUS PROVISIONS

A. THE COMMISSION'S RIGHTS

25. Nothing in this Agreement is intended to impinge or restrict, in any manner, the exercise by the Commission of any statutory right, including the right of access to information, and any statutory obligation, including the obligation to ensure that Atmos Energy is providing efficient and sufficient service at just and reasonable rates.

B. PARTIES' RIGHTS

26. The Parties, including Staff, shall have the right to present pre filed testimony in support of this Agreement. Such testimony shall be filed formally in the docket and presented by witnesses at a hearing on this Agreement. Such testimony shall be filed on or before February 24, 2023, as required by the procedural schedule filed in this docket.

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C. WAIVER OF CROSS EXAMINATION AND POST HEARING BRIEFS

27. The Parties agree to waive cross examination on all testimony filed prior to the filing of this Agreement. The Parties agree that all such pre-filed testimony and exhibits may be incorporated into the record without objection. The Parties agree to waive filing of post-hearing briefs.

D. NEGOTIATED SETTLEMENT

28. This Agreement represents a negotiated settlement that fully resolves all of the issues in this docket among the Parties. The Parties represent that the terms of this Agreement constitute a fair and reasonable resolution of the issues addressed herein. Except as specified herein, the Parties shall not be prejudiced, bound by, or in any way affected by the terms of this Agreement (a) in any future proceeding; (b) in any proceeding currently pending under a separate docket; and/or (c) in this proceeding should the Commission decide not to approve this Agreement in the instant proceeding. If the Commission accepts this Agreement in its entirety and incorporates the same into a final order without material modification, the Parties shall be bound by its terms and the Commission's order incorporating its terms as to all issues addressed herein and in accordance with the terms hereof, and will not appeal the Commission's order on these issues.

E. INTERDEPENDENT PROVISIONS

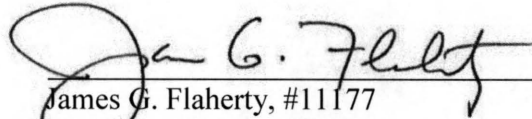
29. The provisions of this Agreement have resulted from negotiations among the Parties and are interdependent. In the event that the Commission does not approve and adopt the terms of this Agreement in total, the Agreement shall be voidable and no party hereto shall be bound, prejudiced, or in any way affected by any of the agreements or provisions hereof. Further, in such event, this Agreement shall be considered privileged and not admissible in evidence or made a part of the record in any proceeding.

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F. SUBMISSION OF DOCUMENTS TO THE COMMISSION OR STAFF

30. To the extent this Agreement provides for information, documents or other data to be furnished to the Commission or Staff, such information, documents or data shall be filed with the Commission and a copy served upon the Commission's Director of Utilities. Such information, documents, or data shall be marked and identified with the docket number of this proceeding.

IN WITNESS WHEREOF, the Parties have executed and approved this Stipulated Settlement Agreement, effective as of the 21st day of February, 2023, by subscribing their signatures below.



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ATMOS ENERGY - SHARED SERVICES UNIT SUMMARY OF DEPRECIATION RATES & ANNUAL ACCRUAL

Account	Description	9/30/19 Investment	Current Approved		Atmos Proposed-ELG			Staff Proposed-ALG			
			Accrual Rate	Annual Accrual	Accrual Rate	Annual Accrual	Difference from Current	Accrual Rate	Annual Accrual	Difference from Current	Difference from Company
A	B	C	D	E	F	G	H=G-E	I	J=C*I	K=J-E	L=J-G
39000	Structures & Improvements	35,954,768	2.33%	837,746	2.38%	857,131	19,385	1.90%	683,065	(154,681)	(174,066)
39009	Improvements - Leased	12,035,696	3.12%	375,514	5.13%	617,787	242,273	5.24%	630,658	255,144	12,872
39100	Office Furniture & Equipment	9,098,413	3.69%	335,731	6.60%	600,829	265,098	6.26%	569,112	233,380	(31,717)
39200	Transportation Equipment	103,416	6.47%	6,691	6.29%	6,508	(183)	4.98%	5,150	(1,541)	(1,358)
39400	Tools Shop And Garage Equipment	606,029	8.29%	50,240	13.04%	79,007	28,767	13.04%	79,033	28,793	26
39500	Laboratory Equipment	23,632	8.28%	1,957	9.70%	2,292	335	8.64%	2,042	85	(250)
39700	Communication Equipment	3,269,128	5.69%	186,013	6.72%	219,554	33,540	5.86%	191,468	5,454	(28,086)
39800	Miscellaneous Equipment	741,800	5.35%	39,686	7.24%	53,740	14,053	6.58%	48,821	9,134	(4,919)
39900	Other Tangible Equipment	295,692	12.70%	37,553	14.96%	44,241	6,688	14.48%	42,821	5,268	(1,420)
39901	Servers-Hardware	33,275,869	7.82%	2,602,173	13.30%	4,426,644	1,824,471	12.49%	4,157,569	1,555,396	(269,075)
39902	Servers-Software	12,446,587	7.18%	893,665	10.63%	1,323,468	429,803	10.31%	1,283,798	390,133	(39,670)
39903	Network Hardware	5,427,398	6.99%	379,375	10.34%	561,162	181,787	10.10%	548,309	168,934	(12,853)
39906	PC Hardware	3,181,360	10.15%	322,908	17.92%	570,020	247,112	16.36%	520,553	197,645	(49,467)
39907	PC Software	1,511,357	6.44%	97,331	10.75%	162,406	65,074	9.63%	145,544	48,212	(16,862)
39908	Application Software	211,721,688	5.11%	10,818,978	7.55%	15,989,991	5,171,013	5.80%	12,273,684	1,454,705	(3,716,308)
	Total	329,692,833		16,985,562	7.74%	25,514,780	8,529,218	6.42%	21,181,625	4,196,063	(4,333,155)

Sources:

Exhibit DAW-3

"Atmos SSU 2019 Accrual" provided in response to Staff 1-001.

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ATMOS ENERGY - SHARED SERVICES UNIT CALCULATION OF DEPRECIATION ACCRUAL RATE

Account	Description	9/30/19	9/30/19	Book	Future	Remaining	Calculated Annual	
		Investment	Book	Reserve	Net		Life	Rate
		A	B	C=B/A	D	E	F=(1-C-D)/E	G=A*F
39000	Structures & Improvements	35,954,768	7,245,549	20.15%	0%	42.03	1.90%	683,065
39009	Improvements - Leased	12,035,696	8,743,660	72.65%	0%	5.22	5.24%	630,658
39100	Office Furniture & Equipment	9,098,413	4,488,607	49.33%	0%	8.10	6.26%	569,112
39200	Transportation Equipment	103,416	53,934	52.15%	10%	7.60	4.98%	5,150
39400	Tools Shop And Garage Equipment	606,029	301,752	49.79%	0%	3.85	13.04%	79,033
39500	Laboratory Equipment	23,632	15,791	66.82%	0%	3.84	8.64%	2,042
39700	Communication Equipment	3,269,128	1,869,500	57.19%	0%	7.31	5.86%	191,468
39800	Miscellaneous Equipment	741,800	293,626	39.58%	0%	9.18	6.58%	48,821
39900	Other Tangible Equipment	295,692	100,002	33.82%	0%	4.57	14.48%	42,821
39901	Servers-Hardware	33,275,869	17,518,682	52.65%	0%	3.79	12.49%	4,157,569
39902	Servers-Software	12,446,587	6,541,118	52.55%	0%	4.60	10.31%	1,283,798
39903	Network Hardware	5,427,398	2,954,523	54.44%	0%	4.51	10.10%	548,309
39906	PC Hardware	3,181,360	1,489,562	46.82%	0%	3.25	16.36%	520,553
39907	PC Software	1,511,357	632,273	41.83%	0%	6.04	9.63%	145,544
39908	Application Software	211,721,688	87,880,219	41.51%	0%	10.09	5.80%	12,273,684
	Total	329,692,833	140,128,799	42.50%			6.42%	21,181,625

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ATMOS ENERGY - SHARED SERVICES UNIT PARAMETER REPORT

Account	Description	Current			Company Proposed				Staff Proposed			
		P.L. or AYFR	Iowa Curve Shape	Future Net Salvage	P.L. or AYFR	Iowa Curve Shape	ELG Rem. Life	Future Net Salvage	P.L. or AYFR	Iowa Curve Shape	ALG Rem. Life	Future Net Salvage
		A	B	C	D	E	F	G	H	I	J	K
39000	Structures & Improvements	40	R2	0%	50	R2	33.49	0%	50	R2	42.03	0%
39009	Improvements - Leased	20	R4	0%	20	R4	5.33	0%	20	R4	5.22	0%
39100	Office Furniture & Equipment	22	L4	0%	16	R4	7.67	0%	16	R4	8.10	0%
39200	Transportation Equipment	10	L2	10%	15	L2	6.01	10%	15	L2	7.60	10%
39400	Tools Shop And Garage Equipment	11	S6	0%	8	S6	3.85	0%	8	S6	3.85	0%
39500	Laboratory Equipment	10	R2	0%	10	R2	3.42	0%	10	R2	3.84	0%
39700	Communication Equipment	15	R5	0%	15	R2	6.37	0%	15	R2	7.31	0%
39800	Miscellaneous Equipment	15	S3	0%	15	S3	8.34	0%	15	S3	9.18	0%
39900	Other Tangible Equipment	7	R5	0%	7	R5	4.42	0%	7	R5	4.57	0%
39901	Servers-Hardware	9	R4	0%	8	R4	3.56	0%	8	R4	3.79	0%
39902	Servers-Software	9	S5	0%	10	R5	4.46	0%	10	R5	4.60	0%
39903	Network Hardware	10	SQ	0%	10	R4	4.41	0%	10	R4	4.51	0%
39906	PC Hardware	6	S3	0%	6	S3	2.97	0%	6	S3	3.25	0%
39907	PC Software	10	R3	0%	10	R3	5.41	0%	10	R3	6.04	0%
39908	Application Software	15	L1.5	0%	15	L1.5	7.74	0%	15	L1.5	10.09	0%

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**Atmos Energy - Colorado Kansas General Office
Depreciation Study as of September 30, 2021
Comparison of Parameters**

Account	Description	Approved Parameters					Proposed Parameters				
		ASL	Curve	Salvage %	COR %	Net Salvage %	ASL	Curve	Salvage %	COR %	Net Salvage %
39009	Improvements to Leased Property	10	SQ	0%	0%	0%	20	SQ	0%	0%	0%
39100	Office Furniture and Equipment	15	R1.5	0%	0%	0%	20	R1.5	0%	0%	0%
39103	Office Machines	15	R1.5	0%	0%	0%	20	R1.5	0%	0%	0%
39200	Transportation Equipment	5	SQ	0%	0%	0%	10	L4	0%	0%	0%
39400	Tools, Shop, and Garage Equipment	9	S5	0%	0%	0%	10	S5	0%	0%	0%
39500	Laboratory Equipment	10	SQ	0%	0%	0%	10	S5	0%	0%	0%
39700	Communication Equipment	12	S5	0%	0%	0%	12	S5	0%	0%	0%
39800	Miscellaneous Equipment	8	L5	0%	0%	0%	8	L5	0%	0%	0%
39901	Servers Hardware	7	SQ	0%	0%	0%	7	R4	0%	0%	0%
39902	Servers Software	7	SQ	0%	0%	0%	7	R4	0%	0%	0%
39903	Network Hardware	8	SQ	0%	0%	0%	7	S6	0%	0%	0%
39906	PC Hardware	5	SQ	0%	0%	0%	4	SQ	0%	0%	0%
39907	PC Software	6	SQ	0%	0%	0%	4	SQ	0%	0%	0%

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**Atmos Energy - Colorado Kansas General Office
Depreciation Study as of September 30, 2021
Calculation of Depreciation Accrual Remaining Life - ELG
With Reserve Reallocation**

Account	Description	Plant Balance	Allocated Book Reserve	Net Salvage %	Net Salvage Amount	Unaccrued Balance	Remaining Life	Annual Accrual	
								Amount \$	Rate %
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
39009	Improvements to Leased Premise	\$ 280,309.53	\$ 190,475.17	0%	\$ -	\$ 89,834.36	9.05	\$ 9,924.21	3.54%
39100	Office Furniture and Equipmen	399,117.90	253,207.10	0%	-	145,910.80	10.02	14,565.01	3.65%
39200	Transportation Equipmen	25,513.33	22,545.90	0%	-	2,967.43	2.95	1,005.05	3.94%
39700	Communication Equipmen	39,177.35	28,094.69	0%	-	11,082.66	4.99	2,219.87	5.67%
39901	Servers Hardware	48,327.95	44,982.59	0%	-	3,345.36	1.18	2,827.67	5.85%
39903	Network Hardware	121,151.02	95,484.04	0%	-	25,666.98	2.00	12,854.74	10.61%
39906	PC Hardware	122,046.67	77,709.20	0%	-	44,337.47	1.77	25,021.46	20.50%
39907	PC Software	32,412.01	29,610.41	0%	-	2,801.60	0.36	7,825.25	24.14%
	Total Depreciable Plant	\$ 1,068,055.76	\$ 742,109.10		\$ -	\$ 325,946.66		\$ 76,243.26	7.14%

Note: Accounts below have zero balance. Recommend the following whole life (1-NS%/ASL) rates for new additions.

39400	Tools, Shop and Garage Equipmer	10.00%
39800	Miscellaneous Equipmen	12.50%

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Staff's Class Revenue Allocation							
Customer Classes	Current Revenue	% of Total Revenue	Class Rate of Return	Relative Rate of Return	Class Revenue Allocation \$ 2,200,000	Class % Increase	Proposed Revenue Allocation
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Residential Sales Service	\$ 47,064,272	71.5%	6.44%	0.96	\$ 1,581,535	3.360%	\$ 48,645,807
Commercial Sales Service	\$ 10,850,660	16.5%	8.36%	1.25	\$ 381,800	3.272%	\$ 12,050,034
Public Authority Sales Service	\$ 817,574	1.2%	8.36%	1.25			
School Sales Service	\$ 110,317	0.2%	4.35%	0.65	\$ 3,800	3.445%	\$ 114,117
Industrial Sales Service	\$ 110,794	0.2%	1.45%	0.22	\$ 4,100	3.701%	\$ 114,894
Small Generator Sales Service	\$ 42,462	0.1%	1.54%	0.23	\$ 1,560	3.674%	\$ 44,022
Large Industrial Sales Serv - Interruptible <20,000	\$ 26,112	0.1%	-2.22%	(0.33)	\$ 3,150	4.257%	\$ 77,146
Large Industrial Sales Serv - Interruptible >20,000	\$ 47,884						
Irrigation Engine Sales Service	\$ 1,349,556	2.0%	1.92%	0.29	\$ 49,500	3.668%	\$ 1,399,056
TOTAL Sales	\$ 60,419,631	91.8%			\$ 2,025,445	3.352%	\$ 62,445,076
Firm Transportation Serv Commercial	\$ 3,139,692	4.8%	9.47%	1.42	\$ 99,180	3.128%	\$ 3,238,872
School Transportation Service Post '95	\$ 742,538	1.1%	5.46%	0.82	\$ 25,215	3.396%	\$ 767,753
Firm Transportation Serv - Industrial	\$ 30,686	0.0%	9.47%	1.42			\$ 30,686
Irrigation Transportation	\$ 167,962	0.3%	11.42%	1.71	\$ 5,200	3.096%	\$ 173,162
	\$ -						
Interruptible Transportation Serv - Industrial <20,000	\$ 703,210	1.1%	6.29%	0.94	\$ 44,960	3.360%	\$ 1,383,083
Interruptible Transportation Serv - Industrial >20,000	\$ 634,913	1.0%	6.29%	0.94			
TOTAL Transportation	\$ 5,419,001	8.2%			\$ 174,555	3.221%	\$ 5,593,556
TOTAL: Sales and Transportation	\$ 65,838,632	100.0%	6.69%	1.00	\$ 2,200,000	3.342%	\$ 68,038,632

Exhibit CDK-7

Atmos Revenue with Staff's Proposed Rates and Bill Count & Volumetric Usage								
Customer Classes	Number of Bills	Total Volumes	Proposed Rates		Facilities Charge Revenue	Commodity Charge Revenue	Total Revenue	Proposed Revenue Allocation
			Facilities Charge	Commodity Charge				
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(g)
Residential Sales Service	1,533,223	107,330,735	\$ 19.75	\$ 0.17110	\$ 30,281,152	\$ 18,364,289	\$ 48,645,441	\$ 48,645,807
Commercial Sales Service	111,108	36,736,199	\$ 50.00	\$ 0.15382	\$ 5,555,424	5,650,762	12,049,804	\$ 12,050,034
Public Authority Sales Service	7,897	2,917,609	\$ 50.00	\$ 0.15382	\$ 394,831	448,787		\$ -
School Sales Service	776	389,927	\$ 62.50	\$ 0.16830	\$ 48,516	65,625	114,141	\$ 114,117
Industrial Sales Service	162	604,941	\$ 104.00	\$ 0.16200	\$ 16,881	98,001	114,882	\$ 114,894
Small Generator Sales Service	874	1,928	\$ 50.00	\$ 0.16000	\$ 43,677	308	43,985	\$ 44,022
Large Industrial Sales Serv - Interruptible <20,000	16	240,000	\$ 330.00	\$ 0.09660	\$ 5,280	\$ 23,184	28,464	\$ 77,146
Large Industrial Sales Serv - Interruptible >20,000		590,000		\$ 0.08259		\$ 48,728	48,728	\$ -
Irrigation Engine Sales Service	3,199	9,196,930	\$ 100.00	\$ 0.11735	\$ 319,900	1,079,260	1,399,160	\$ 1,399,056
TOTAL Sales	1,657,255	158,008,270			\$ 36,665,661	\$ 25,778,944	\$ 62,444,605	\$ 62,445,076
Firm Transportation Serv Commercial	2,003	19,194,340	\$ 150.00	\$ 0.15305	\$ 300,450	\$ 2,937,694	\$ 3,238,144	\$ 3,238,872
School Transportation Service Post '95	2,860	2,832,611	\$ 109.00	\$ 0.16100	\$ 311,740	\$ 456,050	\$ 767,790	\$ 767,753
Firm Transportation Serv - Industrial	12	194,833	\$ 150.00	\$ 0.15305	\$ 1,800	\$ 29,819	\$ 31,619	\$ 30,686
Irrigation Transportation	313	1,227,269	\$ 143.00	\$ 0.10420	\$ 44,759	\$ 127,881	\$ 172,640	\$ 173,162
								\$ -
Interruptible Transportation Serv - Industrial <20,000	392	5,662,746	\$ 418.00	\$ 0.10690	\$ 163,856	\$ 605,348	\$ 769,204	\$ 1,383,083
Interruptible Transportation Serv - Industrial >20,000		8,005,461		\$ 0.07670		\$ 614,019	\$ 614,019	
TOTAL Transportation	5,580	37,117,261			\$ 822,605	\$ 4,770,811	\$ 5,593,416	\$ 5,593,556
TOTAL: Sales and Transportation	1,662,835	195,125,531			37,488,266	30,549,755	68,038,021	\$ 68,038,632

Exhibit CDK-7

Atmos Revenue with Current Rates with Atmos's Bill Count & Volumetric Usage				
Customer Classes	Current Rates		Proposed Rates	
	Facilities Charge	Commodity Charge	Facilities Charge	Commodity Charge
SALES CLASSES	(c)	(d)	(c)	(d)
Residential Sales Service	20.20	0.14994	19.75	0.17110
Commercial Sales Service	47.64	0.15128	50.00	0.15382
Public Authority Sales Service	47.64	0.15128	50.00	0.15382
School Sales Service	58.47	0.16651	62.50	0.16830
Industrial Sales Service	90.82	0.15878	104.00	0.16200
Small Generator Sales Service	48.89	(0.12691)	50.00	0.16000
Large Industrial Sales Serv - Interruptible <20,000	347.13	0.08566	330.00	0.09660
Large Industrial Sales Serv - Interruptible >20,000		0.08116		0.08259
Irrigation Engine Sales Service	96.77	0.11308	100.00	0.11735
TRANSPORTATION CLASSES				
Firm Transportation Serv Commercial	142.15	0.14874	150.00	0.15305
School Transportation Service Post '95	102.29	0.15886	109.00	0.16100
Firm Transportation Serv - Industrial	142.15	0.14874	150.00	0.15305
Irrigation Transportation	143.15	0.10035	143.00	0.10420
Interruptible Transportation Serv - Industrial <20,000	482.66	0.09077	418.00	0.10690
Interruptible Transportation Serv - Industrial >20,000		0.07931		0.07670

Exhibit CDK-7

CERTIFICATE OF SERVICE

23-ATMG-359-RTS

I, the undersigned, certify that a true copy of the attached Order has been served to the following by means of electronic service on 05/09/2023.

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Exhibit CDK-7

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American Economic Association

The Cost of Capital, Corporation Finance and the Theory of Investment

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THE COST OF CAPITAL, CORPORATION FINANCE AND THE THEORY OF INVESTMENT

By FRANCO MODIGLIANI AND MERTON H. MILLER*

What is the “cost of capital” to a firm in a world in which funds are used to acquire assets whose yields are uncertain; and in which capital can be obtained by many different media, ranging from pure debt instruments, representing money-fixed claims, to pure equity issues, giving holders only the right to a pro-rata share in the uncertain venture? This question has vexed at least three classes of economists: (1) the corporation finance specialist concerned with the techniques of financing firms so as to ensure their survival and growth; (2) the managerial economist concerned with capital budgeting; and (3) the economic theorist concerned with explaining investment behavior at both the micro and macro levels.¹

In much of his formal analysis, the economic theorist at least has tended to side-step the essence of this cost-of-capital problem by proceeding as though physical assets—like bonds—could be regarded as yielding known, sure streams. Given this assumption, the theorist has concluded that the cost of capital to the owners of a firm is simply the rate of interest on bonds; and has derived the familiar proposition that the firm, acting rationally, will tend to push investment to the point

* The authors are, respectively, professor and associate professor of economics in the Graduate School of Industrial Administration, Carnegie Institute of Technology. This article is a revised version of a paper delivered at the annual meeting of the Econometric Society, December 1956. The authors express thanks for the comments and suggestions made at that time by the discussants of the paper, Evsey Domar, Robert Eisner and John Lintner, and subsequently by James Duesenberry. They are also greatly indebted to many of their present and former colleagues and students at Carnegie Tech who served so often and with such remarkable patience as a critical forum for the ideas here presented.

¹ The literature bearing on the cost-of-capital problem is far too extensive for listing here. Numerous references to it will be found throughout the paper though we make no claim to completeness. One phase of the problem which we do not consider explicitly, but which has a considerable literature of its own is the relation between the cost of capital and public utility rates. For a recent summary of the “cost-of-capital theory” of rate regulation and a brief discussion of some of its implications, the reader may refer to H. M. Somers [20].

where the marginal yield on physical assets is equal to the market rate of interest.² This proposition can be shown to follow from either of two criteria of rational decision-making which are equivalent under certainty, namely (1) the maximization of profits and (2) the maximization of market value.

According to the first criterion, a physical asset is worth acquiring if it will increase the net profit of the owners of the firm. But net profit will increase only if the expected rate of return, or yield, of the asset exceeds the rate of interest. According to the second criterion, an asset is worth acquiring if it increases the value of the owners' equity, *i.e.*, if it adds more to the market value of the firm than the costs of acquisition. But what the asset adds is given by capitalizing the stream it generates at the market rate of interest, and this capitalized value will exceed its cost if and only if the yield of the asset exceeds the rate of interest. Note that, under either formulation, the cost of capital is equal to the rate of interest on bonds, regardless of whether the funds are acquired through debt instruments or through new issues of common stock. Indeed, in a world of sure returns, the distinction between debt and equity funds reduces largely to one of terminology.

It must be acknowledged that some attempt is usually made in this type of analysis to allow for the existence of uncertainty. This attempt typically takes the form of superimposing on the results of the certainty analysis the notion of a "risk discount" to be subtracted from the expected yield (or a "risk premium" to be added to the market rate of interest). Investment decisions are then supposed to be based on a comparison of this "risk adjusted" or "certainty equivalent" yield with the market rate of interest.³ No satisfactory explanation has yet been provided, however, as to what determines the size of the risk discount and how it varies in response to changes in other variables.

Considered as a convenient approximation, the model of the firm constructed via this certainty—or certainty-equivalent—approach has admittedly been useful in dealing with some of the grosser aspects of the processes of capital accumulation and economic fluctuations. Such a model underlies, for example, the familiar Keynesian aggregate investment function in which aggregate investment is written as a function of the rate of interest—the same riskless rate of interest which appears later in the system in the liquidity-preference equation. Yet few would maintain that this approximation is adequate. At the macroeconomic level there are ample grounds for doubting that the rate of interest has

² Or, more accurately, to the marginal cost of borrowed funds since it is customary, at least in advanced analysis, to draw the supply curve of borrowed funds to the firm as a rising one. For an advanced treatment of the certainty case, see F. and V. Lutz [13].

³ The classic examples of the certainty-equivalent approach are found in J. R. Hicks [8] and O. Lange [11].

as large and as direct an influence on the rate of investment as this analysis would lead us to believe. At the microeconomic level the certainty model has little descriptive value and provides no real guidance to the finance specialist or managerial economist whose main problems cannot be treated in a framework which deals so cavalierly with uncertainty and ignores all forms of financing other than debt issues.⁴

Only recently have economists begun to face up seriously to the problem of the cost of capital *cum* risk. In the process they have found their interests and endeavors merging with those of the finance specialist and the managerial economist who have lived with the problem longer and more intimately. In this joint search to establish the principles which govern rational investment and financial policy in a world of uncertainty two main lines of attack can be discerned. These lines represent, in effect, attempts to extrapolate to the world of uncertainty each of the two criteria—profit maximization and market value maximization—which were seen to have equivalent implications in the special case of certainty. With the recognition of uncertainty this equivalence vanishes. In fact, the profit maximization criterion is no longer even well defined. Under uncertainty there corresponds to each decision of the firm not a unique profit outcome, but a plurality of mutually exclusive outcomes which can at best be described by a subjective probability distribution. The profit outcome, in short, has become a random variable and as such its maximization no longer has an operational meaning. Nor can this difficulty generally be disposed of by using the mathematical expectation of profits as the variable to be maximized. For decisions which affect the expected value will also tend to affect the dispersion and other characteristics of the distribution of outcomes. In particular, the use of debt rather than equity funds to finance a given venture may well increase the expected return to the owners, but only at the cost of increased dispersion of the outcomes.

Under these conditions the profit outcomes of alternative investment and financing decisions can be compared and ranked only in terms of a *subjective* “utility function” of the owners which weighs the expected yield against other characteristics of the distribution. Accordingly, the extrapolation of the profit maximization criterion of the certainty model has tended to evolve into utility maximization, sometimes explicitly, more frequently in a qualitative and heuristic form.⁵

The utility approach undoubtedly represents an advance over the certainty or certainty-equivalent approach. It does at least permit us

⁴ Those who have taken a “case-method” course in finance in recent years will recall in this connection the famous Liquigas case of Hunt and Williams, [9, pp. 193–96] a case which is often used to introduce the student to the cost-of-capital problem and to poke a bit of fun at the economist’s certainty-model.

⁵ For an attempt at a rigorous explicit development of this line of attack, see F. Modigliani and M. Zeman [14].

to explore (within limits) some of the implications of different financing arrangements, and it does give some meaning to the "cost" of different types of funds. However, because the cost of capital has become an essentially subjective concept, the utility approach has serious drawbacks for normative as well as analytical purposes. How, for example, is management to ascertain the risk preferences of its stockholders and to compromise among their tastes? And how can the economist build a meaningful investment function in the face of the fact that any given investment opportunity might or might not be worth exploiting depending on precisely who happen to be the owners of the firm at the moment?

Fortunately, these questions do not have to be answered; for the alternative approach, based on market value maximization, can provide the basis for an operational definition of the cost of capital and a workable theory of investment. Under this approach any investment project and its concomitant financing plan must pass only the following test: Will the project, as financed, raise the market value of the firm's shares? If so, it is worth undertaking; if not, its return is less than the marginal cost of capital to the firm. Note that such a test is entirely independent of the tastes of the current owners, since market prices will reflect not only their preferences but those of all potential owners as well. If any current stockholder disagrees with management and the market over the valuation of the project, he is free to sell out and reinvest elsewhere, but will still benefit from the capital appreciation resulting from management's decision.

The potential advantages of the market-value approach have long been appreciated; yet analytical results have been meager. What appears to be keeping this line of development from achieving its promise is largely the lack of an adequate theory of the effect of financial structure on market valuations, and of how these effects can be inferred from objective market data. It is with the development of such a theory and of its implications for the cost-of-capital problem that we shall be concerned in this paper.

Our procedure will be to develop in Section I the basic theory itself and to give some brief account of its empirical relevance. In Section II, we show how the theory can be used to answer the cost-of-capital question and how it permits us to develop a theory of investment of the firm under conditions of uncertainty. Throughout these sections the approach is essentially a partial-equilibrium one focusing on the firm and "industry." Accordingly, the "prices" of certain income streams will be treated as constant and given from outside the model, just as in the standard Marshallian analysis of the firm and industry the prices of all inputs and of all other products are taken as given. We have chosen to focus at this level rather than on the economy as a whole because it

is at the level of the firm and the industry that the interests of the various specialists concerned with the cost-of-capital problem come most closely together. Although the emphasis has thus been placed on partial-equilibrium analysis, the results obtained also provide the essential building blocks for a general equilibrium model which shows how those prices which are here taken as given, are themselves determined. For reasons of space, however, and because the material is of interest in its own right, the presentation of the general equilibrium model which rounds out the analysis must be deferred to a subsequent paper.

I. *The Valuation of Securities, Leverage, and the Cost of Capital*

A. *The Capitalization Rate for Uncertain Streams*

As a starting point, consider an economy in which all physical assets are owned by corporations. For the moment, assume that these corporations can finance their assets by issuing common stock only; the introduction of bond issues, or their equivalent, as a source of corporate funds is postponed until the next part of this section.

The physical assets held by each firm will yield to the owners of the firm—its stockholders—a stream of “profits” over time; but the elements of this series need not be constant and in any event are uncertain. This stream of income, and hence the stream accruing to any share of common stock, will be regarded as extending indefinitely into the future. We assume, however, that the mean value of the stream over time, or average profit per unit of time, is finite and represents a random variable subject to a (subjective) probability distribution. We shall refer to the average value over time of the stream accruing to a given share as the return of that share; and to the mathematical expectation of this average as the expected return of the share.⁶ Although individual investors may have different views as to the shape of the probability distri-

⁶ These propositions can be restated analytically as follows: The assets of the *i*th firm generate a stream:

$$X_i(1), X_i(2) \cdots X_i(T)$$

whose elements are random variables subject to the joint probability distribution:

$$\chi_i[X_i(1), X_i(2) \cdots X_i(t)].$$

The return to the *i*th firm is defined as:

$$X_i = \lim_{T \rightarrow \infty} \frac{1}{T} \sum_{t=1}^T X_i(t).$$

X_i is itself a random variable with a probability distribution $\Phi_i(X_i)$ whose form is determined uniquely by χ_i . The expected return \bar{X}_i is defined as $\bar{X}_i = E(X_i) = \int_{X_i} X_i \Phi_i(X_i) dX_i$. If N_i is the number of shares outstanding, the return of the *i*th share is $x_i = (1/N_i) X_i$ with probability distribution $\phi_i(x_i) dx_i = \Phi_i(N_i x_i) d(N_i x_i)$ and expected value $\bar{x}_i = (1/N_i) \bar{X}_i$.

bution of the return of any share, we shall assume for simplicity that they are at least in agreement as to the expected return.⁷

This way of characterizing uncertain streams merits brief comment. Notice first that the stream is a stream of profits, not dividends. As will become clear later, as long as management is presumed to be acting in the best interests of the stockholders, retained earnings can be regarded as equivalent to a fully subscribed, pre-emptive issue of common stock. Hence, for present purposes, the division of the stream between cash dividends and retained earnings in any period is a mere detail. Notice also that the uncertainty attaches to the mean value over time of the stream of profits and should not be confused with variability over time of the successive elements of the stream. That variability and uncertainty are two totally different concepts should be clear from the fact that the elements of a stream can be variable even though known with certainty. It can be shown, furthermore, that whether the elements of a stream are sure or uncertain, the effect of variability per se on the valuation of the stream is at best a second-order one which can safely be neglected for our purposes (and indeed most others too).⁸

The next assumption plays a strategic role in the rest of the analysis. We shall assume that firms can be divided into "equivalent return" classes such that the return on the shares issued by any firm in any given class is proportional to (and hence perfectly correlated with) the return on the shares issued by any other firm in the same class. This assumption implies that the various shares within the same class differ, at most, by a "scale factor." Accordingly, if we adjust for the difference in scale, by taking the *ratio* of the return to the expected return, the probability distribution of that ratio is identical for all shares in the class. It follows that all relevant properties of a share are uniquely characterized by specifying (1) the class to which it belongs and (2) its expected return.

The significance of this assumption is that it permits us to classify firms into groups within which the shares of different firms are "homogeneous," that is, perfect substitutes for one another. We have, thus, an analogue to the familiar concept of the industry in which it is the commodity produced by the firms that is taken as homogeneous. To complete this analogy with Marshallian price theory, we shall assume in the

⁷ To deal adequately with refinements such as differences among investors in estimates of expected returns would require extensive discussion of the theory of portfolio selection. Brief references to these and related topics will be made in the succeeding article on the general equilibrium model.

⁸ The reader may convince himself of this by asking how much he would be willing to rebate to his employer for the privilege of receiving his annual salary in equal monthly installments rather than in irregular amounts over the year. See also J. M. Keynes [10, esp. pp. 53-54].

analysis to follow that the shares concerned are traded in perfect markets under conditions of atomistic competition.⁹

From our definition of homogeneous classes of stock it follows that in equilibrium in a perfect capital market the price per dollar's worth of expected return must be the same for all shares of any given class. Or, equivalently, in any given class the price of every share must be proportional to its expected return. Let us denote this factor of proportionality for any class, say the k th class, by $1/\rho_k$. Then if p_j denotes the price and \bar{x}_j is the expected return per share of the j th firm in class k , we must have:

$$(1) \quad p_j = \frac{1}{\rho_k} \bar{x}_j;$$

or, equivalently,

$$(2) \quad \frac{\bar{x}_j}{p_j} = \rho_k \text{ a constant for all firms } j \text{ in class } k.$$

The constants ρ_k (one for each of the k classes) can be given several economic interpretations: (a) From (2) we see that each ρ_k is the expected rate of return of any share in class k . (b) From (1) $1/\rho_k$ is the price which an investor has to pay for a dollar's worth of expected return in the class k . (c) Again from (1), by analogy with the terminology for perpetual bonds, ρ_k can be regarded as the market rate of capitalization for the expected value of the uncertain streams of the kind generated by the k th class of firms.¹⁰

B. Debt Financing and Its Effects on Security Prices

Having developed an apparatus for dealing with uncertain streams we can now approach the heart of the cost-of-capital problem by dropping the assumption that firms cannot issue bonds. The introduction of debt-financing changes the market for shares in a very fundamental way. Because firms may have different proportions of debt in their capi-

⁹ Just what our classes of stocks contain and how the different classes can be identified by outside observers are empirical questions to which we shall return later. For the present, it is sufficient to observe: (1) Our concept of a class, while not identical to that of the industry is at least closely related to it. Certainly the basic characteristics of the probability distributions of the returns on assets will depend to a significant extent on the product sold and the technology used. (2) What are the appropriate class boundaries will depend on the particular problem being studied. An economist concerned with general tendencies in the market, for example, might well be prepared to work with far wider classes than would be appropriate for an investor planning his portfolio, or a firm planning its financial strategy.

¹⁰ We cannot, on the basis of the assumptions so far, make any statements about the relationship or spread between the various ρ 's or capitalization rates. Before we could do so we would have to make further specific assumptions about the way investors believe the probability distributions vary from class to class, as well as assumptions about investors' preferences as between the characteristics of different distributions.

tal structure, shares of different companies, even in the same class, can give rise to different probability distributions of returns. In the language of finance, the shares will be subject to different degrees of financial risk or "leverage" and hence they will no longer be perfect substitutes for one another.

To exhibit the mechanism determining the relative prices of shares under these conditions, we make the following two assumptions about the nature of bonds and the bond market, though they are actually stronger than is necessary and will be relaxed later: (1) All bonds (including any debts issued by households for the purpose of carrying shares) are assumed to yield a constant income per unit of time, and this income is regarded as certain by all traders regardless of the issuer. (2) Bonds, like stocks, are traded in a perfect market, where the term perfect is to be taken in its usual sense as implying that any two commodities which are perfect substitutes for each other must sell, in equilibrium, at the same price. It follows from assumption (1) that all bonds are in fact perfect substitutes up to a scale factor. It follows from assumption (2) that they must all sell at the same price per dollar's worth of return, or what amounts to the same thing must yield the same rate of return. This rate of return will be denoted by r and referred to as the rate of interest or, equivalently, as the capitalization rate for sure streams. We now can derive the following two basic propositions with respect to the valuation of securities in companies with different capital structures:

Proposition I. Consider any company j and let \bar{X}_j stand as before for the expected return on the assets owned by the company (that is, its expected profit before deduction of interest). Denote by D_j the market value of the debts of the company; by S_j the market value of its common shares; and by $V_j \equiv S_j + D_j$ the market value of all its securities or, as we shall say, the market value of the firm. Then, our Proposition I asserts that we must have in equilibrium:

$$(3) \quad V_j \equiv (S_j + D_j) = \bar{X}_j / \rho_k, \text{ for any firm } j \text{ in class } k.$$

That is, the market value of any firm is independent of its capital structure and is given by capitalizing its expected return at the rate ρ_k appropriate to its class.

This proposition can be stated in an equivalent way in terms of the firm's "average cost of capital," \bar{X}_j / V_j , which is the ratio of its expected return to the market value of all its securities. Our proposition then is:

$$(4) \quad \frac{\bar{X}_j}{(S_j + D_j)} \equiv \frac{\bar{X}_j}{V_j} = \rho_k, \text{ for any firm } j, \text{ in class } k.$$

That is, the average cost of capital to any firm is completely independent of

its capital structure and is equal to the capitalization rate of a pure equity stream of its class.

To establish Proposition I we will show that as long as the relations (3) or (4) do not hold between any pair of firms in a class, arbitrage will take place and restore the stated equalities. We use the term arbitrage advisedly. For if Proposition I did not hold, an investor could buy and sell stocks and bonds in such a way as to exchange one income stream for another stream, identical in all relevant respects but selling at a lower price. The exchange would therefore be advantageous to the investor quite independently of his attitudes toward risk.¹¹ As investors exploit these arbitrage opportunities, the value of the overpriced shares will fall and that of the underpriced shares will rise, thereby tending to eliminate the discrepancy between the market values of the firms.

By way of proof, consider two firms in the same class and assume for simplicity only, that the expected return, X , is the same for both firms. Let company 1 be financed entirely with common stock while company 2 has some debt in its capital structure. Suppose first the value of the levered firm, V_2 , to be larger than that of the unlevered one, V_1 . Consider an investor holding s_2 dollars' worth of the shares of company 2, representing a fraction α of the total outstanding stock, S_2 . The return from this portfolio, denoted by Y_2 , will be a fraction α of the income available for the stockholders of company 2, which is equal to the total return X_2 less the interest charge, rD_2 . Since under our assumption of homogeneity, the anticipated total return of company 2, X_2 , is, under all circumstances, the same as the anticipated total return to company 1, X_1 , we can hereafter replace X_2 and X_1 by a common symbol X . Hence, the return from the initial portfolio can be written as:

$$(5) \quad Y_2 = \alpha(X - rD_2).$$

Now suppose the investor sold his αS_2 worth of company 2 shares and acquired instead an amount $s_1 = \alpha(S_2 + D_2)$ of the shares of company 1. He could do so by utilizing the amount αS_2 realized from the sale of his initial holding and borrowing an additional amount αD_2 on his own credit, pledging his new holdings in company 1 as a collateral. He would thus secure for himself a fraction $s_1/S_1 = \alpha(S_2 + D_2)/S_1$ of the shares and earnings of company 1. Making proper allowance for the interest payments on his personal debt αD_2 , the return from the new portfolio, Y_1 , is given by:

¹¹ In the language of the theory of choice, the exchanges are movements from inefficient points in the interior to efficient points on the boundary of the investor's opportunity set; and not movements between efficient points along the boundary. Hence for this part of the analysis nothing is involved in the way of specific assumptions about investor attitudes or behavior other than that investors behave consistently and prefer more income to less income, *ceteris paribus*.

$$(6) \quad Y_1 = \frac{\alpha(S_2 + D_2)}{S_1} X - r\alpha D_2 = \alpha \frac{V_2}{V_1} X - r\alpha D_2.$$

Comparing (5) with (6) we see that as long as $V_2 > V_1$ we must have $Y_1 > Y_2$, so that it pays owners of company 2's shares to sell their holdings, thereby depressing S_2 and hence V_2 ; and to acquire shares of company 1, thereby raising S_1 and thus V_1 . We conclude therefore that levered companies cannot command a premium over unlevered companies because investors have the opportunity of putting the equivalent leverage into their portfolio directly by borrowing on personal account.

Consider now the other possibility, namely that the market value of the levered company V_2 is less than V_1 . Suppose an investor holds initially an amount s_1 of shares of company 1, representing a fraction α of the total outstanding stock, S_1 . His return from this holding is:

$$Y_1 = \frac{s_1}{S_1} X = \alpha X.$$

Suppose he were to exchange this initial holding for another portfolio, also worth s_1 , but consisting of s_2 dollars of stock of company 2 and of d dollars of bonds, where s_2 and d are given by:

$$(7) \quad s_2 = \frac{S_2}{V_2} s_1, \quad d = \frac{D_2}{V_2} s_1.$$

In other words the new portfolio is to consist of stock of company 2 and of bonds in the proportions S_2/V_2 and D_2/V_2 , respectively. The return from the stock in the new portfolio will be a fraction s_2/S_2 of the total return to stockholders of company 2, which is $(X - rD_2)$, and the return from the bonds will be rd . Making use of (7), the total return from the portfolio, Y_2 , can be expressed as follows:

$$Y_2 = \frac{s_2}{S_2} (X - rD_2) + rd = \frac{s_1}{V_2} (X - rD_2) + r \frac{D_2}{V_2} s_1 = \frac{s_1}{V_2} X = \alpha \frac{S_1}{V_2} X$$

(since $s_1 = \alpha S_1$). Comparing Y_2 with Y_1 we see that, if $V_2 < S_1 \equiv V_1$, then Y_2 will exceed Y_1 . Hence it pays the holders of company 1's shares to sell these holdings and replace them with a mixed portfolio containing an appropriate fraction of the shares of company 2.

The acquisition of a mixed portfolio of stock of a levered company j and of bonds in the proportion S_j/V_j and D_j/V_j respectively, may be regarded as an operation which "undoes" the leverage, giving access to an appropriate fraction of the unlevered return X_j . It is this possibility of undoing leverage which prevents the value of levered firms from being consistently less than those of unlevered firms, or more generally prevents the average cost of capital \bar{X}_j/V_j from being systematically higher for levered than for nonlevered companies in the same class.

Since we have already shown that arbitrage will also prevent V_2 from being larger than V_1 , we can conclude that in equilibrium we must have $V_2 = V_1$, as stated in Proposition I.

Proposition II. From Proposition I we can derive the following proposition concerning the rate of return on common stock in companies whose capital structure includes some debt: the expected rate of return or yield, i , on the stock of any company j belonging to the k th class is a linear function of leverage as follows:

$$(8) \quad i_j = \rho_k + (\rho_k - r)D_j/S_j.$$

That is, *the expected yield of a share of stock is equal to the appropriate capitalization rate ρ_k for a pure equity stream in the class, plus a premium related to financial risk equal to the debt-to-equity ratio times the spread between ρ_k and r .* Or equivalently, the market price of any share of stock is given by capitalizing its expected return at the continuously variable rate i_j of (8).¹²

A number of writers have stated close equivalents of our Proposition I although by appealing to intuition rather than by attempting a proof and only to insist immediately that the results were not applicable to the actual capital markets.¹³ Proposition II, however, so far as we have been able to discover is new.¹⁴ To establish it we first note that, by definition, the expected rate of return, i , is given by:

$$(9) \quad i_j \equiv \frac{\bar{X}_j - rD_j}{S_j}.$$

From Proposition I, equation (3), we know that:

$$\bar{X}_j = \rho_k(S_j + D_j).$$

Substituting in (9) and simplifying, we obtain equation (8).

¹² To illustrate, suppose $\bar{X} = 1000$, $D = 4000$, $r = 5$ per cent and $\rho_k = 10$ per cent. These values imply that $V = 10,000$ and $S = 6000$ by virtue of Proposition I. The expected yield or rate of return per share is then:

$$i = \frac{1000 - 200}{6000} = .1 + (.1 - .05) \frac{4000}{6000} = 13\frac{1}{3} \text{ per cent.}$$

¹³ See, for example, J. B. Williams [21, esp. pp. 72-73]; David Durand [3]; and W. A. Morton [15]. None of these writers describe in any detail the mechanism which is supposed to keep the average cost of capital constant under changes in capital structure. They seem, however, to be visualizing the equilibrating mechanism in terms of switches by investors between stocks and bonds as the yields of each get out of line with their "riskiness." This is an argument quite different from the pure arbitrage mechanism underlying our proof, and the difference is crucial. Regarding Proposition I as resting on investors' attitudes toward risk leads inevitably to a misunderstanding of many factors influencing relative yields such as, for example, limitations on the portfolio composition of financial institutions. See below, esp. Section I.D.

¹⁴ Morton does make reference to a linear yield function but only ". . . for the sake of simplicity and because the particular function used makes no essential difference in my conclusions" [15, p. 443, note 2].

C. *Some Qualifications and Extensions of the Basic Propositions*

The methods and results developed so far can be extended in a number of useful directions, of which we shall consider here only three: (1) allowing for a corporate profits tax under which interest payments are deductible; (2) recognizing the existence of a multiplicity of bonds and interest rates; and (3) acknowledging the presence of market imperfections which might interfere with the process of arbitrage. The first two will be examined briefly in this section with some further attention given to the tax problem in Section II. Market imperfections will be discussed in Part D of this section in the course of a comparison of our results with those of received doctrines in the field of finance.

Effects of the Present Method of Taxing Corporations. The deduction of interest in computing taxable corporate profits will prevent the arbitrage process from making the value of all firms in a given class proportional to the expected returns generated by their physical assets. Instead, it can be shown (by the same type of proof used for the original version of Proposition I) that the market values of firms in each class must be proportional in equilibrium to their expected return net of taxes (that is, to the sum of the interest paid and expected net stockholder income). This means we must replace each \bar{X}_j in the original versions of Propositions I and II with a new variable \bar{X}_j^τ representing the total income net of taxes generated by the firm:

$$(10) \quad \bar{X}_j^\tau \equiv (\bar{X}_j - rD_j)(1 - \tau) + rD_j \equiv \bar{\pi}_j^\tau + rD_j,$$

where $\bar{\pi}_j^\tau$ represents the expected net income accruing to the common stockholders and τ stands for the average rate of corporate income tax.¹⁵

After making these substitutions, the propositions, when adjusted for taxes, continue to have the same form as their originals. That is, Proposition I becomes:

$$(11) \quad \frac{\bar{X}_j^\tau}{V_j} = \rho_k^\tau, \text{ for any firm in class } k,$$

and Proposition II becomes

$$(12) \quad i_j \equiv \frac{\bar{\pi}_j^\tau}{S_j} = \rho_j^\tau + (\rho_k^\tau - r)D_j/S_j$$

where ρ_k^τ is the capitalization rate for income net of taxes in class k .

Although the form of the propositions is unaffected, certain interpretations must be changed. In particular, the after-tax capitalization rate

¹⁵ For simplicity, we shall ignore throughout the tiny element of progression in our present corporate tax and treat τ as a constant independent of $(X_j - rD_j)$.

ρ_k^r can no longer be identified with the "average cost of capital" which is $\rho_k = \bar{X}_j/V_j$. The difference between ρ_k^r and the "true" average cost of capital, as we shall see, is a matter of some relevance in connection with investment planning within the firm (Section II). For the description of market behavior, however, which is our immediate concern here, the distinction is not essential. To simplify presentation, therefore, and to preserve continuity with the terminology in the standard literature we shall continue in this section to refer to ρ_k^r as the average cost of capital, though strictly speaking this identification is correct only in the absence of taxes.

Effects of a Plurality of Bonds and Interest Rates. In existing capital markets we find not one, but a whole family of interest rates varying with maturity, with the technical provisions of the loan and, what is most relevant for present purposes, with the financial condition of the borrower.¹⁶ Economic theory and market experience both suggest that the yields demanded by lenders tend to increase with the debt-equity ratio of the borrowing firm (or individual). If so, and if we can assume as a first approximation that this yield curve, $r = r(D/S)$, whatever its precise form, is the same for all borrowers, then we can readily extend our propositions to the case of a rising supply curve for borrowed funds.¹⁷

Proposition I is actually unaffected in form and interpretation by the fact that the rate of interest may rise with leverage; while the average cost of *borrowed* funds will tend to increase as debt rises, the average cost of funds from *all* sources will still be independent of leverage (apart from the tax effect). This conclusion follows directly from the ability of those who engage in arbitrage to undo the leverage in any financial structure by acquiring an appropriately mixed portfolio of bonds and stocks. Because of this ability, the ratio of earnings (*before* interest charges) to market value—*i.e.*, the average cost of capital from all

¹⁶ We shall not consider here the extension of the analysis to encompass the time structure of interest rates. Although some of the problems posed by the time structure can be handled within our comparative statics framework, an adequate discussion would require a separate paper.

¹⁷ We can also develop a theory of bond valuation along lines essentially parallel to those followed for the case of shares. We conjecture that the curve of bond yields as a function of leverage will turn out to be a nonlinear one in contrast to the linear function of leverage developed for common shares. However, we would also expect that the rate of increase in the yield on new issues would not be substantial in practice. This relatively slow rise would reflect the fact that interest rate increases by themselves can never be completely satisfactory to creditors as compensation for their increased risk. Such increases may simply serve to raise r so high relative to ρ that they become self-defeating by giving rise to a situation in which even normal fluctuations in earnings may force the company into bankruptcy. The difficulty of borrowing more, therefore, tends to show up in the usual case not so much in higher rates as in the form of increasingly stringent restrictions imposed on the company's management and finances by the creditors; and ultimately in a complete inability to obtain new borrowed funds, at least from the institutional investors who normally set the standards in the market for bonds.

sources—must be the same for all firms in a given class.¹⁸ In other words, the increased cost of borrowed funds as leverage increases will tend to be offset by a corresponding reduction in the yield of common stock. This seemingly paradoxical result will be examined more closely below in connection with Proposition II.

A significant modification of Proposition I would be required only if the yield curve $r = r(D/S)$ were different for different borrowers, as might happen if creditors had marked preferences for the securities of a particular class of debtors. If, for example, corporations as a class were able to borrow at lower rates than individuals having equivalent personal leverage, then the average cost of capital to corporations might fall slightly, as leverage increased over some range, in reflection of this differential. In evaluating this possibility, however, remember that the relevant interest rate for our arbitrage operators is the rate on brokers' loans and, historically, that rate has not been noticeably higher than representative corporate rates.¹⁹ The operations of holding companies and investment trusts which can borrow on terms comparable to operating companies represent still another force which could be expected to wipe out any marked or prolonged advantages from holding levered stocks.²⁰

Although Proposition I remains unaffected as long as the yield curve is the same for all borrowers, the relation between common stock yields and leverage will no longer be the strictly linear one given by the original Proposition II. If r increases with leverage, the yield i will still tend to

¹⁸ One normally minor qualification might be noted. Once we relax the assumption that all bonds have certain yields, our arbitrage operator faces the danger of something comparable to "gambler's ruin." That is, there is always the possibility that an otherwise sound concern—one whose long-run expected income is greater than its interest liability—might be forced into liquidation as a result of a run of temporary losses. Since reorganization generally involves costs, and because the operation of the firm may be hampered during the period of reorganization with lasting unfavorable effects on earnings prospects, we might perhaps expect heavily levered companies to sell at a slight discount relative to less heavily indebted companies of the same class.

¹⁹ Under normal conditions, moreover, a substantial part of the arbitrage process could be expected to take the form, not of having the arbitrage operators go into debt on personal account to put the required leverage into their portfolios, but simply of having them reduce the amount of corporate bonds they already hold when they acquire underpriced unlevered stock. Margin requirements are also somewhat less of an obstacle to maintaining any desired degree of leverage in a portfolio than might be thought at first glance. Leverage could be largely restored in the face of higher margin requirements by switching to stocks having more leverage at the corporate level.

²⁰ An extreme form of inequality between borrowing and lending rates occurs, of course, in the case of preferred stocks, which can not be directly issued by individuals on personal account. Here again, however, we would expect that the operations of investment corporations plus the ability of arbitrage operators to sell off their holdings of preferred stocks would act to prevent the emergence of any substantial premiums (for this reason) on capital structures containing preferred stocks. Nor are preferred stocks so far removed from bonds as to make it impossible for arbitrage operators to approximate closely the risk and leverage of a corporate preferred stock by incurring a somewhat smaller debt on personal account.

rise as D/S increases, but at a decreasing rather than a constant rate. Beyond some high level of leverage, depending on the exact form of the interest function, the yield may even start to fall.²¹ The relation between i and D/S could conceivably take the form indicated by the curve MD

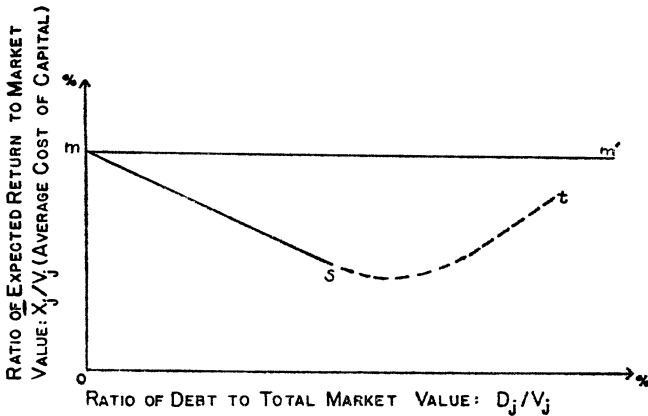


FIGURE 1

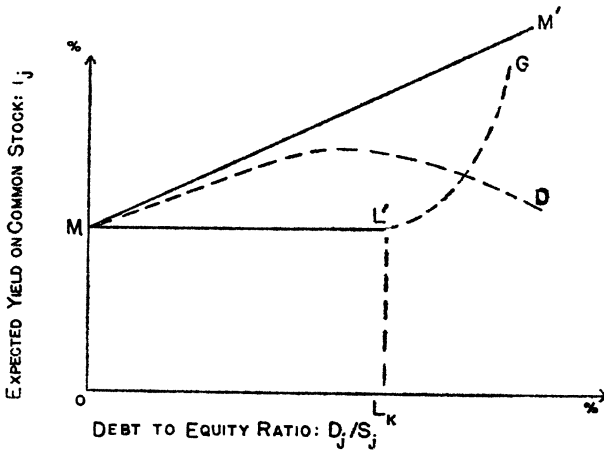


FIGURE 2

in Figure 2, although in practice the curvature would be much less pronounced. By contrast, with a constant rate of interest, the relation would be linear throughout as shown by line MM' , Figure 2.

The downward sloping part of the curve MD perhaps requires some

²¹ Since new lenders are unlikely to permit this much leverage (*cf.* note 17), this range of the curve is likely to be occupied by companies whose earnings prospects have fallen substantially since the time when their debts were issued.

comment since it may be hard to imagine why investors, other than those who like lotteries, would purchase stocks in this range. Remember, however, that the yield curve of Proposition II is a consequence of the more fundamental Proposition I. Should the demand by the risk-lovers prove insufficient to keep the market to the peculiar yield-curve MD , this demand would be reinforced by the action of arbitrage operators. The latter would find it profitable to own a pro-rata share of the firm as a whole by holding its stock *and* bonds, the lower yield of the shares being thus offset by the higher return on bonds.

D. *The Relation of Propositions I and II to Current Doctrines*

The propositions we have developed with respect to the valuation of firms and shares appear to be substantially at variance with current doctrines in the field of finance. The main differences between our view and the current view are summarized graphically in Figures 1 and 2. Our Proposition I [equation (4)] asserts that the average cost of capital, \bar{X}_j^r/V_j , is a constant for all firms j in class k , independently of their financial structure. This implies that, if we were to take a sample of firms in a given class, and if for each firm we were to plot the ratio of expected return to market value against some measure of leverage or financial structure, the points would tend to fall on a horizontal straight line with intercept ρ_k^r , like the solid line mm' in Figure 1.²² From Proposition I we derived Proposition II [equation (8)] which, taking the simplest version with r constant, asserts that, for all firms in a class, the relation between the yield on common stock and financial structure, measured by D_j/S_j , will approximate a straight line with slope $(\rho_k^r - r)$ and intercept ρ_k^r . This relationship is shown as the solid line MM' in Figure 2, to which reference has been made earlier.²³

By contrast, the conventional view among finance specialists appears to start from the proposition that, other things equal, the earnings-price ratio (or its reciprocal, the times-earnings multiplier) of a firm's common stock will normally be only slightly affected by "moderate" amounts of debt in the firm's capital structure.²⁴ Translated into our no-

²² In Figure 1 the measure of leverage used is D_j/V_j (the ratio of debt to market value) rather than D_j/S_j (the ratio of debt to equity), the concept used in the analytical development. The D_j/V_j measure is introduced at this point because it simplifies comparison and contrast of our view with the traditional position.

²³ The line MM' in Figure 2 has been drawn with a positive slope on the assumption that $\rho_k^r > r$, a condition which will normally obtain. Our Proposition II as given in equation (8) would continue to be valid, of course, even in the unlikely event that $\rho_k^r < r$, but the slope of MM' would be negative.

²⁴ See, e.g., Graham and Dodd [6, pp. 464-66]. Without doing violence to this position, we can bring out its implications more sharply by ignoring the qualification and treating the yield as a virtual constant over the relevant range. See in this connection the discussion in Durand [3, esp. pp. 225-37] of what he calls the "net income method" of valuation.

tation, it asserts that for any firm j in the class k ,

$$(13) \quad \frac{\bar{X}_j^r - rD_j}{S_j} \equiv \frac{\bar{\pi}_j^r}{S_j} = i_k^*, \text{ a constant for } \frac{D_j}{S_j} \leq L_k$$

or, equivalently,

$$(14) \quad S_j = \bar{\pi}_j^r / i_k^*.$$

Here i_k^* represents the capitalization rate or earnings-price ratio on the common stock and L_k denotes some amount of leverage regarded as the maximum "reasonable" amount for firms of the class k . This assumed relationship between yield and leverage is the horizontal solid line ML' of Figure 2. Beyond L' , the yield will presumably rise sharply as the market discounts "excessive" trading on the equity. This possibility of a rising range for high leverages is indicated by the broken-line segment $L'G$ in the figure.²⁵

If the value of shares were really given by (14) then the over-all market value of the firm must be:

$$(16) \quad V_j \equiv S_j + D_j = \frac{\bar{X}_j^r - rD_j}{i_k^*} + D_j = \frac{\bar{X}_j^r}{i_k^*} + \frac{(i_k^* - r)D_j}{i_k^*}.$$

That is, for any given level of expected total returns after taxes (\bar{X}_j^r) and assuming, as seems natural, that $i_k^* > r$, the value of the firm must tend to *rise* with debt,²⁶ whereas our Proposition I asserts that the value of the firm is completely independent of the capital structure. Another way of contrasting our position with the traditional one is in terms of the cost of capital. Solving (16) for \bar{X}_j^r/V_j yields:

$$(17) \quad \bar{X}_j^r/V_j = i_k^* - (i_k^* - r)D_j/V_j.$$

According to this equation, the average cost of capital is not independent of capital structure as we have argued, but should tend to *fall* with increasing leverage, at least within the relevant range of moderate debt ratios, as shown by the line ms in Figure 1. Or to put it in more familiar terms, debt-financing should be "cheaper" than equity-financing if not carried too far.

When we also allow for the possibility of a rising range of stock yields for large values of leverage, we obtain a U-shaped curve like mst in

²⁵ To make it easier to see some of the implications of this hypothesis as well as to prepare the ground for later statistical testing, it will be helpful to assume that the notion of a critical limit on leverage beyond which yields rise rapidly, can be epitomized by a quadratic relation of the form:

$$(15) \quad \bar{\pi}_j^r/S_j = i_k^* + \beta(D_j/S_j) + \alpha(D_j/S_j)^2, \quad \alpha > 0.$$

²⁶ For a typical discussion of how a promoter can, supposedly, increase the market value of a firm by recourse to debt issues, see W. J. Eiteman [4, esp. pp. 11-13].

Figure 1.²⁷ That a yield-curve for stocks of the form $ML'G$ in Figure 2 implies a U-shaped cost-of-capital curve has, of course, been recognized by many writers. A natural further step has been to suggest that the capital structure corresponding to the trough of the U is an “optimal capital structure” towards which management ought to strive in the best interests of the stockholders.²⁸ According to our model, by contrast, no such optimal structure exists—all structures being equivalent from the point of view of the cost of capital.

Although the falling, or at least U-shaped, cost-of-capital function is in one form or another the dominant view in the literature, the ultimate rationale of that view is by no means clear. The crucial element in the position—that the expected earnings-price ratio of the stock is largely unaffected by leverage up to some conventional limit—is rarely even regarded as something which requires explanation. It is usually simply taken for granted or it is merely asserted that this is the way the market behaves.²⁹ To the extent that the constant earnings-price ratio has a rationale at all we suspect that it reflects in most cases the feeling that moderate amounts of debt in “sound” corporations do not really add very much to the “riskiness” of the stock. Since the extra risk is slight, it seems natural to suppose that firms will not have to pay noticeably higher yields in order to induce investors to hold the stock.³⁰

A more sophisticated line of argument has been advanced by David Durand [3, pp. 231–33]. He suggests that because insurance companies and certain other important institutional investors are restricted to debt securities, nonfinancial corporations are able to borrow from them at interest rates which are lower than would be required to compensate

²⁷ The U-shaped nature of the cost-of-capital curve can be exhibited explicitly if the yield curve for shares as a function of leverage can be approximated by equation (15) of footnote 25. From that equation, multiplying both sides by S_j , we obtain: $\bar{\pi}_j^r = \bar{X}_j^r - rD_j = i_k^*S_j + \beta D_j + \alpha D_j^2/S_j$ or, adding and subtracting $i_k^*D_j$ from the right-hand side and collecting terms,

$$(18) \quad \bar{X}_j^r = i_k^*(S_j + D_j) + (\beta + r - i_k^*)D_j + \alpha D_j^2/S_j.$$

Dividing (18) by V_j gives an expression for the cost of capital:

$$(19) \quad \bar{X}_j^r/V_j = i_k^* - (i_k^* - r - \beta)D_j/V_j + \alpha D_j^2/S_j V_j = i_k^* - (i_k^* - r - \beta)D_j/V_j + \alpha(D_j/V_j)^2/(1 - D_j/V_j)$$

which is clearly U-shaped since α is supposed to be positive.

²⁸ For a typical statement see S. M. Robbins [16, p. 307]. See also Graham and Dodd [6, pp. 468–74].

²⁹ See *e.g.*, Graham and Dodd [6, p. 466].

³⁰ A typical statement is the following by Guthmann and Dougall [7, p. 245]: “Theoretically it might be argued that the increased hazard from using bonds and preferred stocks would counterbalance this additional income and so prevent the common stock from being more attractive than when it had a lower return but fewer prior obligations. In practice, the extra earnings from ‘trading on the equity’ are often regarded by investors as more than sufficient to serve as a ‘premium for risk’ when the proportions of the several securities are judiciously mixed.”

creditors in a free market. Thus, while he would presumably agree with our conclusions that stockholders could not gain from leverage in an unconstrained market, he concludes that they can gain under present institutional arrangements. This gain would arise by virtue of the "safety superpremium" which lenders are willing to pay corporations for the privilege of lending.³¹

The defective link in both the traditional and the Durand version of the argument lies in the confusion between investors' subjective risk preferences and their objective market opportunities. Our Propositions I and II, as noted earlier, do not depend for their validity on any assumption about individual risk preferences. Nor do they involve any assertion as to what is an adequate compensation to investors for assuming a given degree of risk. They rely merely on the fact that a given commodity cannot consistently sell at more than one price in the market; or more precisely that the price of a commodity representing a "bundle" of two other commodities cannot be consistently different from the weighted average of the prices of the two components (the weights being equal to the proportion of the two commodities in the bundle).

An analogy may be helpful at this point. The relations between $1/\rho_k$, the price per dollar of an unlevered stream in class k ; $1/r$, the price per dollar of a sure stream, and $1/i_j$, the price per dollar of a levered stream j , in the k th class, are essentially the same as those between, respectively, the price of whole milk, the price of butter fat, and the price of milk which has been thinned out by skimming off some of the butter fat. Our Proposition I states that a firm cannot reduce the cost of capital—*i.e.*, increase the market value of the stream it generates—by securing part of its capital through the sale of bonds, even though debt money appears to be cheaper. This assertion is equivalent to the proposition that, under perfect markets, a dairy farmer cannot in general earn more for the milk he produces by skimming some of the butter fat and selling it separately, even though butter fat per unit weight, sells for more than whole milk. The advantage from skimming the milk rather than selling whole milk would be purely illusory; for what would be gained from selling the high-priced butter fat would be lost in selling the low-priced residue of thinned milk. Similarly our Proposition II—that the price per dollar of a levered stream falls as leverage increases—is an ex-

³¹ Like Durand, Morton [15] contends "that the actual market deviates from [Proposition I] by giving a changing over-all cost of money at different points of the [leverage] scale" (p. 443, note 2, inserts ours), but the basis for this contention is nowhere clearly stated. Judging by the great emphasis given to the lack of mobility of investment funds between stocks and bonds and to the psychological and institutional pressures toward debt portfolios (see pp. 444-51 and especially his discussion of the optimal capital structure on p. 453) he would seem to be taking a position very similar to that of Durand above.

act analogue of the statement that the price per gallon of thinned milk falls continuously as more butter fat is skimmed off.³²

It is clear that this last assertion is true as long as butter fat is worth more per unit weight than whole milk, and it holds even if, for many consumers, taking a little cream out of the milk (adding a little leverage to the stock) does not detract noticeably from the taste (does not add noticeably to the risk). Furthermore the argument remains valid even in the face of institutional limitations of the type envisaged by Durand. For suppose that a large fraction of the population habitually dines in restaurants which are required by law to serve only cream in lieu of milk (entrust their savings to institutional investors who can only buy bonds). To be sure the price of butter fat will then tend to be higher in relation to that of skimmed milk than in the absence such restrictions (the rate of interest will tend to be lower), and this will benefit people who eat at home and who like skim milk (who manage their own portfolio and are able and willing to take risk). But it will still be the case that a farmer cannot gain by skimming some of the butter fat and selling it separately (firm cannot reduce the cost of capital by recourse to borrowed funds).³³

Our propositions can be regarded as the extension of the classical theory of markets to the particular case of the capital markets. Those who hold the current view—whether they realize it or not—must as-

³² Let M denote the quantity of whole milk, B/M the proportion of butter fat in the whole milk, and let p_M , p_B and p_α denote, respectively, the price per unit weight of whole milk, butter fat and thinned milk from which a fraction α of the butter fat has been skimmed off. We then have the fundamental perfect market relation:

$$(a) \quad p_\alpha(M - \alpha B) + p_B \alpha B = p_M M, \quad 0 \leq \alpha \leq 1,$$

stating that total receipts will be the same amount $p_M M$, independently of the amount αB of butter fat that may have been sold separately. Since p_M corresponds to $1/\rho$, p_B to $1/r$, p_α to $1/i$, M to \bar{X} and αB to rD , (a) is equivalent to Proposition I, $S + D = \bar{X}/\rho$. From (a) we derive:

$$(b) \quad p_\alpha = p_M \frac{M}{M - \alpha B} - p_B \frac{\alpha B}{M - \alpha B}$$

which gives the price of thinned milk as an explicit function of the proportion of butter fat skimmed off; the function decreasing as long as $p_B > p_M$. From (a) also follows:

$$(c) \quad 1/p_\alpha = 1/p_M + (1/p_M - 1/p_B) \frac{p_B \alpha B}{p_\alpha (M - \alpha B)}$$

which is the exact analogue of Proposition II, as given by (8).

³³ The reader who likes parables will find that the analogy with interrelated commodity markets can be pushed a good deal farther than we have done in the text. For instance, the effect of changes in the market rate of interest on the over-all cost of capital is the same as the effect of a change in the price of butter on the price of whole milk. Similarly, just as the relation between the prices of skim milk and butter fat influences the kind of cows that will be reared, so the relation between i and r influences the kind of ventures that will be undertaken. If people like butter we shall have Guernseys; if they are willing to pay a high price for safety, this will encourage ventures which promise smaller but less uncertain streams per dollar of physical assets.

sume not merely that there are lags and frictions in the equilibrating process—a feeling we certainly share,³⁴ claiming for our propositions only that they describe the central tendency around which observations will scatter—but also that there are large and *systematic* imperfections in the market which permanently bias the outcome. This is an assumption that economists, at any rate, will instinctively eye with some skepticism.

In any event, whether such prolonged, systematic departures from equilibrium really exist or whether our propositions are better descriptions of long-run market behavior can be settled only by empirical research. Before going on to the theory of investment it may be helpful, therefore, to look at the evidence.

E. Some Preliminary Evidence on the Basic Propositions

Unfortunately the evidence which has been assembled so far is amazingly skimpy. Indeed, we have been able to locate only two recent studies—and these of rather limited scope—which were designed to throw light on the issue. Pending the results of more comprehensive tests which we hope will soon be available, we shall review briefly such evidence as is provided by the two studies in question: (1) an analysis of the relation between security yields and financial structure for some 43 large electric utilities by F. B. Allen [1], and (2) a parallel (unpublished) study by Robert Smith [19], for 42 oil companies designed to test whether Allen's rather striking results would be found in an industry with very different characteristics.³⁵ The Allen study is based on average figures for the years 1947 and 1948, while the Smith study relates to the single year 1953.

The Effect of Leverage on the Cost of Capital. According to the received view, as shown in equation (17) the average cost of capital, \bar{X}^r/V , should decline linearly with leverage as measured by the ratio D/V , at least through most of the relevant range.³⁶ According to Proposition I, the average cost of capital within a given class k should tend to have the same value ρ_k independently of the degree of leverage. A simple test

³⁴ Several specific examples of the failure of the arbitrage mechanism can be found in Graham and Dodd [6, *e.g.*, pp. 646–48]. The price discrepancy described on pp. 646–47 is particularly curious since it persists even today despite the fact that a whole generation of security analysts has been brought up on this book!

³⁵ We wish to express our thanks to both writers for making available to us some of their original worksheets. In addition to these recent studies there is a frequently cited (but apparently seldom read) study by the Federal Communications Commission in 1938 [22] which purports to show the existence of an optimal capital structure or range of structures (in the sense defined above) for public utilities in the 1930's. By current standards for statistical investigations, however, this study cannot be regarded as having any real evidential value for the problem at hand.

³⁶ We shall simplify our notation in this section by dropping the subscript j used to denote a particular firm wherever this will not lead to confusion.

of the merits of the two alternative hypotheses can thus be carried out by correlating \bar{X}^r/V with D/V . If the traditional view is correct, the correlation should be significantly negative; if our view represents a better approximation to reality, then the correlation should not be significantly different from zero.

Both studies provide information about the average value of D —the market value of bonds and preferred stock—and of V —the market value of all securities.³⁷ From these data we can readily compute the ratio D/V and this ratio (expressed as a percentage) is represented by the symbol d in the regression equations below. The measurement of the variable \bar{X}^r/V , however, presents serious difficulties. Strictly speaking, the numerator should measure the expected returns net of taxes, but this is a variable on which no direct information is available. As an approximation, we have followed both authors and used (1) the average value of actual net returns in 1947 and 1948 for Allen's utilities; and (2) actual net returns in 1953 for Smith's oil companies. Net return is defined in both cases as the sum of interest, preferred dividends and stockholders' income net of corporate income taxes. Although this approximation to expected returns is undoubtedly very crude, there is no reason to believe that it will systematically bias the test in so far as the sign of the regression coefficient is concerned. The roughness of the approximation, however, will tend to make for a wide scatter. Also contributing to the scatter is the crudeness of the industrial classification, since especially within the sample of oil companies, the assumption that all the firms belong to the same class in our sense, is at best only approximately valid.

Denoting by x our approximation to \bar{X}^r/V (expressed, like d , as a percentage), the results of the tests are as follows:

$$\text{Electric Utilities } x = 5.3 + .006d \quad r = .12 \\ (\pm .008)$$

$$\text{Oil Companies } x = 8.5 + .006d \quad r = .04. \\ (\pm .024)$$

The data underlying these equations are also shown in scatter diagram form in Figures 3 and 4.

The results of these tests are clearly favorable to our hypothesis.

³⁷ Note that for purposes of this test preferred stocks, since they represent an *expected* fixed obligation, are properly classified with bonds even though the tax status of preferred dividends is different from that of interest payments and even though preferred dividends are really fixed only as to their maximum in any year. Some difficulty of classification does arise in the case of convertible preferred stocks (and convertible bonds) selling at a substantial premium, but fortunately very few such issues were involved for the companies included in the two studies. Smith included bank loans and certain other short-term obligations (at book values) in his data on oil company debts and this treatment is perhaps open to some question. However, the amounts involved were relatively small and check computations showed that their elimination would lead to only minor differences in the test results.

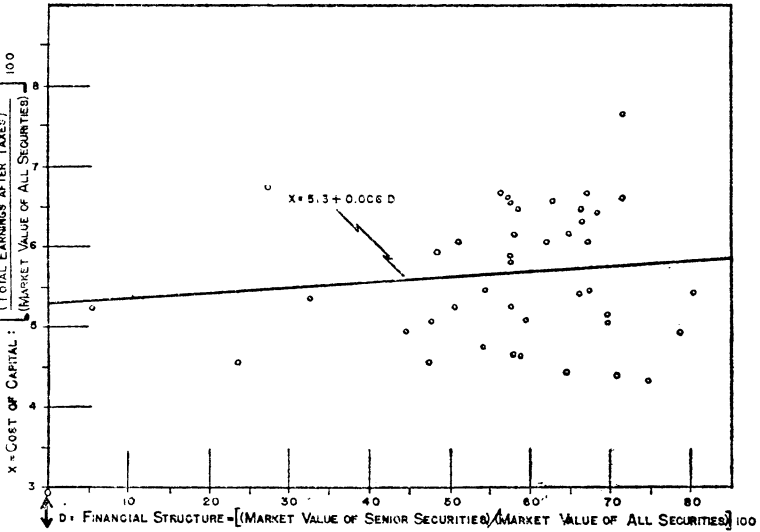


FIGURE 3. COST OF CAPITAL IN RELATION TO FINANCIAL STRUCTURE FOR 43 ELECTRIC UTILITIES, 1947-48

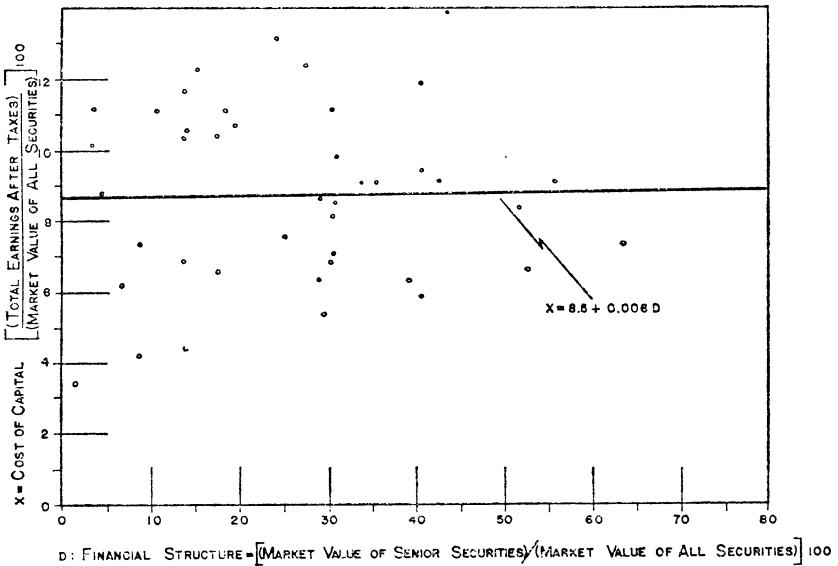


FIGURE 4. COST OF CAPITAL IN RELATION TO FINANCIAL STRUCTURE FOR 42 OIL COMPANIES, 1953

Both correlation coefficients are very close to zero and not statistically significant. Furthermore, the implications of the traditional view fail to be supported even with respect to the sign of the correlation. The data in short provide no evidence of any tendency for the cost of capital to fall as the debt ratio increases.³⁸

It should also be apparent from the scatter diagrams that there is no hint of a curvilinear, U-shaped, relation of the kind which is widely believed to hold between the cost of capital and leverage. This graphical impression was confirmed by statistical tests which showed that for both industries the curvature was not significantly different from zero, its sign actually being opposite to that hypothesized.³⁹

Note also that according to our model, the constant terms of the regression equations are measures of ρ_k^r , the capitalization rates for unlevered streams and hence the average cost of capital in the classes in question. The estimates of 8.5 per cent for the oil companies as against 5.3 per cent for electric utilities appear to accord well with a priori expectations, both in absolute value and relative spread.

The Effect of Leverage on Common Stock Yields. According to our Proposition II—see equation 12 and Figure 2—the expected yield on common stock, $\bar{\pi}^r/S$, in any given class, should tend to increase with leverage as measured by the ratio D/S . The relation should tend to be linear and with positive slope through most of the relevant range (as in the curve MM' of Figure 2), though it might tend to flatten out if we move

³⁸ It may be argued that a test of the kind used is biased against the traditional view. The fact that both sides of the regression equation are divided by the variable V which may be subject to random variation might tend to impart a positive bias to the correlation. As a check on the results presented in the text, we have, therefore, carried out a supplementary test based on equation (16). This equation shows that, if the traditional view is correct, the market value of a company should, for given \bar{X}^r , increase with debt through most of the relevant range; according to our model the market value should be uncorrelated with D , given \bar{X}^r . Because of wide variations in the size of the firms included in our samples, all variables must be divided by a suitable scale factor in order to avoid spurious results in carrying out a test of equation (16). The factor we have used is the book value of the firm denoted by A . The hypothesis tested thus takes the specific form:

$$V/A = a + b(\bar{X}^r/A) + c(D/A)$$

and the numerator of the ratio \bar{X}^r/A is again approximated by actual net returns. The partial correlation between V/A and D/A should now be positive according to the traditional view and zero according to our model. Although division by A should, if anything, bias the results in favor of the traditional hypothesis, the partial correlation turns out to be only .03 for the oil companies and $-.28$ for the electric utilities. Neither of these coefficients is significantly different from zero and the larger one even has the wrong sign.

³⁹ The tests consisted of fitting to the data the equation (19) of footnote 27. As shown there, it follows from the U-shaped hypothesis that the coefficient α of the variable $(D/V)^2/(1-D/V)$, denoted hereafter by d^* , should be significant and positive. The following regression equations and partials were obtained:

$$\text{Electric Utilities } x = 5.0 + .017d - .003d^*; r_{xd^*} = -.15$$

$$\text{Oil Companies } x = 8.0 + .05d - .03d^*; r_{xd^*} = -.14$$

far enough to the right (as in the curve MD'), to the extent that high leverage tends to drive up the cost of senior capital. According to the conventional view, the yield curve as a function of leverage should be a horizontal straight line (like ML') through most of the relevant range; far enough to the right, the yield may tend to rise at an increasing rate. Here again, a straight-forward correlation—in this case between $\bar{\pi}'/S$ and D/S —can provide a test of the two positions. If our view is correct, the correlation should be significantly positive; if the traditional view is correct, the correlation should be negligible.

Subject to the same qualifications noted above in connection with \bar{X}^τ , we can approximate $\bar{\pi}'$ by actual stockholder net income.⁴⁰ Letting z denote in each case the approximation to $\bar{\pi}'/S$ (expressed as a percentage) and letting h denote the ratio D/S (also in percentage terms) the following results are obtained:

$$\text{Electric Utilities } z = 6.6 + .017h \quad r = .53 \\ (\pm .004)$$

$$\text{Oil Companies } z = 8.9 + .051h \quad r = .53. \\ (\pm .012)$$

These results are shown in scatter diagram form in Figures 5 and 6.

Here again the implications of our analysis seem to be borne out by the data. Both correlation coefficients are positive and highly significant when account is taken of the substantial sample size. Furthermore, the estimates of the coefficients of the equations seem to accord reasonably well with our hypothesis. According to equation (12) the constant term should be the value of ρ_k^τ for the given class while the slope should be $(\rho_k^\tau - r)$. From the test of Proposition I we have seen that for the oil companies the mean value of ρ_k^τ could be estimated at around 8.7. Since the average yield of senior capital during the period covered was in the order of $3\frac{1}{2}$ per cent, we should expect a constant term of about 8.7 per cent and a slope of just over 5 per cent. These values closely approximate the regression estimates of 8.9 per cent and 5.1 per cent respectively. For the electric utilities, the yield of senior capital was also on the order of $3\frac{1}{2}$ per cent during the test years, but since the estimate of the mean value of ρ_k^τ from the test of Proposition I was 5.6 per cent,

⁴⁰ As indicated earlier, Smith's data were for the single year 1953. Since the use of a single year's profits as a measure of expected profits might be open to objection we collected profit data for 1952 for the same companies and based the computation of $\bar{\pi}'/S$ on the average of the two years. The value of $\bar{\pi}'/S$ was obtained from the formula:

$$\left(\text{net earnings in 1952} \cdot \frac{\text{assets in '53}}{\text{assets in '52}} + \text{net earnings in '1953} \right) \frac{1}{2} \\ \div (\text{average market value of common stock in '53}).$$

The asset adjustment was introduced as rough allowance for the effects of possible growth in the size of the firm. It might be added that the correlation computed with $\bar{\pi}'/S$ based on net profits in 1953 alone was found to be only slightly smaller, namely .50.

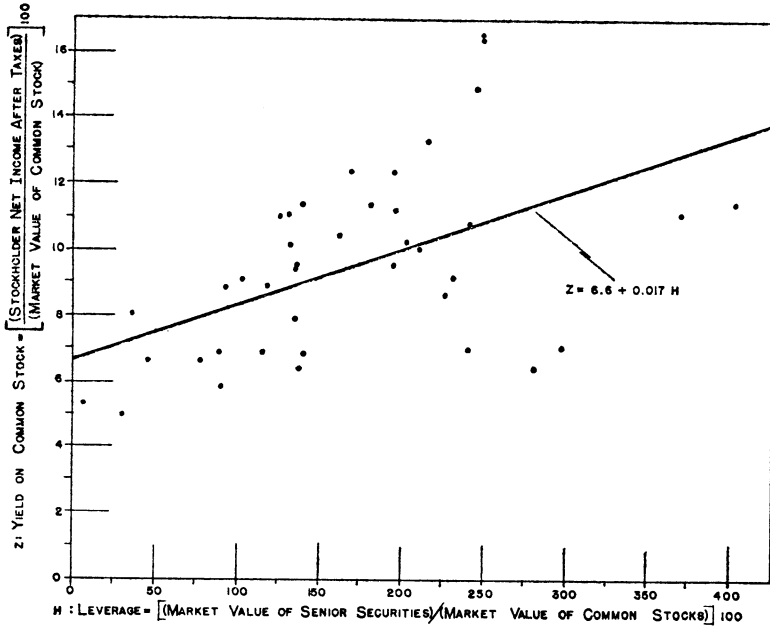


FIGURE 5. YIELD ON COMMON STOCK IN RELATION TO LEVERAGE FOR 43 ELECTRIC UTILITIES, 1947-48

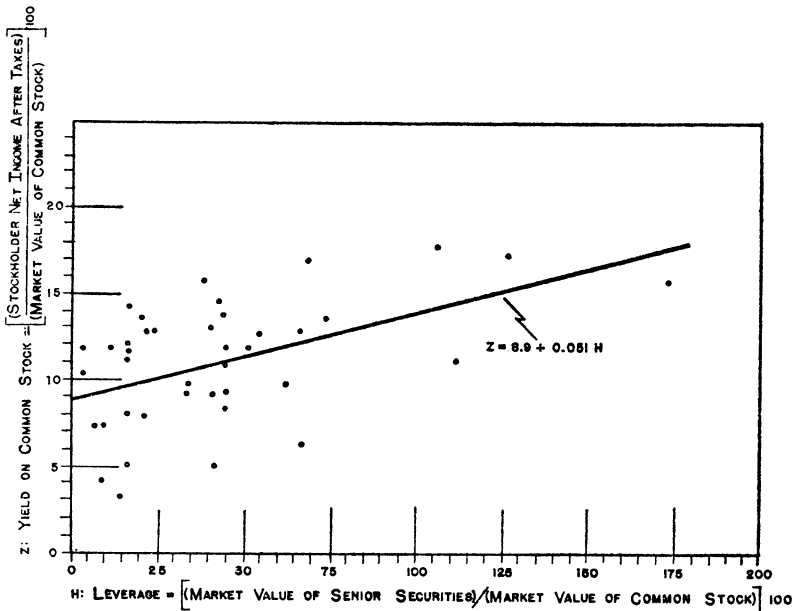


FIGURE 6. YIELD ON COMMON STOCK IN RELATION TO LEVERAGE FOR 42 OIL COMPANIES, 1952-53

the slope should be just above 2 per cent. The actual regression estimate for the slope of 1.7 per cent is thus somewhat low, but still within one standard error of its theoretical value. Because of this underestimate of the slope and because of the large mean value of leverage ($\bar{h}=160$ per cent) the regression estimate of the constant term, 6.6 per cent, is somewhat high, although not significantly different from the value of 5.6 per cent obtained in the test of Proposition I.

When we add a square term to the above equations to test for the presence and direction of curvature we obtain the following estimates:

$$\text{Electric Utilities } z = 4.6 + .004h - .007h^2$$

$$\text{Oil Companies } z = 8.5 + .072h - .016h^2.$$

For both cases the curvature is negative. In fact, for the electric utilities, where the observations cover a wider range of leverage ratios, the negative coefficient of the square term is actually significant at the 5 per cent level. Negative curvature, as we have seen, runs directly counter to the traditional hypothesis, whereas it can be readily accounted for by our model in terms of rising cost of borrowed funds.⁴¹

In summary, the empirical evidence we have reviewed seems to be broadly consistent with our model and largely inconsistent with traditional views. Needless to say much more extensive testing will be required before we can firmly conclude that our theory describes market behavior. Caution is indicated especially with regard to our test of Proposition II, partly because of possible statistical pitfalls⁴² and partly because not all the factors that might have a systematic effect on stock yields have been considered. In particular, no attempt was made to test the possible influence of the dividend pay-out ratio whose role has tended to receive a great deal of attention in current research and thinking. There are two reasons for this omission. First, our main objective has been to assess the prima facie tenability of *our* model, and in this model, based as it is on rational behavior by investors, dividends per se play no role. Second, in a world in which the policy of dividend stabilization is widespread, there is no simple way of disentangling the true effect of dividend payments on stock prices from their apparent effect,

⁴¹ That the yield of senior capital tended to rise for utilities as leverage increased is clearly shown in several of the scatter diagrams presented in the published version of Allen's study. This significant negative curvature between stock yields and leverage for utilities may be partly responsible for the fact, previously noted, that the constant in the linear regression is somewhat higher and the slope somewhat lower than implied by equation (12). Note also in connection with the estimate of ρ_k^7 that the introduction of the quadratic term reduces the constant considerably, pushing it in fact below the a priori expectation of 5.6, though the difference is again not statistically significant.

⁴² In our test, *e.g.*, the two variables z and h are both ratios with S appearing in the denominator, which may tend to impart a positive bias to the correlation (*cf.* note 38). Attempts were made to develop alternative tests, but although various possibilities were explored, we have so far been unable to find satisfactory alternatives.

the latter reflecting only the role of dividends as a proxy measure of long-term earning anticipations.⁴³ The difficulties just mentioned are further compounded by possible interrelations between dividend policy and leverage.⁴⁴

II. *Implications of the Analysis for the Theory of Investment*

A. *Capital Structure and Investment Policy*

On the basis of our propositions with respect to cost of capital and financial structure (and for the moment neglecting taxes), we can derive the following simple rule for optimal investment policy by the firm:

Proposition III. If a firm in class k is acting in the best interest of the stockholders at the time of the decision, it will exploit an investment opportunity if and only if the rate of return on the investment, say ρ^* , is as large as or larger than ρ_k . That is, *the cut-off point for investment in the firm will in all cases be ρ_k and will be completely unaffected by the type of security used to finance the investment.* Equivalently, we may say that regardless of the financing used, the marginal cost of capital to a firm is equal to the average cost of capital, which is in turn equal to the capitalization rate for an unlevered stream in the class to which the firm belongs.⁴⁵

To establish this result we will consider the three major financing alternatives open to the firm—bonds, retained earnings, and common stock issues—and show that in each case an investment is worth undertaking if, and only if, $\rho^* \geq \rho_k$.⁴⁶

Consider first the case of an investment financed by the sale of bonds. We know from Proposition I that the market value of the firm before the investment was undertaken was:⁴⁷

$$(20) \quad V_0 = \bar{X}_0 / \rho_k$$

⁴³ We suggest that failure to appreciate this difficulty is responsible for many fallacious, or at least unwarranted, conclusions about the role of dividends.

⁴⁴ In the sample of electric utilities, there is a substantial negative correlation between yields and pay-out ratios, but also between pay-out ratios and leverage, suggesting that either the association of yields and leverage or of yields and pay-out ratios may be (at least partly) spurious. These difficulties however do not arise in the case of the oil industry sample. A preliminary analysis indicates that there is here no significant relation between leverage and pay-out ratios and also no significant correlation (either gross or partial) between yields and pay-out ratios.

⁴⁵ The analysis developed in this paper is essentially a comparative-statics, not a dynamic analysis. This note of caution applies with special force to Proposition III. Such problems as those posed by expected changes in r and in ρ_k over time will not be treated here. Although they are in principle amenable to analysis within the general framework we have laid out, such an undertaking is sufficiently complex to deserve separate treatment. Cf. note 17.

⁴⁶ The extension of the proof to other types of financing, such as the sale of preferred stock or the issuance of stock rights is straightforward.

⁴⁷ Since no confusion is likely to arise, we have again, for simplicity, eliminated the subscripts identifying the firm in the equations to follow. Except for ρ_k , the subscripts now refer to time periods.

and that the value of the common stock was:

$$(21) \quad S_0 = V_0 - D_0.$$

If now the firm borrows I dollars to finance an investment yielding ρ^* its market value will become:

$$(22) \quad V_1 = \frac{\bar{X}_0 + \rho^* I}{\rho_k} = V_0 + \frac{\rho^* I}{\rho_k}$$

and the value of its common stock will be:

$$(23) \quad S_1 = V_1 - (D_0 + I) = V_0 + \frac{\rho^* I}{\rho_k} - D_0 - I$$

or using equation 21,

$$(24) \quad S_1 = S_0 + \frac{\rho^* I}{\rho_k} - I.$$

Hence $S_1 \geq S_0$ as $\rho^* \geq \rho_k$.⁴⁸

To illustrate, suppose the capitalization rate for uncertain streams in the k th class is 10 per cent and the rate of interest is 4 per cent. Then if a given company had an expected income of 1,000 and if it were financed entirely by common stock we know from Proposition I that the market value of its stock would be 10,000. Assume now that the managers of the firm discover an investment opportunity which will require an outlay of 100 and which is expected to yield 8 per cent. At first sight this might appear to be a profitable opportunity since the expected return is double the interest cost. If, however, the management borrows the necessary 100 at 4 per cent, the total expected income of the company rises to 1,008 and the market value of the firm to 10,080. But the firm now will have 100 of bonds in its capital structure so that, paradoxically, the market value of the stock must actually be reduced from 10,000 to 9,980 as a consequence of this apparently profitable investment. Or, to put it another way, the gains from being able to tap cheap, borrowed funds are more than offset for the stockholders by the market's discounting of the stock for the added leverage assumed.

Consider next the case of retained earnings. Suppose that in the course of its operations the firm acquired I dollars of cash (without impairing

⁴⁸ In the case of bond-financing the rate of interest on bonds does not enter explicitly into the decision (assuming the firm borrows at the market rate of interest). This is true, moreover, given the conditions outlined in Section I.C, even though interest rates may be an increasing function of debt outstanding. To the extent that the firm borrowed at a rate other than the market rate the two I 's in equation (24) would no longer be identical and an additional gain or loss, as the case might be, would accrue to the shareholders. It might also be noted in passing that permitting the two I 's in (24) to take on different values provides a simple method for introducing underwriting expenses into the analysis.

the earning power of its assets). If the cash is distributed as a dividend to the stockholders their wealth W_0 , after the distribution will be:

$$(25) \quad W_0 = S_0 + I = \frac{\bar{X}_0}{\rho_k} - D_0 + I$$

where \bar{X}_0 represents the expected return from the assets exclusive of the amount I in question. If however the funds are retained by the company and used to finance new assets whose expected rate of return is ρ^* , then the stockholders' wealth would become:

$$(26) \quad W_1 = S_1 = \frac{\bar{X}_0 + \rho^*I}{\rho_k} - D_0 = S_0 + \frac{\rho^*I}{\rho_k}.$$

Clearly $W_1 \geq W_0$ as $\rho^* \geq \rho_k$ so that an investment financed by retained earnings raises the net worth of the owners if and only if $\rho^* > \rho_k$.⁴⁹

Consider finally, the case of common-stock financing. Let P_0 denote the current market price per share of stock and assume, for simplicity, that this price reflects currently expected earnings only, that is, it does not reflect any future increase in earnings as a result of the investment under consideration.⁵⁰ Then if N is the original number of shares, the price per share is:

$$(27) \quad P_0 = S_0/N$$

and the number of new shares, M , needed to finance an investment of I dollars is given by:

$$(28) \quad M = \frac{I}{P_0}.$$

As a result of the investment the market value of the stock becomes:

$$S_1 = \frac{\bar{X}_0 + \rho^*I}{\rho_k} - D_0 = S_0 + \frac{\rho^*I}{\rho_k} = NP_0 + \frac{\rho^*I}{\rho_k}$$

and the price per share:

$$(29) \quad P_1 = \frac{S_1}{N + M} = \frac{1}{N + M} \left[NP_0 + \frac{\rho^*I}{\rho_k} \right].$$

⁴⁹ The conclusion that ρ_k is the cut-off point for investments financed from internal funds applies not only to undistributed net profits, but to depreciation allowances (and even to the funds represented by the current sale value of any asset or collection of assets). Since the owners can earn ρ_k by investing funds elsewhere in the class, partial or total liquidating distributions should be made whenever the firm cannot achieve a marginal internal rate of return equal to ρ_k .

⁵⁰ If we assumed that the market price of the stock did reflect the expected higher future earnings (as would be the case if our original set of assumptions above were strictly followed) the analysis would differ slightly in detail, but not in essentials. The cut-off point for new investment would still be ρ_k , but where $\rho^* > \rho_k$ the gain to the original owners would be larger than if the stock price were based on the pre-investment expectations only.

Since by equation (28), $I = MP_0$, we can add MP_0 and subtract I from the quantity in bracket, obtaining:

$$(30) \quad P_1 = \frac{1}{N+M} \left[(N+M)P_0 + \frac{\rho^* - \rho_k}{\rho_k} I \right]$$

$$= P_0 + \frac{1}{N+M} \frac{\rho^* - \rho_k}{\rho_k} I > P_0 \text{ if,}$$

and only if, $\rho^* > \rho_k$.

Thus an investment financed by common stock is advantageous to the current stockholders if and only if its yield exceeds the capitalization rate ρ_k .

Once again a numerical example may help to illustrate the result and make it clear why the relevant cut-off rate is ρ_k and not the current yield on common stock, i . Suppose that ρ_k is 10 per cent, r is 4 per cent, that the original expected income of our company is 1,000 and that management has the opportunity of investing 100 having an expected yield of 12 per cent. If the original capital structure is 50 per cent debt and 50 per cent equity, and 1,000 shares of stock are initially outstanding, then, by Proposition I, the market value of the common stock must be 5,000 or 5 per share. Furthermore, since the interest bill is $.04 \times 5,000 = 200$, the yield on common stock is $800/5,000 = 16$ per cent. It may then appear that financing the additional investment of 100 by issuing 20 shares to outsiders at 5 per share would dilute the equity of the original owners since the 100 promises to yield 12 per cent whereas the common stock is currently yielding 16 per cent. Actually, however, the income of the company would rise to 1,012; the value of the firm to 10,120; and the value of the common stock to 5,120. Since there are now 1,020 shares, each would be worth 5.02 and the wealth of the original stockholders would thus have been increased. What has happened is that the dilution in expected earnings per share (from .80 to .796) has been more than offset, in its effect upon the market price of the shares, by the decrease in leverage.

Our conclusion is, once again, at variance with conventional views,⁵¹ so much so as to be easily misinterpreted. Read hastily, Proposition III seems to imply that the capital structure of a firm is a matter of indifference; and that, consequently, one of the core problems of corporate finance—the problem of the optimal capital structure for a firm—is no problem at all. It may be helpful, therefore, to clear up such possible misunderstandings.

⁵¹ In the matter of investment policy under uncertainty there is no single position which represents "accepted" doctrine. For a sample of current formulations, all very different from ours, see Joel Dean [2, esp. Ch. 3], M. Gordon and E. Shapiro [5], and Harry Roberts [17].

B. *Proposition III and Financial Planning by Firms*

Misinterpretation of the scope of Proposition III can be avoided by remembering that this Proposition tells us only that the type of instrument used to finance an investment is irrelevant to the question of whether or not the investment is worth while. This does not mean that the owners (or the managers) have no grounds whatever for preferring one financing plan to another; or that there are no other policy or technical issues in finance at the level of the firm.

That grounds for preferring one type of financial structure to another will still exist within the framework of our model can readily be seen for the case of common-stock financing. In general, except for something like a widely publicized oil-strike, we would expect the market to place very heavy weight on current and recent past earnings in forming expectations as to future returns. Hence, if the owners of a firm discovered a major investment opportunity which they felt would yield much more than ρ_k , they might well prefer not to finance it via common stock at the then ruling price, because this price may fail to capitalize the new venture. A better course would be a pre-emptive issue of stock (and in this connection it should be remembered that stockholders are free to borrow and buy). Another possibility would be to finance the project initially with debt. Once the project had reflected itself in increased actual earnings, the debt could be retired either with an equity issue at much better prices or through retained earnings. Still another possibility along the same lines might be to combine the two steps by means of a convertible debenture or preferred stock, perhaps with a progressively declining conversion rate. Even such a double-stage financing plan may possibly be regarded as yielding too large a share to outsiders since the new stockholders are, in effect, being given an interest in any similar opportunities the firm may discover in the future. If there is a reasonable prospect that even larger opportunities may arise in the near future and if there is some danger that borrowing now would preclude more borrowing later, the owners might find their interests best protected by splitting off the current opportunity into a separate subsidiary with independent financing. Clearly the problems involved in making the crucial estimates and in planning the optimal financial strategy are by no means trivial, even though they should have no bearing on the basic decision to invest (as long as $\rho^* \geq \rho_k$).⁵²

Another reason why the alternatives in financial plans may not be a matter of indifference arises from the fact that managers are concerned

⁵² Nor can we rule out the possibility that the existing owners, if unable to use a financing plan which protects their interest, may actually prefer to pass up an otherwise profitable venture rather than give outsiders an "excessive" share of the business. It is presumably in situations of this kind that we could justifiably speak of a shortage of "equity capital," though this kind of market imperfection is likely to be of significance only for small or new firms.

with more than simply furthering the interest of the owners. Such other objectives of the management—which need not be necessarily in conflict with those of the owners—are much more likely to be served by some types of financing arrangements than others. In many forms of borrowing agreements, for example, creditors are able to stipulate terms which the current management may regard as infringing on its prerogatives or restricting its freedom to maneuver. The creditors might even be able to insist on having a direct voice in the formation of policy.⁵³ To the extent, therefore, that financial policies have these implications for the management of the firm, something like the utility approach described in the introductory section becomes relevant to financial (as opposed to investment) decision-making. It is, however, the utility functions of the managers per se and not of the owners that are now involved.⁵⁴

In summary, many of the specific considerations which bulk so large in traditional discussions of corporate finance can readily be superimposed on our simple framework without forcing any drastic (and certainly no systematic) alteration of the conclusion which is our principal concern, namely that for investment decisions, the marginal cost of capital is ρ_k .

C. *The Effect of the Corporate Income Tax on Investment Decisions*

In Section I it was shown that when an unintegrated corporate income tax is introduced, the original version of our Proposition I,

$$\bar{X}/V = \rho_k = \text{a constant}$$

must be rewritten as:

$$(11) \quad \frac{(\bar{X} - rD)(1 - \tau) + rD}{V} \equiv \frac{\bar{X}^\tau}{V} = \rho_k^\tau = \text{a constant.}$$

Throughout Section I we found it convenient to refer to \bar{X}^τ/V as the cost of capital. The appropriate measure of the cost of capital relevant

⁵³ Similar considerations are involved in the matter of dividend policy. Even though the stockholders may be indifferent as to payout policy as long as investment policy is optimal, the management need not be so. Retained earnings involve far fewer threats to control than any of the alternative sources of funds and, of course, involve no underwriting expense or risk. But against these advantages management must balance the fact that sharp changes in dividend rates, which heavy reliance on retained earnings might imply, may give the impression that a firm's finances are being poorly managed, with consequent threats to the control and professional standing of the management.

⁵⁴ In principle, at least, this introduction of management's risk preferences with respect to financing methods would do much to reconcile the apparent conflict between Proposition III and such empirical findings as those of Modigliani and Zeman [14] on the close relation between interest rates and the ratio of new debt to new equity issues; or of John Lintner [12] on the considerable stability in target and actual dividend-payout ratios.

to investment decisions, however, is the ratio of the expected return *before taxes* to the market value, *i.e.*, \bar{X}/V . From (11) above we find:

$$(31) \quad \frac{\bar{X}}{V} = \frac{\rho_k^r - \tau_r(D/V)}{1 - \tau} = \frac{\rho_k^r}{1 - \tau} \left[1 - \frac{\tau r D}{\rho_k^r V} \right],$$

which shows that the cost of capital now depends on the debt ratio, decreasing, as D/V rises, at the constant rate $\tau r / (1 - \tau)$.⁵⁵ Thus, with a corporate income tax under which interest is a deductible expense, gains can accrue to stockholders from having debt in the capital structure, even when capital markets are perfect. The gains however are small, as can be seen from (31), and as will be shown more explicitly below.

From (31) we can develop the tax-adjusted counterpart of Proposition III by interpreting the term D/V in that equation as the proportion of debt used in any additional financing of V dollars. For example, in the case where the financing is entirely by new common stock, $D=0$ and the required rate of return ρ_k^S on a venture so financed becomes:

$$(32) \quad \rho_k^S = \frac{\rho_k^r}{1 - \tau}.$$

For the other extreme of pure debt financing $D=V$ and the required rate of return, ρ_k^D , becomes:

$$(33) \quad \rho_k^D = \frac{\rho_k^r}{1 - \tau} \left[1 - \tau \frac{r}{\rho_k^r} \right] = \rho_k^S \left[1 - \tau \frac{r}{\rho_k^r} \right] = \rho_k^S - \frac{\tau}{1 - \tau} r. \text{ } ^{56}$$

For investments financed out of retained earnings, the problem of defining the required rate of return is more difficult since it involves a comparison of the tax consequences to the individual stockholder of receiving a dividend versus having a capital gain. Depending on the time of realization, a capital gain produced by retained earnings may be taxed either at ordinary income tax rates, 50 per cent of these rates, 25 per

⁵⁵ Equation (31) is amenable, in principle, to statistical tests similar to those described in Section I.E. However we have not made any systematic attempt to carry out such tests so far, because neither the Allen nor the Smith study provides the required information. Actually, Smith's data included a very crude estimate of tax liability, and, using this estimate, we did in fact obtain a negative relation between \bar{X}/V and D/V . However, the correlation ($-.28$) turned out to be significant only at about the 10 per cent level. While this result is not conclusive, it should be remembered that, according to our theory, the slope of the regression equation should be in any event quite small. In fact, with a value of τ in the order of .5, and values of ρ_k^r and r in the order of 8.5 and 3.5 per cent respectively (*cf.* Section I.E) an increase in D/V from 0 to 60 per cent (which is, approximately, the range of variation of this variable in the sample) should tend to reduce the average cost of capital only from about 17 to about 15 per cent.

⁵⁶ This conclusion does not extend to preferred stocks even though they have been classed with debt issues previously. Since preferred dividends except for a portion of those of public utilities are not in general deductible from the corporate tax, the cut-off point for new financing via preferred stock is exactly the same as that for common stock.

cent, or zero, if held till death. The rate on any dividends received in the event of a distribution will also be a variable depending on the amount of other income received by the stockholder, and with the added complications introduced by the current dividend-credit provisions. If we assume that the managers proceed on the basis of reasonable estimates as to the average values of the relevant tax rates for the owners, then the required return for retained earnings ρ_k^R can be shown to be:

$$(34) \quad \rho_k^R = \rho_k^\tau \frac{1}{1 - \tau} \frac{1 - \tau_d}{1 - \tau_g} = \frac{1 - \tau_d}{1 - \tau_g} \rho_k^g$$

where τ_d is the assumed rate of personal income tax on dividends and τ_g is the assumed rate of tax on capital gains.

A numerical illustration may perhaps be helpful in clarifying the relationship between these required rates of return. If we take the following round numbers as representative order-of-magnitude values under present conditions: an after-tax capitalization rate ρ_k^τ of 10 per cent, a rate of interest on bonds of 4 per cent, a corporate tax rate of 50 per cent, a marginal personal income tax rate on dividends of 40 per cent (corresponding to an income of about \$25,000 on a joint return), and a capital gains rate of 20 per cent (one-half the marginal rate on dividends), then the required rates of return would be: (1) 20 per cent for investments financed entirely by issuance of new common shares; (2) 16 per cent for investments financed entirely by new debt; and (3) 15 per cent for investments financed wholly from internal funds.

These results would seem to have considerable significance for current discussions of the effect of the corporate income tax on financial policy and on investment. Although we cannot explore the implications of the results in any detail here, we should at least like to call attention to the remarkably small difference between the "cost" of equity funds and debt funds. With the numerical values assumed, equity money turned out to be only 25 per cent more expensive than debt money, rather than something on the order of 5 times as expensive as is commonly supposed to be the case.⁵⁷ The reason for the wide difference is that the traditional

⁵⁷ See *e.g.*, D. T. Smith [18]. It should also be pointed out that our tax system acts in other ways to reduce the gains from debt financing. Heavy reliance on debt in the capital structure, for example, commits a company to paying out a substantial proportion of its income in the form of interest payments taxable to the owners under the personal income tax. A debt-free company, by contrast, can reinvest in the business all of its (smaller) net income and to this extent subject the owners only to the low capital gains rate (or possibly no tax at all by virtue of the loophole at death). Thus, we should expect a high degree of leverage to be of value to the owners, even in the case of closely held corporations, primarily in cases where their firm was not expected to have much need for additional funds to expand assets and earnings in the future. To the extent that opportunities for growth were available, as they presumably would be for most successful corporations, the interest of the stockholders would tend to be better served by a structure which permitted maximum use of retained earnings.

view starts from the position that debt funds are several times cheaper than equity funds even in the absence of taxes, with taxes serving simply to magnify the cost ratio in proportion to the corporate rate. By contrast, in our model in which the repercussions of debt financing on the value of shares are taken into account, the *only* difference in cost is that due to the tax effect, and its magnitude is simply the tax on the "grossed up" interest payment. Not only is this magnitude likely to be small but our analysis yields the further paradoxical implication that the stockholders' gain from, and hence incentive to use, debt financing is actually smaller the lower the rate of interest. In the extreme case where the firm could borrow for practically nothing, the advantage of debt financing would also be practically nothing.

III. Conclusion

With the development of Proposition III the main objectives we outlined in our introductory discussion have been reached. We have in our Propositions I and II at least the foundations of a theory of the valuation of firms and shares in a world of uncertainty. We have shown, moreover, how this theory can lead to an operational definition of the cost of capital and how that concept can be used in turn as a basis for rational investment decision-making within the firm. Needless to say, however, much remains to be done before the cost of capital can be put away on the shelf among the solved problems. Our approach has been that of static, partial equilibrium analysis. It has assumed among other things a state of atomistic competition in the capital markets and an ease of access to those markets which only a relatively small (though important) group of firms even come close to possessing. These and other drastic simplifications have been necessary in order to come to grips with the problem at all. Having served their purpose they can now be relaxed in the direction of greater realism and relevance, a task in which we hope others interested in this area will wish to share.

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Docket No. 26-00009
Atmos Energy Corporation, Tennessee Division
Consumer Advocate DR Set No. 1
Question No. 1-01
Page 1 of 1

REQUEST:

Refer to the Direct Testimony of Maureen H. Melson at 14:19-21. Ms. Melson concludes that “The cost of service items for which the Company seeks recovery, particularly but not limited to capital investments and operating expenses have been prudently incurred.” With regards to this conclusion, respond to the following:

- a. Identify all the procedures performed by Ms. Melson to reach this conclusion.
- b. To the extent Ms. Melson relied upon the prudence review of others in making this statement, identifying the steps performed by others in reaching this conclusion.
- c. Provide all workpapers and documentation which support the conclusion that all capital investment and operating expenses have been prudently incurred.

RESPONSE:

- a. See Attachment 1 for narrative of the Company process for books and records.
- b. See response to a.
- c. The Company objects to this part of the request on the grounds that it is overly broad, unduly burdensome, and not relevant. As drafted, this portion of this request seeks all invoices, purchase orders, and other documentation associated with the entirety of the Company’s capital investment and operating expenses over the entire period, which would entail an extremely large number of documents, almost none of which are relevant to this case. The Company is withholding responsive materials based on these objections.

ATTACHMENT:

CA_1-1_Att1 - Books and records narrative.docx

Docket No. 26-00009
Atmos Energy Corporation, Tennessee Division
Consumer Advocate DR Set No. 1
Question No. 1-05
Page 1 of 1

REQUEST:

Provide a copy of Atmos Energy-Tennessee's Distribution Integrity Management Plan ("DIMP") for the years 2023 through 2026. If such plan is done by region rather than by state, provide the regional DIMP that incorporates Tennessee.

RESPONSE:

Atmos Energy objects to this request on the grounds that it is overly broad and not relevant to any issue in this case. The Company's safety related procedures constitute trade secrets and critical energy infrastructure information which the Company must protect from becoming available in the public domain. Balanced against the highly sensitive nature of this document is the fact that it is unclear how this document, which is not addressed in either the Company's ARM Tariff or the Approved Methodologies and has never been requested in any previous ARM proceeding, is relevant to whether Company properly applied the Approved Methodologies, particularly insofar as this request seeks such plans for the years 2023 through 2026 when this proceeding relates only to the 12 month test year ending September 30, 2025.

Subject to and without waiver of the foregoing objections, the Company is willing to meet and confer with the Consumer Advocate regarding the grounds for which this document is being sought and whether those issues may be addressed through means that will protect the Company's confidentiality interests in unrelated portions or versions of the document being requested. Responsive materials are being withheld based on this objection.

Atmos Energy Corporation, Tennessee Division
Consumer Advocate DR Set No. 1
Question No. 1-09
Page 1 of 1

REQUEST:

Relying upon the Company's 2026 capital budget forecast as well as other existing Atmos Energy forecasts, provide the estimated revenue deficiency/sufficiency forecast for the Company's 2027 ARM filing covering operations for the twelve months ending September 30, 2026.

RESPONSE:

Atmos Energy objects to this request on the grounds that it is not relevant to any issue in this proceeding. Budget forecasts and estimates have no relevance to whether the Company followed the Approved Methodologies for the test year ending September 30, 2025, as evidenced by the fact that they have never been requested or produced in connection with any prior ARM docket and are not required by any provision of the ARM Tariff, any prior Commission Order, or any provision of Tenn. Code Ann. § 65-5-103(d)(6). Further, this request is premature, as it relates to items that will be discussed in the 2027 ARM proceeding; in the event the Consumer Advocate has concerns regarding that filing, the proper venue for raising those concerns will be in that proceeding. Permitting parties to litigate future ARM revenue requirements in current dockets would undermine the structured annual process established by the statute and tariff and create the risk of wasteless re-litigation of issues across various dockets. In addition, this Request seeks, by definition, forecasts and estimates, which are not based on any actual recorded amount, relate to an ongoing test period, and are therefore inherently provisional and speculative. The Company is withholding responsive materials based on these objections.

Docket No. 26-00009
Atmos Energy Corporation, Tennessee Division
Consumer Advocate DR Set No. 1
Question No. 1-14
Page 1 of 1

REQUEST:

Refer to Atmos Energy's Tariff, Tariff Sheet 63. Provide the analysis supporting the non-collection of AIC for all Mains installed in the period 2023-2025, to serve customers. For each main project listed, identify the associated mileage of Main and the date the expected revenue was anticipated to begin.

RESPONSE:

Atmos Energy objects to this request to the extent it seeks the analysis supporting non-collection of AIC for any and all Mains installed during a period of three years on the grounds that it is irrelevant, overly broad, and unduly burdensome. The Company does not store this analysis in a central repository; as such, responding to this Request would require a cumbersome manual process of locating and collecting hundreds of such analysis from a variety of locations. Such a project is particularly onerous here, when the request seeks such calculations going back to 2023 even though this proceeding relates solely to the test year ending September 30, 2025. The Company is withholding responsive materials based on these objections.

Subject to and without waiver of the foregoing objections, the Company states that it determines whether to collect AIC based upon the results of analysis it performs as described in section 7.1 of its Tariff Sheet 63 (inserted below).

The Company will install all mains necessary to serve the Customer(s) free of charge, provided the revenue expected to be realized produces a rate of return on the investment that is equal to or greater than the minimum allowed rate of return on equity approved in the Company's most recent rate case. This rate of return analysis will be based on a feasibility study performed by the Company. This study will include consideration of all costs needed to provide service (materials, Company and/or contract labor, overheads, and applicable taxes). These costs will be compared to the revenue that is either contracted for or can be reasonably expected to be generated by the Customers served by the extension. Should this analysis result in a rate of return (ROE) less than the minimum allowed rate of return approved in the Company's most recent rate case, then the Customer(s) may be required to remit to the Company an Aid-in-Construction (AIC), including any applicable taxes, to make up the difference in the actual and allowable rate of return.

ATTACHMENT:

CA_1-14_Att1 - Miles of Main and Revenue Date Miles to Ft.xlsx