BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

IN THE MATTER OF THE APPLICATION	**)**	
OF ATMOS ENERGY CORPORATION	**)**	**Docket No.**
FOR REVIEW AND ADJUSTMENT OF ITS	**)**	**26-ATMG-____-RTS**
NATURAL GAS RATES	**)**	

DIRECT TESTIMONY OF DYLAN W. D'ASCENDIS

JULY 25, 2025

SUBMITTED ON BEHALF OF

ATMOS ENERGY CORPORATION

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dylan W. D'Ascendis. My business address is 1820 Chapel Ave., W., Suite 300, Cherry Hill, N.J. 08003.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a Partner at ScottMadden, Inc.

Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE AND EDUCATIONAL BACKGROUND.

A. I have offered expert testimony on behalf of investor-owned utilities before over 40 state regulatory commissions in the United States, the Federal Energy Regulatory Commission, the National Energy Regulator in Canada, the Alberta Utility Commission, one American Arbitration Association panel, and the Superior Court of Rhode Island on issues including, but not limited to, common equity cost rate, rate of return, valuation, capital structure, class cost of service, and rate design.

On behalf of the American Gas Association ("AGA"), I calculate the AGA Gas Index, which serves as the benchmark against which the performance of the American Gas Index Fund ("AGIF") is measured on a monthly basis. The AGA Gas Index and AGIF are a market capitalization-weighted index and mutual fund, respectively, comprised of the common stocks of the publicly traded corporate members of the AGA.

I am a member of the Society of Utility and Regulatory Financial Analysts ("SURFA"). In 2011, I was awarded the professional designation "Certified Rate of Return Analyst" by SURFA, which is based on education, experience, and the successful completion of a comprehensive written examination.

I am also a member of the National Association of Certified Valuation Analysts ("NACVA") and was awarded the professional designation "Certified Valuation Analyst" by the NACVA in 2015.

I am a graduate of the University of Pennsylvania, where I received a Bachelor of Arts degree in Economic History. I have also received a Master of Business Administration with high honors and concentrations in Finance and International Business from Rutgers University.

The details of my educational background and expert witness appearances are included in Appendix A.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present evidence and provide a recommendation regarding Atmos Energy Corporation's Kansas operations ("Atmos Energy" or the "Company") relative to the appropriate cost of common equity which the Company should be afforded the opportunity to earn on its jurisdictional rate base.

Q. WHAT IS YOUR RECOMMENDED RETURN ON COMMON EQUITY ("ROE") FOR ATMOS ENERGY?

A. I recommend that the Kansas Corporation Commission ("Commission") authorize Atmos Energy the opportunity to earn an ROE of 10.80% on its jurisdictional rate base. The ratemaking capital structure and debt cost rates are sponsored by Company Witness Joe Christian. The overall rate of return is summarized on page 1 of Exhibit DWD-1 and in Table 1 below:

Table 1: Summary of Recommended Weighted Average Cost of Capital

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate
Long-Term Debt	38.94%	4.13%	1.61%
Common Equity	61.06%	10.80%	6.59%
Total	100.00%		8.20%

II. SUMMARY OF TESTIMONY

Q. PLEASE SUMMARIZE YOUR RECOMMENDED COMMON EQUITY COST RATE.

A. My recommended common equity cost rate of 10.80% is summarized on page 2 of Exhibit DWD-1. I have assessed the market-based common equity cost rates of companies of relatively similar, but not necessarily identical, risk to Atmos Energy. Using companies of relatively comparable risk as proxies is consistent with the principles of fair rate of return established in the *Hope*[1] and *Bluefield*[2] decisions. No proxy group can be identical in risk to any single company. Consequently, there must be an evaluation of relative risk between the Company and the proxy group to determine if it is appropriate to adjust the proxy group's indicated rate of return.

My recommendation results from the application of several cost of common equity models, specifically the Discounted Cash Flow ("DCF") model, the Risk Premium Model ("RPM"), and the Capital Asset Pricing Model ("CAPM"), to the market data of a proxy group of eight natural gas distribution utilities ("Utility Proxy Group") whose selection criteria will be discussed below. In addition, I applied these same models to a proxy group of 34 domestic, non-price regulated

[1] *Fed. Power Comm'n v. Hope Nat. Gas Co.*, 320 U.S. 591, 64 S. Ct. 281, 88 L. Ed. 333 (1944) ("*Hope*").
[2] *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*").

companies comparable in total risk to the Utility Proxy Group ("Non-Price Regulated Proxy Group"). The results derived from each are as follows:

Table 2: Summary of Common Equity Cost Rates

Discounted Cash Flow Model	10.39%
Risk Premium Model	10.69%
Capital Asset Pricing Model	10.88%
Market Models Applied to Comparable Risk, Non-Price Regulated Companies	11.32%
Indicated Range of Common Equity Cost Rates Before Adjustments for Company-Specific Risk	10.39% - 11.32%
Business Risk Adjustment	0.20%
Credit Risk Adjustment	-0.06%
Flotation Cost Adjustment	0.04%
Indicated Range of Common Equity Cost Rates after Adjustment	10.57%– 11.50%
Recommended Cost of Common Equity	10.80%

The indicated range of common equity cost rates applicable to the Utility Proxy Group is between 10.39% and 11.32%, before any Company-specific adjustments.

To reflect Atmos Energy's specific risks, I then adjusted the indicated common equity cost rate model results to reflect the Company's smaller relative size (0.20%) and higher bond rating (-0.06%), as compared to the Utility Proxy Group. I also adjusted the indicated range of common equity cost rate upward to reflect flotation costs (0.04%).[3] These adjustments resulted in a Company-specific

[3] *See* Section VII for a detailed discussion of my cost of common equity adjustments.

indicated range of common equity cost rates between 10.57% and 11.50%. From the unadjusted and adjusted ranges, I recommend the Commission adopt an ROE of 10.80% for ratemaking purposes in this case.

Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

A. The remainder of my Direct Testimony is organized as follows:

- Section III – Provides a summary of financial theory and regulatory principles pertinent to the development of the cost of common equity;
- Section IV – Explains my selection of the Utility Proxy Group used to develop my analytical results;
- Section V – Describes the analyses on which my recommendation is based;
- Section VI – Summarizes my common equity cost rate before adjustments to reflect Company-specific factors;
- Section VII – Explains my adjustments to my common equity cost rate to reflect Company-specific factors; and
- Section VIII – Presents my conclusions.

III. GENERAL PRINCIPLES

Q. WHAT GENERAL PRINCIPLES HAVE YOU CONSIDERED IN ARRIVING AT YOUR RECOMMENDED COMMON EQUITY COST RATE OF 10.80%?

A. In unregulated industries, marketplace competition is the principal determinant of the price of products or services. For regulated public utilities, regulation must act as a substitute for marketplace competition. Assuring that the utility can fulfill its

obligations to the public, while providing safe and reliable service at all times, requires a level of earnings sufficient to maintain the integrity of presently invested capital. Sufficient earnings also permit the attraction of needed new capital at a reasonable cost, for which the utility must compete with other firms of comparable risk, consistent with the fair rate of return standards established by the U.S. Supreme Court in the previously cited *Hope* and *Bluefield* cases.

The U.S. Supreme Court affirmed the fair rate of return standards in *Hope*, when it stated:

> The rate-making process under the Act, i.e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests. Thus we stated in the Natural Gas Pipeline Co. case that 'regulation does not insure that the business shall produce net revenues.' 315 U.S. at page 590, 62 S.Ct. at page 745. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. Chicago & Grand Trunk R. Co. v. Wellman, 143 U.S. 339, 345, 346 12 S.Ct. 400,402, 36 L.Ed. 176. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That 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.[4]

In summary, the U.S. Supreme Court has found a return that is adequate to attract capital at reasonable terms enables the utility to provide service while maintaining its financial integrity. As discussed above, and in keeping with established regulatory standards, that return should be commensurate with the returns expected elsewhere for investments of equivalent risk. The Commission's

[4] *Hope*, 320 U.S. at 603.

decision in this proceeding, therefore, should provide the Company with the opportunity to earn a return that is: (1) adequate to attract capital at reasonable cost and terms; (2) sufficient to ensure their financial integrity; and (3) commensurate with returns on investments in enterprises having corresponding risks.

Lastly, the required return for a regulated public utility is established on a stand-alone basis, i.e., for the utility operating company at issue in a rate case. Parent entities, like other investors, have capital constraints and must look at the attractiveness of the expected risk-adjusted return of each investment alternative in their capital budgeting process. That is, utility holding companies that own many utility operating companies or are comprised of separate divisions, have choices as to where they will invest their capital within their operating footprint. Therefore, the opportunity cost concept applies regardless of the source of the funding, public funding or corporate funding.

When funding is provided by a parent entity, the return still must be sufficient to provide an incentive to allocate equity capital to the subsidiary or business unit rather than other internal or external investment opportunities. That is, the regulated subsidiary or division must compete for capital with all the parent company's affiliates, across divisions, and with other, similarly situated utility companies. In that regard, investors value corporate entities on a sum-of-the-parts basis and expect each division within the parent company to provide an appropriate risk-adjusted return.

It therefore is important that the authorized ROE reflects the risks and prospects of the utility's operations and supports the utility's financial integrity

from a stand-alone perspective as measured by their combined business and financial risks. Consequently, the ROE authorized in this proceeding should be sufficient to support the operational (i.e., business risk) and financing (i.e., financial risk) of the Company's utility operations on a stand-alone basis.

Q. SHOULD THE COMMISSION EVALUATE ATMOS ENERGY'S KANSAS OPERATIONS AS A STAND-ALONE COMPANY FOR COST OF CAPITAL PURPOSES IN THIS CASE?

A. Yes, it should. Because the overall rates of return set in this proceeding will be applied to Atmos Energy's rate base, it should be evaluated as a stand-alone entity. To do otherwise would be discriminatory, confiscatory, and inaccurate. It is also a basic financial precept that the use of the funds invested give rise to the risk of the investment. As Brealey and Myers state:

> *The true cost of capital depends on the use to which the capital is put.*
>
> ***
>
> ***Each project should be evaluated at its own opportunity cost of capital; the true cost of capital depends on the use to which the capital is put.***[5]

Morin confirms Brealey and Myers when he states:

> Financial theory clearly establishes that the cost of equity is the risk-adjusted opportunity cost of the investors and not the cost of the specific capital sources employed by investors. The true cost of capital depends on the use to which the capital is put and not on its source. The *Hope* and *Bluefield* doctrines have made clear that the relevant considerations in calculating a company's cost of capital are the alternatives available to investors and the returns and risks associated with those alternatives.[6]

[5] Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance at 173, 198 (McGraw-Hill, 3rd ed. 1988) (italics and bold in original).

[6] Roger A. Morin, Modern Regulatory Finance at 581 (Public Utility Reports, Inc., 2021) ("Morin").

Additionally, Levy and Sarnat state:

> The firm's cost of capital is the discount rate employed to discount the firm's average cash flow, hence obtaining the value of the firm. It is also the weighted average cost of capital, as we shall see below. The weighted average cost of capital should be employed for project evaluation . . . only in cases where the risk profile of the new project is a "carbon copy" of the risk profile of the firm.[7]

Although Levy and Sarnat discuss a project's cost of capital relative to a firm's cost of capital, these principles apply equally to the use of a proxy group-based cost of capital. Each company must be viewed on its own merits, regardless of the source of its equity capital. As *Bluefield* clearly states:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; [8]

In other words, it is the "risks and uncertainties" surrounding the property employed for the "convenience of the public" which determines the appropriate level of rates. In this proceeding, the property employed "for the convenience of the public" is the rate base of Atmos Energy in Kansas. Thus, it is only the risk of investment in Atmos Energy's Kansas Division that is relevant to the determination of the cost of common equity to be applied to the common equity-financed portion of that rate base.

[7] Haim Levy & Marshall Sarnat, Capital Investment and Financial Decisions at 465 (Prentice/Hall International, 1986).
[8] *Bluefield*, 262 U.S. at 692, 43 S. Ct. at 678.

Q. WITHIN THAT BROAD FRAMEWORK, HOW IS THE COST OF CAPITAL ESTIMATED IN REGULATORY PROCEEDINGS?

A. Regulated utilities primarily use common stock and long-term debt to finance their permanent property, plant, and equipment (i.e., rate base). The fair rate of return for a regulated utility is based on its weighted average cost of capital, in which, as noted earlier, the costs of the individual sources of capital are weighted by their respective book values.

The cost of capital is the return investors require to make an investment in a firm. Investors will provide funds to a firm only if the return that they *expect* is equal to, or greater than, the return that they *require* to accept the risk of providing funds to the firm.

The cost of capital (that is, the combination of the costs of debt and equity) is based on the economic principle of "opportunity costs." Investing in any asset (whether debt or equity securities) represents a forgone opportunity to invest in alternative assets. For any investment to be sensible, its expected return must be at least equal to the return expected on alternative, comparable risk investment opportunities. Because investments with like risks should offer similar returns, the opportunity cost of an investment should equal the return available on an investment of comparable risk.

The cost of debt is contractually defined and can be directly observed as the interest rate or yield on debt securities. However, the cost of equity is not directly observable and must be estimated based on market data and various financial models. Because the cost of equity is premised on opportunity costs, the models

used to determine it are typically applied to a group of "comparable" or "proxy" companies.

In the end, the estimated cost of capital should reflect the return that investors require in light of the subject company's business and financial risks, and the returns available on comparable investments.

Q. IS THE AUTHORIZED RETURN SET IN REGULATORY PROCEEDINGS GUARANTEED?

A. No, it is not. Consistent with the *Hope* and *Bluefield* standards, the ratemaking process should provide the utility a reasonable opportunity to recover its return of, and return on, its reasonably incurred investments, but it does not guarantee that return. While a utility may have control over some factors that affect the ability to earn its authorized return (e.g., management performance, operating and maintenance expenses, etc.), there are several factors beyond a utility's control that affect its ability to earn its authorized return. Those may include factors such as weather, the economy, and the prevalence and magnitude of regulatory lag.

A. <u>Business Risk</u>

Q. PLEASE DEFINE BUSINESS RISK AND EXPLAIN WHY IT IS IMPORTANT FOR DETERMINING A FAIR RATE OF RETURN.

A. The investor-required ROE reflects investors' assessment of the total investment risk of the subject firm. Total investment risk is often discussed in the context of business and financial risk.[9]

[9] As will be discussed later in this testimony, another definition of total risk is systematic risk plus unsystematic risk.

Business risk reflects the uncertainty associated with owning a company's common stock without the company's use of debt and/or preferred stock financing. One way of considering the distinction between business and financial risk is to view the former as the uncertainty of the expected earned ROE, assuming the firm is financed with no debt.

Examples of business risks generally faced by utilities include, but are not limited to, the regulatory environment, pipeline safety requirements, mandatory environmental compliance requirements, customer mix and concentration of customers, service territory economic growth, market demand, risks and uncertainties of supply, operations, capital intensity, size, the degree of operating leverage, and the like, all of which have a direct bearing on earnings.

Although analysts, including rating agencies, may categorize business risks individually, as a practical matter, such risks are interrelated and not wholly distinct from one another. When determining an appropriate ROE, the relevant issue is where investors see the subject company in relation to other similarly situated utility companies (i.e., the Utility Proxy Group). To the extent investors view a company as being exposed to higher risk, the required return will increase, and vice versa.

For regulated utilities, business risks are both long-term and near-term in nature. Whereas near-term business risks are reflected in year-to-year variability in earnings and cash flow brought about by economic or regulatory factors, long-term business risks reflect the prospect of an impaired ability of investors to obtain both a fair rate of return on, and return of, their capital. Moreover, because utilities

accept the obligation to provide safe, adequate and reliable service (in exchange for a reasonable opportunity to earn a fair return on their investment), they generally do not have the option to delay, defer, or reject capital investments. Because those investments are capital-intensive, utilities generally do not have the option to avoid raising external funds during periods of capital market distress, if necessary.

Because utilities invest in long-lived assets, long-term business risks are of paramount concern to equity investors. That is, the risk of not recovering the return on their investment extends far into the future. The timing and nature of events that may lead to losses, however, also are uncertain and, consequently, those risks and their implications for the required ROE tend to be difficult to quantify. Regulatory commissions (like investors who commit their capital) must review a variety of quantitative and qualitative data and apply their reasoned judgment to determine how long-term risks weigh in their assessment of the market-required ROE.

B. Financial Risk

Q. PLEASE DEFINE FINANCIAL RISK AND EXPLAIN WHY IT IS IMPORTANT IN DETERMINING A FAIR RATE OF RETURN.

A. Financial risk is the additional risk created by the introduction of debt and preferred stock into the capital structure. The higher the proportion of debt and preferred stock in the capital structure, the higher the financial risk to common equity owners (i.e., failure to receive dividends due to default or other covenants). Therefore, consistent with the basic financial principle of risk and return, common equity investors demand higher returns as compensation for bearing higher financial risk.

Q. CAN BOND AND CREDIT RATINGS BE A PROXY FOR A FIRM'S COMBINED BUSINESS AND FINANCIAL RISKS TO EQUITY OWNERS (I.E., INVESTMENT RISK)?

A. Yes, similar bond ratings/issuer credit ratings reflect, and are representative of, similar combined business and financial risks (i.e., total risk) faced by bond investors.[10] Although specific business or financial risks may differ between companies, the same bond/credit rating indicates that the combined risks are roughly similar from a debtholder perspective. The caveat is that these debtholder risk measures do not translate directly to risks for common equity.

Q. DO RATING AGENCIES ACCOUNT FOR COMPANY SIZE IN THEIR BOND RATINGS?

A. No. Neither Standard & Poor's ("S&P") nor Moody's Investor Service ("Moody's") have minimum company size requirements for any given rating level. This means, all else equal, a relative size analysis must be conducted for equity investments in companies with similar bond ratings.

IV. ATMOS ENERGY'S OPERATIONS AND THE UTILITY PROXY GROUP

Q. ARE YOU FAMILIAR WITH ATMOS ENERGY'S OPERATIONS?

A. Yes. Atmos Energy's operations serve approximately 140,000 customers in Kansas.[11] Atmos Energy's gas operations are not publicly-traded as they comprise an operating division of Atmos Energy Corporation ("ATO"), which operates in

[10] Risk distinctions within S&P's bond rating categories are recognized by a plus or minus, e.g., within the A category, an S&P rating can by at A+, A, or A-. Similarly, risk distinction for Moody's ratings are distinguished by numerical rating gradations, e.g., within the A category, a Moody's rating can be A1, A2 and A3.

[11] Atmos Energy Corporation, 2024 SEC Form 10-K, at 4.

eight states[12] and serves approximately 3.3 million gas customers[13] and is publicly-traded under symbol ATO.

Q. WHY IS IT NECESSARY TO DEVELOP A PROXY GROUP WHEN ESTIMATING THE ROE FOR THE COMPANY?

A. Because Atmos Energy's Kansas Division is not publicly traded and does not have publicly traded equity securities, it is necessary to develop groups of publicly traded, comparable companies to serve as "proxies" for the Company. In addition to the analytical necessity of doing so, the use of proxy companies is consistent with the *Hope* and *Bluefield* comparable risk standards, as discussed above. I have selected two proxy groups that, in my view, are fundamentally risk-comparable to the Company: a Utility Proxy Group and a Non-Price Regulated Proxy Group, which is comparable in total risk to the Utility Proxy Group.[14]

Even when proxy groups are carefully selected, it is common for analytical results to vary from company to company. Despite the care taken to ensure comparability, because no two companies are identical, market expectations regarding future risks and prospects will vary within the proxy group. It therefore is common for analytical results to reflect a seemingly wide range, even for a group of similarly situated companies. At issue is how to estimate the ROE from within that range. That determination will be best informed by employing a variety of sound analyses that necessarily must consider the sort of quantitative and qualitative information discussed throughout my Direct Testimony. Additionally, a

[12] *Id.* In addition to Kansas, ATO also serves customers in Kentucky, Louisiana, Texas, Virginia, Colorado, Mississippi, and Tennessee.
[13] Atmos Energy Corporation, 2024 SEC Form 10-K, at 4.
[14] The development of the Non-Price Regulated Proxy Group is explained in more detail in Section V.

relative risk analysis between the Company and the Utility Proxy Group must be made to determine whether or not explicit Company-specific adjustments need to be made to the Utility Proxy Group's indicated results.

Q. PLEASE EXPLAIN HOW YOU CHOSE THE COMPANIES IN THE UTILITY PROXY GROUP.

A. The companies selected for the Utility Proxy Group met the following criteria:

(i) They were included in the Natural Gas Utility Group of *Value Line's Standard Edition* (*Value Line*) (May 23, 2025);

(ii) They have 60% or greater of fiscal year 2024 total operating income derived from, or 60% or greater of fiscal year 2024 total assets attributable to, regulated gas distribution operations;

(iii) At the time of preparation of this testimony, they had not publicly announced that they were involved in any major merger or acquisition activity (i.e., one publicly-traded utility merging with or acquiring another);

(iv) They have not cut or omitted their common dividends during the five years ended 2024 or through the time of preparation of this testimony;

(v) They have *Value Line* and Bloomberg Professional Services ("Bloomberg") adjusted Beta coefficients ("beta");

(vi) They have positive *Value Line* five-year dividends per share ("DPS") growth rate projections; and

(vii) They have *Value Line*, Zacks, or S&P Capital IQ consensus five-year earnings per share ("EPS") growth rate projections.

The following eight companies met these criteria:

Table 3: Gas Utility Proxy Group Screening Results

Company	Ticker
Atmos Energy Corporation	ATO
Chesapeake Utilities Corp.	CPK
New Jersey Resources Corporation	NJR
NiSource Inc.	NI
Northwest Natural Holding Company	NWN
ONE Gas, Inc.	OGS
Southwest Gas Holdings, Inc.	SWX
Spire Inc.	SR

V. COMMON EQUITY COST RATE MODELS

Q. IS IT IMPORTANT THAT COST OF COMMON EQUITY MODELS BE MARKET BASED?

A. Yes. Utility companies are consistently investing in assets to ensure safe and reliable service. Because of this, they need access to capital markets, in which they compete for capital from firms of comparable risk (including non-utilities). The cost of common equity is thus determined based on equity market expectations for the returns of those companies. If an individual investor is choosing to invest their capital among companies of comparable risk, they will choose a company providing a higher return over a company providing a lower return.

Q. ARE YOUR COST OF COMMON EQUITY MODELS MARKET BASED?

A. Yes. The DCF model uses market prices in developing the model's dividend yield component. The RPM uses bond ratings and expected bond yields that reflect the market's assessment of bond/credit risk. In addition, betas (β), which reflect the market/systematic risk component of equity risk premium, are derived from

regression analyses of market prices. The CAPM is market-based for many of the same reasons that the RPM is market-based (i.e., the use of expected bond yields and betas). Selection criteria for comparable risk non-price regulated companies are based on regression analyses of market prices and reflect the market's assessment of total risk.

Q. WHAT ANALYTICAL APPROACHES DID YOU USE TO DETERMINE THE COMPANY'S ROE?

A. As discussed earlier, I have relied on the DCF model, the RPM, and the CAPM, which I apply to the Utility Proxy Group described above. I also applied these same models to a Non-Price Regulated Proxy Group described later in this section.

I rely on these models because reasonable investors use a variety of tools and do not rely exclusively on a single source of information or single model. Moreover, the models on which I rely focus on different aspects of return requirements and provide different insights to investors' views of risk and return. The DCF model, for example, estimates the investor-required return assuming a constant expected dividend yield and growth rate in perpetuity, while Risk Premium-based methods (i.e., the RPM and CAPM approaches) provide the ability to reflect investors' views of risk, future market returns, and the relationship between interest rates and the cost of common equity. Just as the use of market data for the Utility Proxy Group adds the reliability necessary to inform expert judgment in arriving at a recommended common equity cost rate, the use of multiple generally accepted common equity cost rate models also adds reliability and accuracy when arriving at a recommended common equity cost rate.

A. Discounted Cash Flow Model

Q. WHAT IS THE THEORETICAL BASIS OF THE DCF MODEL?

A. The theory underlying the DCF model is that the present value of an expected future stream of net cash flows during the investment holding period can be determined by discounting those cash flows at the cost of capital, or the investors' capitalization rate. DCF theory indicates that an investor buys a stock for an expected total return rate, which is derived from the cash flows received from dividends and market price appreciation. Mathematically, the dividend yield on market price plus a growth rate equals the capitalization rate; i.e., the total common equity return rate expected by investors.

$$K_e = (D_0 (1+g))/P + g$$

where:

K_e = the required Return on Common Equity;

D_0 = the annualized Dividend Per Share;

P = the current stock price; and

g = the growth rate.

Q. WHICH VERSION OF THE DCF MODEL DID YOU USE?

A. I used the single-stage constant growth DCF model in my analyses.

Q. PLEASE DESCRIBE THE DIVIDEND YIELD YOU USED IN APPLYING THE CONSTANT GROWTH DCF MODEL.

A. The unadjusted dividend yields are based on the proxy companies' dividends as of May 30, 2025, divided by the average closing market price for the 60 trading days

ended May 30, 2025.[15]

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE DIVIDEND YIELD.

A. Because dividends are paid periodically (e.g., quarterly), as opposed to continuously (daily), an adjustment must be made to the dividend yield. This is often referred to as the discrete, or the Gordon Periodic, version of the DCF model.

DCF theory calls for using the full growth rate, or D_1, in calculating the model's dividend yield component. Since the companies in the Utility Proxy Group increase their quarterly dividends at various times during the year, a reasonable assumption is to reflect one-half the annual dividend growth rate in the dividend yield component, or $D_{1/2}$. Because the dividend should be representative of the next 12-month period, this adjustment is a conservative approach that does not overstate the dividend yield. Therefore, the actual average dividend yields in Column 1, page 1 of Exhibit DWD-2 have been adjusted upward to reflect one-half the average projected growth rate shown in Column 5.

Q. PLEASE EXPLAIN THE BASIS FOR THE GROWTH RATES YOU APPLY TO THE UTILITY PROXY GROUP IN YOUR CONSTANT GROWTH DCF MODEL.

A. Investors are likely to rely on widely available financial information services, such as *Value Line*, Zacks, and S&P Capital IQ. Investors realize that analysts have significant insight into the dynamics of the industries and individual companies they analyze, as well as companies' ability to effectively manage the effects of changing laws and regulations, and ever-changing economic and market conditions.

[15] *See*, column 1, page 1 of Exhibit DWD-2.

For these reasons, I used analysts' five-year forecasts of EPS growth in my DCF analysis.

Over the long run, there can be no growth in DPS without growth in EPS. Security analysts' earnings expectations have a more significant influence on market prices than dividend expectations. Thus, using earnings growth rates in a DCF analysis provides a better match between investors' market price appreciation expectations and the growth rate component of the DCF.

Q. PLEASE SUMMARIZE THE CONSTANT GROWTH DCF MODEL RESULTS.

A. The results of applying the DCF model to the Utility Proxy Groups are shown on page 1 of Exhibit DWD-2 and in Table 4 below:

Table 4: DCF Model Results for the Utility Proxy Group

Mean	10.32%
Median	10.45%
Average of Mean and Median	10.39%

In arriving at a conclusion for the constant growth DCF-indicated common equity cost rate for the Utility Proxy Group, I relied on an average of the mean and median results of the DCF, specifically 10.39%. This approach takes into consideration all proxy company results while mitigating high and low side outliers of those results.[16]

B. The Risk Premium Model

Q. PLEASE DESCRIBE THE THEORETICAL BASIS OF THE RPM.

A. The RPM is based on the fundamental financial principle of risk and return; namely,

[16] Excluding DCF results that are over two standard deviations from the mean.

that investors require greater returns for bearing greater risk. The RPM recognizes that common equity capital has greater investment risk than debt capital, as common equity shareholders are behind debt holders in any claim on a company's assets and earnings. As a result, investors require higher returns from common stocks than from bonds to compensate them for bearing the additional risk.

While it is possible to directly observe bond returns and yields, investors' required common equity returns cannot be directly determined or observed. According to RPM theory, one can estimate a common equity risk premium over bonds (either historically or prospectively) and use that premium to derive a cost rate of common equity. The cost of common equity equals the expected cost rate for long-term debt capital, plus a risk premium over that cost rate, to compensate common shareholders for the added risk of being unsecured and last-in-line for any claim on the corporation's assets and earnings in the event of liquidation.

Q. PLEASE EXPLAIN THE TOTAL MARKET APPROACH RPM.

A. The total market approach RPM adds a prospective public utility bond yield to an average of: (1) an equity risk premium that is derived from a beta-adjusted total market equity risk premium, (2) an equity risk premium based on the S&P Utilities Index, and (3) an equity risk premium based on authorized ROEs for natural gas distribution utilities.

Q. PLEASE EXPLAIN THE BASIS OF THE EXPECTED BOND YIELDS OF 5.77% APPLICABLE TO THE UTILITY PROXY GROUP.

A. The first step in the total market approach RPM analysis is to determine the expected bond yield. Because both ratemaking and the cost of capital, including

the common equity cost rate, are prospective in nature, a prospective yield on similarly-rated long-term debt is essential. I relied on a consensus forecast of about 50 economists of the expected yield on Aaa-rated corporate bonds for the six calendar quarters ending with the third calendar quarter of 2026, and *Blue Chip Financial Forecast's ("Blue Chip")* long-term projections for 2027 to 2031, and 2032 to 2036. As shown on line 1, page 1 of Exhibit DWD-3, the average expected yield on Moody's Aaa-rated corporate bonds is 5.25%. In order to adjust the expected Aaa-rated corporate bond yield to an equivalent A2-rated public utility bond yield, I made an upward adjustment of 0.46%, which represents a recent spread between Aaa-rated corporate bonds and A2-rated public utility bonds.[17] Adding that recent 0.46% spread to the expected Aaa-rated corporate bond yield of 5.25% results in an expected A2-rated public utility bond yield of 5.71%.

Since the Utility Proxy Group's average Moody's long-term issuer rating is A3, another adjustment to the expected A2 rated public utility bond yield is needed to reflect the difference in bond ratings. An upward adjustment of 0.06%, which represents one-third of a recent spread between A2 and Baa2 rated public utility bond yields, is necessary to make the A2 rated prospective bond yield applicable to an A3 rated public utility bond.[18] Adding the 0.06% to the 5.71% prospective A2 rated public utility bond yield results in a 5.77% expected bond yield for the Utility Proxy Group.

[17] As shown on line 2 of page 1 of Exhibit DWD-3 and explained in note 2, page 1 of Exhibit DWD-3.

[18] As shown on line 4 and explained in note 3, page 1 of Exhibit DWD-3. Moody's does not provide public utility bond yields for A3 rated bonds. As such, it was necessary to estimate the difference between A2 rated and A3 rated public utility bonds. Because there are three steps between Baa2 and A2 (Baa2 to Baa1, Baa1 to A3, and A3 to A2) I assumed an adjustment of one-third of the difference between the A2 rated and Baa2 rated public utility bond yield was appropriate.

Table 5: Summary of the Calculation of the Utility Proxy Group Projected Bond Yield[19]

Prospective Yield on Moody's Aaa-Rated Corporate Bonds (*Blue Chip*)	5.25%
Adjustment to Reflect Yield Spread Between Moody's Aaa-Rated Corporate Bonds and Moody's A2-Rated Utility Bonds	0.46%
Adjustment to Reflect the Utility Proxy Group's Average Moody's Bond Rating of A3	0.06%
Prospective Bond Yield Applicable to the Utility Proxy Group	5.77%

1. The Beta-Derived Risk Premium

Q. PLEASE EXPLAIN HOW THE BETA-DERIVED EQUITY RISK PREMIUM IS DETERMINED.

A. The components of the beta-derived RPM are: (1) an expected market equity risk premium over corporate bonds, and (2) the beta. The derivation of the beta-derived equity risk premium that I applied to the Utility Proxy Group is shown on lines 1 through 8, on page 6 of Exhibit DWD-3. The total beta-derived equity risk premium I applied is based on an average of three historical market data-based equity risk premiums, a *Value Line*-based equity risk premium, and a combined *Value Line*, Bloomberg, and S&P Capital IQ-based equity risk premium. Each of these are described below.

Q. HOW DID YOU DERIVE A MARKET EQUITY RISK PREMIUM BASED ON LONG-TERM HISTORICAL DATA?

A. To derive a historical market equity risk premium, I used the most recent holding period returns for the large company common stocks less the average historical

[19] As shown on page 1 of Exhibit DWD-3.

yield on Moody's Aaa/Aa-rated corporate bonds for the period 1928 to 2024. The use of holding period returns over a very long period of time is appropriate because it is consistent with the long-term investment horizon presumed by investing in a going concern, i.e., a company expected to operate in perpetuity.

The long-term arithmetic mean monthly total return rate on large company common stocks was 12.05% and the long-term arithmetic mean monthly yield on Moody's Aaa/Aa-rated corporate bonds was 5.95% from 1928 to 2024. As shown on line 1 of page 6 of Exhibit DWD-3, subtracting the mean monthly bond yield from the total return on large company stocks results in a long-term historical equity risk premium of 6.10%.

I used the arithmetic mean monthly total return rates for the large company stocks and yields (income returns) for the Moody's Aaa/Aa-rated corporate bonds, because they are appropriate for the purpose of estimating the cost of capital as noted in Kroll's Stocks, Bonds, Bills, and Inflation ("SBBI") Yearbook 2023 ("SBBI - 2023").[20] The use of the arithmetic mean return rates and yields is appropriate because historical total returns and equity risk premiums provide insight into the variance and standard deviation of returns needed by investors in estimating future risk when making a current investment. If investors relied on the geometric mean of historical equity risk premiums, they would have no insight into the potential variance of future returns because the geometric mean relates the change over many periods to a constant rate of change, thereby obviating the year-to-year fluctuations, or variance, which is critical to risk analysis.

[20] SBBI – 2023, at 193-194.

Q. PLEASE EXPLAIN THE DERIVATION OF THE REGRESSION-BASED MARKET EQUITY RISK PREMIUM.

A. To derive the regression-based market equity risk premium of 6.94% shown on line 2, page 6 of Exhibit DWD-3, I used the same monthly annualized total returns on large company common stocks relative to the monthly annualized yields on Moody's Aaa/Aa-rated corporate bonds as mentioned above. I modeled the relationship between interest rates and the market equity risk premium using the observed monthly market equity risk premium as the dependent variable, and the monthly yield on Moody's Aaa/Aa-rated corporate bonds as the independent variable. I then used a linear Ordinary Least Squares ("OLS") regression, in which the market equity risk premium is expressed as a function of the Moody's Aaa/Aa-rated corporate bond yield:

$$RP = \alpha + \beta\ (R_{Aaa/Aa})$$

where:

RP = the market equity risk premium;

α = the regression intercept coefficient;

β = the regression slope coefficient; and

$R_{Aaa/Aa}$ = the Moody's Aaa/Aa rated corporate bond yield.

Q. PLEASE EXPLAIN THE DERIVATION OF THE PRPM EQUITY RISK PREMIUM.

A. The PRPM, published in the *Journal of Regulatory Economics*,[21] was developed from the work of Robert F. Engle, who shared the Nobel Prize in Economics in

[21] Pauline M. Ahern, Frank J. Hanley, and Richard A. Michelfelder, "A New Approach to Estimating the Cost of Common Equity Capital for Public Utilities", The Journal of Regulatory Economics (August 2011), 40:261-278.

2003 “for methods of analyzing economic time series with time-varying volatility” or ARCH.[22] Engle found that volatility changes over time and is related from one period to the next, especially in financial markets. Engle discovered that volatility of prices and returns clusters over time and is, therefore, highly predictable and can be used to predict future levels of risk and risk premiums.

The PRPM estimates the risk-return relationship directly, as the predicted equity risk premium is generated by predicting volatility or risk. The PRPM is not based on an estimate of investor behavior, but rather on an evaluation of the results of that behavior (i.e., the variance of historical equity risk premiums).

The inputs to the model are the historical returns on large company stocks minus the historical monthly yield on Moody’s Aaa/Aa-rated corporate bonds from January 1928 through May 2025. Using a generalized form of ARCH, known as GARCH, I calculated each of the projected equity risk premiums using Eviews© statistical software. When the GARCH model is applied to the historical return data, it produces a predicted GARCH variance series and a GARCH coefficient. Multiplying the predicted monthly variance by the GARCH coefficient and then annualizing, it produces the predicted annual equity risk premium. The resulting PRPM predicted a market equity risk premium of 7.66%.[23]

Q. PLEASE EXPLAIN THE DERIVATION OF A PROJECTED EQUITY RISK PREMIUM BASED ON *VALUE LINE* SUMMARY & INDEX DATA FOR YOUR RPM ANALYSIS.

[22] Autoregressive conditional heteroscedasticity; *see also* https://www.nobelprize.org/prizes/economic-sciences/2003/engle/facts/.

[23] Shown on line 3, page 6 of Exhibit DWD-3.

A. As noted above, because both ratemaking and the cost of capital are prospective, a prospective market equity risk premium is needed. The derivation of the forecasted or prospective market equity risk premium can be found in note 1, page 2 of Exhibit DWD-4. Consistent with my calculation of the dividend yield component in my DCF analysis, this prospective market equity risk premium is derived from an average of the three-to five-year median market price appreciation potential by *Value Line* for the 13 weeks ended May 30, 2025, plus an average of the median estimated dividend yield for the common stocks of the 1,700 firms covered in *Value Line* (Standard Edition).[24]

The average median expected price appreciation is 58.00%, which translates to a 12.12% annual appreciation, and when added to the average of *Value Line's* median expected dividend yields of 2.28%, equates to a forecasted annual total return rate on the market of 14.40%. The forecasted Moody's Aaa-rated corporate bond yield of 5.25% is deducted from the total market return of 14.40%, resulting in an equity risk premium of 9.15%, as shown on line 4, page 6 of Exhibit DWD-3.

Q. PLEASE EXPLAIN THE DERIVATION OF AN EQUITY RISK PREMIUM BASED ON THE S&P 500 COMPANIES.

A. Using data from *Value Line*, Bloomberg, and S&P Capital IQ, I calculated an expected total return on the S&P 500 companies using expected dividend yields and long-term growth estimates as a proxy for capital appreciation. The expected total return for the S&P 500 is 15.34%. Subtracting the prospective yield on

[24] As explained in detail in note 1, page 2 of Exhibit DWD-4.

Moody's Aaa-rated corporate bonds of 5.25% results in a 10.09% projected equity risk premium as shown on page 6, line 5 of Exhibit DWD-3.

Q. WHAT IS YOUR CONCLUSION OF A BETA-DRIVEN EQUITY RISK PREMIUM FOR USE IN YOUR RPM ANALYSIS?

A. I gave equal weight to all five equity risk premiums– historical, *Value Line*, and Bloomberg, *Value Line* and S&P Capital IQ – in arriving at a 7.99% equity risk premium.

Table 6: Summary of the Calculation of the Equity Risk Premium Using Total Market Returns[25]

Historical Spread Between Total Returns of Large Stocks and Aaa and Aa-Rated Corporate Bond Yields (1928 – 2024)	6.10%
Regression Analysis on Historical Data	6.94%
PRPM Analysis on Historical Data	7.66%
Prospective Equity Risk Premium using Total Market Returns from *Value Line* Summary & Index less Projected Aaa Corporate Bond Yields	9.15%
Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns for the S&P 500 less Projected Aaa Corporate Bond Yields	10.09%
Average	7.99%

After calculating the average market equity risk premium of 7.99%, I adjusted it by beta to account for the risk of the Utility Proxy Group. As discussed below, beta is a meaningful measure of prospective relative risk to the market as a whole, and is a logical way to allocate a company's, or proxy group's, share of the market's total equity risk premium relative to corporate bond yields. As shown on page 1 of Exhibit DWD-4, the average of the mean and median beta for the Utility

[25] As shown on page 6 of Exhibit DWD-3.

Proxy Group is 0.67. Multiplying beta by the market equity risk premium of 7.99% results in a 5.35% beta-adjusted equity risk premium.

2. The S&P Utility Index-Derived Risk Premium

Q. HOW DID YOU DERIVE THE EQUITY RISK PREMIUM BASED ON THE S&P UTILITY INDEX AND MOODY'S A2-RATE PUBLIC UTILITY BONDS?

A. I estimated three equity risk premiums based on S&P Utility Index holding period returns, and one equity risk premium based on the expected returns of the S&P Utilities Index, using *Value Line*, Bloomberg data, and S&P Capital IQ. Turning first to the S&P Utility Index holding period returns, I derived a long-term monthly arithmetic mean equity risk premium between the S&P Utility Index total returns of 10.59% and monthly Moody's A2-rated public utility bond yields of 6.42% from 1928 to 2024, to arrive at an equity risk premium of 4.16%.[26] I then used the same historical data to derive an equity risk premium of 4.82% based on a regression of the monthly equity risk premiums. The final S&P Utility Index holding period equity risk premium involved applying the PRPM using the historical monthly equity risk premiums from January 1928 to May 2025 to arrive at a PRPM-derived equity risk premium of 4.46% for the S&P Utility Index.

I then derived an expected total return on the S&P Utilities Index of 10.95% using data from *Value Line*, Bloomberg, and S&P Capital IQ, and subtracted the prospective Moody's A2-rated public utility bond yield of 5.71%.[27] This resulted in an equity risk premium of 5.24%. As with the market equity risk premiums, I

[26] As shown on line 1, page 9 of Exhibit DWD-3.
[27] Derived on line 3, page 1 of Exhibit DWD-3.

averaged the four-risk premium based estimates to arrive at my utility-specific equity risk premium of 4.67%.

Table 7: Summary of the Calculation of the Equity Risk Premium Using S&P Utility Index Holding Returns[28]

Historical Spread Between Total Returns of the S&P Utilities Index and A2-Rated Utility Bond Yields (1928 – 2024)	4.16%
Regression Analysis on Historical Data	4.82%
PRPM Analysis on Historical Data	4.46%
Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns for the S&P Utilities Index less Projected A2 Utility Bond Yields	5.24%
Average	4.67%

3. Authorized Return-Derived Equity Risk Premium

Q. HOW DID YOU DERIVE AN EQUITY RISK PREMIUM OF 4.74% BASED ON AUTHORIZED ROEs FOR NATURAL GAS DISTRIBUTION UTILITIES?

A. The equity risk premium of 4.74% shown on page 10 of Exhibit DWD-3 is the result of a regression analysis based on regulatory awarded ROEs related to the yields on Moody's A2-rated public utility bonds and contains the graphical results of a regression analysis of 848 rate cases for natural gas distribution utilities which were fully litigated during the period from January 1, 1980 through May 30, 2025. It shows the implicit equity risk premium relative to the yields on A2-rated public utility bonds immediately prior to the issuance of each regulatory decision. It is readily discernible that there is an inverse relationship between the yield on A2-rated public utility bonds and equity risk premiums. In other words, as interest rates decline, the equity risk premium rises and vice versa, a result consistent with

[28] As shown on page 9 of Exhibit DWD-3.

financial literature on the subject.[29] I used the regression results to estimate the equity risk premium applicable to the projected yield on Moody's A2-rated public utility bonds. Given the expected A2-rated utility bond yield of 5.71%, it can be calculated that the indicated equity risk premium applicable to that bond yield is 4.74%.

Q. WHAT IS YOUR CONCLUSION OF EQUITY RISK PREMIUMS FOR USE IN YOUR TOTAL MARKET APPROACH RPM?

A. The equity risk premium I applied to the Utility Proxy Group is 4.92% which is the average of the beta-adjusted equity risk premium for the Utility Proxy Group, the S&P Utilities Index, and the authorized return utility equity risk premium.

Table 8: Summary of Conclusions for the Equity Risk Premium for the Utility Proxy Group[30]

Beta-Adjusted Equity Risk Premium	5.35%
S&P Utilities Index Equity Risk Premium	4.67%
Authorized ROE Equity Risk Premium	4.74%
Average	4.92%

Q. WHAT IS THE INDICATED RPM COMMON EQUITY COST RATE BASED ON THE TOTAL MARKET APPROACH?

A. As shown on line 7 page 1 of Exhibit DWD-3, and shown on Table 9 below, I calculated a common equity cost rate of 10.69% for the Utility Proxy Group based on the total market approach RPM.

[29] *See, e.g.,* Robert S. Harris and Felicia C. Marston, "The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," Journal of Applied Finance, Vol. 11, No. 1, 2001, at 11-12; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, "The Risk Premium Approach to Measuring a Utility's Cost of Equity," Financial Management, Spring 1985, at 33-45.

[30] As shown on page 5 of Exhibit DWD-3.

Table 9: Summary of the Total Market Return Risk Premium Model[31]

Prospective Moody's Utility Bond Yield Applicable to the Utility Proxy Group	5.77%
Prospective Equity Risk Premium	4.92%
Indicated Cost of Common Equity	10.69%

C. The Capital Asset Pricing Model

Q. PLEASE EXPLAIN THE THEORETICAL BASIS OF THE CAPM.

A. CAPM theory defines risk as the co-variability of a security's returns with the market's returns as measured by the beta (β). A beta less than 1.0 indicates lower variability than the market as a whole, while a beta greater than 1.0 indicates greater variability than the market.

The CAPM assumes that all other risk (i.e., all non-market or unsystematic risk) can be eliminated through diversification. The risk that cannot be eliminated through diversification is called market, or systematic, risk. In addition, the CAPM presumes that investors require compensation only for systematic risk, which is the result of macroeconomic and other events that affect the returns on all assets. The model is applied by adding a risk-free rate of return to a market risk premium, which is adjusted proportionately to reflect the systematic risk of the individual security relative to the total market as measured by beta. The traditional CAPM model is expressed as:

$$R_s = R_f + \beta (R_m - R_f)$$

Where: R_s = Return rate on the common stock

R_f = Risk-free rate of return

R_m = Return rate on the market as a whole

[31] As shown on page 1 of Exhibit DWD-3.

β = Adjusted beta (volatility of the security relative to the market as a whole)

Numerous tests of the CAPM have measured the extent to which security returns and beta are related as predicted by the CAPM, confirming its validity. The empirical CAPM ("ECAPM") reflects the reality that while the results of these tests support the notion that the beta is related to security returns, the empirical Security Market Line ("SML") described by the CAPM formula is not as steeply sloped as the predicted SML.[32] The ECAPM reflects this empirical reality.

Q. PLEASE EXPLAIN THE THEORETICAL BASIS OF THE CAPM. WHY IS THE USE OF ECAPM APPROPRIATE IN DETERMINING THE ROE FOR THE COMPANY?

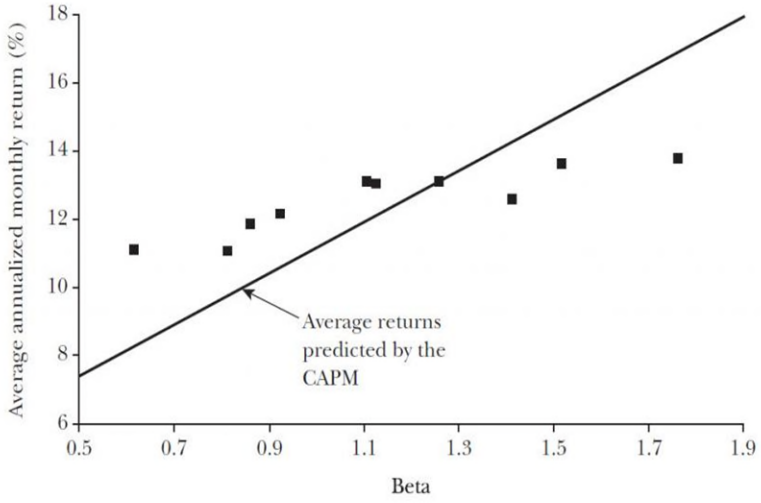
A. The ECAPM is a well-established model that has been relied on in both academic and regulatory settings. Fama & French clearly state regarding their Figure 2, below, that "[t]he returns on the low beta portfolios are too high, and the returns on the high beta portfolios are too low."[33]

[32] Morin at 223.

[33] Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," Journal of Economic Perspectives, Vol. 18, No. 3, Summer 2004 at 33 ("Fama & French").

Figure 2 http://pubs.aeaweb.org/doi/pdfplus/10.1257/0895330042162430

Average Annualized Monthly Return versus Beta for Value Weight Portfolios Formed on Prior Beta, 1928–2003



In addition, Morin observes that while the results of these tests support the notion that beta is related to security returns, the empirical SML described by the CAPM formula is not as steeply sloped as the predicted SML. Morin states:

> With few exceptions, the empirical studies agree that . . . low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.[34]
>
> * * *
>
> Therefore, the empirical evidence suggests that the expected return on a security is related to its risk by the following approximation:
>
> $$K = R_F + x\,\beta(R_M - R_F) + (1-x)\;\beta(R_M - R_F)$$
>
> where x is a fraction to be determined empirically. The value of x that best explains the observed relationship [is] Return = 0.0829 + 0.0520 β is between 0.25 and 0.30. If x = 0.25, the equation becomes:
>
> $$K = R_F + 0.25(R_M - R_F) + 0.75\,\beta(R_M - R_F)$$[35]

Fama and French provide similar support for the ECAPM when they state:

[34] Morin at 207.
[35] *Id.* at 221.

> The early tests firmly reject the Sharpe-Lintner version of the CAPM. There is a positive relation between beta and average return, but it is too 'flat.' . . . The regressions consistently find that the intercept is greater than the average risk-free rate . . . and the coefficient on beta is less than the average excess market return. . . . This is true in the early tests . . . as well as in more recent cross-section regressions tests, like Fama and French (1992).[36]

Finally, Fama and French further note:

> Confirming earlier evidence, the relation between beta and average return for the ten portfolios is much flatter than the Sharpe-Linter CAPM predicts. The returns on low beta portfolios are too high, and the returns on the high beta portfolios are too low. For example, the predicted return on the portfolio with the lowest beta is 8.3 percent per year; the actual return as 11.1 percent. The predicted return on the portfolio with the t beta is 16.8 percent per year; the actual is 13.7 percent.[37]

Clearly, the justification from Morin and Fama & French, along with their reviews of other academic research on the CAPM, validate the use of the ECAPM. In view of theory and practical research, I have applied both the traditional CAPM and the ECAPM to the companies in the Utility Proxy Groups and averaged the results.

Q. WHAT BETAS DID YOU USE IN YOUR CAPM ANALYSIS?

A. With respect to beta, I considered two methods of calculation: (1) the average of the betas of the respective proxy group companies as reported by Bloomberg, and (2) the average of the betas of the respective proxy group companies as reported by *Value Line*. While both of those services adjust their calculated (or "raw") betas to reflect the tendency of beta to regress to the market mean of 1.00, *Value Line*

[36] Fama & French at 32.
[37] *Id.* at 33.

calculates beta over a five-year period, while Bloomberg's calculation is based on two years of data.

Q. PLEASE DESCRIBE YOUR SELECTION OF A RISK-FREE RATE OF RETURN.

A. As shown in Exhibit DWD-4, the risk-free rate adopted for applications of the CAPM is 4.56%. This risk-free rate is based on the average of the *Blue Chip* consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the six quarters ending with the third calendar quarter of 2026, and long-term projections for the years 2027 to 2031 and 2032 to 2036.

Q. WHY DO YOU USE THE PROJECTED 30-YEAR TREASURY YIELD IN YOUR ANALYSES?

A. The yield on long-term U.S. Treasury bonds is almost risk-free and its term is consistent with the long-term cost of capital to public utilities measured by the yields on Moody's A2-rated public utility bonds; the long-term investment horizon inherent in utilities' common stocks; and the long-term life of the jurisdictional rate base to which the allowed fair rate of return (i.e., cost of capital) will be applied. In contrast, short-term U.S. Treasury yields are more volatile and largely a function of Federal Reserve monetary policy.

Q. PLEASE EXPLAIN THE ESTIMATION OF THE EXPECTED RISK PREMIUM FOR THE MARKET USED IN YOUR CAPM ANALYSES.

A. The basis of the market risk premium is explained in detail in note 1 on page 2 of Exhibit DWD-4. As discussed above, the market risk premium is derived from an average of three historical data-based market risk premiums, one *Value Line* data-

based market risk premium, and one *Value Line*, Bloomberg, and S&P Capital IQ data-based market risk premium.

The long-term income return on U.S. Government Securities of 4.99% was deducted from the monthly historical total market return of 12.29%, which results in an historical market equity risk premium of 7.31%.[38] I applied a linear OLS regression to the monthly annualized historical returns on the S&P 500 relative to historical yields on long-term U.S. Government Securities. That regression analysis yielded a market equity risk premium of 7.93%. The PRPM market equity risk premium is 8.57% and is derived using the PRPM relative to the yields on long-term U.S. Treasury securities from January 1926 through May 2025.

The *Value Line*-derived forecasted total market equity risk premium is derived by deducting the forecasted risk-free rate of 4.56%, discussed above, from the *Value Line* projected total annual market return of 14.40%, resulting in a forecasted total market equity risk premium of 9.84%.

The S&P 500 projected market equity risk premium using *Value Line*, Bloomberg and S&P Capital IQ data is derived by subtracting the projected risk-free rate of 4.56% from the projected total return of the S&P 500 of 15.34%. The resulting market equity risk premium is 10.78%.

These five market risk premiums, when averaged, result in an average total market equity risk premium of 8.88%.

[38] Sources: SBBI - 2023, at Appendix A-1 (1) through A-1 (3) and Appendix A-7 (19) through A-7 (21); Bloomberg Professional.

Table 10: Summary of the Calculation of the Market Risk Premium for Use in the CAPM[39]

Historical Spread Between Total Returns of Large Stocks and Long-Term Government Bond Yields (1926 – 2024)	7.31%
Regression Analysis on Historical Data	7.93%
PRPM Analysis on Historical Data	8.57%
Prospective Equity Risk Premium using Total Market Returns from *Value Line* Summary & Index less Projected 30-Year Treasury Bond Yields	9.84%
Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from for the S&P 500 less Projected 30-Year Treasury Bond Yields	10.78%
Average	8.88%

Q. WHAT ARE THE RESULTS OF YOUR APPLICATION OF THE TRADITIONAL AND ECAPM TO THE UTILITY PROXY GROUP?

A. As shown on page 1 of Exhibit DWD-4, the mean result of my CAPM/ECAPM analyses is 10.91%, the median is 10.84%, and the average of the two is 10.88%. Consistent with my reliance on the average of mean and median DCF results discussed above, the indicated common equity cost rate using the CAPM/ECAPM is 10.88%.

D. Common Equity Cost Rates for a Proxy Group of Domestic, Non-Price Regulated Companies Based on the DCF, RPM, and CAPM

Q. WHY DO YOU ALSO CONSIDER A PROXY GROUP OF DOMESTIC, NON-PRICE REGULATED COMPANIES?

A. Although I am not an attorney, my interpretation of the *Hope* and *Bluefield* cases is that they did not specify that comparable risk companies had to be utilities. Since the purpose of rate regulation is to be a substitute for marketplace competition, non-price regulated firms operating in the competitive marketplace make an excellent proxy if they are comparable in total risk to the utility proxy groups being used to

[39] As shown on page 2 of Exhibit DWD-4.

estimate the cost of common equity. The selection of such domestic, non-price regulated competitive firms theoretically and empirically results in proxy groups which is comparable in total risk to the Utility Proxy Group, since all of these companies compete for capital in the exact same markets.

Q. HOW DID YOU SELECT NON-PRICE REGULATED COMPANIES THAT ARE COMPARABLE IN TOTAL RISK TO THE UTILITY PROXY GROUP?

A. To select proxy groups of domestic, non-price regulated companies similar in total risk to the Utility Proxy Groups, I relied on betas and related statistics derived from *Value Line* regression analyses of weekly market prices over the most recent 260 weeks (i.e., five years). As shown on Exhibit DWD-5, these selection criteria resulted in a proxy group of 34 domestic, non-price regulated firms comparable in total risk to the Utility Proxy Group. Total risk is the sum of non-diversifiable market risk and diversifiable company-specific risks. The criteria used in selecting the domestic, non-price regulated firms was:

(i) They must be covered by *Value Line* (Standard Edition);

(ii) They must be domestic, non-price regulated companies, i.e., not utilities;

(iii) Their unadjusted betas must lie within plus or minus two standard deviations of the average unadjusted beta of the Utility Proxy Group; and

(iv) The residual standard errors of the *Value Line* regressions which gave rise to the unadjusted betas must lie within plus or minus two

standard deviations of the average residual standard error of the Utility Proxy Group.

Betas measure market, or systematic, risk, which is not diversifiable. The residual standard errors of the regressions measure each firm's company-specific, diversifiable risk. Companies that have similar betas and similar residual standard errors resulting from the same regression analyses have similar total investment risk.

Q. DID YOU CALCULATE COMMON EQUITY COST RATES USING THE DCF MODEL, THE RPM, AND THE CAPM FOR THE NON-PRICE REGULATED PROXY GROUP?

A. Yes. Because the DCF model, RPM, and CAPM have been applied in an identical manner as described above, I will not repeat the details of the rationale and application of each model. One exception is in the application of the RPM, where I did not use public utility-specific equity risk premiums

Page 2 of Exhibit DWD-6 derives the constant growth DCF model common equity cost rate. As shown, the indicated common equity cost rate, using the constant growth DCF for the Non-Price Regulated Proxy Group comparable in total risk to the Utility Proxy Group, is 11.26%.

Page 3 through 5 of Exhibit DWD-6 contain the data and calculations that support the 11.64% RPM common equity cost rates. As shown on line 1, page 3 of Exhibit DWD-6, the consensus prospective yield on Moody's Baa2-rated corporate bonds for the six quarters ending in the third quarter of 2026, and for the years 2027

to 2031 and 2032 to 2036, is 6.10%.[40] Since the Non-Price Regulated Proxy Group has an average Moody's long-term issuer rating of A3, it is necessary to take a two-thirds downward adjustment (0.21%) of the 0.31% spread between A2 and Baa2 corporate bond to reach an adjusted prospective bond yield of 5.89%.

When the beta-adjusted risk premium of 5.75%[41] relative to the Non-Price Regulated Proxy Group is added to the prospective A3-rated corporate bond yield of 5.89%, the indicated RPM common equity cost rate is 11.64%.

Page 6 of Exhibit DWD-6 contains the inputs and calculations that support my indicated CAPM/ECAPM common equity cost rates of 11.21%.

Q. WHAT IS THE COST RATE OF COMMON EQUITY BASED ON THE NON-PRICE REGULATED PROXY GROUP COMPARABLE IN TOTAL RISK TO THE UTILITY PROXY GROUP?

A. As shown on page 1 of Exhibit DWD-6, the results of the common equity models applied to the Non-Price Regulated Proxy Group – which is comparable in total risk to the Utility Proxy Group – are as follows:

Table 11: Summary of Model Results Applied to the Non-Price Regulated Proxy Group[42]

Discounted Cash Flow Model	11.26%
Risk Premium Model	11.64%
Capital Asset Pricing Model	11.21%
Mean	11.37%
Median	11.26%
Average of Mean and Median	11.32%

The average of the mean and median of these models is 11.32%, which I used as the indicated common equity cost rates for the Non-Price Regulated Proxy Group.

[40] *Blue Chip Financial Forecasts*, June 2, 2025, at 2 and 14.
[41] Derived on page 5 of Exhibit DWD-6.
[42] As shown on page 1 of Exhibit DWD-6.

VI. CONCLUSION OF COMMON EQUITY COST RATE BEFORE ADJUSTMENTS

Q. WHAT ARE THE INDICATED COMMON EQUITY COST RATES BEFORE ADJUSTMENTS?

A. The range of indicated ROEs produced from my analysis is from 10.39% (DCF model) and 11.32% (Non-Price Regulated Market Models), which is applicable to the Utility Proxy Group as shown on Exhibit DWD-1, page 2. I used multiple cost of common equity models as primary tools in arriving at my recommended common equity cost rate, because no single model is so inherently precise that it can be relied on to the exclusion of other theoretically sound models. Using multiple models adds reliability to the estimated common equity cost rate, with the prudence of using multiple cost of common equity models supported in both the financial literature and regulatory precedent. In view of these results, I recommend a range of ROEs applicable to the Utility Proxy Group between 10.39% and 11.32%.

As will be discussed below, Atmos Energy has unique company-specific risk factors relative to the Utility Proxy Group. Because of this, the indicated range of model results based on the Utility Proxy Group must be adjusted to reflect Atmos Energy's relative risk.

VII. ADJUSTMENTS TO THE COMMON EQUITY COST RATE

A. Size Adjustment

Q. DOES ATMOS ENERGY'S SMALLER SIZE RELATIVE TO THE UTILITY PROXY GROUP COMPANIES INCREASE ITS BUSINESS RISK?

A. Yes. Atmos Energy's[43] smaller size relative to the Utility Proxy Group companies indicates greater relative business risk for the Company because, all else being equal, size has a material bearing on risk.

Size affects business risk because smaller companies generally are less able to cope with significant events that affect sales, revenues and earnings. For example, smaller companies face more risk exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few larger customers would have a greater effect on a small company than on a bigger company with a larger, more diverse, customer base.

Investors generally demand greater returns from smaller firms to compensate for less marketability and liquidity of their securities. Kroll discusses the nature of the small-size phenomenon, providing an indication of the magnitude of the size premium based on several measures of size. In discussing "Size as a Predictor of Equity Premiums," Kroll states:

> The size effect is based on the empirical observation that companies of smaller size are associated with greater risk and, therefore, have greater cost of capital [sic]. The "size" of a company is one of the most important risk elements to consider when developing cost of equity capital estimates for use in valuing a business simply because size has been shown to be a *predictor* of equity returns. In other words, there is a significant (negative) relationship between size and

[43] This discussion specifically refers to ATO's Kansas Division.

> historical equity returns - as size *decreases*, returns tend to *increase*, and vice versa. (footnote omitted) (emphasis in original)[44]

Furthermore, in "The Capital Asset Pricing Model: Theory and Evidence," Fama and French note size is indeed a risk factor which must be reflected when estimating the cost of common equity. On page 38, they note:

> . . . the higher average returns on small stocks and high book-to-market stocks reflect unidentified state variables that produce undiversifiable risks (covariances) in returns not captured by the market return and are priced separately from market betas.[45]

Based on this evidence, Fama and French proposed their three-factor model which includes a size variable in recognition of the effect size has on the cost of common equity.

Also, it is a basic financial principle that the use of funds invested, and not the source of funds, is what gives rise to the risk of any investment.[46] Eugene Brigham, a well-known authority, states:

> A number of researchers have observed that portfolios of small-firms (sic) have earned consistently higher average returns than those of large-firm stocks; this is called the "small-firm effect." On the surface, it would seem to be advantageous to the small firm to provide average returns in the stock market that are higher than those of larger firms. In reality, it is bad news for the small firm; **what the small-firm effect means is that the capital market demands higher returns on stocks of small firms than on otherwise similar stocks of the large firms**. (emphasis added)[47]

Consistent with the financial principle of risk and return discussed above, relative risk due to size must be considered in the allowed rate of return on common

[44] Kroll, Cost of Capital Navigator: U.S. Cost of Capital Module, Size as a Predictor of Returns, at 1 (emphasis in original).
[45] Fama & French at 25-43.
[46] Brealey, Richard A. and Myers, Stewart C., Principles of Corporate Finance (McGraw-Hill Book Company, 1996), at 204-205, 229.
[47] Brigham, Eugene F., Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989), at 623.

equity. Therefore, the Commission's authorization of a cost rate of common equity in this proceeding must appropriately reflect the unique risks of Atmos Energy's Kansas operations, including its size, which is justified and supported above by evidence in the financial literature.

Q. ARE YOU AWARE OF ACADEMIC LITERATURE RELATING TO THE APPLICABILITY OF A SIZE PREMIUM?

A. Yes. An article by Michael A. Paschall, ASA, CFA, and George B. Hawkins ASA, CFA, "Do Smaller Companies Warrant a Higher Discount Rate for Risk?" also supports the applicability of a size premium. As the article makes clear, all else equal, size is a risk factor which must be taken into account when setting the cost of capital or capitalization (discount) rate. Paschall and Hawkins state in their conclusion as follows:

> The current challenge to traditional thinking about a small stock premium is a very real and potentially troublesome issue. The challenge comes from bright and articulate people and has already been incorporated into some court cases, providing further ammunition for the IRS. Failing to consider the additional risk associated with mostsmaller companies, however, is to fail to acknowledge reality. Measured properly, small company stocks have proven to be more risky over a long period of time than have larger company stocks. This makes sense due to the various advantages that larger companies have over smaller companies. Investors looking to purchase a riskier company will require a greater return on investment to compensate for that risk. There are numerous other risks affecting a particular company, yet the use of a size premium is one way to quantify the risk associated with smaller companies.[48]

Hence, Paschall and Hawkins corroborate the need to adjust for differences in size, all else equal.

[48] Michael A. Paschall, ASA, CFA and George B. Hawkins ASA, CFA, Do Smaller Companies Warrant a Higher Discount Rate for Risk? (CCH Business Valuation Alert, Vol. 1, Issue No. 2, December 1999).

In addition, in the Fama and French article previously cited,[49] the authors proposed that their three-factor model include the SMB (Small Minus Big) factor, which indicates that small capitalization firms are more risky than large capitalization firms, confirming that size is a risk factor which must be considered in estimating the cost of common equity.

Consistent with the financial principle of risk and return discussed previously, and the stand-alone nature of ratemaking, an upward adjustment must be applied to the indicated cost of common equity derived from the cost of equity models of the proxy groups used in this proceeding.

Q. DO CREDIT RATING AGENCIES HAVE A MINIMUM SIZE CRITERION FOR A GIVEN RATING LEVEL?

A. As noted previously, they do not. S&P states in its "General Corporate Methodology, Section 2: Analyzing Subfactors for Scale, Scope, and Diversity," that there is no minimum size criterion, although size often provides a measure of diversification. Size and scope of operations is important relative to those of industry peers, though not in absolute terms. While relatively smaller companies can enjoy a high degree of diversification, they will likely be, almost by definition, more concentrated in terms of product, number of customers, or geography, than their larger peers in the same industry.[50]

Moody's, in its "Ratings Methodology for Regulated Electric and Gas Companies" states that size and scale of a regulated utility has generally not been a

[49] Fama & French at 39.
[50] Standard & Poors, "General Corporate Methodology, Section 2: Analyzing Subfactors for Scale, Scope, and Diversity," at 60.

major determinant of its credit strength in the same way that it has been for most other industrial sectors. While size brings certain economies of scale that can somewhat affect the utility's cost structure and competitiveness, rates are more heavily impacted by costs related to fuel and fixed assets. Smaller utilities have sometimes been better able to focus their attention on meeting the expectations of a single regulator than their multi-state peers.

However, size can be a very important factor in our assessment of certain risks that impact ratings, including exposure to natural disasters, customer concentration (primarily to industrial customers in a single sector) and construction risks associated with large projects. While the scorecard attempts to incorporate the first two of these into Factors [diversification], for some issuers these considerations may be sufficiently important that the rating reflects a greater weight for these risks.[51]

The above statements by S&P and Moody's reinforce that they do not specifically take size into account (i.e., there is no minimum size criterion for any given rating) in the rating process. Given this, one must adjust for size differences between the proxy group and the target company, even when credit ratings are similar.

Q. IS THERE A WAY TO QUANTIFY A RELATIVE RISK ADJUSTMENT DUE TO ATMOS ENERGY'S SIZE RELATIVE TO THE UTILITY PROXY GROUP?

[51] Moody's, "Ratings Methodology for Regulated Electric and Gas Companies," at 26-27.

A. Yes. Atmos Energy's Kansas operations have a greater relative risk than the average utility in the Utility Proxy Group because of its smaller size compared with the utilities in that group, as measured by an estimated market capitalization of common equity for Atmos Energy.

Table 12: Size as Measured by Market Capitalization for Atmos Energy and the Utility Proxy Group

	Market Capitalization* ($ Millions)	Times Greater than The Company
Atmos Energy Kansas Operations	$352.733	
Utility Proxy Group	$4,520.340	12.8x

*From page 1 of Exhibit DWD-7.

Atmos Energy's Kansas operations' estimated market capitalization was $352.73 million as of May 30, 2025,[52] compared with the market capitalization of the median company in the Utility Proxy Group of $4.520 billion as of May 30, 2025. The average company in the Utility Proxy Group has a market capitalization 12.8 times the size of Atmos Energy's Kansas operations' estimated market capitalization.

As a result, it is necessary to upwardly adjust the range of indicated common equity cost rates to reflect Atmos Energy's Kansas operations greater risk due to its smaller relative size. The determination is based on the size premiums for portfolios of New York Stock Exchange, American Stock Exchange and NASDAQ listed companies ranked by deciles for the 1926 to 2024 period. The size premium for the Utility Proxy Group with a market capitalization of $4.520 billion falls in

[52] $335,277,633 (requested rate base) * 61.06% (common equity ratio) * 172.3 (market-to-book ratio of the Utility Proxy Group) as demonstrated on page 2 of Exhibit DWD-7.

the 5th decile, while the Company's estimated market capitalization of $352.73 million places it in the 9th decile. The size premium spread between the 5th decile and the 9th decile is 0.99%. Even though a 0.99% size adjustment is indicated, I applied a size premium of 0.20% to the Company's range of indicated common equity cost rates.

B. Credit Risk Adjustment

Q. PLEASE DISCUSS YOUR PROPOSED CREDIT RISK ADJUSTMENT.

A. Atmos Energy's long-term issuer ratings are A2 and A- from Moody's and S&P, respectively, which are less risky than the average long-term ratings for the Utility Proxy Group of A3 and A-, respectively.[53] Hence, a downward credit risk adjustment is necessary to reflect the less risky credit rating, i.e., A2, of Atmos Energy relative to the A3 average Moody's bond rating of the Utility Proxy Group.[54]

An indication of the magnitude of the necessary downward adjustment to reflect the lower credit risk inherent in an A2 bond rating is one-third of a recent three-month average spread between Moody's A2 and Baa2-rated public utility bond yields of 0.19%, shown on page 2 of Exhibit DWD-3, or 0.06%.[55]

C. Flotation Cost Adjustment

Q. WHAT ARE FLOTATION COSTS?

A. Flotation costs are those costs associated with the sale of new issuances of common stock. They include market pressure and the mandatory unavoidable costs of

[53] Source of Information: S&P Capital IQ, Moody's Investor Service.
[54] As shown on page 3 of Exhibit DWD-3.
[55] 1/3 * 0.19% = 0.06%

issuance (e.g., underwriting fees and out-of-pocket costs for printing, legal, registration, etc.). For every dollar raised through debt or equity offerings, the Company receives less than one full dollar in financing.

Q. WHY IS IT IMPORTANT TO RECOGNIZE FLOTATION COSTS IN THE ALLOWED COMMON EQUITY COST RATE?

A. It is important because there is no other mechanism in the ratemaking paradigm through which such costs can be recognized and recovered. Because these costs are real, necessary, and legitimate, recovery of these costs should be permitted. As noted by Morin:

> The costs of issuing these securities are just as real as operating and maintenance expenses or costs incurred to build utility plants, and fair regulatory treatment must permit the recovery of these costs….
>
> The simple fact of the matter is that common equity capital is not free…[Flotation costs] must be recovered through a rate of return adjustment.[56]

Q. SHOULD FLOTATION COSTS BE RECOGNIZED ONLY IF THERE WAS AN ISSUANCE DURING THE TEST YEAR OR THERE IS AN IMMINENT POST-TEST YEAR ISSUANCE OF ADDITIONAL COMMON STOCK?

A. No. As noted above, there is no mechanism to recapture such costs in the ratemaking paradigm other than an adjustment to the allowed common equity cost rate. Flotation costs are charged to capital accounts and are not expensed on a utility's income statement. As such, flotation costs are analogous to capital investments, albeit negative, reflected on the balance sheet. Recovery of capital investments relates to the expected useful lives of the investment. Since common

[56] Morin, at 329.

equity has a very long and indefinite life (assumed to be infinity in the standard regulatory DCF model), flotation costs should be recovered through an adjustment to common equity cost rate, even when there has not been an issuance during the test year, or in the absence of an expected imminent issuance of additional shares of common stock.

Historical flotation costs are a permanent loss of investment to the utility and should be taken into account. When any company, including a utility, issues common stock, flotation costs are incurred for legal, accounting, printing fees, and the like. For each dollar of issuing market price, a small percentage is expensed and is permanently unavailable for investment in utility rate base. Since these expenses are charged to capital accounts and not expensed on the income statement, the only way to restore the full value of that dollar of issuing price with an assumed investor required return of 10% is for the net investment, $0.95, to earn more than 10% to net back to the investor a fair return on that dollar. In other words, if a company issues stock at $1.00 with 5% in flotation costs, it will net $0.95 in investment. Assuming the investor in that stock requires a 10% return on their invested $1.00 (i.e., a return of $0.10), the company needs to earn approximately 10.5% on its invested $0.95 to receive a $0.10 return.

Q. DO THE COMMON EQUITY COST RATE MODELS YOU HAVE USED ALREADY REFLECT INVESTORS' ANTICIPATION OF FLOTATION COSTS?

A. No. All of these models assume no transaction costs. The literature is quite clear that these costs are not reflected in the market prices paid for common stocks. For

example, Brigham and Daves confirm this and provide the methodology utilized to calculate the flotation adjustment.[57] In addition, Morin confirms the need for such an adjustment even when no new equity issuance is imminent.[58] Consequently, it is proper to include a flotation cost adjustment when using cost of common equity models to estimate the common equity cost rate.

Q. HOW DID YOU CALCULATE THE FLOTATION COST ALLOWANCE?

A. I modified the DCF calculation to provide a dividend yield that would reimburse investors for issuance costs in accordance with the method cited in literature by Brigham and Daves, as well as by Morin. The flotation cost adjustment recognizes the actual costs of issuing equity that were incurred by Atmos Energy Corporation. Based on the issuance costs shown on page 1 of Exhibit DWD-8, an adjustment of 0.04% is required to reflect the flotation costs applicable to the Utility Proxy Group.

Q. WHAT IS THE INDICATED RANGE OF ROES APPLICABLE TO ATMOS ENERGY AFTER YOUR COMPANY-SPECIFIC ADJUSTMENTS?

A. Applying the 0.20% business risk adjustment, the negative 0.06% credit risk adjustment, and the 0.04% flotation cost adjustment to the indicated range of common equity cost rates applicable to the Utility Proxy Group results in a Company-specific range of ROEs between 10.57% and 11.50%.

[57] Eugene F. Brigham and Phillip R. Daves, Intermediate Financial Management, 9th Edition, Thomson/Southwestern, at p. 342.

[58] Morin, at 337-339.

VIII. CONCLUSION

Q. WHAT IS YOUR RECOMMENDED ROE FOR ATMOS ENERGY?

A. Given the indicated ROE ranges applicable to the Utility Proxy Group and Company, I conclude that an appropriate ROE for the Company is 10.80%.

Q. IN YOUR OPINION, IS YOUR PROPOSED ROE OF 10.80% AND REASONABLE TO ATMOS ENERGY AND ITS CUSTOMERS?

A. Yes, it is.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

VERIFICATION

STATE OF NEW JERSEY)
)
COUNTY OF CAMDEN)

Dylan W. D'Ascendis, being duly sworn upon his oath, deposes and states that he is Partner at ScottMadden, Inc.; that he has read and is familiar with the foregoing Direct Testimony filed herewith; and that the statements made therein are true to the best of his knowledge, information and belief.

Dylan W. D'Ascendis

Subscribed and sworn before me this 15th day of July, 2025.

Notary Public

My appointment expires: 2/1/2027

Joyce E Kelly
NOTARY PUBLIC
State of New Jersey
ID # 2416714
My Commission Expires 2/1/2027

Atmos Energy Corporation
Table of Contents
Supporting Exhibits Accompanying the Direct Testimony of
Dylan W. D'Ascendis, CRRA, CVA

Atmos Energy Corporation
Recommended Capital Structure and Cost Rates
for Ratemaking Purposes

Type of Capital	Ratios(1)	Cost Rate		Weighted Cost Rate
Long-Term Debt	38.94%	4.13%	(1)	1.61%
Common Equity	61.06%	10.80%	(2)	6.59%
Total	100.00%			8.20%

Notes:
(1) Company-provided.
(2) From page 2 of this Exhibit.

Atmos Energy Corporation
Brief Summary of Common Equity Cost Rate

Line No.	Principal Methods	Proxy Group of Eight Natural Gas Companies
1.	Discounted Cash Flow Model (DCF) (1)	10.39%
2.	Risk Premium Model (RPM) (2)	10.69%
3.	Capital Asset Pricing Model (CAPM) (3)	10.88%
4.	Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4)	11.32%
5.	Indicated Common Equity Cost Rate before Adjustment for Company-specific Risk	10.39% - 11.32%
6.	Business Risk Adjustment (5)	0.20%
7.	Credit Risk Adjustment (6)	-0.06%
8.	Flotation Cost Adjustment (7)	0.04%
9.	Indicated Range of Common Equity Cost Rates after Adjustment for Company-Specific Risk	10.57% - 11.50%
10.	Recommended Common Equity Cost Rate	10.80%

Notes:
(1) From page 1 of Exhibit DWD-2.
(2) From page 1 of Exhibit DWD-3.
(3) From page 1 of Exhibit DWD-4.
(4) From page 1 of Exhibit DWD-6.
(5) Adjustment to reflect the Company's greater business risk relative to the Utility Proxy Group as detailed in Mr. D'Ascendis' Direct Testimony.
(6) Company-specific risk adjustment to reflect Atmos' lower risk due to a higher long-term rating relative to the proxy group as detailed in Mr. D'Ascendis' Direct Testimony.
(7) From page 1 of Exhibit DWD-8.

Atmos Energy Corporation
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Proxy Group of Eight Natural Gas Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Proxy Group of Eight Natural Gas Companies	Average Dividend Yield (1)	Value Line Projected Five Year Growth in EPS (2)	Zack's Five Year Projected Growth Rate in EPS	S&P Capital IQ Projected Five Year Growth in EPS	Average Projected Five Year Growth in EPS (3)	Adjusted Dividend Yield (4)	Indicated Common Equity Cost Rate (5)
Atmos Energy Corporation	2.25 %	7.00 %	7.20 %	7.28 %	7.16 %	2.33 %	9.49 %
Chesapeake Utilities Corporation	2.14	8.00	NA	8.88	8.44	2.23	10.67
New Jersey Resources Corporation	3.75	5.00	NA	7.90	6.45	3.87	10.32
NiSource Inc.	2.86	9.50	7.90	7.83	8.41	2.98	11.39
Northwest Natural Holding Company	4.67	6.50	NA	5.75	6.13	4.81	10.94
ONE Gas, Inc.	3.55	4.50	5.60	5.84	5.31	3.64	8.95
Southwest Gas Holdings, Inc.	3.43	10.00	9.90	9.55	9.82	3.60	13.42 (6)
Spire Inc.	4.14	4.50	6.50	7.54	6.18	4.27	10.45
						Average	10.32 %
						Median	10.45 %
					Average of Mean and Median		10.39 %

NA= Not Available

Notes:

(1) Indicated dividend at 5/30/2025 divided by the average closing price of the last 60 trading days ending 05/30/2025 for each company.
(2) From pages 2 through 9 of this Exhibit.
(3) Average of columns 2 through 4 excluding negative growth rates.
(4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 5) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for Atmos Energy Corporation, 2.25% x (1+(1/2 x 7.16%)) = 2.33%.
(5) Column 5 + Column 6.
(6) Results were excluded from the final average and median as they were more than two standard deviations from the proxy group's mean.

Source of Information:
Value Line Investment Survey
www.zacks.com Downloaded on 5/30/2025
S&P Capital IQ

ATMOS ENERGY CORP. NYSE-ATO

RECENT PRICE 155.23 | P/E RATIO 20.9 (Trailing: 21.6 Median: 20.0) | RELATIVE P/E RATIO 1.17 | DIV'D YLD 2.3% | VALUE LINE

TIMELINESS 3 Raised 1/17/25
SAFETY 1 Raised 6/6/14
TECHNICAL 3 Raised 5/9/25
BETA .75 (1.00 = Market)

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$136-$194	$165 (5%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	185	(+20%)	*7%*
Low	150	(-5%)	*2%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	342	357	421
to Sell	311	315	294
Hld's(000)	144146	162641	171243

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
High:	58.2	64.8	82.0	93.6	100.8	115.2	121.1	105.3	123.0	125.3	152.6	167.5						
Low:	44.2	50.8	60.0	72.5	76.5	89.2	77.9	84.6	97.7	101.0	110.5	136.2						

LEGENDS
35.50 x Dividends p sh
Relative Price Strength
Options: Yes
Shaded area indicates recession

Target Price Range 2028 | 2029 | 2030

% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	35.8	6.0
3 yr.	49.4	19.2
5 yr.	82.9	95.9

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
	53.69	53.12	48.15	38.10	42.88	49.22	40.82	32.23	26.01	28.00	24.32	22.41	25.73	29.82	28.79	26.83	*28.05*	*28.15*	Revenues per sh A	*34.05*
	4.29	4.64	4.72	4.76	5.14	5.42	5.81	6.19	6.62	7.24	7.57	8.03	8.64	9.30	10.04	11.03	*11.80*	*12.45*	"Cash Flow" per sh	*14.75*
	1.97	2.16	2.26	2.10	2.50	2.96	3.09	3.38	3.60	4.00	4.35	4.72	5.12	5.60	6.10	6.83	*7.30*	*7.70*	Earnings per sh AB	*9.35*
	1.32	1.34	1.36	1.38	1.40	1.48	1.56	1.68	1.80	1.94	2.10	2.30	2.50	2.72	2.96	3.22	*3.48*	*3.68*	Div'ds Decl'd per sh C■	*4.45*
	5.51	6.02	6.90	8.12	9.32	8.32	9.61	10.46	10.72	13.19	14.19	15.38	14.87	17.35	18.90	18.92	*22.85*	*22.75*	Cap'l Spending per sh	*21.60*
	23.52	24.16	24.98	26.14	28.47	30.74	31.48	33.32	36.74	42.87	48.18	53.95	59.71	66.85	73.20	78.31	*84.25*	*86.25*	Book Value per sh	*97.30*
	92.55	90.16	90.30	90.24	90.64	100.39	101.48	103.93	106.10	111.27	119.34	125.88	132.42	140.90	148.49	155.26	*162.00*	*167.00*	Common Shs Outst'g D	*185.00*
	12.5	13.2	14.4	15.9	15.9	16.1	17.5	20.8	22.0	21.7	23.2	22.3	18.8	19.3	18.7	17.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
	.83	.84	.90	1.01	.89	.85	.88	1.09	1.11	1.17	1.24	1.15	1.02	1.12	1.08	.90			Relative P/E Ratio	*1.00*
	5.3%	4.7%	4.2%	4.1%	3.5%	3.1%	2.9%	2.4%	2.3%	2.2%	2.1%	2.2%	2.6%	2.5%	2.6%	2.7%			Avg Ann'l Div'd Yield	*2.7%*
							4142.1	3349.9	2759.7	3115.5	2901.8	2821.1	3407.5	4201.7	4275.4	4165.2	*4540*	*4700*	Revenues ($mill) A	*6300*
							315.1	350.1	382.7	444.3	511.4	580.5	665.6	774.4	885.9	1042.9	*1170*	*1270*	Net Profit ($mill)	*1730*
							38.3%	36.4%	36.6%	27.0%	21.4%	19.5%	18.8%	9.1%	11.4%	15.6%	*19.0%*	*19.5%*	Income Tax Rate	*25.0%*
							7.6%	10.5%	13.9%	14.3%	17.6%	20.6%	19.5%	18.4%	20.7%	25.0%	*25.8%*	*27.0%*	Net Profit Margin	*27.5%*
							43.5%	38.7%	44.0%	34.3%	38.0%	40.0%	38.4%	37.9%	37.9%	39.3%	*40.0%*	*40.0%*	Long-Term Debt Ratio	*40.0%*
							56.5%	61.3%	56.0%	65.7%	62.0%	60.0%	61.6%	62.1%	62.1%	60.7%	*60.0%*	*60.0%*	Common Equity Ratio	*60.0%*
							5650.2	5651.8	6965.7	7263.6	9279.7	11323	12837	15180	17509	20018	*22750*	*24000*	Total Capital ($mill)	*30000*
							7430.6	8280.5	9259.2	10371	11788	13355	15064	17240	19607	22204	*25000*	*26400*	Net Plant ($mill)	*32000*
							6.6%	7.2%	6.4%	6.9%	6.1%	5.5%	5.5%	5.4%	5.5%	5.7%	*6.5%*	*6.5%*	Return on Total Cap'l	*7.0%*
							9.9%	10.1%	9.8%	9.3%	8.9%	8.5%	8.4%	8.2%	8.1%	8.6%	*8.5%*	*9.0%*	Return on Shr. Equity	*9.5%*
							9.9%	10.1%	9.8%	9.3%	8.9%	8.5%	8.4%	8.2%	8.1%	8.6%	*8.5%*	*9.0%*	Return on Com Equity	*9.5%*
							4.9%	5.1%	4.9%	4.8%	4.6%	4.4%	4.3%	4.2%	4.2%	4.5%	*4.5%*	*4.5%*	Retained to Com Eq	*5.0%*
							51%	50%	50%	48%	48%	49%	49%	49%	49%	47%	*48%*	*48%*	All Div'ds to Net Prof	*48%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $8506.4 mill. **Due in 5 Yrs** $1170.0 mill.
LT Debt $8486.3 mill. **LT Interest** $190.0 mill.
(LT interest earned: 7.5x; total interest coverage: 7.5x)
Leases, Uncapitalized Annual rentals $43.2 mill.

Pfd Stock None

Pension Assets-9/24 $595.2 mill.
Oblig. $470.9 mill.
Common Stock 158,836,864 shs.
as of 5/2/25

MARKET CAP: $24.7 billion (Large Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	15.4	307.3	543.5
Other	870.4	825.0	1047.8
Current Assets	885.8	1132.3	1591.3
Accts Payable	336.1	445.4	445.2
Debt Due	253.4	9.9	20.1
Other	763.1	750.6	733.2
Current Liab.	1352.6	1205.9	1198.5
Fix. Chg. Cov.	1059%	914%	935%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '22-'24 to '28-'30
Revenues	-4.0%	2.0%	*3.0%*
"Cash Flow"	7.0%	7.0%	*6.5%*
Earnings	9.5%	9.0%	*7.0%*
Dividends	7.5%	9.0%	*7.0%*
Book Value	10.0%	11.5%	*5.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2022	1012.8	1649.8	816.4	722.7	4201.7
2023	1484.0	1541.0	662.7	587.7	4275.4
2024	1158.5	1647.2	701.5	658.0	4165.2
2025	1176.0	1950.5	*740*	*673.5*	*4540*
2026	*1210*	*2030*	*760*	*700*	*4700*

Fiscal Year Ends	EARNINGS PER SHARE A B E Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2022	1.86	2.37	.92	.51	5.60
2023	1.91	2.48	.94	.80	6.10
2024	2.08	2.85	1.08	.86	6.83
2025	2.23	3.03	*1.14*	*.90*	*7.30*
2026	*2.34*	*3.14*	*1.22*	*1.00*	*7.70*

Calendar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.625	.625	.625	.68	2.56
2022	.68	.68	.68	.74	2.78
2023	.74	.74	.74	.805	3.03
2024	.805	.805	.805	.87	3.29
2025	.87	.87			

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to over 3.3 million customers through six regulated natural gas utility operations: Louisiana Division, West Texas Division, Mid-Tex Division, Mississippi Division, Colorado-Kansas Division, and Kentucky/Mid-States Division. Gas sales breakdown for fiscal 2024: 68.8%, residential; 27.1%, commercial; 2.7%, industrial; and 1.4% other. The company sold Atmos Energy Marketing, 1/17. Officers and directors own approximately .5% of common stock (12/24 Proxy). President and Chief Executive Officer: Kevin Akers. Incorporated: Texas. Address: Three Lincoln Centre, Suite 1800, 5430 LBJ Freeway, Dallas, Texas 75240. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

Atmos Energy is having a decent year thus far. Earnings per share through the first half of fiscal 2025 (ended March 31st) increased 6.7%, to $5.26, relative to the $4.93 figure that was registered for the fiscal 2024 period. One supporting factor was the distribution unit, aided partially by rate adjustments and benefits of residential customer growth (both happening mainly in the Mid-Tex Division). Moreover, the pipeline and storage segment was helped, among other things, by the Gas Reliability Infrastructure Program filing approved in May 2024 and the System Safety and Integrity Rider filing approved in November 2024. But the company's results were hurt, to some degree, by a rise in bad-debt expense, depreciation, and property taxes. Nonetheless, it appears that, for the full year, the bottom line will end up around $7.30 per share. That would indicate a 7% advance from fiscal 2024's $6.83 tally. Concerning the following fiscal year, per-share profits stand to grow another 5% or so, to $7.70, as operating margins widen further.

There has been activity on the rate-filing front. During the first six months, Atmos managed to complete some regulatory proceedings leading to a $152.6 million boost in annual operating income. What's more, there were ratemaking initiatives in progress at the conclusion of March seeking $224.7 million of annual operating income. Of course, there are no guarantees that the company will receive everything it requests.

Good things seem to be in store out to 2028-2030. Atmos ranks as one of the nation's biggest natural gas-only distributors, with over three million customers across several states, including Texas, Louisiana, and Mississippi. Also, we believe that the pipeline and storage business has promising overall expansion opportunities, since it operates in one of the most-active drilling regions in the world. The solid balance sheet is another positive.

The equity's long-term total return prospects look rather uninspiring. The dividend yield does not impress versus the average of *Value Line's* Natural Gas Utility Industry. Also, 3- to 5-year capital appreciation potential lacks appeal, given recent stock-price strength.

Frederick L. Harris, III *May 23, 2025*

(A) Fiscal year ends Sept. 30th. **(B)** Diluted shrs. Excl. nonrec. gains (loss): '10, 5¢; '11, (1¢); '18, $1.43; '20, 17¢. Excludes discontinued operations: '11, 10¢; '12, 27¢; '13, 14¢; '17, 13¢. Next earnings report due early Aug. **(C)** Dividends historically paid in early March, June, Sept., and Dec. ■ Div. reinvestment plan. Direct stock purchase plan avail. **(D)** In millions. **(E)** Qtrs may not add due to change in shrs outstanding.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	65
Earnings Predictability	100

CHESAPEAKE UTIL. NYSE-CPK

RECENT PRICE **122.91** | P/E RATIO **21.6** (Trailing: 23.3 Median: 23.0) | RELATIVE P/E RATIO **1.21** | DIV'D YLD **2.3%** | **VALUE LINE**

TIMELINESS 3 Raised 3/21/25
SAFETY 2 New 6/5/15
TECHNICAL 1 Raised 5/23/25
BETA .75 (1.00 = Market)

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$95-$148	$122 (0%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	160	(+30%)	*9%*
Low	120	(Nil)	*2%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	121	139	151
to Sell	117	116	127
Hld's(000)	18673	23010	23287

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
High:	52.7	61.1	70.0	86.4	93.4	98.6	111.4	146.1	146.3	132.9	134.2	136.7						
Low:	37.5	44.4	52.3	63.0	66.4	77.6	69.5	99.6	105.8	83.8	98.3	115.1						

LEGENDS
40.00 x Dividends p sh
Relative Price Strength
3-for-2 split 9/14
Options: Yes
Shaded area indicates recession

Target Price Range 2028 | 2029 | 2030

% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	12.3	6.0
3 yr.	2.8	19.2
5 yr.	60.6	95.9

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
	19.07	29.93	29.13	27.26	30.73	34.19	30.07	30.60	37.79	43.81	29.24	27.96	32.28	38.37	30.16	34.38	*37.90*	*42.50*	Revenues per sh	*65.40*
	2.15	3.50	3.69	3.95	4.35	4.73	5.05	5.16	5.42	6.47	6.50	7.37	8.28	8.87	6.87	8.05	*9.40*	*10.20*	"Cash Flow" per sh	*14.05*
	1.43	1.82	1.91	1.99	2.26	2.47	2.68	2.86	2.68	3.45	3.72	4.21	4.73	4.97	4.73	5.26	*5.70*	*6.10*	Earnings per sh [A]	*8.00*
	.83	.87	.91	.96	1.01	1.07	1.12	1.19	1.26	1.39	1.55	1.69	1.84	2.03	2.25	2.46	*2.65*	*2.82*	Div'ds Decl'd per sh [B]■	*3.40*
	1.89	3.18	3.28	5.00	6.72	6.66	9.47	10.42	10.73	16.47	11.26	9.48	10.59	7.23	8.48	15.52	*15.00*	*15.25*	Cap'l Spending per sh	*15.35*
	14.89	15.84	16.78	17.82	19.28	20.59	23.45	27.36	29.75	31.65	34.23	39.92	43.85	46.94	56.04	60.71	*64.05*	*69.00*	Book Value per sh	*77.50*
	14.09	14.29	14.35	14.40	14.46	14.59	15.27	16.30	16.34	16.38	16.40	17.46	17.66	17.74	22.24	22.90	*24.00*	*24.00*	Common Shs Outst'g [C]	*26.00*
	14.2	12.2	14.2	14.8	15.6	17.7	19.1	21.8	27.8	22.9	24.7	21.6	25.6	25.8	24.3	21.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*17.5*
	.95	.78	.89	.94	.88	.93	.96	1.14	1.40	1.24	1.32	1.11	1.38	1.49	1.36	1.13			Relative P/E Ratio	*.95*
	4.1%	3.9%	3.4%	3.3%	2.9%	2.4%	2.2%	1.9%	1.7%	1.8%	1.7%	1.9%	1.5%	1.6%	2.0%	2.2%			Avg Ann'l Div'd Yield	*2.4%*
							459.2	498.9	617.6	717.5	479.6	488.2	570.0	680.7	670.6	787.2	*910*	*1020*	Revenues ($mill)	*1700*
							40.2	44.7	43.8	56.6	61.1	70.6	83.5	88.4	87.2	118.6	*135*	*145*	Net Profit ($mill)	*215*
							39.5%	38.8%	39.5%	27.1%	25.6%	25.0%	25.9%	27.4%	24.4%	26.7%	*26.5%*	*27.0%*	Income Tax Rate	*29.0%*
							8.8%	9.0%	7.1%	7.9%	12.7%	14.5%	14.6%	13.0%	13.0%	15.1%	*14.8%*	*14.2%*	Net Profit Margin	*12.6%*
							29.4%	23.5%	28.9%	37.9%	43.9%	42.2%	41.5%	41.0%	48.8%	47.6%	*47.0%*	*47.0%*	Long-Term Debt Ratio	*48.0%*
							70.6%	76.5%	71.1%	62.1%	56.1%	57.8%	58.5%	59.0%	51.2%	52.4%	*53.0%*	*53.0%*	Common Equity Ratio	*52.0%*
							507.5	583.0	683.7	834.5	1001.7	1205.6	1324.0	1411.2	2433.2	2651.9	*2900*	*3125*	Total Capital ($mill)	*3875*
							855.0	986.7	1126.0	1384.0	1463.8	1601.2	1744.9	1810.5	2456.4	2735.9	*3000*	*3250*	Net Plant ($mill)	*4050*
							8.9%	8.6%	7.3%	7.8%	7.2%	6.8%	7.1%	7.1%	4.3%	5.8%	*6.0%*	*6.0%*	Return on Total Cap'l	*7.0%*
							11.2%	10.0%	9.0%	10.9%	10.9%	10.1%	10.8%	10.6%	7.0%	8.5%	*9.0%*	*9.0%*	Return on Shr. Equity	*10.5%*
							11.2%	10.0%	9.0%	10.9%	10.9%	10.1%	10.8%	10.6%	7.0%	8.5%	*9.0%*	*9.0%*	Return on Com Equity	*10.5%*
							6.8%	6.1%	4.9%	6.7%	6.5%	6.2%	6.7%	6.4%	3.8%	4.6%	*4.5%*	*4.5%*	Retained to Com Eq	*6.5%*
							40%	39%	45%	39%	40%	38%	38%	40%	46%	46%	*47%*	*47%*	All Div'ds to Net Prof	*41%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $1500.9 mill. **Due in 5 Yrs** $780.0 mill.
LT Debt $1260.0 mill. **LT Interest** $68.0 mill.
(LT interest earned: 3.4x; total interest coverage: 3.4x) (47% of Cap'l)
Leases, Uncapitalized Annual rentals $2.6 mill.
Pfd Stock None
Pension Assets-12/24 $49.1 mill.
Oblig. $47.0 mill.
Common Stock 23,327,358 shs.
as of 5/2/25

MARKET CAP: $2.9 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	4.9	7.9	.7
Other	180.8	196.4	198.9
Current Assets	185.7	204.3	199.6
Accts Payable	77.5	78.3	76.6
Debt Due	198.4	222.0	240.9
Other	110.5	119.1	116.2
Current Liab.	386.4	419.4	433.7
Fix. Chg. Cov.	514%	393%	400%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '22-'24 to '28-'30
Revenues	1.0%	-1.5%	*11.5%*
"Cash Flow"	6.0%	5.5%	*10.0%*
Earnings	8.5%	8.5%	*8.0%*
Dividends	8.5%	10.0%	*7.0%*
Book Value	11.0%	11.5%	*6.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	222.9	139.5	131.1	187.2	680.7
2023	218.1	135.6	131.5	185.4	670.6
2024	245.7	166.3	160.1	215.1	787.2
2025	298.7	*187*	*183*	*241.3*	*910*
2026	*330*	*215*	*210*	*265*	*1020*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	2.08	.88	.54	1.47	4.97
2023	2.04	.90	.53	1.26	4.73
2024	2.07	.82	.78	1.60	5.26
2025	2.21	*.88*	*.84*	*1.77*	*5.70*
2026	*2.30*	*.99*	*.93*	*1.88*	*6.10*

Calendar	QUARTERLY DIVIDENDS PAID [B]■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.44	.44	.48	.48	1.84
2022	.48	.48	.535	.535	2.03
2023	.535	.535	.59	.59	2.25
2024	.59	.59	.64	.64	2.46
2025	.64	.64	.685		

BUSINESS: Chesapeake Utilities Corporation consists of two main units. The Regulated Energy segment distributes natural gas in Delaware, Maryland, and Florida; distributes electricity in Florida; and transmits natural gas on the Delmarva Peninsula and in Florida. The Unregulated Energy operation wholesales and distributes propane; markets natural gas; and provides other unregulated energy services, including midstream services in Ohio. Revenue breakdown for 2024: Regulated Energy, 74.1%; Unregulated Energy, 29.0%; Other, d3.1%. Officers and directors own 1.5% of common stock; BlackRock, 16.1% (3/25 Proxy). Chairman and CEO: Jeffry Householder. Inc.: DE. Address: 500 Energy Lane, Dover, DE 19901. Tel.: (302) 734-6799. Internet: www.chpk.com.

Chesapeake Utilities Corporation began 2025 on the right foot. Indeed, first-quarter earnings per share increased almost 7%, to $2.21, compared to the $2.07 figure that was posted last year. One supporting factor was higher customer consumption resulting from cooler temperatures, mainly across the Mid-Atlantic and Ohio service areas. Another plus was a rise in demand for virtual pipeline services. Other positives included internal growth in the natural gas distribution businesses and contributions from regulated infrastructure programs. So, at this juncture, it appears that full-year profits will end up in the vicinity of $5.70 a share. That would show a roughly 8% advance from 2024's $5.26 tally. Regarding 2026, the company's bottom line may grow at a similar percentage rate, to $6.10 a share, assuming additional expansion of operating margins.

This year's capital expenditures are anticipated to lie between $325 million and $375 million. The bulk of the funds are being deployed to the Regulated Energy division, with an emphasis on the natural gas distribution and transmission segments. Moreover, Chesapeake looks for total capital spending to be in the range of $1.5 billion to $1.8 billion for the five-year period between 2024 and 2028. All told, we believe these objectives are achievable, assuming that corporate finances remain in healthy condition, of course.

The quarterly common stock dividend was raised by 7%, to $0.685 per share. That was made possible, no doubt, by the company's solid capital position. Furthermore, our 3- to 5-year projections indicate that additional steady increases in the distribution will probably take place. The payout ratio over that horizon ought to be in the neighborhood of 40%, which is quite manageable.

The stock is not a standout selection at the moment. Its dividend yield is not exciting when measured against those of other Natural Gas Utility equities tracked by *Value Line*. Moreover, capital gains potential out to 2028-2030 does not impress. That's because the recent quotation is already within our Target Price Range. Meanwhile, these shares are ranked just 3 (Average) for Timeliness.

Frederick L. Harris, III *May 23, 2025*

(A) Diluted shrs. Excludes nonrecurring gains: '15, 6¢; '17, 87¢; '22, 8¢. Excludes discontinued operations: '19, 24¢; '20, 5¢. Next earnings report due early Aug. Quarters for '24 don't add up to total due to rounding. **(B)** Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan. Direct stock purchase plan available. **(C)** In millions, adjusted for split.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	80
Earnings Predictability	100

NEW JERSEY RES. NYSE-NJR

RECENT PRICE **46.29** | P/E RATIO **14.9** (Trailing: 12.0 Median: 17.0) | RELATIVE P/E RATIO **0.83** | DIV'D YLD **3.9%** | **VALUE LINE**

TIMELINESS 4 Raised 3/29/24
SAFETY 2 Lowered 4/17/20
TECHNICAL 1 Raised 5/23/25
BETA .85 (1.00 = Market)

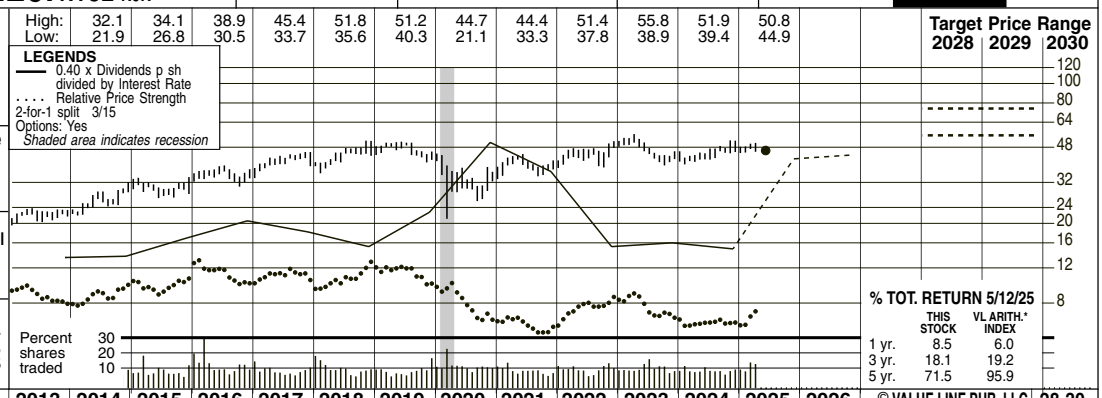
18-Month Target Price Range
Low-High **Midpoint (% to Mid)**
$42-$67 $55 (20%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(+60%)	*16%*
Low	55	(+20%)	*8%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	167	196	215
to Sell	139	134	135
Hld's(000)	71950	88596	91465



2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
31.17	32.05	36.30	27.08	38.38	44.40	32.09	21.90	26.28	33.24	29.01	20.39	22.71	30.19	20.12	18.06	*19.45*	*18.85*	Revenues per sh A	*21.45*
1.58	1.63	1.70	1.86	1.93	2.73	2.52	2.46	2.68	3.72	2.99	3.30	3.36	3.84	4.28	4.59	*5.10*	*5.15*	"Cash Flow" per sh	*6.05*
1.20	1.23	1.29	1.36	1.37	2.08	1.78	1.61	1.73	2.72	1.96	2.07	2.16	2.50	2.71	2.95	*3.30*	*3.25*	Earnings per sh B	*3.90*
.62	.68	.72	.77	.81	.86	.93	.98	1.04	1.11	1.19	1.27	1.36	1.45	1.56	1.71	*1.80*	*1.95*	Div'ds Decl'd per sh C■	*2.20*
.90	1.05	1.13	1.26	1.33	1.52	3.76	4.15	3.80	4.39	5.83	4.65	5.42	5.81	5.13	5.26	*5.50*	*5.75*	Cap'l Spending per sh	*6.50*
8.29	8.81	9.36	9.80	10.65	11.48	12.99	13.58	14.33	16.18	17.37	19.26	17.18	18.88	20.40	22.12	*24.75*	*25.35*	Book Value per sh D	*27.65*
83.17	82.35	82.89	83.05	83.32	84.20	85.19	85.88	86.32	87.69	89.34	95.80	94.95	96.25	97.58	99.46	*101.00*	*102.00*	Common Shs Outst'g E	*105.00*
14.9	15.0	16.8	16.8	16.0	11.7	16.6	21.3	22.4	15.6	24.3	17.7	17.5	17.0	17.6	14.9	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*17.0*
.99	.95	1.05	1.07	.90	.62	.84	1.12	1.13	.84	1.29	.91	.95	.98	.98	.77			Relative P/E Ratio	*.95*
3.5%	3.7%	3.3%	3.4%	3.7%	3.5%	3.1%	2.9%	2.7%	2.6%	2.5%	3.5%	3.6%	3.4%	3.3%	3.9%			Avg Ann'l Div'd Yield	*3.3%*
						2734.0	1880.9	2268.6	2915.1	2592.0	1953.7	2156.6	2906.0	1963.0	1796.5	*1965*	*1925*	Revenues ($mill) A	*2250*
						153.7	138.1	149.4	240.5	175.0	196.2	207.7	240.3	264.7	290.8	*335*	*330*	Net Profit ($mill)	*410*
						26.3%	15.5%	17.2%	--	--	--	10.3%	22.0%	15.9%	23.0%	*21.5%*	*22.0%*	Income Tax Rate	*22.0%*
						5.6%	7.3%	6.6%	8.2%	6.7%	10.0%	9.6%	8.3%	13.5%	16.2%	*17.0%*	*17.2%*	Net Profit Margin	*18.2%*
						43.2%	47.7%	44.6%	45.4%	49.8%	55.1%	57.0%	57.8%	58.2%	56.7%	*55.0%*	*55.0%*	Long-Term Debt Ratio	*55.0%*
						56.8%	52.3%	55.4%	54.6%	50.2%	44.9%	43.0%	42.2%	41.8%	43.3%	*45.0%*	*45.0%*	Common Equity Ratio	*45.0%*
						1950.6	2230.1	2233.7	2599.6	3088.9	4104.2	3793.0	4302.6	4758.8	5079.9	*5550*	*5750*	Total Capital ($mill)	*6450*
						2128.3	2407.7	2609.7	2651.0	3041.2	3983.0	4213.5	4649.9	5022.1	5403.2	*5650*	*5900*	Net Plant ($mill)	*6800*
						8.6%	6.9%	7.7%	10.1%	6.4%	5.6%	6.5%	6.8%	5.5%	5.7%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
						13.9%	11.8%	12.1%	16.9%	11.3%	10.6%	12.7%	13.2%	13.3%	13.2%	*13.5%*	*13.0%*	Return on Shr. Equity	*14.0%*
						13.9%	11.8%	12.1%	16.9%	11.3%	10.6%	12.7%	13.2%	13.3%	13.2%	*13.5%*	*13.0%*	Return on Com Equity	*14.0%*
						7.0%	4.8%	5.0%	10.2%	4.6%	4.3%	5.6%	6.2%	5.7%	5.7%	*6.0%*	*5.0%*	Retained to Com Eq	*6.0%*
						50%	60%	59%	40%	59%	60%	56%	53%	58%	58%	*55%*	*60%*	All Div'ds to Net Prof	*56%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $3243.6 mill. **Due in 5 Yrs** $660 mill.
LT Debt $2970.2 mill. **LT Interest** $130 mill.
Incl. $8.4 mill. capitalized leases.

Pension Assets-9/24 $641 mill.
Oblig. $624 mill.

Pfd Stock None

Common Stock 100,371,550 shs.
as of 5/2/25

MARKET CAP: $4.6 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	1.0	1.0	83.7
Other	531.1	553.6	594.9
Current Assets	532.1	554.6	678.6
Accts Payable	203.1	169.2	121.6
Debt Due	368.3	480.8	273.4
Other	235.2	237.8	337.0
Current Liab.	806.6	887.8	732.0
Fix. Chg. Cov.	331%	480%	1000%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '22-'24 to '28-'30
Revenues	-4.5%	-5.0%	*2.5%*
"Cash Flow"	7.0%	6.5%	*5.0%*
Earnings	5.5%	5.0%	*5.0%*
Dividends	7.0%	7.0%	*5.0%*
Book Value	7.0%	5.0%	*4.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2022	675.9	912.3	552.3	765.5	2906.0
2023	723.6	644.0	264.1	331.3	1963.0
2024	467.2	657.9	275.6	395.8	1796.5
2025	488.4	913.0	*280*	*283.6*	*1965*
2026	*480*	*750*	*350*	*345*	*1925*

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2022	.69	1.36	d.04	.49	2.50
2023	1.14	1.16	.10	.31	2.71
2024	.74	1.41	d.09	.89	2.95
2025	1.28	1.78	*Nil*	*.23*	*3.30*
2026	*1.10*	*1.65*	*.10*	*.40*	*3.25*

Calendar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.3325	.3325	.3325	.3625	1.36
2022	.3625	.3625	.3625	.3625	1.45
2023	.39	.39	.39	.39	1.56
2024	.42	.42	.42	.45	1.71
2025	.45	.45			

BUSINESS: New Jersey Resources Corp. is a holding company providing retail/wholesale energy svcs. to customers in NJ, and in states from the Gulf Coast to New England, and Canada. New Jersey Natural Gas had 583,000 cust. at 9/30/24. Fiscal 2024 volume: 158 bill. cu. ft. (16% interruptible, 41% residential, commercial & firm transportation, 43% other). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2024 dep. rate: 3.2%. Has 1,370 empls. Off./dir. own less than 1% of common; BlackRock, 17.3%; Vanguard, 11.9% (12/24 Proxy). CEO, President & Director: Steven D. Westhoven. Incorporated: New Jersey. Address: 1415 Wyckoff Road, Wall, NJ 07719. Telephone: 732-938-1480. Web: www.njresources.com.

New Jersey Resources reported strong financial and operational results in the second quarter of fiscal 2025. (Year ends September 30th.) Favorable winter conditions and effective execution across its business portfolio led to a significant outperformance of both our top- and bottom-line estimates. Revenues advanced 40%, to $913 million, while earnings per share jumped 26% to $1.78. Principally, the utility's operations benefited from new rates following a recent base rate case settlement. Too, a gain realized on the sale of the company's residential solar portfolio at Clean Energy Ventures added to the earnings outperformance. Although the macroeconomic environment reflected some volatility during the period, and the company had to contend with policy uncertainty in energy markets, we view this result as a strong business-as-usual performance, reflecting NJR's solid fundamental market approach.

We've raised our fiscal 2025 full-year targets, reflecting a strong first half. With the remaining two fiscal quarters consisting of the gas utility's low season, we have a measure of confidence in our full year top- and bottom-line targets of $1.965 billion and $3.30, respectively. The latter is near the high end of management's guidance range.

We expect fiscal 2026 results will be mostly flat. Thanks to a weather tailwind in fiscal 2025, the comparison may be challenging and we expect a soft reset, with both revenues and earnings coming in a bit lower, overall. Operationally, this would reflect the steady advance of NJR's core business verticals.

Long-term growth prospects are defined by several key factors. NJR maintains a solid financial position, with manageable leverage and a strong regional economy as its foundation. Much of the growth we envision is a result of capital spending already planned for the next two years, with infrastructure modernization, energy efficiency and renewable initiatives all representing avenues for expansion.

The stock offers a solid long-term return profile, bolstered by non-regulated businesses that add a measure of growth potential, compared to pure-play utilities.

Earl B. Humes *May 23, 2025*

(A) Fiscal year ends Sept. 30th.
(B) Diluted earnings. Qtly. revenues and egs. may not sum to total due to rounding and change in shares outstanding. Next earnings report due early August.
(C) Dividends historically paid in early Jan., April, July, and October. ■ Dividend reinvestment plan available.
(D) Includes regulatory assets in 2024: $612.6 million, $6.16/share.
(E) In millions, adjusted for 3/15 split.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	40
Earnings Predictability	65

NISOURCE INC. NYSE-NI

RECENT PRICE **38.32** | P/E RATIO **20.1** (Trailing: 20.4 Median: 21.0) | RELATIVE P/E RATIO **1.13** | DIV'D YLD **3.0%** | **VALUE LINE**

TIMELINESS 4 Lowered 5/2/25
SAFETY 2 Raised 2/23/24
TECHNICAL 1 Raised 5/16/25
BETA .85 (1.00 = Market)

18-Month Target Price Range

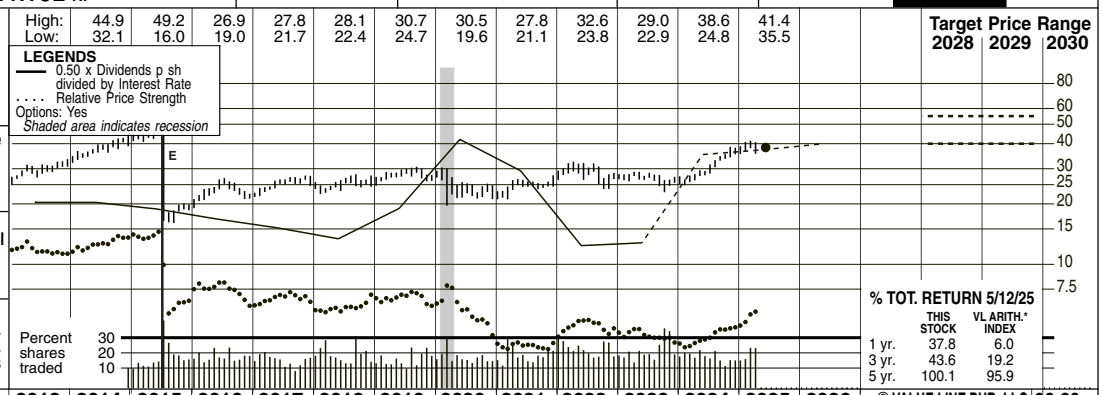
Low-High	Midpoint (% to Mid)
$28-$45	$37 (-5%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+45%)	*12%*
Low	40	(+5%)	*5%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	328	334	383
to Sell	249	286	288
Hld's(000)	439719	484273	493671



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
High:	44.9	49.2	26.9	27.8	28.1	30.7	30.5	27.8	32.6	29.0	38.6	41.4								
Low:	32.1	16.0	19.0	21.7	22.4	24.7	19.6	21.1	23.8	22.9	24.8	35.5								
	24.02	22.99	21.33	16.31	18.04	20.47	14.58	13.90	14.46	13.74	13.63	11.95	12.09	14.20	12.31	11.61	*13.15*	*13.50*	Revenues per sh	*15.60*
	2.96	3.19	2.98	3.13	3.41	3.60	2.27	2.71	2.07	2.86	3.17	3.15	3.26	3.56	3.63	3.97	*4.10*	*4.15*	"Cash Flow" per sh	*5.30*
	.84	1.06	1.05	1.37	1.57	1.67	.63	1.00	.39	1.30	1.31	1.32	1.37	1.47	1.60	1.75	*1.90*	*2.00*	Earnings per sh A	*2.55*
	.92	.92	.92	.94	.98	1.02	.83	.64	.70	.78	.80	.84	.88	.94	1.00	1.06	*1.12*	*1.20*	Div'd Decl'd per sh B ■	*1.44*
	2.81	2.88	3.99	4.83	5.99	6.42	4.26	4.57	5.03	4.88	4.72	4.49	4.53	5.35	5.91	5.56	*5.50*	*6.00*	Cap'l Spending per sh	*7.00*
	17.54	17.63	17.71	17.90	18.77	19.54	12.04	12.60	12.82	13.08	13.36	12.44	13.33	14.63	17.40	22.71	*23.30*	*23.25*	Book Value per sh C	*25.70*
	276.79	279.30	282.18	310.28	313.68	316.04	319.11	323.16	337.02	372.36	382.14	391.76	405.30	412.14	447.38	469.82	*480.00*	*500.00*	Common Shs Outst'g D	*525.00*
	14.3	15.3	19.4	17.9	18.9	22.7	37.3	23.2	NMF	19.3	21.3	18.7	18.0	19.6	16.8	17.5	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*19.0*
	.95	.97	1.22	1.14	1.06	1.19	1.88	1.22	NMF	1.04	1.13	.96	.97	1.13	.93	.97			Relative P/E Ratio	*1.05*
	7.6%	5.7%	4.5%	3.8%	3.3%	2.7%	3.5%	2.8%	2.8%	3.1%	2.9%	3.4%	3.6%	3.3%	3.7%	3.5%			Avg Ann'l Div'd Yield	*3.0%*
							4651.8	4492.5	4874.6	5114.5	5208.9	4681.7	4899.6	5850.6	5505.4	5455.1	*6300*	*6750*	Revenues ($mill)	*8200*
							198.6	328.1	128.6	478.3	549.8	562.6	626.3	648.2	716.3	798.6	*915*	*1000*	Net Profit ($mill)	*1340*
							41.6%	35.7%	71.0%	19.7%	17.0%	18.3%	15.7%	16.5%	17.8%	17.9%	*19.0%*	*19.0%*	Income Tax Rate	*19.0%*
							--	--	--	--	--	--	--	--	3.0%	3.3%	*3.0%*	*3.0%*	AFUDC % to Net Profit	*3.0%*
							60.7%	59.8%	63.5%	55.3%	56.8%	61.6%	56.9%	55.7%	57.2%	54.0%	*54.0%*	*55.0%*	Long-Term Debt Ratio	*55.0%*
							39.3%	40.2%	36.5%	37.9%	36.9%	32.5%	33.5%	35.3%	40.3%	46.0%	*46.0%*	*45.0%*	Common Equity Ratio	*45.0%*
							9792.0	10129	11832	12856	13843	14972	16131	17099	19325	24294	*24300*	*25850*	Total Capital ($mill)	*30000*
							12112	13068	14360	15543	16912	16620	17882	19843	22275	27044	*27045*	*28970*	Net Plant ($mill)	*35325*
							4.0%	5.0%	2.6%	5.1%	5.3%	5.0%	4.9%	3.8%	3.4%	3.5%	*4.0%*	*4.0%*	Return on Total Cap'l	*4.5%*
							5.2%	8.1%	3.0%	8.3%	9.2%	9.8%	9.0%	8.6%	7.1%	*7.5%*	*8.0%*	*8.5%*	Return on Shr. Equity	*10.0%*
							5.2%	8.1%	3.0%	9.6%	9.7%	10.4%	10.6%	10.7%	7.1%	7.5%	*8.0%*	*8.5%*	Return on Com Equity	*10.0%*
							NMF	3.0%	NMF	4.0%	3.8%	3.8%	4.2%	3.6%	2.8%	3.0%	*3.5%*	*3.5%*	Retained to Com Eq	*4.5%*
							NMF	63%	NMF	60%	64%	67%	64%	64%	63%	61%	*59%*	*60%*	All Div'ds to Net Prof	*57%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $14885 mill. **Due in 5 Yrs** $7435 mill.
LT Debt $12833 mill. **LT Interest** $550 mill.
(Interest cov. earned: 5.5x) (54% of Cap'l)

Leases, Uncapitalized Annual rentals $10.0 mill.
Pension Assets-12/23 $1.3 bill. **Oblig.** $1.3 bill.

Common Stock 470,702,914 shs.
as of 4/30/25

MARKET CAP: $18.0 billion (Large Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	2245.4	156.6	259.4
Other	2254.0	1923.6	1925.2
Current Assets	4499.4	2080.2	2184.6
Accts Payable	749.4	863.1	726.3
Debt Due	3072.4	1885.8	2052.0
Other	1443.3	1364.5	1463.6
Current Liab.	5265.1	4113.4	4241.9
Fix. Chg. Cov.	225%	280%	575%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '21-'23 to '28-'30
Revenues	-3.5%	-1.5%	*5.5%*
"Cash Flow"	1.0%	6.5%	*5.5%*
Earnings	1.0%	10.5%	*9.5%*
Dividends	--	6.0%	*4.5%*
Book Value	-2.0%	3.5%	*5.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	1873	1183	1089	1704	5850.6
2023	1966	1090	1027	1422	5505.4
2024	1706	1085	1076	1588	5455.1
2025	2183	*1255*	*1245*	*1617*	*6300*
2026	*2340*	*1245*	*1335*	*1730*	*6750*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	.75	.12	.10	.50	1.47
2023	.77	.11	.19	.53	1.60
2024	.85	.21	.20	.49	1.75
2025	.98	*.30*	*.25*	*.67*	*1.90*
2026	*1.05*	*.40*	*.30*	*.75*	*2.00*

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.22	.22	.22	.22	.88
2022	.235	.235	.235	.235	.94
2023	.25	.25	.25	.25	1.00
2024	.265	.265	.265	.265	1.06
2025	.28	.28			

BUSINESS: NiSource Inc. is a holding company for Northern Indiana Public Service Company (NIPSCO), which supplies electricity and gas to the northern third of Indiana. Customers: 492,690 electric in Indiana, 3.3 million gas in Indiana, Ohio, Pennsylvania, Kentucky, Virginia, Maryland, through its Columbia subsidiaries. Revenue breakdown, 2024: electrical, 34%; gas, 63%; other, 3%. Generating capacity, fossil feuls 56%; renewables, 44%. 2024 reported depreciation rates: 3.0% electric, 2.6% gas. Has 7,746 employees. Chairman: Richard L. Thompson. President & Chief Executive Officer: Lloyd Yates. Incorporated: Indiana. Address: 801 East 86th Avenue, Merrillville, Indiana 46410. Telephone: 877-647-5990. Internet: www.nisource.com.

NiSource posted a strong profit in the first quarter of 2025. Revenues expanded 28% to $2.2 billion, driven by regulated revenue growth and the recovery of significant capital investments made over the past few years. This pushed earnings to increase 15% to $0.98 per share, outpacing our target. Representing over half of our full-year earnings estimate, the result reflects stable utility performance across its gas and electric operations. Management noted the success of capturing efficiency gains from recent investments in technology, with artificial intelligence-optimized scheduling resulting in an impressive 60,000 hours improvement in measured labor productivity. Regulatory progress also supported results, with several successful rate cases contributing to the quarter's strong earnings.

The near-term outlook is somewhat mixed. Continued improvements may face pressure from uncertain regulatory proceedings. Particularly, a new proposal in Indiana is currently pending in settlement discussions. Too, a shifting landscape for renewables investment could affect the company's strategic priorities, especially as it seeks to decomission its legacy coal generation plants over the next few years. On a positive note, management has taken a proactive approach to tariff-related inflation risks by advancing its procurement for key infrastructure, however, broader economic developments may influence future costs. As a result, we are tentatively expecting mid- to high-single-digit earnings growth over the next few years.

NiSource is well positioned to benefit from long-term trends. Regional economic development, including the buildout of data centers and the potential for manufacturing reshoring, along with infrastructure modernization, provide promising tailwinds for energy demand and opportunities for investment. However, we are uncertain about the future for its ambitious clean-energy transition strategy, given the potential for policy shifts. Overall, the utility is likely to maintain a positive trajectory to late decade.

Despite the business' strengths, these untimely shares offer below-average capital appreciation potential to late decade, overall.

Earl B. Humes *May 23, 2025*

(A) Dil. EPS. Excl. gains (losses) on disc. ops.: '15, (30¢); '18, ($1.48). Next egs. report due early August. Qtl'y egs. may not sum to total due to rounding.
(B) Div'ds historically paid in mid-Feb., May, Aug., Nov. ■ Div'd reinv. avail.
(C) Incl. intang in '24: $1485.9 million, $3.16/sh.
(D) In mill.
(E) Spun off Columbia Pipeline Group (7/15)

Company's Financial Strength	A
Stock's Price Stability	95
Price Growth Persistence	30
Earnings Predictability	70

N.W. NATURAL NYSE-NWN

RECENT PRICE **41.22** | P/E RATIO **13.7** (Trailing: 14.7 Median: 24.0) | RELATIVE P/E RATIO **0.77** | DIV'D YLD **4.8%** | **VALUE LINE**

TIMELINESS 3 Raised 3/28/25
SAFETY 2 Raised 2/23/24
TECHNICAL 2 Raised 5/23/25
BETA .80 (1.00 = Market)

18-Month Target Price Range

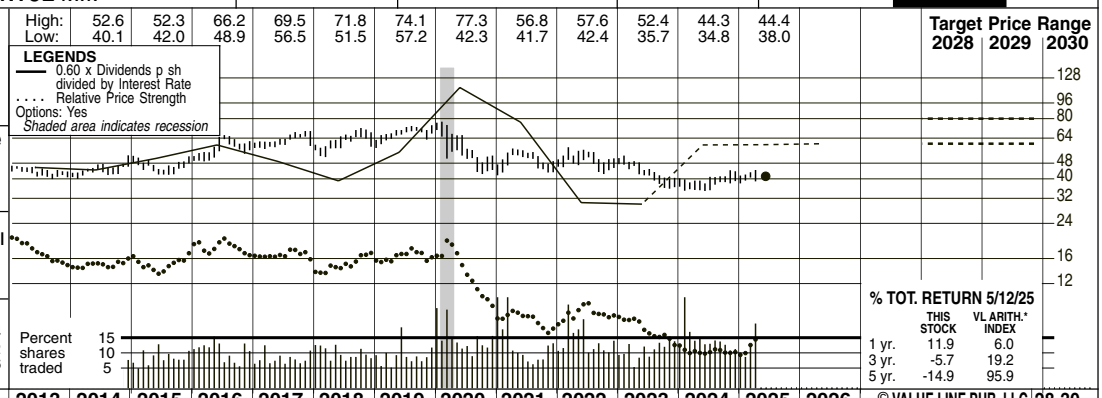
Low-High	Midpoint (% to Mid)
$30-$50	$40 (-5%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	80	(+95%)	*21%*
Low	60	(+45%)	*13%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	132	119	142
to Sell	104	118	96
Hld's(000)	29331	37328	37493



% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	11.9	6.0
3 yr.	-5.7	19.2
5 yr.	-14.9	95.9

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
38.17	30.56	31.72	27.14	28.02	27.64	26.39	23.61	26.52	24.45	24.49	25.29	27.64	29.20	31.82	28.67	*29.20*	*30.20*	Revenues per sh	*30.00*
5.20	5.18	5.00	4.94	5.04	5.05	4.91	4.93	1.04	5.28	5.15	5.69	6.17	5.71	5.83	5.68	*6.50*	*6.65*	"Cash Flow" per sh	*7.45*
2.83	2.73	2.39	2.22	2.24	2.16	1.96	2.12	d1.94	2.33	2.19	2.30	2.56	2.54	2.59	2.33	*3.00*	*3.10*	Earnings per sh A	*3.45*
1.60	1.68	1.75	1.79	1.83	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	*1.96*	*1.97*	Div'ds Decl'd per sh B■	*2.00*
5.09	9.35	3.76	4.91	5.13	4.40	4.37	4.87	7.43	7.43	7.95	9.18	9.49	9.53	8.70	8.80	*9.50*	*10.00*	Cap'l Spending per sh	*11.50*
24.88	26.08	26.70	27.23	27.77	28.12	28.47	29.71	25.85	26.41	28.42	29.05	30.04	33.09	34.12	34.45	*35.80*	*37.75*	Book Value per sh D	*40.40*
26.53	26.58	26.76	26.92	27.08	27.28	27.43	28.63	28.74	28.88	30.47	30.59	31.13	35.53	37.63	40.22	*43.00*	*45.00*	Common Shs Outst'g C	*50.00*
15.2	17.0	19.0	21.1	19.4	20.7	23.7	26.9	- -	26.6	30.9	25.0	19.5	19.6	16.6	16.6	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*20.0*
1.01	1.08	1.19	1.34	1.09	1.09	1.19	1.41	- -	1.44	1.65	1.28	1.05	1.13	.92	.92			Relative P/E Ratio	*1.10*
3.7%	3.6%	3.9%	3.8%	4.2%	4.1%	4.0%	3.3%	3.0%	3.0%	2.8%	3.3%	3.8%	3.9%	4.5%	5.1%			Avg Ann'l Div'd Yield	*2.9%*
723.8	676.0	762.2	706.1	746.4	773.7	860.4	1037.4	1197.5	1153.0	*1255*	*1360*	Revenues ($mill)	*1500*
53.7	58.9	d55.6	67.3	65.3	70.3	78.7	86.3	93.9	90.6	*130*	*140*	Net Profit ($mill)	*175*
40.0%	40.9%	- -	26.4%	16.2%	23.1%	25.8%	25.2%	25.6%	25.6%	*25.0%*	*25.0%*	Income Tax Rate	*25.0%*
7.4%	8.7%	NMF	9.5%	8.8%	9.1%	9.1%	8.3%	7.8%	7.9%	*10.3%*	*10.3%*	Net Profit Margin	*11.5%*
42.5%	44.4%	47.9%	48.1%	48.2%	49.2%	52.8%	51.5%	52.6%	54.8%	*55.0%*	*55.0%*	Long-Term Debt Ratio	*55.0%*
57.5%	55.6%	52.1%	51.9%	51.8%	50.8%	47.2%	48.5%	47.4%	45.2%	*45.0%*	*45.0%*	Common Equity Ratio	*45.0%*
1357.7	1529.8	1426.0	1468.9	1672.0	1748.8	1979.7	2421.6	2709.3	3064.8	*3420*	*3775*	Total Capital ($mill)	*4485*
2182.7	2260.9	2255.0	2421.4	2438.9	2654.8	2871.4	3114.4	3358.1	3672.3	*3990*	*4300*	Net Plant ($mill)	*4930*
5.5%	5.1%	NMF	5.8%	5.2%	5.2%	5.1%	4.7%	4.9%	3.0%	*4.0%*	*3.5%*	Return on Total Cap'l	*4.0%*
6.9%	6.9%	NMF	8.8%	7.5%	7.9%	8.4%	7.3%	7.3%	*6.5%*	*8.5%*	*8.0%*	Return on Shr. Equity	*8.5%*
6.9%	6.9%	NMF	8.8%	7.5%	7.9%	8.4%	7.3%	7.3%	6.5%	*8.5%*	*8.0%*	Return on Com Equity	*8.5%*
.6%	.9%	NMF	2.1%	1.4%	1.7%	2.4%	2.0%	2.1%	.9%	*2.5%*	*2.5%*	Retained to Com Eq	*3.0%*
92%	87%	NMF	76%	82%	79%	71%	73%	72%	84%	*65%*	*64%*	All Div'ds to Net Prof	*58%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $2311 mill. **Due in 5 Yrs** $1100 mill.
LT Debt $2193 mill. **LT Interest** $80 mill.

(Total interest coverage: 6.5x)

Pension Assets-12/23 $284.1 mill.
Oblig. $405.6 mill.

Pfd Stock None

Common Stock 40,309,760 shares
as of 4/28/25

MARKET CAP $1.7 billion (Small Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	32.9	38.5	100.1
Other	568.5	519.3	439.8
Current Assets	601.4	557.8	539.9
Accts Payable	145.4	133.3	132.8
Debt Due	240.7	200.9	117.9
Other	310.8	314.8	263.3
Current Liab.	696.9	649.0	514.0
Fix. Chg. Cov.	240%	410%	665%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '21-'23 to '28-'30
Revenues	- -	3.5%	*4.5%*
"Cash Flow"	1.5%	9.5%	*5.0%*
Earnings	1.0%	25.0%	*6.5%*
Dividends	1.0%	.5%	*.5%*
Book Value	2.0%	3.5%	*4.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	350.3	195.0	116.8	375.3	1037.4
2023	462.4	237.9	141.5	355.7	1197.5
2024	433.5	211.7	136.9	370.9	1153.0
2025	494.3	*230*	*150*	*380.7*	*1255*
2026	*535*	*250*	*165*	*410*	*1360*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	1.80	.05	d.56	1.36	2.54
2023	2.01	.03	d.65	1.21	2.59
2024	1.69	d.07	d.71	1.41	2.33
2025	2.28	*.05*	*d.60*	*1.27*	*3.00*
2026	*2.35*	*.05*	*d.65*	*1.35*	*3.10*

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.48	.48	.48	.483	1.92
2022	.483	.483	.483	.485	1.93
2023	.485	.485	.485	.488	1.94
2024	.488	.488	.488	.49	1.95
2025	.49	.49			

BUSINESS: Northwest Natural Holding Co. distributes natural gas to more than 800,000 customers in Oregon (88% of customers) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline system. Owns local underground storage. Gas margin breakdown: residential, 65%; commercial, 25%; industrial, 6%; other, 4%. Also operates water and wastewater services across six states. Employs 1,452. BlackRock Inc. owns 16.1% of shares; Vanguard, 10.8%; Off./Dir., .93% (4/25 proxy). CEO: Justin B. Palfreyman. Inc.: Oregon. Address: 220 NW 2nd Ave., Portland, OR 97209. Tel.: 503-226-4211. Internet: www.nwnatural.com.

Northwest Natural posted a strong start to what we expect will be a wide recovery performance in 2025. Driven by the resolution of regulatory lag in the last Oregon gas utility rate case, which was settled in October, earnings per share advanced a remarkable 35% to $2.28 in the March period. This long-awaited decision allowed for the recovery of significant capital investments made over the past few years, while seasonal strength in gas demand boosted the result. Organic customer growth across all utilities added up to roughly 2.2%, while the total count increased 9.6% thanks to acquisitions, including that of SiEnergy in January, which added 73,000 gas meters in Texas. The company has been opportunistically expanding into new geographies and verticals over the past few years, including water and wastewater, to help diversify its operating footprint. With the remainder of 2025 in mind, the recent rate case should underpin a majority of the earnings recovery we have envisioned. However, management expects that expansion into water and the SiEnergy acquisition will add roughly $0.25 - $0.30 per share.

Growth will likely be more moderate and consistent both in 2026 and out to late decade. After the expected recovery in 2025, growth will probably be limited to just over 3% in 2026. The company has already filed another rate case in Oregon, seeking a revenue increase of $60 million, or 5.8%. Further out, leadership is positioned to continue its capital investment cycle, targeting system upgrades and reinforcement across the main gas utility and growing number of subsidiaries, which should amount to multiple smaller rate adjustments. Also, although the company is likely to remain active on the acquisition front, with several bolt-on deals already inked, we won't include these in our projections until they are completed. We expect these initiatives to gas up the company's growth over the 3- to 5-years.

Northwest's multi-faceted approach to reinvigorating growth should pay off with above-average long-term upside from the recent quotation. Risks are a modest consideration, with regulatory and operational complexities potentially creating headwinds.

Earl B. Humes *May 23, 2025*

(A) Diluted earnings per share. Excludes nonrecurring items: '08, ($0.03); '09, $0.06; May not sum due to rounding. Next earnings report due in early August.

(B) Dividends historically paid in mid-February, May, August, and November.
■ Dividend reinvestment plan available.
(C) In millions.

(D) Includes intangibles. In 2024: $184 million, $4.60/share.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	20
Earnings Predictability	25

ONE GAS, INC. NYSE-OGS

RECENT PRICE **74.60** | P/E RATIO **17.3** (Trailing: 18.0 Median: 21.0) | RELATIVE P/E RATIO **0.97** | DIV'D YLD **3.6%** | **VALUE LINE**

TIMELINESS 3 Raised 5/23/25
SAFETY 2 New 6/2/17
TECHNICAL 2 Raised 5/23/25
BETA .80 (1.00 = Market)

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$50-$89	$70 (-5%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	110	(+45%)	*13%*
Low	80	(+5%)	*5%*

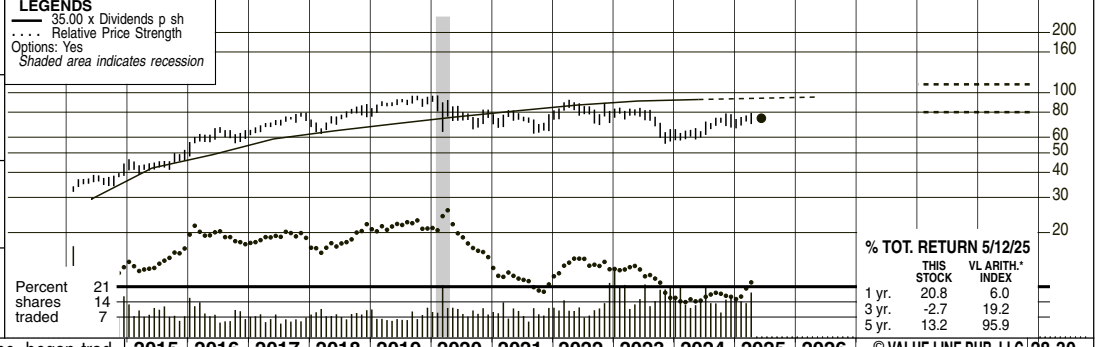
Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	143	152	174
to Sell	160	146	124
Hld's(000)	53086	62020	63204

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
High:	44.3	51.8	67.4	79.5	87.8	96.7	97.0	81.9	92.3	84.3	78.9	82.3
Low:	31.9	38.9	48.0	61.4	62.2	75.8	63.7	62.5	68.9	55.5	57.7	66.4

LEGENDS
35.00 x Dividends p sh
Relative Price Strength
Options: Yes
Shaded area indicates recession

Target Price Range 2028 | 2029 | 2030



% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	20.8	6.0
3 yr.	-2.7	19.2
5 yr.	13.2	95.9

The shares of ONE Gas, Inc. began trading "regular-way" on the New York Stock Exchange on February 3, 2014. That happened as a result of the separation of ONEOK's natural gas distribution operation. Regarding the details of the spinoff, on January 31, 2014, ONEOK distributed one share of OGS common stock for every four shares of ONEOK common stock held by ONEOK shareholders of record as of the close of business on January 21. It should be mentioned that ONEOK did not retain any ownership interest in the new company.

CAPITAL STRUCTURE as of 3/31/25
Total Debt $3212.1 mill. **Due in 5 Yrs** $1500.0 mill.
LT Debt $2370.4 mill. **LT Interest** $145.0 mill.
(LT interest earned: 2.8x; total interest coverage: 2.8x)
Leases, Uncapitalized Annual rentals $5.9 mill.
Pfd Stock None
Pension Assets-12/24 $904.9 mill. **Oblig.** $882.1 mill.
Common Stock 59,930,528 shs.
as of 4/28/25
MARKET CAP: $4.5 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	18.8	58.0	19.3
Other	746.4	871.9	736.9
Current Assets	765.2	929.9	756.2
Accts Payable	278.1	261.3	175.9
Debt Due	888.9	943.6	841.7
Other	310.2	253.4	259.8
Current Liab.	1477.2	1458.3	1277.4
Fix. Chg. Cov.	390%	325%	335%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '22-'24 to '28-'30
Revenues	1.5%	6.0%	*5.0%*
"Cash Flow"	6.5%	6.0%	*4.0%*
Earnings	7.0%	4.5%	*4.5%*
Dividends	12.0%	7.0%	*2.0%*
Book Value	3.5%	5.0%	*2.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	971.5	428.9	359.4	818.2	2578.0
2023	1032.1	398.1	335.8	606.0	2372.0
2024	758.3	354.1	340.4	630.8	2083.6
2025	935.2	*375*	*350*	*654.8*	*2315*
2026	*925*	*415*	*380*	*725*	*2445*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	1.83	.59	.44	1.23	4.08
2023	1.84	.58	.45	1.27	4.14
2024	1.75	.48	.34	1.34	3.91
2025	1.98	*.55*	*.39*	*1.38*	*4.30*
2026	*1.94*	*.63*	*.48*	*1.45*	*4.50*

Calendar	QUARTERLY DIVIDENDS PAID [B] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.58	.58	.58	.58	2.32
2022	.62	.62	.62	.62	2.48
2023	.65	.65	.65	.65	2.60
2024	.66	.66	.66	.66	2.64
2025	.67	.67			

© VALUE LINE PUB. LLC	28-30
Revenues per sh	*55.00*
"Cash Flow" per sh	*11.00*
Earnings per sh [A]	*5.25*
Div'ds Decl'd per sh [B■]	*2.90*
Cap'l Spending per sh	*11.15*
Book Value per sh	*56.60*
Common Shs Outst'g [C]	*70.00*
Avg Ann'l P/E Ratio	*18.0*
Relative P/E Ratio	*1.00*
Avg Ann'l Div'd Yield	*3.1%*
Revenues ($mill)	*3850*
Net Profit ($mill)	*370*
Income Tax Rate	*20.0%*
Net Profit Margin	*9.6%*
Long-Term Debt Ratio	*45.0%*
Common Equity Ratio	*55.0%*
Total Capital ($mill)	*7200*
Net Plant ($mill)	*8500*
Return on Total Cap'l	*6.5%*
Return on Shr. Equity	*9.5%*
Return on Com Equity	*9.5%*
Retained to Com Eq	*4.0%*
All Div'ds to Net Prof	*55%*

Bold figures are Value Line estimates

BUSINESS: ONE Gas, Inc. provides natural gas distribution services to more than two million customers. There are three divisions: Oklahoma Natural Gas, Kansas Gas Service, and Texas Gas Service. The company purchased 149 Bcf of natural gas supply in 2024, compared to 160 Bcf in 2023. Total volumes delivered by customer (fiscal 2024): transportation, 60.7%; residential, 28.6%; commercial & industrial, 10.1%; other, .6%. ONE Gas has around 3,900 employees. BlackRock owns 14.5% of common stock; The Vanguard Group, 11.6%; American Century Investment, 8.0%; officers and directors, 1.2% (4/25 Proxy). CEO: Robert S. McAnnally. Incorporated: Oklahoma. Address: 15 East Fifth Street, Tulsa, Oklahoma 74103. Tel.: 918-947-7000. Internet: www.onegas.com.

ONE Gas got off to an auspicious start in 2025. First-quarter earnings per share advanced 13.1%, to $1.98, relative to the prior-year tally of $1.75. That stemmed partially from benefits from new rates. Another contributing factor was higher residential sales, which reflected net customer growth in both Oklahoma and Texas. But increased depreciation & amortization expense, due to additional capital investments, provided somewhat of an offset to the good results. Also, employee-related costs climbed attributable, to a certain degree, to planned investments in the company's workforce. Still, it seems that full-year profits will grow 10%, to $4.30 a share, versus 2024's $3.91 total. Turning to 2026, the bottom line might rise at a slower (though still respectable) 5% rate, to $4.50 per share, given the tough comparison.

Finances are sound. When the March period concluded, cash on hand resided at $19.3 million (excluding $8.9 million in restricted cash). Furthermore, ONE Gas possesses a $1.3 billion revolving credit facility maturing in March, 2028. Also, at the end of the first quarter, long-term debt was a manageable 43% of total capital and short-term borrowings of $841.7 million did not appear to be a big hurdle. So, the company should continue to handle its obligations with little difficulty.

This year's capital expenditures, including asset removal costs, are expected to be roughly $750 million. (That would be moderately below the 2024 figure of $762.1 million.) The majority of the budget is devoted to system integrity and pipeline replacement projects. It's worth mentioning that the energy firm projects total spending to be $4.0 billion between 2025 and 2029, with around the same percentage of funds allocated to where they are at present. These goals seem achievable assuming, of course, that the balance sheet remains in solid shape.

What is an investor to do? The equity's dividend yield looks decent when stacked against those of other stocks in *Value Line's* Natural Gas Utility group. But at the recent quotation, capital gains potential for the pull to 2028-2030 is not alluring. These shares are ranked just 3 (Average) for Timeliness, as well.

Frederick L. Harris, III *May 23, 2025*

(A) Diluted EPS. Excludes nonrecurring gain: 2017, $0.06. Next earnings report due early August. Quarterly EPS figures for 2022 don't equal total due to rounding.
(B) Dividends historically paid in early March, June, Sept., and Dec. ■ Dividend reinvestment plan. Direct stock purchase plan.
(C) In millions.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	40
Earnings Predictability	100

SOUTHWEST GAS NYSE-SWX

RECENT PRICE **69.80** | P/E RATIO **19.8** (Trailing: 25.4 Median: 21.0) | RELATIVE P/E RATIO **1.11** | DIV'D YLD **3.6%** | **VALUE LINE**

TIMELINESS — Suspended 11/17/23
SAFETY 2 Raised 2/23/24
TECHNICAL — Suspended 11/17/23
BETA .80 (1.00 = Market)

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$59-$94	$77 (10%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	105	(+50%)	*13%*
Low	75	(+5%)	*6%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	141	144	163
to Sell	131	138	132
Hld's(000)	66812	73232	74695

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
High:	64.2	63.7	79.6	86.9	86.0	92.9	81.6	73.5	95.6	68.0	80.3	78.9						
Low:	47.2	50.5	53.5	72.3	62.5	73.3	45.7	57.0	59.5	53.8	57.6	64.7						

LEGENDS
0.80 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
Shaded area indicates recession

Target Price Range 2028 | 2029 | 2030

% TOT. RETURN 5/12/25

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-5.5	6.0
3 yr.	-15.6	19.2
5 yr.	14.9	95.9

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
	42.00	40.18	41.07	41.77	42.08	45.61	52.00	51.82	53.00	54.31	56.72	57.68	60.91	73.90	75.93	71.22	*69.85*	*71.90*	Revenues per sh	*76.65*
	6.16	6.46	6.81	7.73	8.24	8.47	8.62	9.29	8.83	8.14	9.40	9.87	9.46	3.98	8.27	8.87	*10.10*	*11.20*	"Cash Flow" per sh	*13.00*
	1.94	2.27	2.43	2.86	3.11	3.01	2.92	3.18	3.62	3.68	3.94	4.14	3.39	d3.10	2.13	2.76	*3.50*	*4.00*	Earnings per sh [A]	*5.00*
	.95	1.00	1.06	1.18	1.32	1.46	1.62	1.80	1.98	2.08	2.18	2.28	2.38	2.46	2.48	2.48	*2.48*	*2.48*	Div'ds Decl'd per sh [B■†]	*3.00*
	4.81	4.73	8.29	8.57	7.86	8.53	10.30	11.15	12.97	14.44	17.06	14.43	11.84	12.80	12.19	13.18	*12.50*	*13.50*	Cap'l Spending per sh	*14.50*
	24.44	25.62	26.66	28.35	30.47	31.95	33.61	35.03	37.74	42.47	45.56	46.77	48.89	45.57	46.25	51.39	*54.25*	*55.50*	Book Value per sh	*58.65*
	45.09	45.56	45.96	46.15	46.36	46.52	47.38	47.48	48.09	53.03	55.01	57.19	60.42	67.12	71.56	71.78	*73.00*	*73.00*	Common Shs Outst'g [C]	*75.00*
	12.2	14.0	15.7	15.0	15.8	17.9	19.4	21.6	22.2	20.6	21.3	16.8	19.9	- -	29.0	25.9	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
	.81	.89	.98	.95	.89	.94	.98	1.13	1.12	1.11	1.13	.86	1.08	- -	1.61	1.44			Relative P/E Ratio	*1.00*
	4.0%	3.2%	2.8%	2.8%	2.7%	2.7%	2.9%	2.6%	2.5%	2.7%	2.6%	3.3%	3.5%	3.2%	4.0%	3.5%			Avg Ann'l Div'd Yield	*3.3%*
							2463.6	2460.5	2548.8	2880.0	3119.9	3298.9	3680.5	4960.0	5434.0	5112.4	*5100*	*5250*	Revenues ($mill)	*5750*
							138.3	152.0	173.8	182.3	213.9	232.3	200.8	d203.3	150.9	198.8	*255*	*290*	Net Profit ($mill)	*375*
							36.4%	33.9%	32.8%	25.3%	20.5%	21.6%	16.1%	- -	21.2%	15.1%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
							5.6%	6.2%	6.8%	6.3%	6.9%	7.0%	5.5%	NMF	2.8%	3.9%	*5.0%*	*5.6%*	Net Profit Margin	*6.5%*
							49.3%	48.2%	49.8%	48.3%	47.9%	50.5%	58.2%	59.0%	58.2%	54.1%	*55.0%*	*55.0%*	Long-Term Debt Ratio	*56.0%*
							50.7%	51.8%	50.2%	51.7%	52.1%	49.5%	41.8%	41.0%	41.8%	45.9%	*45.0%*	*45.0%*	Common Equity Ratio	*44.0%*
							3143.5	3213.5	3613.3	4359.3	4806.4	5407.2	7069.5	7462.1	7919.9	8037.4	*8800*	*9000*	Total Capital ($mill)	*10000*
							3891.1	4132.0	4523.7	5093.2	5685.2	6176.1	7594.0	7024.5	7518.2	8109.1	*8700*	*9275*	Net Plant ($mill)	*10475*
							5.5%	5.8%	5.8%	5.2%	5.4%	5.3%	3.4%	NMF	3.8%	2.5%	*3.0%*	*3.0%*	Return on Total Cap'l	*4.0%*
							8.7%	9.1%	9.6%	8.1%	8.5%	8.7%	6.8%	NMF	4.6%	*5.5%*	*6.5%*	*7.0%*	Return on Shr. Equity	*8.5%*
							8.7%	9.1%	9.6%	8.1%	8.5%	8.7%	6.8%	NMF	4.6%	5.4%	*6.5%*	*7.0%*	Return on Com Equity	*8.5%*
							4.0%	4.1%	4.5%	3.6%	3.9%	4.0%	2.1%	NMF	NMF	.5%	*2.0%*	*2.5%*	Retained to Com Eq	*3.5%*
							54%	55%	53%	55%	54%	54%	69%	NMF	116%	90%	*71%*	*62%*	All Div'ds to Net Prof	*62%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $5046.8 mill. **Due in 5 Yrs** $1943 mill.
LT Debt $4327.9 mill. **LT Interest** $300 mill.
(Total interest coverage: 4.5x) (54% of Cap'l)

Leases, Uncapitalized Annual rentals $23.7 mill.
Pension Assets-12/23 $1158.0 mill.
Oblig. $1280.5 mill.

Pfd Stock None

Common Stock 71,912,673 shs.
as of 4/25/25

MARKET CAP: $5.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	106.5	363.8	406.3
Other	1774.6	1100.7	1025.6
Current Assets	1881.1	1464.5	1431.9
Accts Payable	346.9	331.8	253.3
Debt Due	671.1	710.0	718.9
Other	666.8	790.3	834.3
Current Liab.	1684.8	1832.1	1806.5
Fix. Chg. Cov.	145%	310%	455%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '21-'23 to '28-'30
Revenues	5.5%	6.5%	*6.0%*
"Cash Flow"	-3.0%	-7.0%	*8.5%*
Earnings	- -	- -	*10.0%*
Dividends	6.5%	3.5%	*5.5%*
Book Value	4.5%	2.0%	*7.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	1267.4	1146.1	1125.6	1420.9	4960.0
2023	1603.3	1293.6	1169.5	1387.6	5434.0
2024	1581.0	1182.2	1079.2	1307.6	5112.4
2025	1296.5	*1240*	*1225*	*1338.5*	*5100*
2026	*1335*	*1275*	*1260*	*1380*	*5250*

Calendar	EARNINGS PER SHARE [A D] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2022	1.58	d.10	d.18	d4.18	d3.10
2023	.67	.40	.04	1.02	2.13
2024	1.22	.25	- -	1.28	2.76
2025	1.58	*.65*	*.15*	*1.15*	*3.50*
2026	*1.80*	*.75*	*.15*	*1.30*	*4.00*

Calendar	QUARTERLY DIVIDENDS PAID [B■†] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.570	.595	.595	.595	2.36
2022	.595	.62	.62	.62	2.46
2023	.62	.62	.62	.62	2.48
2024	.62	.62	.62	.62	2.48
2025	.62				

BUSINESS: Southwest Gas Holdings, Inc. is the parent holding company of Southwest Gas. Centuri Group spun-off in IPO 4/22/24. Southwest Gas is a regulated gas distributor serving 2.3 million customers in Arizona, Nevada, and California. 2024 revenue mix: residential 68%; small commercial, 20%; large commercial and industrial, 5%; transportation, 7%. Southwest has 2,435 employees as of 12/31/24; Centuri has 8,687. Off. & dir. own .5% of common stock; Carl C. Icahn, 13.4%; BlackRock, 12.9%; The Vanguard Group, 10.1%; Corvex Management, 6.6% (3/25 Proxy). Chairman: Michael J. Melarkey. Pres. & CEO: Karen S. Haller. Inc.: DE. Addr.: 8360 S. Durango Drive, P.O. Box 98510 Las Vegas, Nevada 89193. Telephone: 702-876-7237. Internet: www.swgas.com.

Southwest Gas has posted good but slightly underwhelming recent results. The company reported earnings per share of $1.58, reflecting a record quarterly profit figure, but still landed below our target of $1.75. The December period figure was similarly just below our expectation. For now, the ongoing separation from the Centuri Group poses an ongoing headwind to the bottom line. Southwest still maintains a majority interest in the company, post IPO, and partially recognizes its losses, which amounted to $18 million in the March quarter. The utility has performed fairly well, supported by new rates implemented in Arizona and Nevada, along with steady customer growth, having added roughly 40,000 meters in a year. This has helped the utility's operating margin to expand by nearly $40 million. Lower operating and maintenance costs also benefited, but higher depreciation and interest expenses served to offset somewhat.

We've lowered our full-year 2025 targets, but still expect good results. As a result of ongoing struggles at the Centuri Group, we have cut a dime from our bottom-line estimate, now at $3.50 per share. However, the gas utility is going strong, and we still expect overall share-earnings growth of over 25% this year, with net income around $255. However, results will likely depend on management's plans for divesting from its position in Centuri. It's worth noting that we do not take divestitures into account when presenting our forecasts, until such actions are completed. As a result, it is likely that our estimates could prove conservative.

The utility is well positioned to capitalize on investment opportunities. Market dynamics in the company's territories remain favorable, bolstered by population growth and strength in sectors such as hospitality, manufacturing, and mining. Management expects to invest more than $4 billion over the next years, providing a significant infrastructure platform from which to generate long-term returns.

The stock appears to offer below average return prospects over the 3- to 5-year horizon, however. The shares remain unranked for Timeliness, due to the ongoing corporate restructuring.

Earl B. Humes *May 23, 2025*

(A) Diluted earnings. Excl. nonrec. gains (losses): '22, 10¢. Next egs. report due early August. **(B)** Dividends historically paid early March, June, September, and December. ■† Div'd reinvestment and stock purchase plan avail. **(C)** In millions. **(D)** Totals may not sum due to rounding. **(E)** Rank suspended 11/17/2023 for spin-off of the Centuri Group.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	25
Earnings Predictability	5

SPIRE INC. NYSE-SR

RECENT PRICE **72.19** | P/E RATIO **17.4** (Trailing: 17.8 Median: 18.0) | RELATIVE P/E RATIO **0.97** | DIV'D YLD **4.4%** | **VALUE LINE**

TIMELINESS 3 Raised 5/23/25
SAFETY 2 Raised 6/20/03
TECHNICAL 1 Raised 5/16/25
BETA .80 (1.00 = Market)

18-Month Target Price Range

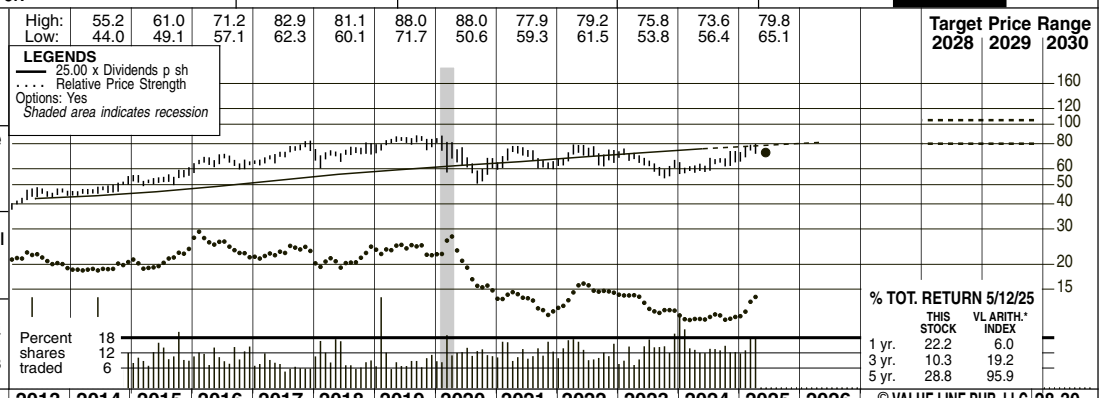
Low-High	Midpoint (% to Mid)
$55-$90	$73 (0%)

2028-30 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	105	(+45%)	*13%*
Low	80	(+10%)	*7%*

Institutional Decisions

	2Q2024	3Q2024	4Q2024
to Buy	160	159	181
to Sell	108	130	133
Hld's(000)	49797	57334	58958



2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC	28-30
85.49	77.83	71.48	49.90	31.10	37.68	45.59	33.68	36.07	38.78	38.30	35.96	43.24	41.88	50.12	44.94	*40.60*	*41.15*	Revenues per sh [A]	*47.90*
4.56	4.11	4.62	4.58	3.12	3.87	6.15	6.16	6.54	7.55	7.12	5.25	9.09	8.44	8.60	8.92	*9.10*	*9.45*	"Cash Flow" per sh	*10.85*
2.92	2.43	2.86	2.79	2.02	2.35	3.16	3.24	3.43	4.33	3.52	1.44	4.96	3.95	3.85	4.19	*4.05*	*4.25*	Earnings per sh [A B]	*5.25*
1.53	1.57	1.61	1.66	1.70	1.76	1.84	1.96	2.10	2.25	2.37	2.49	2.60	2.74	2.88	3.02	*3.14*	*3.26*	Div'ds Decl'd per sh [C■]	*3.70*
2.36	2.56	3.02	4.83	4.00	3.96	6.68	6.42	9.08	9.86	16.15	12.37	12.09	10.52	12.45	14.93	*14.00*	*14.40*	Cap'l Spending per sh	*12.75*
23.32	24.02	25.56	26.67	32.00	34.93	36.30	38.73	41.26	44.51	45.14	44.19	46.74	49.08	50.29	51.83	*55.50*	*55.80*	Book Value per sh [D]	*57.80*
22.17	22.29	22.43	22.55	32.70	43.18	43.36	45.65	48.26	50.67	50.97	51.60	51.70	52.50	53.20	57.70	*60.00*	*62.00*	Common Shs Outst'g [E]	*72.00*
13.4	13.7	13.0	14.5	21.3	19.8	16.5	19.6	19.8	16.7	22.8	51.1	13.6	17.5	17.3	14.6	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*17.5*
.89	.87	.82	.92	1.20	1.04	.83	1.03	1.00	.90	1.21	2.62	.73	1.01	1.00	.76			Relative P/E Ratio	*.95*
3.9%	4.7%	4.3%	4.1%	4.0%	3.8%	3.5%	3.1%	3.1%	3.1%	3.0%	3.4%	3.8%	4.0%	4.3%	4.9%			Avg Ann'l Div'd Yield	*4.0%*
1976.4	1537.3	1740.7	1965.0	1952.4	1855.4	2235.5	2198.5	2666.3	2593.0	*2435*	*2550*	Revenues ($mill) [A]	*3450*
136.9	144.2	161.6	214.2	184.6	88.6	271.7	220.8	217.5	250.9	*245*	*265*	Net Profit ($mill)	*380*
31.2%	32.5%	32.4%	--	15.7%	12.3%	20.1%	21.1%	15.1%	19.0%	*19.5%*	*19.5%*	Income Tax Rate	*23.5%*
6.9%	9.4%	9.3%	10.9%	9.5%	4.8%	12.2%	10.0%	8.2%	9.7%	*10.1%*	*10.4%*	Net Profit Margin	*11.0%*
53.0%	50.9%	50.0%	45.7%	45.0%	49.0%	52.5%	51.2%	54.9%	53.4%	*51.0%*	*52.0%*	Long-Term Debt Ratio	*51.0%*
47.0%	49.1%	50.0%	54.3%	49.7%	46.1%	43.2%	44.6%	41.3%	43.1%	*45.0%*	*44.0%*	Common Equity Ratio	*45.0%*
3345.1	3601.9	3986.3	4155.5	4625.6	4946.0	5597.3	5777.0	6471.3	6937.1	*7400*	*7865*	Total Capital ($mill)	*9250*
2941.2	3300.9	3665.2	3970.5	4352.0	4680.1	5055.7	5370.4	5778.9	6243.3	*6725*	*7040*	Net Plant ($mill)	*8300*
5.1%	4.9%	5.0%	6.3%	5.1%	2.9%	5.8%	4.9%	4.8%	5.1%	*5.0%*	*5.0%*	Return on Total Cap'l	*5.5%*
8.7%	8.2%	8.1%	9.5%	7.3%	3.5%	10.2%	7.8%	7.5%	7.8%	*7.5%*	*7.5%*	Return on Shr. Equity	*9.0%*
8.7%	8.2%	8.1%	9.5%	7.9%	3.2%	10.6%	8.0%	7.6%	7.9%	*7.5%*	*7.5%*	Return on Com Equity	*9.0%*
3.7%	3.3%	3.3%	4.7%	2.7%	NMF	5.1%	2.5%	1.9%	2.3%	*1.5%*	*1.5%*	Retained to Com Eq	*2.5%*
58%	59%	60%	51%	66%	NMF	54%	71%	76%	72%	*83%*	*82%*	All Div'ds to Net Prof	*74%*

CAPITAL STRUCTURE as of 3/31/25
Total Debt $4756.0 mill. **Due in 5 Yrs**$1766.0 mill.
LT Debt $3348.5 mill. **LT Interest** $185.0 mill.
(Total interest coverage: 2.5x)

Leases, Uncapitalized Annual rentals $9.8 mill.
Pension Assets-9/24 $704.5 mill.
Oblig. $887.3 mill.
Pfd Stock $242.0 mill. **Pfd Div'd** $14.8 mill.
Common Stock 59,016,874 shs.
as of 4/25/25

MARKET CAP: $4.3 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2023	2024	3/31/25
Cash Assets	5.6	4.5	15.2
Other	1071.3	766.8	892.6
Current Assets	1076.9	771.3	907.8
Accts Payable	253.1	237.2	283.5
Debt Due	1112.1	989.0	1407.5
Other	390.2	477.7	421.5
Current Liab.	1755.4	1703.9	2112.5
Fix. Chg. Cov.	294%	305%	315%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '22-'24 to '28-'30
Revenues	1.5%	4.0%	*1.0%*
"Cash Flow"	8.5%	4.0%	*4.0%*
Earnings	5.5%	1.0%	*4.5%*
Dividends	5.5%	5.0%	*4.0%*
Book Value	5.0%	3.0%	*2.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.)[A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2022	555.4	880.9	448.0	314.2	2198.5
2023	814.0	1123.4	418.5	310.4	2666.3
2024	756.6	1128.5	414.1	293.8	2593.0
2025	669.1	1051.3	*415*	*299.6*	*2435*
2026	*715*	*1100*	*425*	*310*	*2550*

Fiscal Year Ends	EARNINGS PER SHARE [A B F] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2022	1.01	3.27	d.10	d.20	3.95
2023	1.66	3.33	d.48	d.66	3.85
2024	1.52	3.58	d.28	d.51	4.19
2025	1.34	3.51	*d.30*	*d.50*	*4.05*
2026	*1.43*	*3.57*	*d.27*	*d.48*	*4.25*

Calendar	QUARTERLY DIVIDENDS PAID [C■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2021	.65	.65	.65	.65	2.60
2022	.685	.685	.685	.685	2.74
2023	.72	.72	.72	.72	2.88
2024	.755	.755	.755	.755	3.02
2025	.785	.785			

BUSINESS: Spire Inc., formerly known as the Laclede Group, Inc., is a holding company for natural gas utilities, which distributes natural gas across Missouri, including the cities of St. Louis and Kansas City, Alabama, and Mississippi. Has roughly 1.7 million customers. Acquired Missouri Gas 9/13, Alabama Gas Co 9/14. Utility therms sold and transported in fiscal 2024: 3.1 bill. Revenue mix for regulated operations: residential, 66%; commercial and industrial, 24%; transportation, 5%; other, 5%. Officers and directors own 2.3% of common shares; BlackRock, 11.9%; The Vanguard Group, 9.6% (12/24 proxy). Chairman: Rob L. Jones; CEO: Scott Doyle. Inc.: Missouri. Address: 700 Market Street, St. Louis, Missouri 63101. Tel.: 314-342-0500. Internet: www.spireenergy.com.

In April, Spire Inc. announced that its CEO Steve Lindsey was "terminated without cause." The company added, however, that the move was not because of some material or unexpected financial event. In any case, his successor Scott Doyle had been serving as the chief operating officer. (When Mr. Lindsey took a leave of absence earlier this year for health-related reasons, he filled in.) Prior to joining Spire in January of 2024, Mr. Doyle was executive vice president of utility operations at CenterPoint Energy. All things considered, we believe that the company is in capable hands.

Results have been lackluster thus far in fiscal 2025 (concludes September 30th). First-half profits of $4.85 a share were 5% lower than the previous year's $5.10 tally. That was due partly to reduced earnings from the Gas Marketing arm, reflecting less favorable market conditions combined with greater transportation and storage fees. The number of diluted shares outstanding rose, too. But the Gas Utility division and Midstream unit had improved performances during the period. Nevertheless, for the whole year, we expect Spire's bottom line to slip about 3%, to $4.05 per share, compared to fiscal 2024's $4.19 total. Regarding fiscal 2026, though, earnings per share may rebound around 5%, to $4.25. That is based, to some extent, on our assumption that the business climate is better. Improvements in operating efficiencies should also help.

The capital spending budget for this year was increased from $790 million to $840 million. (That's slightly below the fiscal 2024 level of $861.3 million.) The majority of the funds are being used for infrastructure upgrades, the installation of advanced meters, plus new business development initiatives at the utilities. Management adds that it expects total capital expenditures from fiscal 2025 through fiscal 2034 to be $7.4 billion. If finances stay healthy, the company ought to have little trouble achieving those goals.

These shares' big draw is the dividend yield. It stacks up nicely versus other Natural Gas Utility stocks covered by *Value Line*. Also, we expect more steady hikes in the payout out to 2028-2030.

Frederick L. Harris, III *May 23, 2025*

(A) Fiscal year ends Sept. 30th.
(B) Based on diluted shares outstanding. Next earnings report due late July.
(C) Dividends paid in early January, April, July, and October. ■ Dividend reinvestment plan available.
(D) Includes deferred charges. In '24: $1,171.6 mill., $20.31/sh.
(E) In millions.
(F) Quarterly earnings may not sum due to rounding or change in shares outstanding.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	25
Earnings Predictability	50

Atmos Energy Corporation
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Eight Natural Gas Companies
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.25 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds (2)	0.46
3.	Adjusted Prospective Yield on A2 Rated Public Utility Bonds	5.71 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group (3)	0.06
5.	Adjusted Bond Yield	5.77 %
6.	Equity Risk Premium (4)	4.92
7.	Risk Premium Derived Common Equity Cost Rate	10.69 %

Notes: (1) Consensus forecast of Moody's Aaa Rated Corporate bonds from Blue Chip Financial Forecasts (see pages 7 and 8 of this Exhibit).

(2) The average yield spread of A2 rated public utility bonds over Aaa rated corporate bonds of 0.46% from page 2 of this Exhibit.

(3) Adjustment to reflect the A3 Moody's LT issuer rating of the Utility Proxy Group as shown on page 3 of this Exhibit. The 0.06% upward adjustment is derived by taking 1/3 of the spread between A2 and Baa2 Public Utility Bonds (1/3 * 0.19% = 0.06%) as derived from page 2 of this Exhibit.

(4) From page 5 of this Exhibit.

Atmos Energy Corporation
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

Selected Bond Yields

	[1] Aaa Rated Corporate Bond	[2] A2 Rated Public Utility Bond	[3] Baa2 Rated Public Utility Bond
May-2025	5.54 %	6.05 %	6.23 %
Apr-2025	5.45	5.91	6.11
Mar-2025	5.29	5.72	5.91
Average	5.43 %	5.89 %	6.08 %

Selected Bond Spreads

A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds: 0.46 % (1)

Baa2 Rated Public Utility Bonds Over A2 Rated Public Utility Bonds: 0.19 % (2)

Notes:
(1) Column [2] - Column [1].
(2) Column [3] - Column [2].

Source of Information:
Bloomberg Professional Services

Atmos Energy Corporation
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Eight Natural Gas Companies

	Moody's		Standard & Poor's	
	Long-Term Issuer Rating		Long-Term Issuer Rating	
	May 2025		May 2025	
Proxy Group of Eight Natural Gas Companies	Long-Term Issuer Rating (1)	Numerical Weighting (2)	Long-Term Issuer Rating (1)	Numerical Weighting (1)
Atmos Energy Corporation	A2	6.0	A-	7.0
Chesapeake Utilities Corporation	NR	- -	NR	- -
New Jersey Resources Corporation	A1	5.0	NR	- -
NiSource Inc.	Baa1	8.0	BBB+	8.0
Northwest Natural Holding Company	Baa1	8.0	A+	5.0
ONE Gas, Inc.	A3	7.0	A-	7.0
Southwest Gas Holdings, Inc.	Baa1	8.0	BBB	9.0
Spire Inc.	A1/A2	5.5	BBB+	8.0
Average	A3	6.8	A-	7.3

Notes:
(1) Ratings are that of the average of each company's utility operating subsidiaries.
(2) From page 4 of this Exhibit.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

Numerical Assignment for Moody's and Standard & Poor's Bond Ratings

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's Bond Rating
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-
B1	14	B+
B2	15	B
B3	16	B-

Atmos Energy Corporation
Judgment of Equity Risk Premium for the
Proxy Group of Eight Natural Gas Companies

Line No.		Proxy Group of Eight Natural Gas Companies
1.	Calculated equity risk premium based on the total market using the beta approach (1)	5.35 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2)	4.67
3.	Predicted Equity Risk Premium based on Regression Analysis of 848 Fully-Litigated Natural Gas Cases (3)	4.74
4.	Average equity risk premium	4.92 %

Notes: (1) From page 6 of this Exhibit.
(2) From page 9 of this Exhibit.
(3) From page 10 of this Exhibit.

Atmos Energy Corporation
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Group of Eight Natural Gas Companies

Line No.	Equity Risk Premium Measure	Proxy Group of Eight Natural Gas Companies
1.	Kroll Equity Risk Premium (1)	6.10 %
2.	Regression on Kroll Risk Premium Data (2)	6.94
3.	Kroll Equity Risk Premium based on PRPM (3)	7.66
4	Equity Risk Premium Based on Value Line Summary and Index (4)	9.15
5.	Equity Risk Premium Based on Bloomberg, Value Line, and S&P Global Market Intelligence S&P 500 Companies (5)	10.09
6.	Conclusion of Equity Risk Premium	7.99 %
7.	Adjusted Beta (6)	0.67
8.	Forecasted Equity Risk Premium	5.35 %

Notes:

(1) Based on the arithmetic mean historical monthly returns on large company common stocks from Kroll 2024 SBBI® Yearbook and Bloomberg Professional Services minus the arithmetic mean monthly yield of Moody's average Aaa and Aa2 corporate bonds from 1928-2024.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of large company common stocks relative to Moody's average Aaa and Aa2 rated corporate bond yields from 1928-2024 referenced in Note 1 above. Using the equation generated from the regression, an expected equity risk premium is calculated using the average consensus forecast of Aaa corporate bonds of 5.25% (from page 1 of this Exhibit).

(3) The Predictive Risk Premium Model (PRPM) is discussed in the accompanying direct testimony. The Ibbotson equity risk premium based on the PRPM is derived by applying the PRPM to the monthly risk premiums between Ibbotson large company common stock monthly returns and average Aaa and Aa corporate monthly bond yields, from January 1928 through May 2025.

(4) The equity risk premium based on the Value Line Summary and Index is derived by subtracting the average consensus forecast of Aaa corporate bonds of 5.25% (from page 1 of this Exhibit) from the projected 3-5 year total annual market return of 14.40% (described fully in note 1 on page 2 of Exhibit DWD-4).

(5) Using data from the Bloomberg Professional Services, Value Line, and S&P Global Market Intelligence for the S&P 500, an expected total return of 15.34% was derived based upon expected dividend yields as a proxy for income returns and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 5.25% results in an expected equity risk premium of 10.09%.

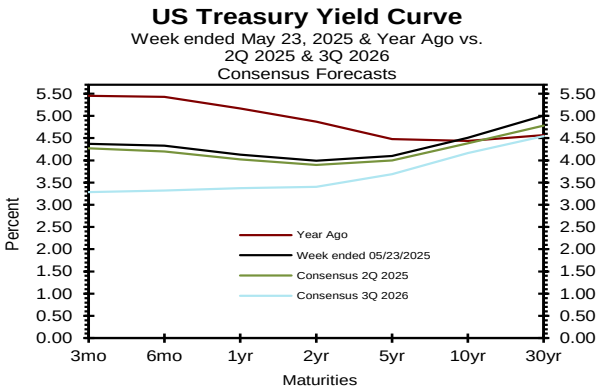
(6) Average of mean and median beta from Exhibit DWD-4.

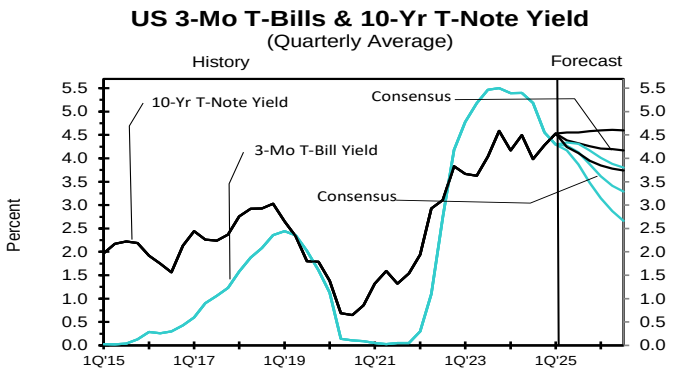
Sources of Information:
Kroll 2023 SBBI® Yearbook
Industrial Manual and Mergent Bond Record Monthly Update.
Value Line Summary and Index
Blue Chip Financial Forecasts, June 2, 2025
S&P Capital IQ
Bloomberg Professional Services

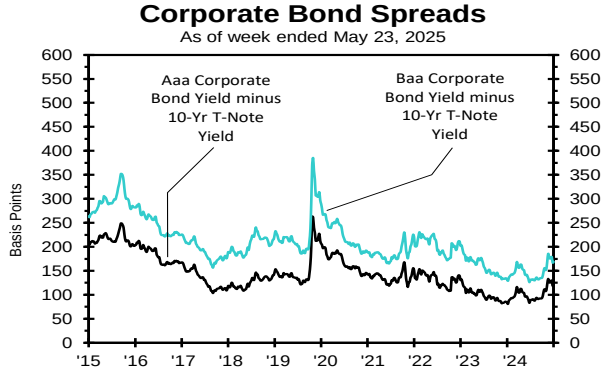
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

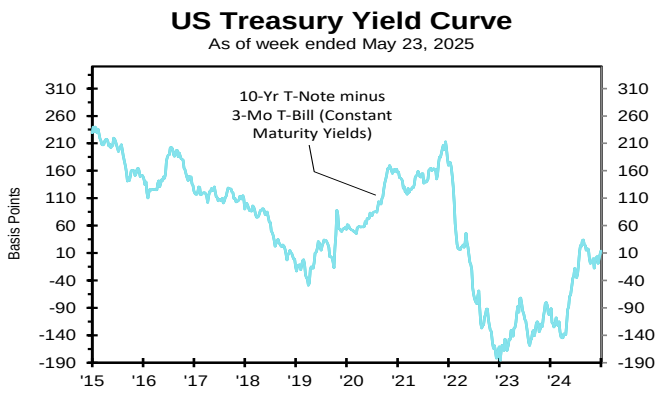
	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			*Latest Qtr*	2Q	3Q	4Q	1Q	2Q	3Q
Interest Rates	May 23	May 16	May 9	May 2	Apr	Mar	Feb	1Q 2025	2025	2025	2025	2026	2026	2026
Federal Funds Rate	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	**4.3**	**4.2**	**3.9**	**3.7**	**3.5**	**3.4**
Prime Rate	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	**7.5**	**7.4**	**7.1**	**6.8**	**6.6**	**6.5**
SOFR	4.27	4.30	4.30	4.38	4.35	4.33	4.34	4.33	**4.3**	**4.2**	**4.0**	**3.7**	**3.5**	**3.3**
Commercial Paper, 1-mo.	4.31	4.32	4.33	4.31	4.34	4.32	4.31	4.32	**4.3**	**4.2**	**3.9**	**3.7**	**3.4**	**3.3**
Treasury bill, 3-mo.	4.37	4.40	4.34	4.32	4.32	4.34	4.33	4.34	**4.3**	**4.1**	**3.9**	**3.6**	**3.4**	**3.3**
Treasury bill, 6-mo.	4.33	4.29	4.27	4.22	4.20	4.27	4.30	4.28	**4.2**	**4.1**	**3.8**	**3.6**	**3.5**	**3.3**
Treasury bill, 1 yr.	4.13	4.12	4.02	3.92	3.95	4.06	4.19	4.14	**4.0**	**3.9**	**3.8**	**3.6**	**3.5**	**3.4**
Treasury note, 2 yr.	3.99	4.00	3.83	3.69	3.78	3.97	4.21	4.15	**3.9**	**3.8**	**3.7**	**3.5**	**3.5**	**3.4**
Treasury note, 5 yr.	4.10	4.10	3.94	3.81	3.91	4.04	4.28	4.25	**4.0**	**4.0**	**3.9**	**3.8**	**3.7**	**3.7**
Treasury note, 10 yr.	4.51	4.47	4.33	4.23	4.28	4.28	4.45	4.45	**4.4**	**4.3**	**4.3**	**4.2**	**4.2**	**4.2**
Treasury note, 30 yr.	5.01	4.92	4.81	4.70	4.71	4.60	4.68	4.71	**4.8**	**4.7**	**4.6**	**4.6**	**4.6**	**4.5**
Corporate Aaa bond	5.73	5.66	5.63	5.52	5.56	5.38	5.39	5.44	**5.4**	**5.4**	**5.3**	**5.3**	**5.2**	**5.2**
Corporate Baa bond	6.20	6.14	6.12	6.01	6.06	5.81	5.82	5.86	**6.2**	**6.2**	**6.2**	**6.1**	**6.1**	**6.0**
State & Local bonds	4.48	4.46	4.46	4.48	4.50	4.22	4.16	4.19	**4.6**	**4.6**	**4.5**	**4.4**	**4.5**	**4.4**
Home mortgage rate	6.86	6.81	6.76	6.76	6.73	6.65	6.84	6.82	**6.8**	**6.7**	**6.5**	**6.4**	**6.3**	**6.3**
	History								Consensus Forecasts-Quarterly					
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q
Key Assumptions	2023	2023	2023	2024	2024	2024	2024	2025	2025	2025	2025	2026	2026	2026
Fed's AFE $ Index	114.6	115.0	116.6	115.5	117.3	114.9	117.9	119.8	**115.1**	**114.4**	**113.6**	**113.0**	**112.9**	**113.0**
Real GDP	2.4	4.4	3.2	1.6	3.0	3.1	2.4	-0.2	**1.3**	**0.4**	**0.9**	**1.4**	**1.8**	**2.0**
GDP Price Index	1.9	3.2	1.5	3.0	2.5	1.9	2.3	3.7	**2.9**	**3.4**	**2.8**	**2.6**	**2.2**	**2.3**
Consumer Price Index	3.0	3.5	2.8	3.7	2.8	1.4	3.0	3.8	**2.7**	**3.7**	**3.1**	**2.8**	**2.5**	**2.5**
PCE Price Index	2.9	2.7	1.7	3.4	2.5	1.5	2.4	3.6	**2.7**	**3.5**	**2.9**	**2.7**	**2.4**	**2.3**

Forecasts for interest rates and the Federal Reserve's Advanced Foreign Economies Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index, CPI and PCE Price Index are seasonally adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; SOFR from the New York Fed. All interest rate data are sourced from Haver Analytics. Historical data for Fed's Major Currency Index are from FRSR H.10. Historical data for Real GDP, GDP Price Index and PCE Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index history is from the Department of Labor's Bureau of Labor Statistics (BLS).









Long-Range Survey:

The table below contains results of our semi-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are estimates for the years 2026 through 2031 and averages for the five-year periods 2027-2031 and 2032-2036. Apply these projections cautiously. Few economic, demographic and political forces can be evaluated accurately over such long time spans.

		Average For The Year						Five-Year Averages	
		2026	2027	2028	2029	2030	2031	2027-2031	2032-2036
1. Federal Funds Rate	**CONSENSUS**	**3.4**	**3.2**	**3.2**	**3.2**	**3.1**	**3.1**	**3.2**	**3.1**
	Top 10 Average	3.7	3.5	3.4	3.4	3.4	3.4	3.4	3.4
	Bottom 10 Average	3.1	3.0	2.9	2.9	2.8	2.9	2.9	2.8
2. Prime Rate	**CONSENSUS**	**6.5**	**6.4**	**6.3**	**6.3**	**6.2**	**6.2**	**6.3**	**6.2**
	Top 10 Average	6.7	6.6	6.5	6.6	6.5	6.5	6.5	6.5
	Bottom 10 Average	6.2	6.2	6.0	6.0	5.9	5.9	6.0	5.9
3. SOFR	**CONSENSUS**	**3.4**	**3.3**	**3.2**	**3.1**	**3.1**	**3.1**	**3.2**	**3.1**
	Top 10 Average	3.6	3.4	3.3	3.3	3.3	3.3	3.3	3.3
	Bottom 10 Average	3.2	3.2	3.0	2.9	2.9	2.9	3.0	2.8
4. Commercial Paper, 1-Mo	**CONSENSUS**	**3.4**	**3.3**	**3.2**	**3.1**	**3.1**	**3.1**	**3.2**	**3.1**
	Top 10 Average	3.5	3.4	3.3	3.2	3.2	3.2	3.3	3.3
	Bottom 10 Average	3.3	3.3	3.1	3.0	3.0	3.0	3.1	2.9
5. Treasury Bill Yield, 3-Mo	**CONSENSUS**	**3.3**	**3.2**	**3.2**	**3.1**	**3.1**	**3.1**	**3.1**	**3.1**
	Top 10 Average	3.6	3.4	3.4	3.4	3.3	3.3	3.4	3.3
	Bottom 10 Average	3.1	2.9	2.9	2.8	2.8	2.8	2.9	2.8
6. Treasury Bill Yield, 6-Mo	**CONSENSUS**	**3.3**	**3.2**	**3.2**	**3.1**	**3.1**	**3.1**	**3.2**	**3.1**
	Top 10 Average	3.6	3.4	3.4	3.3	3.3	3.3	3.3	3.3
	Bottom 10 Average	3.1	3.0	3.0	2.9	2.9	2.9	3.0	2.8
7. Treasury Bill Yield, 1-Yr	**CONSENSUS**	**3.3**	**3.3**	**3.3**	**3.2**	**3.2**	**3.2**	**3.2**	**3.2**
	Top 10 Average	3.6	3.5	3.4	3.4	3.4	3.4	3.4	3.4
	Bottom 10 Average	3.1	3.1	3.1	3.1	3.0	3.0	3.1	3.0
8. Treasury Note Yield, 2-Yr	**CONSENSUS**	**3.4**	**3.4**	**3.5**	**3.4**	**3.4**	**3.4**	**3.4**	**3.4**
	Top 10 Average	3.7	3.6	3.7	3.6	3.6	3.6	3.6	3.6
	Bottom 10 Average	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.1
9. Treasury Note Yield, 5-Yr	**CONSENSUS**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**
	Top 10 Average	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.0
	Bottom 10 Average	3.4	3.5	3.5	3.5	3.4	3.4	3.5	3.4
10. Treasury Note Yield, 10-Yr	**CONSENSUS**	**4.0**	**4.1**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**
	Top 10 Average	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	Bottom 10 Average	3.8	3.9	3.8	3.8	3.8	3.8	3.8	3.8
11. Treasury Bond Yield, 30-Yr	**CONSENSUS**	**4.5**	**4.4**	**4.4**	**4.3**	**4.3**	**4.3**	**4.4**	**4.3**
	Top 10 Average	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.7
	Bottom 10 Average	4.2	4.3	4.1	4.1	4.1	4.1	4.1	4.1
12. Corporate Aaa Bond Yield	**CONSENSUS**	**5.2**	**5.2**	**5.2**	**5.1**	**5.1**	**5.1**	**5.1**	**5.1**
	Top 10 Average	5.4	5.5	5.4	5.4	5.4	5.4	5.4	5.4
	Bottom 10 Average	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9
13. Corporate Baa Bond Yield	**CONSENSUS**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**	**6.0**
	Top 10 Average	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	Bottom 10 Average	5.8	5.9	5.8	5.8	5.8	5.7	5.8	5.8
14. State & Local Bonds Yield	**CONSENSUS**	**4.3**	**4.3**	**4.3**	**4.2**	**4.2**	**4.2**	**4.3**	**4.1**
	Top 10 Average	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4
	Bottom 10 Average	4.1	4.2	4.1	4.1	4.1	4.1	4.1	3.8
15. Home Mortgage Rate	**CONSENSUS**	**6.2**	**6.2**	**6.1**	**6.0**	**6.0**	**6.0**	**6.1**	**5.9**
	Top 10 Average	6.4	6.4	6.4	6.3	6.3	6.3	6.3	6.3
	Bottom 10 Average	5.9	6.0	5.8	5.8	5.8	5.7	5.8	5.6
A. Fed's AFE Nominal $ Index	**CONSENSUS**	**113.3**	**112.7**	**112.7**	**112.2**	**111.7**	**111.3**	**112.1**	**110.8**
	Top 10 Average	114.2	113.3	113.4	112.9	112.5	112.2	112.8	112.4
	Bottom 10 Average	112.2	111.9	112.0	111.3	110.7	110.3	111.3	109.1
		Year-Over-Year, % Change						Five-Year Averages	
		2026	2027	2028	2029	2030	2031	2027-2031	2032-2036
B. Real GDP	**CONSENSUS**	**1.5**	**1.9**	**2.0**	**2.0**	**1.9**	**2.0**	**2.0**	**1.9**
	Top 10 Average	1.9	2.1	2.2	2.2	2.2	2.2	2.2	2.1
	Bottom 10 Average	1.1	1.8	1.8	1.8	1.7	1.7	1.8	1.8
C. GDP Chained Price Index	**CONSENSUS**	**2.4**	**2.2**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**
	Top 10 Average	2.6	2.3	2.2	2.2	2.2	2.2	2.2	2.2
	Bottom 10 Average	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
D. Consumer Price Index	**CONSENSUS**	**2.5**	**2.2**	**2.2**	**2.1**	**2.1**	**2.2**	**2.2**	**2.2**
	Top 10 Average	2.9	2.4	2.3	2.3	2.3	2.3	2.3	2.3
	Bottom 10 Average	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1
E. PCE Price Index	**CONSENSUS**	**2.4**	**2.0**	**2.0**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**
	Top 10 Average	2.8	2.3	2.2	2.1	2.1	2.1	2.2	2.1
	Bottom 10 Average	2.1	1.8	1.8	1.8	1.7	1.8	1.8	1.8

Projected Market Appreciation of the S&P Utility Index
Derivation of Mean Equity Risk Premium Based Studies
Using Holding Period Returns and
Projected Market Appreciation of the S&P Utility Index

Line No.		Implied Equity Risk Premium
1.	Historical Equity Risk Premium (1)	4.16 %
2.	Regression of Historical Equity Risk Premium (2)	4.82
3	Forecasted Equity Risk Premium Based on PRPM (3)	4.46
4.	Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Bloomberg, Value Line, and S&P Capital IQ Data) (4)	5.24
5.	Average Equity Risk Premium (5)	4.67 %

Notes: (1) Based on S&P Public Utility Index monthly total returns and Moody's Public Utility Bond average monthly yields from 1928-2024. Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in the market value of a security over a one-year holding period.

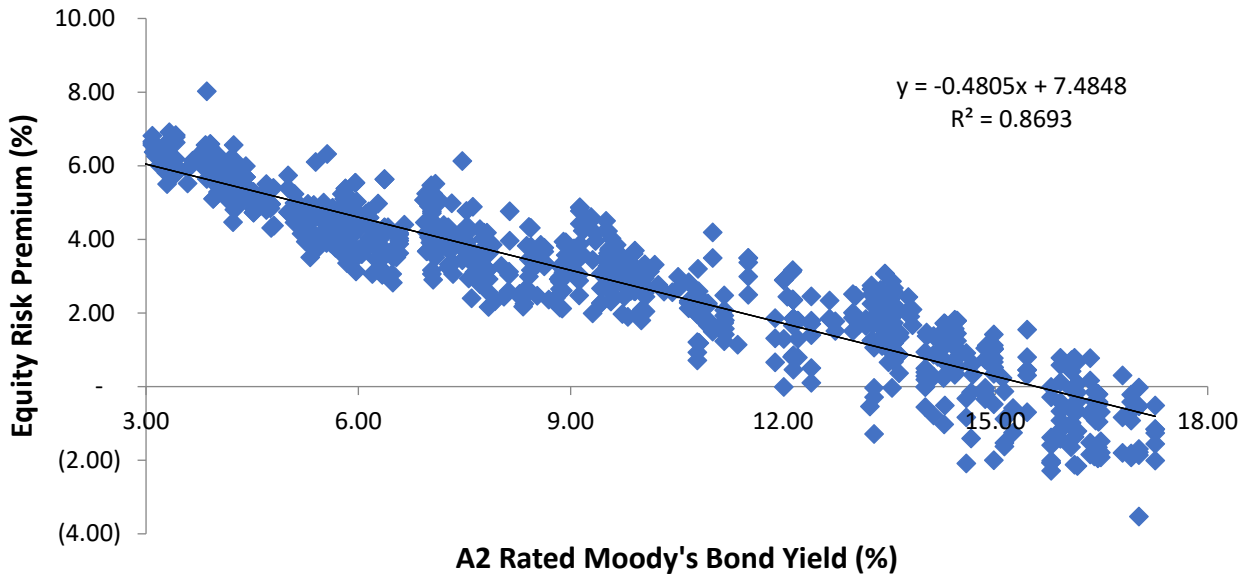
(2) This equity risk premium is based on a regression of the monthly equity risk premiums of the S&P Utility Index relative to Moody's A2 rated public utility bond yields from 1928 - 2024 referenced in note 1 above. Using the equation generated from the regression, an expected equity risk premium is calculated using the prospective A2 rated public utility bond yield of 5.71% (from line 3, page 1 of this Exhibit).

(3) The Predictive Risk Premium Model (PRPM) is applied to the risk premium of the monthly total returns of the S&P Utility Index and the monthly yields on Moody's A2 rated public utility bonds from January 1928 through May 2025.

(4) Using data from Bloomberg, Value Line, and S&P Capital IQ for the S&P Utilities Index, an expected return of 10.95% was derived based on expected dividend yields as a proxy for income returns and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 5.71%, calculated on line 3 of page 1 of this Exhibit, results in an equity risk premium of 5.24%. (10.95% - 5.71% = 5.24%).

(5) Average of lines 1 through 4.

Atmos Energy Corporation
Prediction of Equity Risk Premiums Relative to
Moody's A2 Rated Utility Bond Yields - Electric Utilities



Constant	Slope	Prospective A2 Rated Utility Bond (1)	Equity Risk Premium
7.4848 %	-0.4805	5.71 %	4.74 %

Notes:

(1) From line 3 of page 1 of this Exhibit.

Source of Information: Regulatory Research Associates.

Atmos Energy Corporation
Indicated Common Equity Cost Rate Through Use
of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

Proxy Group of Eight Natural Gas Companies	[1] Value Line Adjusted Beta	[2] Bloomberg Adjusted Beta	[3] Average Beta	[4] Market Risk Premium (1)	[5] Risk-Free Rate (2)	[6] Traditional CAPM Cost Rate	[7] ECAPM Cost Rate	[8] Indicated Common Equity Cost Rate (3)
Atmos Energy Corporation	0.75	0.54	0.65	8.88 %	4.56 %	10.33 %	11.11 %	10.72 %
Chesapeake Utilities Corporation	0.75	0.49	0.62	8.88	4.56	10.07	10.91	10.49
New Jersey Resources Corporation	0.85	0.48	0.67	8.88	4.56	10.51	11.25	10.88
NiSource Inc.	0.85	0.60	0.73	8.88	4.56	11.05	11.64	11.35
Northwest Natural Holding Company	0.80	0.53	0.67	8.88	4.56	10.51	11.25	10.88
ONE Gas, Inc.	0.80	0.51	0.65	8.88	4.56	10.33	11.11	10.72
Southwest Gas Holdings, Inc.	0.80	0.68	0.74	8.88	4.56	11.13	11.71	11.42
Spire Inc.	0.80	0.51	0.66	8.88	4.56	10.42	11.18	10.80
Mean			0.67			10.55 %	11.27 %	10.91 %
Median			0.67			10.47 %	11.21 %	10.84 %
Average of Mean and Median			0.67			10.51 %	11.24 %	10.88 %

Notes on page 2 of this Exhibit.

Atmos Energy Corporation
Notes to Accompany the Application of the CAPM and ECAPM

Notes:

(1) The market risk premium (MRP) is derived by using five different measures from four sources: Kroll, Value Line, Bloomberg, and S&P Capital IQ as illustrated below:

Measure 1: Kroll Arithmetic Mean MRP (1926-2024)

Arithmetic Mean Monthly Returns for Large Stocks 1926-2024:	12.29 %
Arithmetic Mean Income Returns on Long-Term Government Bonds:	4.99
MRP based on Kroll Historical Data:	7.31 %

Measure 2: Application of a Regression Analysis to Historical Data

(1926-2024)	7.93 %

Measure 3: Application of the PRPM to Historical Data

(January 1926 through May 2025)	8.57 %

Measure 4: Value Line Projected MRP (Thirteen weeks ending May 30, 2025)

Total projected return on the market 3-5 years hence*:	14.40 %
Risk-Free Rate (see note 2):	4.56
MRP based on Value Line Summary & Index:	9.84 %

*Forcasted 3-5 year capital appreciation plus expected dividend yield

Measure 5: Bloomberg, Value Line, and S&P Capital IQ Projected Return on the Market based on the S&P 500

Total return on the Market based on the S&P 500:	15.34 %
Risk-Free Rate (see note 2):	4.56
MRP based on Bloomberg, Value Line, and S&P Capital IQ data	10.78 %

Average of all MRP Measures:	8.88 %

(2) For reasons explained in the Direct Testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Treasury Bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts. (See pages 7 and 8 of Exhibit DWD-3.) The projection of the risk-free rate is illustrated below:

Second Quarter 2025	4.80 %
Third Quarter 2025	4.70
Fourth Quarter 2025	4.60
First Quarter 2026	4.60
Second Quarter 2026	4.60
Third Quarter 2026	4.50
2027-2031	4.40
2032-2036	4.30
	4.56 %

(3) Average of Column 6 and Column 7.

Sources of Information:
Value Line Summary and Index
Blue Chip Financial Forecasts, June 2, 2025
Kroll 2023 SBBI® Yearbook
S&P Capital IQ
Bloomberg Professional Services

Atmos Energy Corporation
Basis of Selection of the Group of Non-Price Regulated Companies
Comparable in Total Risk to the Proxy Group of Eight Natural Gas Companies

The criteria for selection of the proxy group of non-price regulated companies comparable in total risk to the proxy group of eight natural gas companies was that the non-price regulated companies be domestic and reported in Value Line Investment Survey (Standard Edition).

The proxy group of non-price regulated companies was selected based on the unadjusted beta range of 0.50 - 0.84 and residual standard error of the regression range of 2.6848 - 3.2020 of the proxy group of eight natural gas companies.

These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression. Plus or minus three standard deviations captures 95.50% of the distribution of unadjusted betas and residual standard errors of the regression.

The standard deviation of the Utility Proxy Group's residual standard error of the regression is 0.1293. The standard deviation of the standard error of the regression is calculated as follows:

$$\text{Standard Deviation of the Std. Err. of the Regr.} = \frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

$$\text{Thus,} \quad 0.1293 = \frac{2.9434}{\sqrt{518}} = \frac{2.9434}{22.7596}$$

Source of Information: Value Line Proprietary Database, March 2025.
Value Line Investment Survey (Standard Edition).

Atmos Energy Corporation
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

Proxy Group of Eight Natural Gas Companies	[1] Value Line Adjusted Beta	[2] Unadjusted Beta	[3] Residual Standard Error of the Regression	[4] Standard Deviation of Beta
Atmos Energy Corporation	0.75	0.60	2.3930	0.0686
Chesapeake Utilities Corporation	0.75	0.61	3.1465	0.0902
New Jersey Resources Corporation	0.90	0.80	3.0205	0.0866
NiSource Inc.	0.85	0.73	2.5604	0.0734
Northwest Natural Holding Company	0.80	0.65	3.0976	0.0888
ONE Gas, Inc.	0.80	0.67	3.1532	0.0904
Southwest Gas Holdings, Inc.	0.80	0.64	3.3149	0.0951
Spire Inc.	0.80	0.66	2.8610	0.0820
Average	0.81	0.67	2.9434	0.0844
Beta Range (+/- 2 std. Devs. of Beta)	0.50	0.84		
2 std. Devs. of Beta	0.17			
Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.)	2.6848	3.2020		
Std. dev. of the Res. Std. Err.	0.1293			
2 std. devs. of the Res. Std. Err.	0.2586			

Source of Information: Value Line Proprietary Database, March 2025.

Atmos Energy Corporation
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Eight Natural Gas Companies

Proxy Group of Thirty-Four Non-Price Regulated Companies	[1] Value Line Adjusted Beta	[2] Unadjusted Beta	[3] Residual Standard Error of the Regression	[4] Standard Deviation of Beta
Abbott Laboratories	0.75	0.58	2.7801	0.0797
Allstate Corporation	0.85	0.77	2.8150	0.0807
Assurant, Inc.	0.90	0.82	2.9060	0.0833
AutoZone Inc.	0.75	0.58	2.9871	0.0857
Becton, Dickinson and Company	0.75	0.55	2.7023	0.0775
Bristol-Myers Squibb Company	0.75	0.58	3.0267	0.0868
Brown-Forman Corporation 'B'	0.80	0.65	3.0299	0.0869
Casella Waste System	0.85	0.72	2.9209	0.0838
Cencora	0.75	0.55	2.7229	0.0781
Cisco Systems, Inc.	0.85	0.75	2.6869	0.0771
Constellation Brands, Inc.	0.80	0.69	2.9242	0.0839
Costco Wholesale Corporation	0.75	0.61	2.7469	0.0788
Gilead Sciences, Inc.	0.75	0.56	2.9843	0.0856
Heartland Express, Inc.	0.85	0.74	3.1295	0.0897
Jack Henry & Associcates, Inc.	0.80	0.62	3.1114	0.0892
International Business Machines Corporation	0.85	0.72	2.9047	0.0833
L3Harris Technologies	0.85	0.75	3.0407	0.0872
Landstar System	0.85	0.75	2.7334	0.0784
Lowe's Companies, Inc.	0.90	0.83	2.9305	0.0840
Maximus, Inc.	0.90	0.80	3.0668	0.0879
McKesson Corporation	0.75	0.57	2.9235	0.0838
Microsoft Corporation	0.90	0.79	2.8958	0.0830
Monster Beverage Corporation	0.75	0.56	2.8136	0.0807
NewMarket Corporation	0.75	0.61	2.9922	0.0858
O'Reilly Automotive, Inc.	0.75	0.60	2.7811	0.0798
Philip Morris International Inc.	0.80	0.68	2.7950	0.0802
Prestige Consumer	0.75	0.62	3.1446	0.0902
The Progressive Corporation	0.75	0.55	2.9424	0.0844
RLI Corporation	0.85	0.70	2.9794	0.0854
Thermo Fisher Scientific Inc.	0.90	0.80	2.9556	0.0848
UnitedHealth Group Incorporated	0.80	0.65	3.0349	0.0870
VeriSign, Inc.	0.80	0.69	2.8280	0.0811
The Wendy's Company	0.85	0.75	3.1576	0.0905
Werner Enterprises	0.80	0.68	3.0716	0.0881
Average	0.81	0.67	2.9255	0.0839
Proxy Group of Eight Natural Gas Companies	0.81	0.67	2.9434	0.0844

Source of Information: Value Line Proprietary Database, March 2025.

Atmos Energy Corporation
Summary of Cost of Equity Models Applied to
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Eight Natural Gas Companies

Principal Methods		Proxy Group of Thirty-Four Non-Price Regulated Companies	
Discounted Cash Flow Model (DCF) (1)		11.26	%
Risk Premium Model (RPM) (2)		11.64	
Capital Asset Pricing Model (CAPM) (3)		11.21	
	Mean	11.37	%
	Median	11.26	%
	Average of Mean and Median	11.32	%

Notes:
(1) From page 2 of this Exhibit.
(2) From page 3 of this Exhibit.
(3) From page 6 of this Exhibit.

Atmos Energy Corporation
DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Eight Natural Gas Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	
Proxy Group of Thirty-Four Non-Price Regulated Companies	Average Dividend Yield	Value Line Projected Five Year Growth in EPS	Zack's Five Year Projected Growth Rate in EPS	S&P Capital IQ Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS (1)	Adjusted Dividend Yield	Indicated Common Equity Cost Rate (2)	
Abbott Laboratories	1.81 %	6.00 %	10.30 %	9.28 %	8.53 %	1.89 %	10.42 %	
Allstate Corporation	1.99	27.50	10.60	NA	19.05	2.18	21.23	
Assurant, Inc.	1.61	9.50	NA	NA	9.50	1.69	11.19	
AutoZone Inc.	-	7.50	11.40	10.85	9.92	-	NA	
Becton, Dickinson and Company	2.07	7.50	9.30	10.33	9.04	2.16	11.20	
Bristol-Myers Squibb Company	4.70	2.50	5.00	59.80	22.43	5.23	27.66	(3)
Brown-Forman Corporation 'B'	2.63	9.50	3.30	0.10	4.30	2.69	6.99	
Casella Waste System	-	6.50	25.80	NA	16.15	-	NA	
Cencora	0.79	6.50	12.80	12.66	10.65	0.83	11.48	
Cisco Systems, Inc.	2.74	5.50	5.40	4.63	5.18	2.81	7.99	
Constellation Brands, Inc.	2.21	6.50	1.70	2.43	3.54	2.25	5.79	
Costco Wholesale Corporation	0.54	10.00	9.40	9.11	9.50	0.57	10.07	
Gilead Sciences, Inc.	2.96	6.50	19.50	24.79	16.93	3.21	20.14	
Heartland Express, Inc.	0.91	26.00	NA	NA	26.00	1.03	27.03	(3)
Jack Henry & Associcates, Inc.	1.31	5.50	10.10	10.10	8.57	1.37	9.94	
International Business Machines Corporation	2.71	3.00	4.30	6.90	4.73	2.77	7.50	
L3Harris Technologies	2.20	14.50	12.00	11.99	12.83	2.34	15.17	
Landstar System	1.12	6.00	NA	3.00	4.50	1.15	5.65	
Lowe's Companies, Inc.	2.12	6.50	8.60	5.61	6.90	2.19	9.09	
Maximus, Inc.	1.72	10.50	NA	12.50	11.50	1.82	13.32	
McKesson Corporation	0.41	10.00	13.50	12.41	11.97	0.43	12.40	
Microsoft Corporation	0.82	12.00	14.80	12.17	12.99	0.87	13.86	
Monster Beverage Corporation	-	12.00	15.20	13.77	13.66	-	NA	
NewMarket Corporation	1.88	5.50	NA	NA	5.50	1.93	7.43	
O'Reilly Automotive, Inc.	-	10.50	12.50	11.90	11.63	-	NA	
Philip Morris International Inc.	3.32	5.00	9.30	11.38	8.56	3.46	12.02	
Prestige Consumer	-	6.00	7.00	7.67	6.89	-	NA	
The Progressive Corporation	0.14	16.50	10.20	13.88	13.53	0.15	13.68	
RLI Corporation	0.84	13.50	NA	NA	13.50	0.90	14.40	
Thermo Fisher Scientific Inc.	0.38	6.00	8.50	7.75	7.42	0.39	7.81	
UnitedHealth Group Incorporated	1.89	8.00	10.90	7.13	8.68	1.97	10.65	
VeriSign, Inc.	1.19	10.50	NA	NA	10.50	1.25	11.75	
The Wendy's Company	4.22	11.00	6.90	7.18	8.36	4.40	12.76	
Werner Enterprises	1.99	NA	NMF	NMF	NA	NA	NA	
	NA = Not Available					Mean	11.31 %	
	NMF=Not Meaningful Figure					Median	11.20 %	
					Average of Mean and Median		11.26 %	

Notes:

(1) Average of columns 2 through 4 excluding negative growth rates and extreme positive values.

(2) The application of the DCF model to the domestic, non-price regulated comparable risk companies is identical to the application of the DCF to the Utility Proxy Groups. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of 5/30/2025. The dividend yield is then adjusted by 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.zacks.com, and S&P Capital IQ (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

(3) Results were excluded from the final average and median as they were more than two standard deviations from the proxy group's mean.

Source of Information:

Value Line Investment Survey.
www.zacks.com, Downloaded on 05/30/2025
S&P Capital IQ

Atmos Energy Corporation
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Thirty-Four Non-Price Regulated Companies
1.	Prospective Yield on Baa2 Rated Corporate Bonds (1)	6.10 %
2.	Adjustment to Reflect Bond rating Difference of Non-Price Regulated Companies (2)	(0.21)
3.	Adjusted Bond Yield	5.89
4.	Equity Risk Premium (3)	5.75
5.	Risk Premium Derived Common Equity Cost Rate	11.64 %

Notes: (1) Average forecast of Baa corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated June 2, 2025 (see pages 7 and 8 of Exhibit DWD-3). The estimates are detailed below.

Second Quarter 2025	6.20 %
Third Quarter 2025	6.20
Fourth Quarter 2025	6.20
First Quarter 2026	6.10
Second Quarter 2026	6.10
Third Quarter 2026	6.00
2027-2031	6.00
2032-2036	6.00
Average	6.10 %

(2) The average yield spread of Baa2 rated corporate bonds over A2 corporate bonds for the three months ending May 2025. To reflect the A3 average rating of the Non-Price Regulated Proxy Group, the yield on the Baa corporate bond must be adjusted by 2/3 of the spread between A2 and Baa2 corporate bond yields as shown below:

	A2 Corp. Bond Yield	Baa2 Corp. Bond Yield	Spread
May-25	5.97 %	6.29 %	0.32 %
Apr-25	5.85	6.18	0.33
Mar-25	5.65	5.93	0.28
		Average yield spread	0.31
		2/3 of spread	0.21

(3) From page 5 of this Exhibit.

Atmos Energy Corporation
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Thirty-Four Non-Price Regulated Companies

Proxy Group of Thirty-Four Non-Price Regulated Companies	Moody's Long-Term Issuer Rating May 2025		Standard & Poor's Long-Term Issuer Rating May 2025	
	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
Abbott Laboratories	Aa3	4.0	AA-	4.0
Allstate Corporation	A3	7.0	BBB+	8.0
Assurant, Inc.	Baa2	9.0	BBB	9.0
AutoZone Inc.	Baa1	8.0	BBB	9.0
Becton, Dickinson and Company	Baa2	9.0	BBB	9.0
Bristol-Myers Squibb Company	A2	6.0	A	6.0
Brown-Forman Corporation 'B'	A1	5.0	A-	7.0
Casella Waste System	NA	--	BB	12.0
Cencora	Baa2	9.0	BBB+	8.0
Cisco Systems, Inc.	A1	5.0	AA-	4.0
Constellation Brands, Inc.	Baa2	9.0	BBB	9.0
Costco Wholesale Corporation	Aa3	4.0	AA	3.0
Gilead Sciences, Inc.	A3	7.0	A-	7.0
Heartland Express, Inc.	NA	--	NA	--
Jack Henry & Associcates, Inc.	NA	--	NA	--
International Business Machines Corporation	A3	7.0	A-	7.0
L3Harris Technologies	Baa2	9.0	BBB	9.0
Landstar System	NA	--	NA	--
Lowe's Companies, Inc.	Baa1	8.0	BBB+	8.0
Maximus, Inc.	NA	--	BB+	11.0
McKesson Corporation	A3	7.0	BBB+	8.0
Microsoft Corporation	Aaa	1.0	AAA	1.0
Monster Beverage Corporation	NA	--	NA	--
NewMarket Corporation	Baa2	9.0	BBB+	8.0
O'Reilly Automotive, Inc.	Baa1	8.0	BBB	9.0
Philip Morris International Inc.	A2	6.0	A-	7.0
Prestige Consumer	NA	--	BB	12.0
The Progressive Corporation	A2	6.0	A	6.0
RLI Corporation	WR	--	BBB	9.0
Thermo Fisher Scientific Inc.	A3	7.0	A-	7.0
UnitedHealth Group Incorporated	A2	6.0	A+	5.0
VeriSign, Inc.	Baa3	10.0	BBB	9.0
The Wendy's Company	NA	--	B+	14.0
Werner Enterprises	NA	--	NA	--
Natural Gas CEM Proxy Group Average	A3	6.9	BBB+	7.8

Notes:
(1) From page 4 of Exhibit DWD-3.

Source of Information:
Bloomberg Professional Services.

Atmos Energy Corporation
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Eight Natural Gas Companies

Line No.	Equity Risk Premium Measure	Proxy Group of Thirty-Four Non-Price Regulated Companies	
1.	Kroll Equity Risk Premium (1)	6.10	%
2.	Regression on Kroll Risk Premium Data (2)	6.94	
3.	Kroll Equity Risk Premium based on PRPM (3)	7.66	
4.	Equity Risk Premium Based on Value Line Summary and Index (4)	9.15	
5.	Equity Risk Premium Based on Bloomberg, Value Line, and S&P Global Market Intelligence S&P 500 Companies (5)	10.09	
6.	Conclusion of Equity Risk Premium	7.99	%
7.	Adjusted Beta (6)	0.72	
8.	Forecasted Equity Risk Premium	5.75	%

Notes:

(1) From note 1 of page 6 of Exhibit DWD-3.
(2) From note 2 of page 6 of Exhibit DWD-3.
(3) From note 3 of page 6 of Exhibit DWD-3.
(4) From note 4 of page 6 of Exhibit DWD-3.
(5) From note 5 of page 6 of Exhibit DWD-3.
(6) Average of mean and median beta from page 6 of this Exhibit.

Sources of Information:

Stocks, Bonds, Bills, and Inflation - 2023 SBBI Yearbook, Kroll.
Value Line Summary and Index.
Blue Chip Financial Forecasts, June 2, 2025
Bloomberg Professional Services.

Atmos Energy Corporation
Traditional CAPM and ECAPM Results for the Proxy Groups of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Eight Natural Gas Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Thirty-Four Non-Price Regulated Companies	Value Line Adjusted Beta	Bloomberg Beta	Average Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
Abbott Laboratories	0.75	0.58	0.66	8.88 %	4.56 %	10.42 %	11.18 %	10.80 %
Allstate Corporation	0.90	0.64	0.77	8.88	4.56	11.40	11.91	11.66
Assurant, Inc.	0.95	0.75	0.85	8.88	4.56	12.11	12.44	12.28
AutoZone Inc.	0.75	0.61	0.68	8.88	4.56	10.60	11.31	10.96
Becton, Dickinson and Company	0.75	0.57	0.66	8.88	4.56	10.42	11.18	10.80
Bristol-Myers Squibb Company	0.75	0.45	0.60	8.88	4.56	9.89	10.78	10.33
Brown-Forman Corporation 'B'	0.80	0.74	0.77	8.88	4.56	11.40	11.91	11.66
Casella Waste System	0.85	0.63	0.74	8.88	4.56	11.13	11.71	11.42
Cencora	0.70	0.44	0.57	8.88	4.56	9.62	10.58	10.10
Cisco Systems, Inc.	0.85	0.88	0.86	8.88	4.56	12.20	12.51	12.36
Constellation Brands, Inc.	0.80	0.64	0.72	8.88	4.56	10.96	11.58	11.27
Costco Wholesale Corporation	0.75	0.78	0.76	8.88	4.56	11.31	11.84	11.58
Gilead Sciences, Inc.	0.75	0.57	0.66	8.88	4.56	10.42	11.18	10.80
Heartland Express, Inc.	0.85	0.96	0.90	8.88	4.56	12.56	12.78	12.67
Jack Henry & Associcates, Inc.	0.80	0.55	0.68	8.88	4.56	10.60	11.31	10.96
International Business Machines Corporation	0.85	0.75	0.80	8.88	4.56	11.67	12.11	11.89
L3Harris Technologies	0.85	0.75	0.80	8.88	4.56	11.67	12.11	11.89
Landstar System	0.85	0.93	0.89	8.88	4.56	12.47	12.71	12.59
Lowe's Companies, Inc.	1.00	0.90	0.95	8.88	4.56	13.00	13.11	13.06 (4)
Maximus, Inc.	0.80	0.61	0.70	8.88	4.56	10.78	11.45	11.11
McKesson Corporation	0.75	0.52	0.63	8.88	4.56	10.16	10.98	10.57
Microsoft Corporation	0.90	1.01	0.96	8.88	4.56	13.09	13.18	13.13 (4)
Monster Beverage Corporation	0.75	0.58	0.67	8.88	4.56	10.51	11.25	10.88
NewMarket Corporation	0.75	0.66	0.71	8.88	4.56	10.87	11.51	11.19
O'Reilly Automotive, Inc.	0.75	0.52	0.63	8.88	4.56	10.16	10.98	10.57
Philip Morris International Inc.	0.80	0.44	0.62	8.88	4.56	10.07	10.91	10.49
Prestige Consumer	0.80	0.60	0.70	8.88	4.56	10.78	11.45	11.11
The Progressive Corporation	0.75	0.57	0.66	8.88	4.56	10.42	11.18	10.80
RLI Corporation	0.85	0.51	0.68	8.88	4.56	10.60	11.31	10.96
Thermo Fisher Scientific Inc.	0.90	0.83	0.87	8.88	4.56	12.29	12.58	12.43
UnitedHealth Group Incorporated	0.80	0.23	0.51	8.88	4.56	9.09	10.18	9.63 (4)
VeriSign, Inc.	0.80	0.64	0.72	8.88	4.56	10.96	11.58	11.27
The Wendy's Company	0.85	0.53	0.69	8.88	4.56	10.69	11.38	11.03
Werner Enterprises	0.80	0.85	0.83	8.88	4.56	11.93	12.31	12.12
		Mean	0.73			11.07 %	11.66 %	11.31 %
		Median	0.71			10.82 %	11.48 %	11.11 %
		Average of Mean and Median	0.72			10.95 %	11.57 %	11.21 %

Notes:
(1) From note 1 of page 2 of Exhibit DWD-4.
(2) From note 2 of page 2 of Exhibit DWD-4.
(3) Average of CAPM and ECAPM cost rates.
(4) Results were excluded from the final average and median as they were more than two standard deviations from the proxy group's mean.

Atmos Energy Corporation
Derivation of Investment Risk Adjustment Based upon
Kroll Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

Line No.		[1] Market Capitalization on May 30, 2025 (1) (millions)			[2] Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	[3] Applicable Size Premium (3)	[4] Spread from Applicable Size Premium (4)
1.	Atmos Energy Corporation	$ 352.733			9	1.73%	
2.	Proxy Group of Eight Natural Gas Companies	$ 4,520.340	12.8	x	5	0.74%	0.99%
			[A]		[B]	[C]	[D]

	Decile	Market Capitalization of Smallest Company (millions)	Market Capitalization of Largest Company (millions)	Size Premium (Return in Excess of CAPM)*
Largest	1	$ 47,156.530	$ 3,522,211.140	-0.01%
	2	20,191.220	46,949.060	0.33%
	3	9,937.940	20,178.360	0.49%
	4	6,196.710	9,937.350	0.50%
	5	3,948.050	6,181.270	0.74%
	6	2,481.780	3,946.150	1.00%
	7	1,422.890	2,464.500	1.19%
	8	731.190	1,417.450	0.88%
	9	304.620	729.920	1.73%
Smallest	10	1.110	304.480	4.47%

*From 2025 Kroll Cost of Capital Navigator

Notes:

(1) From page 2 of this Exhibit.

(2) Gleaned from Columns [B] and [C] on the bottom of this page. The appropriate decile (Column [A]) corresponds to the market capitalization of the proxy group, which is found in Column [1].

(3) Corresponding risk premium to the decile is provided in Column [D] on the bottom of this page.

(4) Line No. 1 Column [3] – Line No. 2 Column [3]. For example, the 0.99% in Column [4], Line No. 2 is derived as follows 0.99% = 1.73% - 0.74%.

Atmos Energy Corporation
Market Capitalization of Atmos Energy Corporation and the
Proxy Group of Eight Natural Gas Companies

Company	Exchange	[1] Common Stock Shares Outstanding at Fiscal Year End 2024 (millions)	[2] Book Value per Share at Fiscal Year End 2023 (1)	[3] Total Common Equity at Fiscal Year End 2024 (millions)	[4] Closing Stock Market Price on May 30, 2025	[5] Market-to-Book Ratio on May 30, 2025 (2)	[6] Market Capitalization on May 30, 2025 (3) (millions)
Atmos Energy Corporation		NA	NA	204.721 (4)	NA		
Based upon Proxy Group of Eight Natural Gas Companies						172.3 (5)	$ 352.733 (6)
Proxy Group of Eight Natural Gas Companies							
Atmos Energy Corporation	NYSE	155.259	$ 78.306	$ 12,157.67	$ 154.680	197.5 %	$ 24,015.438
Chesapeake Utilities Corporation	NYSE	22.899	60.710	1,390.200	122.190	201.3	2,798.029
New Jersey Resources Corporation	NYSE	99.461	22.124	2,200.443	45.890	207.4	4,564.286
NiSource Inc.	NYSE	469.822	18.484	8,684.200	39.540	213.9	18,576.781
Northwest Natural Holding Company	NYSE	40.222	34.443	1,385.371	40.970	119.0	1,647.908
ONE Gas, Inc.	NYSE	59.877	51.849	3,104.548	74.760	144.2	4,476.394
Southwest Gas Holdings, Inc.	NYSE	71.783	48.817	3,504.187	71.830	147.1	5,156.155
Spire Inc.	NYSE	57.750	55.978	3,232.700	75.280	134.5	4,347.395
Median		65.830	$ 50.333	$ 3,168.624	$ 73.295	172.3 %	$ 4,520.340

NA= Not Available

Notes: (1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 1 * Column 4.
(4) Requested rate base multiplied by the requested common equity ratio.
(5) The market-to-book ratio of Atmos Energy Corporation on May 30, 2025 is assumed to be equal to the market-to-book ratio of Proxy Group of Eight Natural Gas Companies on May 30, 2025 as appropriate.
(6) Column [3] multiplied by Column [5].

Source of Information: 2024 Annual Forms 10K
Bloomberg Professional

Atmos Energy Corporation
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

Equity Issuances and Flotation Costs for FY 2016 - 2025

		[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
Fiscal Year	Transaction (1)	Shares Issued (1)	Average Offering Price per Share	Net Proceeds per Share (2)	Gross Equity Issue before Costs (1)	Total Net Proceeds (1)	Total Flotation Costs (3)	Flotation Cost Percentage (4)
2025	At the Market Equity Offering	3,300,904	$ 115.1200	$ 114.9617	$ 380,000,009	$ 379,477,557	$ 522,451	0.14%
2024	At the Market Equity Offering	6,401,469	$ 117.2233	$ 116.6373	$ 750,401,394	$ 746,649,868	$ 3,751,526	0.50%
2023	At the Market Equity Offering	7,272,261	$ 112.7133	$ 111.0946	$ 819,680,535	$ 807,908,920	$ 11,771,616	1.44%
2022	At the Market Equity Offering	7,907,883	$ 100.0634	$ 98.3843	$ 791,290,027	$ 778,011,289	$ 13,278,738	1.68%
2021	At the Market Equity Offering	6,130,875	$ 101.5775	$ 99.0072	$ 622,758,775	$ 607,000,833	$ 15,757,941	2.53%
2020	At the Market Equity Offering	6,101,916	NA	NA	$ 632,630,269	$ 625,894,599	$ 6,735,669	1.06%
2019	At the Market Equity Offering	5,390,836	$ 92.7500	$ 91.6555	$ 500,000,000	$ 494,100,000	$ 5,900,000	1.18%
2018	At the Market Equity Offering	4,558,404	$ 87.7500	$ 86.6751	$ 400,000,000	$ 395,100,000	$ 4,900,000	1.23%
2017	At the Market Equity Offering	1,303,494	$ 76.7169	$ 75.7963	$ 100,000,000	$ 98,800,000	$ 1,200,000	1.20%
2016	At the Market Equity Offering	1,360,756	$ 73.4886	$ 72.4597	$ 100,000,000	$ 98,600,000	$ 1,400,000	1.40%
					$ 5,096,761,008	$ 5,031,543,067	$ 65,217,941	1.28%

Flotation Cost Adjustment

	Average Dividend Yield	Average Projected EPS Growth Rate	Adjusted Dividend Yield	Average DCF Cost Rate Unadjusted for Flotation (5)	DCF Cost Rate Adjusted for Flotation (6)	Flotation Cost Adjustment (7)
Proxy Group of Eight Natural Gas Companies	3.35 %	7.24 %	3.47 %	10.71 %	10.75 %	0.04 %

Source of Information: Atmos Energy Corporation SEC Form 10-Ks, Company-Provided Data

Notes provided on page 2 of this Exhibit

Atmos Energy Corporation
Notes to Accompany the
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

(1) Atmos Energy Corporation SEC Filings, Company-provided.

(2) Column 5 ÷ Column 1.

(3) Column 4 - Column 5.

(4) Column 6 ÷ Column 4.

(5) Using the average growth rate from Exhibit DWD-2.

(6) Adjustment for flotation costs based on adjusting the average DCF constant growth cost rate in accordance with the following:

$$K = \frac{D(1+0.5g)}{P(1-F)} + g,$$

where g is the growth factor and F is the percentage of flotation costs.

(7) Flotation cost adjustment of 0.04% equals the difference between the flotation adjusted average DCF cost rate of 10.75% and the unadjusted average DCF cost rate of 10.71% of the Utility Proxy Group.